Draft
Environmental Impact Report

SCH# 2025071048

Volume 5

Appendix H (part 3 of 3)

Discovery Solar PV and Storage Project

Discovery Solar PV and Storage Project by Discovery Solar Storage, LLC (PP24408); ZCC No. 56, Map 197; ZCC No. 71, Map 198; ZCC No. 29, Map 214; ZCC No. 16, Map 215; CUP No. 22 Map 197; CUP No. 47, Map 198; CUP No. 50, Map 214; CUP No. 51, Map 214; CUP No. 19, Map 215; ZV No. 20, Map 197; ZV No. 36, Map 198; ZV No. 15, Map 214; ZV No. 3, Map 215; GPA No. 18, Map 197 (Circulation); GPA No. 5, Map 198 (Circulation); GPA No. 10, Map 214 (Circulation); GPA No. 7, Map 215 (Circulation); Multiple Vesting Tentative Parcel Maps (VTPM)

Kern County
Planning and Natural Resources Department
Bakersfield, California

January 2026

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Appendices—Volume 5

NOTE TO REVIEWER OF ELECTRONIC FILES:

To assist you in reviewing this electronic document, "bookmarks" and/or "links" have been provided for easier navigation between sections. When available, bookmarks are located in the panel to the left. Links are highlighted in **BLUE** in the Table of Contents. Clicking on either the bookmarks or links will take you to the selected item. This document may consist of multiple linked PDF files. If saving this document to your computer, you must save all corresponding files to a directory on your hard drive to maintain the manner in which these PDF documents are linked.

Appendix H: Phase I Environmental Site Assessment (part 3 of 3)

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Appendix H
Phase I Environmental Site Assessment

continued from Volume 4

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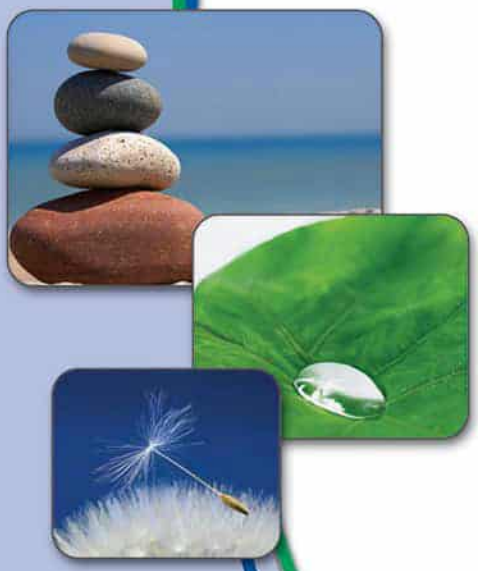
TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-210940-1
Client Project/Site: Blue Eagle Lode Mine

For:
GeoPentech, Inc
5251 California Ave
Suite 210
Irvine, California 92617

Attn: Jennipher Von Stauffenberg



Authorized for release by:
6/12/2018 3:32:21 PM

Linda C. Laver, Project Manager II
(916)374-4362
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LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-210940-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-210940-1	MW-6	Water	05/09/18 08:56	05/09/18 18:30
440-210940-2	MW-3	Water	05/09/18 11:09	05/09/18 18:30

Job ID: 440-210940-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-210940-1

Receipt
The samples were received on 5/9/2018 6:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.7º C and 3.2º C.

GC/MS VOA
Method(s) 8260B: The method blank for analytical batch 440-477762 contained Naphthalene above the method detection limit (J flagged). This target analyte concentration was less than the reporting limit (RL); therefore, re-analysis of samples was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
Method(s) 8015B (DRO/MRO): Surrogate recovery for the following sample was outside control limits: MW-6 (440-210940-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8015B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 490-514271 for ethylene glycol.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

HPLC/IC
Method(s) 8330A: The %RPD between the primary and confirmation column exceeded 40% for 1,3,5-Trinitrobenzene and HMX for the following sample: MW-6 (440-210940-1). The primary column has been reported and qualified in accordance with the laboratory's SOP.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
The requested analyses includes dissolved metals and hardness but samples were not filtered in the field. The following samples were filtered and preserved upon receipt to the laboratory: MW-6 (440-210940-1) and MW-3 (440-210940-2).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
Method(s) 8330-Prep: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-223301 .

Method(s) 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-223298 for DRO/MRO.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Client Sample ID: MW-6

Date Collected: 05/09/18 08:56
Date Received: 05/09/18 18:30

Lab Sample ID: 440-210940-1

Matrix: Water

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	91		50	35	ug/L			05/22/18 15:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*105*		*76 - 132*		*05/22/18 15:39*	*1*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*05/22/18 15:39*	*1*
Toluene-d8 (Surr)	*102*		*80 - 128*		*05/22/18 15:39*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.25	ug/L			05/22/18 15:39	1
Ethylbenzene	ND		0.50	0.25	ug/L			05/22/18 15:39	1
m,p-Xylene	ND		1.0	0.50	ug/L			05/22/18 15:39	1
o-Xylene	ND		0.50	0.25	ug/L			05/22/18 15:39	1
Toluene	ND		0.50	0.25	ug/L			05/22/18 15:39	1
Xylenes, Total	ND		1.0	0.50	ug/L			05/22/18 15:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*05/22/18 15:39*	*1*
Dibromofluoromethane (Surr)	*105*		*76 - 132*		*05/22/18 15:39*	*1*
Toluene-d8 (Surr)	*102*		*80 - 128*		*05/22/18 15:39*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	3.2		1.0	0.40	ug/L			05/23/18 11:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*80 - 120*		*05/23/18 11:23*	*1*
Dibromofluoromethane (Surr)	*100*		*76 - 132*		*05/23/18 11:23*	*1*
Toluene-d8 (Surr)	*96*		*80 - 128*		*05/23/18 11:23*	*1*

Method: 8015B - Glycols -Direct Injection (GC/FID)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene glycol	ND		10	1.0	mg/L			05/11/18 19:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-butyl alcohol (Surr)	*85*		*70 - 130*		*05/11/18 19:55*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	7800		240	78	ug/L		05/15/18 11:30	05/23/18 23:45	5
Motor Oil Range Organics (C25-C36)	1300	J	2400	810	ug/L		05/15/18 11:30	05/23/18 23:45	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*2333*	*X*	*56 - 145*	*05/15/18 11:30*	*05/23/18 23:45*	*5*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23		10	5.0	mg/L			05/10/18 04:52	20
Fluoride	0.60		0.50	0.25	mg/L			05/10/18 04:38	1
Nitrite as N	ND		0.15	0.070	mg/L			05/10/18 04:38	1

Client Sample ID: MW-6
Date Collected: 05/09/18 08:56
Date Received: 05/09/18 18:30

Lab Sample ID: 440-210940-1
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**200**		10	5.0	mg/L			05/10/18 04:52	20
Nitrate as N	ND		0.11	0.055	mg/L			05/10/18 04:38	1

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			05/22/18 13:52	1

Method: 8330A - Nitroaromatics and Nitramines

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dinitrobenzene	ND		0.10	0.051	ug/L		05/15/18 11:45	05/24/18 19:35	1
2,4-Dinitrotoluene	ND		0.10	0.051	ug/L		05/15/18 11:45	05/24/18 19:35	1
2,6-Dinitrotoluene	**0.12**		0.10	0.051	ug/L		05/15/18 11:45	05/24/18 19:35	1
HMX	**0.46**	**p1**	0.10	0.037	ug/L		05/15/18 11:45	05/24/18 19:35	1
Nitrobenzene	**3.2**		0.10	0.051	ug/L		05/15/18 11:45	05/24/18 19:35	1
Nitroglycerin	ND		0.67	0.34	ug/L		05/15/18 11:45	05/24/18 19:35	1
2-Nitrotoluene	ND		0.51	0.090	ug/L		05/15/18 11:45	05/24/18 19:35	1
3-Nitrotoluene	ND		0.51	0.059	ug/L		05/15/18 11:45	05/24/18 19:35	1
4-Nitrotoluene	ND		0.51	0.090	ug/L		05/15/18 11:45	05/24/18 19:35	1
RDX	ND		0.10	0.037	ug/L		05/15/18 11:45	05/24/18 19:35	1
1,3,5-Trinitrobenzene	**0.071**	**J p1**	0.10	0.032	ug/L		05/15/18 11:45	05/24/18 19:35	1
2,4,6-Trinitrotoluene	ND		0.10	0.051	ug/L		05/15/18 11:45	05/24/18 19:35	1
PETN	ND		0.67	0.31	ug/L		05/15/18 11:45	05/24/18 19:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*86*		*79 - 111*	*05/15/18 11:45*	*05/24/18 19:35*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	**74**		0.50	0.30	mg/L		05/17/18 07:00	05/18/18 16:27	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		05/17/18 07:00	05/17/18 16:29	1
Aluminum	ND		0.050	0.025	mg/L		05/17/18 07:00	05/17/18 16:29	1
Antimony	**0.00033**	**J**	0.0020	0.00020	mg/L		05/17/18 07:00	05/17/18 16:29	1
Arsenic	**1.6**		0.0020	0.0010	mg/L		05/17/18 07:00	05/17/18 16:29	1
Barium	**0.041**		0.0010	0.00050	mg/L		05/17/18 07:00	05/17/18 16:29	1
Beryllium	ND		0.0010	0.00010	mg/L		05/17/18 07:00	05/17/18 16:29	1
Cadmium	ND		0.0010	0.00050	mg/L		05/17/18 07:00	05/17/18 16:29	1
Calcium	**130**		0.30	0.17	mg/L		05/17/18 07:00	05/17/18 16:29	1
Chromium	ND		0.0020	0.0010	mg/L		05/17/18 07:00	05/17/18 16:29	1
Cobalt	**0.0015**		0.0010	0.00060	mg/L		05/17/18 07:00	05/17/18 16:29	1
Copper	ND		0.0020	0.0010	mg/L		05/17/18 07:00	05/17/18 16:29	1
Iron	**0.87**		0.050	0.025	mg/L		05/17/18 07:00	05/17/18 16:29	1
Lead	ND		0.0010	0.00060	mg/L		05/17/18 07:00	05/17/18 16:29	1
Magnesium	**41**		0.050	0.025	mg/L		05/17/18 07:00	05/17/18 16:29	1
Manganese	**6.3**		0.0025	0.0014	mg/L		05/17/18 07:00	05/17/18 16:29	1
Molybdenum	**0.0032**		0.0020	0.00060	mg/L		05/17/18 07:00	05/17/18 16:29	1
Nickel	**0.0012**	**J**	0.0020	0.0010	mg/L		05/17/18 07:00	05/17/18 16:29	1
Potassium	**14**		0.050	0.025	mg/L		05/17/18 07:00	05/17/18 16:29	1
Selenium	ND		0.0020	0.0010	mg/L		05/17/18 07:00	05/17/18 16:29	1

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-210940-1

Client Sample ID: MW-6
Date Collected: 05/09/18 08:56
Date Received: 05/09/18 18:30

Lab Sample ID: 440-210940-1
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**130**		0.10	0.080	mg/L		05/17/18 07:00	05/17/18 16:29	1
Thallium	ND		0.0010	0.00050	mg/L		05/17/18 07:00	05/17/18 16:29	1
Vanadium	ND		0.010	0.0030	mg/L		05/17/18 07:00	05/17/18 16:29	1
Zinc	**0.0099**		0.0050	0.0040	mg/L		05/17/18 07:00	05/17/18 16:29	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00010**	**J**	0.00020	0.00010	mg/L		05/24/18 19:30	05/25/18 11:38	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**490**		2.5	2.5	mg/L			05/28/18 14:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	ND		0.20	0.10	mg/L			05/16/18 00:07	1
Total Dissolved Solids	**1100**		10	5.0	mg/L			05/16/18 10:23	1
Cyanide, Total	ND		0.025	0.013	mg/L		05/15/18 09:52	05/15/18 13:36	1
Nitrocellulose	ND		2.0	0.48	mg/L		06/04/18 13:48	06/05/18 09:58	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	**500**		4.0	4.0	mg/L			05/10/18 15:26	1
Bicarbonate Alkalinity as CaCO3	**500**		4.0	4.0	mg/L			05/10/18 15:26	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			05/10/18 15:26	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			05/10/18 15:26	1
Specific Conductance	**1400**		1.0	1.0	umhos/cm			05/21/18 11:14	1
pH adj. to 25 deg C	**7.6**	**HF**	0.1	0.1	SU			05/10/18 18:51	1

Client Sample ID: MW-3
Date Collected: 05/09/18 11:09
Date Received: 05/09/18 18:30

Lab Sample ID: 440-210940-2
Matrix: Water

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50	35	ug/L			05/22/18 16:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*111*		*76 - 132*		*05/22/18 16:07*	*1*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*05/22/18 16:07*	*1*
Toluene-d8 (Surr)	*98*		*80 - 128*		*05/22/18 16:07*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.25	ug/L			05/22/18 16:07	1
Ethylbenzene	ND		0.50	0.25	ug/L			05/22/18 16:07	1
m,p-Xylene	ND		1.0	0.50	ug/L			05/22/18 16:07	1
o-Xylene	ND		0.50	0.25	ug/L			05/22/18 16:07	1
Toluene	**0.62**		0.50	0.25	ug/L			05/22/18 16:07	1
Xylenes, Total	ND		1.0	0.50	ug/L			05/22/18 16:07	1
Naphthalene	ND		1.0	0.40	ug/L			05/22/18 16:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*05/22/18 16:07*	*1*
Dibromofluoromethane (Surr)	*111*		*76 - 132*		*05/22/18 16:07*	*1*
Toluene-d8 (Surr)	*98*		*80 - 128*		*05/22/18 16:07*	*1*

Method: 8015B - Glycols -Direct Injection (GC/FID)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene glycol	ND		10	1.0	mg/L			05/11/18 20:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-butyl alcohol (Surr)	*84*		*70 - 130*		*05/11/18 20:11*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	**22**	**J**	48	15	ug/L		05/15/18 11:30	05/24/18 00:09	1
Motor Oil Range Organics (C25-C36)	ND		480	160	ug/L		05/15/18 11:30	05/24/18 00:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*72*		*56 - 145*	*05/15/18 11:30*	*05/24/18 00:09*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	ND		0.15	0.070	mg/L			05/10/18 03:17	1
Sulfate	**170**		2.5	1.3	mg/L			05/10/18 03:57	5
Nitrate as N	ND		0.11	0.055	mg/L			05/10/18 03:17	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**16**		0.50	0.25	mg/L			05/10/18 03:17	1
Fluoride	**0.81**		0.50	0.25	mg/L			05/10/18 03:17	1

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			05/22/18 14:09	1

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-210940-1

Client Sample ID: MW-3
Date Collected: 05/09/18 11:09
Date Received: 05/09/18 18:30

Lab Sample ID: 440-210940-2
Matrix: Water

Method: 8330A - Nitroaromatics and Nitramines

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dinitrobenzene	ND		0.10	0.051	ug/L		05/15/18 11:45	05/24/18 20:20	1
2,4-Dinitrotoluene	ND		0.10	0.051	ug/L		05/15/18 11:45	05/24/18 20:20	1
2,6-Dinitrotoluene	ND		0.10	0.051	ug/L		05/15/18 11:45	05/24/18 20:20	1
HMX	ND		0.10	0.037	ug/L		05/15/18 11:45	05/24/18 20:20	1
Nitrobenzene	ND		0.10	0.051	ug/L		05/15/18 11:45	05/24/18 20:20	1
Nitroglycerin	ND		0.66	0.34	ug/L		05/15/18 11:45	05/24/18 20:20	1
2-Nitrotoluene	ND		0.51	0.090	ug/L		05/15/18 11:45	05/24/18 20:20	1
3-Nitrotoluene	ND		0.51	0.058	ug/L		05/15/18 11:45	05/24/18 20:20	1
4-Nitrotoluene	ND		0.51	0.090	ug/L		05/15/18 11:45	05/24/18 20:20	1
RDX	ND		0.10	0.037	ug/L		05/15/18 11:45	05/24/18 20:20	1
1,3,5-Trinitrobenzene	ND		0.10	0.032	ug/L		05/15/18 11:45	05/24/18 20:20	1
2,4,6-Trinitrotoluene	ND		0.10	0.051	ug/L		05/15/18 11:45	05/24/18 20:20	1
PETN	ND		0.66	0.31	ug/L		05/15/18 11:45	05/24/18 20:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*85*		*79 - 111*	*05/15/18 11:45*	*05/24/18 20:20*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	**58**		0.50	0.30	mg/L		05/17/18 07:00	05/18/18 16:46	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		05/17/18 07:00	05/17/18 16:56	1
Aluminum	ND		0.050	0.025	mg/L		05/17/18 07:00	05/17/18 16:56	1
Antimony	ND		0.0020	0.00020	mg/L		05/17/18 07:00	05/17/18 16:56	1
Arsenic	**0.28**		0.0020	0.0010	mg/L		05/17/18 07:00	05/17/18 16:56	1
Barium	**0.0020**		0.0010	0.00050	mg/L		05/17/18 07:00	05/17/18 16:56	1
Beryllium	ND		0.0010	0.00010	mg/L		05/17/18 07:00	05/17/18 16:56	1
Cadmium	ND		0.0010	0.00050	mg/L		05/17/18 07:00	05/17/18 16:56	1
Calcium	**26**		0.30	0.17	mg/L		05/17/18 07:00	05/17/18 16:56	1
Chromium	ND		0.0020	0.0010	mg/L		05/17/18 07:00	05/17/18 16:56	1
Cobalt	ND		0.0010	0.00060	mg/L		05/17/18 07:00	05/17/18 16:56	1
Copper	ND		0.0020	0.0010	mg/L		05/17/18 07:00	05/17/18 16:56	1
Iron	ND		0.050	0.025	mg/L		05/17/18 07:00	05/17/18 16:56	1
Lead	ND		0.0010	0.00060	mg/L		05/17/18 07:00	05/17/18 16:56	1
Magnesium	**16**		0.050	0.025	mg/L		05/17/18 07:00	05/17/18 16:56	1
Manganese	**0.063**		0.0025	0.0014	mg/L		05/17/18 07:00	05/17/18 16:56	1
Molybdenum	ND		0.0020	0.00060	mg/L		05/17/18 07:00	05/17/18 16:56	1
Nickel	**0.0012**	**J**	0.0020	0.0010	mg/L		05/17/18 07:00	05/17/18 16:56	1
Potassium	**21**		0.050	0.025	mg/L		05/17/18 07:00	05/17/18 16:56	1
Selenium	ND		0.0020	0.0010	mg/L		05/17/18 07:00	05/17/18 16:56	1
Sodium	**41**		0.10	0.080	mg/L		05/17/18 07:00	05/17/18 16:56	1
Thallium	ND		0.0010	0.00050	mg/L		05/17/18 07:00	05/17/18 16:56	1
Vanadium	ND		0.010	0.0030	mg/L		05/17/18 07:00	05/17/18 16:56	1
Zinc	**0.52**		0.0050	0.0040	mg/L		05/17/18 07:00	05/17/18 16:56	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		05/24/18 19:30	05/25/18 11:41	1

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-210940-1

Client Sample ID: MW-3
Date Collected: 05/09/18 11:09
Date Received: 05/09/18 18:30

Lab Sample ID: 440-210940-2
Matrix: Water

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**130**		2.5	2.5	mg/L			05/28/18 14:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	ND		0.20	0.10	mg/L			05/16/18 00:13	1
Total Dissolved Solids	**410**		10	5.0	mg/L			05/16/18 10:23	1
Cyanide, Total	ND		0.025	0.013	mg/L		05/15/18 09:52	05/15/18 13:36	1
Nitrocellulose	ND		2.0	0.48	mg/L		06/04/18 13:48	06/05/18 10:10	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	**49**		4.0	4.0	mg/L			05/10/18 15:15	1
Bicarbonate Alkalinity as CaCO3	**49**		4.0	4.0	mg/L			05/10/18 15:15	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			05/10/18 15:15	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			05/10/18 15:15	1
Specific Conductance	**500**		1.0	1.0	umhos/cm			05/21/18 11:14	1
pH adj. to 25 deg C	**7.0**	**HF**	0.1	0.1	SU			05/10/18 18:51	1

Method Summary

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-210940-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL IRV
8260B/CA_LUFTMS	Volatile Organic Compounds by GC/MS	SW846	TAL IRV
8015B	Glycols -Direct Injection (GC/FID)	SW846	TAL NSH
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL SAC
300.0	Anions, Ion Chromatography	MCAWW	TAL IRV
314.0 LL	Perchlorate (IC)	EPA	TAL IRV
8330A	Nitroaromatics and Nitramines	SW846	TAL SAC
6010B	Metals (ICP)	SW846	TAL SAC
6020	Metals (ICP/MS)	SW846	TAL SAC
7470A	Mercury (CVAA)	SW846	TAL SAC
SM 2340B	Total Hardness (as CaCO3) by calculation	SM	TAL SAC
350.1	Nitrogen, Ammonia	MCAWW	TAL IRV
SM 2320B	Alkalinity	SM	TAL IRV
SM 2510B	Conductivity, Specific Conductance	SM	TAL IRV
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL IRV
SM 4500 CN E	Cyanide, Total	SM	TAL IRV
SM 4500 H+ B	pH	SM	TAL IRV
WS-WC-0050	Nitrocellulose	TAL-SAC	TAL SAC
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL SAC
3010A	Preparation, Total Metals	SW846	TAL SAC
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL SAC
353 (NCell-Hyd)	Nitrocellulose Sample Preparation (Hydrolysis)	MCAWW	TAL SAC
353.2 (NCell)	Nitrocellulose Sample Preparation	MCAWW	TAL SAC
5030B	Purge and Trap	SW846	TAL IRV
7470A	Preparation, Mercury	SW846	TAL SAC
8330-Prep	Solid-Phase Extraction (Explosives)	SW846	TAL SAC
Distill/CN	Distillation, Cyanide	None	TAL IRV
Filtration	Sample Filtration	None	TAL SAC

Protocol References:

EPA = US Environmental Protection Agency
MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
TAL-SAC = TestAmerica Laboratories, West Sacramento, Facility Standard Operating Procedure.

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022
TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177
TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Lab Chronicle

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-210940-1

Client Sample ID: MW-6

Date Collected: 05/09/18 08:56
Date Received: 05/09/18 18:30

Lab Sample ID: 440-210940-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	477762	05/22/18 15:39	TCN	TAL IRV
Total/NA	Analysis	8260B	RA	1	10 mL	10 mL	478001	05/23/18 11:23	TCN	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	477761	05/22/18 15:39	TCN	TAL IRV
Total/NA	Analysis	8015B		1			514271	05/11/18 19:55	JML	TAL NSH
Total/NA	Prep	3510C			1028.1 mL	3 mL	223298	05/15/18 11:30	NGK	TAL SAC
Total/NA	Analysis	8015B		5			225024	05/23/18 23:45	RS1	TAL SAC
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	475046	05/10/18 04:38	NTN	TAL IRV
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	475047	05/10/18 04:38	NTN	TAL IRV
Total/NA	Analysis	300.0		20	5 mL	1.0 mL	475047	05/10/18 04:52	NTN	TAL IRV
Total/NA	Analysis	314.0 LL		1			477770	05/22/18 13:52	CTH	TAL IRV
Total/NA	Prep	8330-Prep			973.6 mL	20 mL	223301	05/15/18 11:45	VPM	TAL SAC
Total/NA	Analysis	8330A		1			225011	05/24/18 19:35	TQP	TAL SAC
Total/NA	Prep	8330-Prep			973.6 mL	20 mL	223301	05/15/18 11:45	VPM	TAL SAC
Total/NA	Analysis	8330A		1			225769	05/27/18 17:40	D1R	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	223220	05/15/18 07:45	NIM	TAL SAC
Dissolved	Prep	3010A			50 mL	50 mL	223675	05/17/18 07:00	NIM	TAL SAC
Dissolved	Analysis	6010B		1			224395	05/18/18 16:27	CJH	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	223220	05/15/18 07:45	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	223676	05/17/18 07:00	NIM	TAL SAC
Dissolved	Analysis	6020		1			223984	05/17/18 16:29	CJH	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	223220	05/15/18 07:45	NIM	TAL SAC
Dissolved	Prep	7470A			30 mL	30 mL	225414	05/24/18 19:30	SSS	TAL SAC
Dissolved	Analysis	7470A		1			225554	05/25/18 11:38	GSH	TAL SAC
Dissolved	Analysis	SM 2340B		1			225833	05/28/18 14:37	LW1	TAL SAC
Total/NA	Analysis	350.1		1	0.8 mL	8 mL	476437	05/16/18 00:07	MMH	TAL IRV
Total/NA	Analysis	SM 2320B		1			475473	05/10/18 15:26	YZ	TAL IRV
Total/NA	Analysis	SM 2510B		1			477517	05/21/18 11:14	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	476534	05/16/18 10:23	XL	TAL IRV
Total/NA	Prep	Distill/CN			50 mL	50 mL	476209	05/15/18 09:52	KMY	TAL IRV
Total/NA	Analysis	SM 4500 CN E		1			476290	05/15/18 13:36	KMY	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			475361	05/10/18 18:51	CMM	TAL IRV
Total/NA	Pre Prep	353.2 (NCell)			100.00 mL	50.00 mL	226828	06/02/18 11:53	JER	TAL SAC
Total/NA	Prep	353 (NCell-Hyd)			50.00 mL	40.00 mL	227050	06/04/18 13:48	JER	TAL SAC
Total/NA	Analysis	WS-WC-0050		1			227238	06/05/18 09:58	TCS	TAL SAC

Client Sample ID: MW-3

Date Collected: 05/09/18 11:09
Date Received: 05/09/18 18:30

Lab Sample ID: 440-210940-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	477762	05/22/18 16:07	TCN	TAL IRV

Lab Chronicle

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-210940-1

Client Sample ID: MW-3

Date Collected: 05/09/18 11:09
Date Received: 05/09/18 18:30

Lab Sample ID: 440-210940-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	477761	05/22/18 16:07	TCN	TAL IRV
Total/NA	Analysis	8015B		1			514271	05/11/18 20:11	JML	TAL NSH
Total/NA	Prep	3510C			1049.2 mL	3 mL	223298	05/15/18 11:30	NGK	TAL SAC
Total/NA	Analysis	8015B		1			225024	05/24/18 00:09	RS1	TAL SAC
Total/NA	Analysis	300.0		1			475046	05/10/18 03:17	NTN	TAL IRV
Total/NA	Analysis	300.0	DL	1			475047	05/10/18 03:17	NTN	TAL IRV
Total/NA	Analysis	300.0		5			475047	05/10/18 03:57	NTN	TAL IRV
Total/NA	Analysis	314.0 LL		1			477770	05/22/18 14:09	CTH	TAL IRV
Total/NA	Prep	8330-Prep			977.7 mL	20 mL	223301	05/15/18 11:45	VPM	TAL SAC
Total/NA	Analysis	8330A		1			225011	05/24/18 20:20	TQP	TAL SAC
Total/NA	Prep	8330-Prep			977.7 mL	20 mL	223301	05/15/18 11:45	VPM	TAL SAC
Total/NA	Analysis	8330A		1			225769	05/27/18 18:38	D1R	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	223220	05/15/18 07:45	NIM	TAL SAC
Dissolved	Prep	3010A			50 mL	50 mL	223675	05/17/18 07:00	NIM	TAL SAC
Dissolved	Analysis	6010B		1			224395	05/18/18 16:46	CJH	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	223220	05/15/18 07:45	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	223676	05/17/18 07:00	NIM	TAL SAC
Dissolved	Analysis	6020		1			223984	05/17/18 16:56	CJH	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	223220	05/15/18 07:45	NIM	TAL SAC
Dissolved	Prep	7470A			30 mL	30 mL	225414	05/24/18 19:30	SSS	TAL SAC
Dissolved	Analysis	7470A		1			225554	05/25/18 11:41	GSH	TAL SAC
Dissolved	Analysis	SM 2340B		1			225833	05/28/18 14:37	LW1	TAL SAC
Total/NA	Analysis	350.1		1	0.8 mL	8 mL	476437	05/16/18 00:13	MMH	TAL IRV
Total/NA	Analysis	SM 2320B		1			475473	05/10/18 15:15	YZ	TAL IRV
Total/NA	Analysis	SM 2510B		1			477517	05/21/18 11:14	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	476534	05/16/18 10:23	XL	TAL IRV
Total/NA	Prep	Distill/CN			50 mL	50 mL	476209	05/15/18 09:52	KMY	TAL IRV
Total/NA	Analysis	SM 4500 CN E		1			476290	05/15/18 13:36	KMY	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			475361	05/10/18 18:51	CMM	TAL IRV
Total/NA	Pre Prep	353.2 (NCell)			100.00 mL	50.00 mL	226828	06/02/18 11:53	JER	TAL SAC
Total/NA	Prep	353 (NCell-Hyd)			50.00 mL	40.00 mL	227050	06/04/18 13:48	JER	TAL SAC
Total/NA	Analysis	WS-WC-0050		1			227238	06/05/18 10:10	TCS	TAL SAC

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022
TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177
TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-477762/5
Matrix: Water
Analysis Batch: 477762

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.25	ug/L			05/22/18 08:53	1
Ethylbenzene	ND		0.50	0.25	ug/L			05/22/18 08:53	1
m,p-Xylene	ND		1.0	0.50	ug/L			05/22/18 08:53	1
o-Xylene	ND		0.50	0.25	ug/L			05/22/18 08:53	1
Toluene	ND		0.50	0.25	ug/L			05/22/18 08:53	1
Xylenes, Total	ND		1.0	0.50	ug/L			05/22/18 08:53	1
Naphthalene	0.674	J	1.0	0.40	ug/L			05/22/18 08:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*05/22/18 08:53*	*1*
Dibromofluoromethane (Surr)	*113*		*76 - 132*		*05/22/18 08:53*	*1*
Toluene-d8 (Surr)	*100*		*80 - 128*		*05/22/18 08:53*	*1*

Lab Sample ID: LCS 440-477762/6
Matrix: Water
Analysis Batch: 477762

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	25.0	22.7		ug/L		91	68 - 130
Ethylbenzene	25.0	27.1		ug/L		108	70 - 130
m,p-Xylene	25.0	26.4		ug/L		105	70 - 130
o-Xylene	25.0	27.1		ug/L		109	70 - 130
Toluene	25.0	25.4		ug/L		102	70 - 130
Naphthalene	25.0	27.9		ug/L		111	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*
Dibromofluoromethane (Surr)	*105*		*76 - 132*
Toluene-d8 (Surr)	*96*		*80 - 128*

Lab Sample ID: MB 440-478001/4
Matrix: Water
Analysis Batch: 478001

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	0.40	ug/L			05/23/18 08:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*80 - 120*		*05/23/18 08:06*	*1*
Dibromofluoromethane (Surr)	*99*		*76 - 132*		*05/23/18 08:06*	*1*
Toluene-d8 (Surr)	*97*		*80 - 128*		*05/23/18 08:06*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-478001/5
Matrix: Water
Analysis Batch: 478001

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Naphthalene			25.0	17.2		ug/L		69	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*89*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*76 - 132*
Toluene-d8 (Surr)	*97*		*80 - 128*

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 440-477761/5
Matrix: Water
Analysis Batch: 477761

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50	35	ug/L			05/22/18 08:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*113*		*76 - 132*		*05/22/18 08:53*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*05/22/18 08:53*	*1*
Toluene-d8 (Surr)	*100*		*80 - 128*		*05/22/18 08:53*	*1*

Lab Sample ID: LCS 440-477761/7
Matrix: Water
Analysis Batch: 477761

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Volatile Fuel Hydrocarbons (C4-C12)			500	453		ug/L		91	55 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*105*		*76 - 132*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*
Toluene-d8 (Surr)	*104*		*80 - 128*

Method: 8015B - Glycols -Direct Injection (GC/FID)

Lab Sample ID: MB 490-514271/11
Matrix: Water
Analysis Batch: 514271

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene glycol	ND		10	1.0	mg/L			05/11/18 17:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-butyl alcohol (Surr)	*96*		*70 - 130*		*05/11/18 17:42*	*1*

Method: 8015B - Glycols -Direct Injection (GC/FID) (Continued)

Lab Sample ID: LCS 490-514271/12
Matrix: Water
Analysis Batch: 514271

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ethylene glycol			50.0	50.3		mg/L		101	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
n-butyl alcohol (Surr)	*88*		*70 - 130*

Lab Sample ID: LCSD 490-514271/13
Matrix: Water
Analysis Batch: 514271

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylene glycol			50.0	45.6		mg/L		91	70 - 130	10	36

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
n-butyl alcohol (Surr)	*87*		*70 - 130*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 320-223298/1-A
Matrix: Water
Analysis Batch: 225024

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 223298

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	ND		50	16	ug/L		05/15/18 11:30	05/23/18 17:28	1
Motor Oil Range Organics (C25-C36)	ND		500	170	ug/L		05/15/18 11:30	05/23/18 17:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*72*		*56 - 145*	*05/15/18 11:30*	*05/23/18 17:28*	*1*

Lab Sample ID: LCS 320-223298/2-A
Matrix: Water
Analysis Batch: 225024

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 223298

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics (C10-C24)			300	251		ug/L		84	53 - 123		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl (Surr)	*76*		*56 - 145*

Lab Sample ID: LCS 320-223298/4-A
Matrix: Water
Analysis Batch: 225024

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 223298

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Motor Oil Range Organics (C25-C36)			900	791		ug/L		88	50 - 150		

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 320-223298/4-A
Matrix: Water
Analysis Batch: 225024

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 223298

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl (Surr)	*76*		*56 - 145*

Lab Sample ID: LCSD 320-223298/3-A
Matrix: Water
Analysis Batch: 225024

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 223298

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (C10-C24)			300	250		ug/L		83	53 - 123	0	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
o-Terphenyl (Surr)	*76*		*56 - 145*

Lab Sample ID: LCSD 320-223298/5-A
Matrix: Water
Analysis Batch: 225024

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 223298

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Motor Oil Range Organics (C25-C36)			900	836		ug/L		93	50 - 150	6	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
o-Terphenyl (Surr)	*74*		*56 - 145*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 440-475046/41
Matrix: Water
Analysis Batch: 475046

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	ND		0.15	0.070	mg/L			05/09/18 22:08	1
Nitrate as N	ND		0.11	0.055	mg/L			05/09/18 22:08	1

Lab Sample ID: LCS 440-475046/42
Matrix: Water
Analysis Batch: 475046

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrite as N			1.52	1.54		mg/L		101	90 - 110		
Nitrate as N			1.13	1.10		mg/L		98	90 - 110		

Lab Sample ID: 440-210940-2 MS
Matrix: Water
Analysis Batch: 475046

Client Sample ID: MW-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrite as N	ND		1.52	1.43		mg/L		94	80 - 120		

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 440-210940-2 MS
Matrix: Water
Analysis Batch: 475046

Client Sample ID: MW-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	ND		1.13	0.969		mg/L		86	80 - 120

Lab Sample ID: 440-210940-2 MSD
Matrix: Water
Analysis Batch: 475046

Client Sample ID: MW-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrite as N	ND		1.52	1.44		mg/L		94	80 - 120	0	20
Nitrate as N	ND		1.13	0.980		mg/L		87	80 - 120	1	20

Lab Sample ID: MB 440-475047/41
Matrix: Water
Analysis Batch: 475047

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50	0.25	mg/L			05/09/18 22:08	1
Fluoride	ND		0.50	0.25	mg/L			05/09/18 22:08	1
Sulfate	ND		0.50	0.25	mg/L			05/09/18 22:08	1

Lab Sample ID: LCS 440-475047/42
Matrix: Water
Analysis Batch: 475047

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	5.00	4.61		mg/L		92	90 - 110
Fluoride	5.00	4.76		mg/L		95	90 - 110
Sulfate	5.00	4.80		mg/L		96	90 - 110

Method: 300.0 - Anions, Ion Chromatography - DL

Lab Sample ID: 440-210940-2 MS
Matrix: Water
Analysis Batch: 475047

Client Sample ID: MW-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride - DL	16		5.00	21.3	E	mg/L		101	80 - 120
Fluoride - DL	0.81		5.00	5.29		mg/L		90	80 - 120
Sulfate - DL	220	E	5.00	221	E 4	mg/L		91	80 - 120

Lab Sample ID: 440-210940-2 MSD
Matrix: Water
Analysis Batch: 475047

Client Sample ID: MW-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride - DL	16		5.00	21.3	E	mg/L		102	80 - 120	0	20
Fluoride - DL	0.81		5.00	5.31		mg/L		90	80 - 120	0	20
Sulfate - DL	220	E	5.00	222	E 4	mg/L		99	80 - 120	0	20

Method: 314.0 LL - Perchlorate (IC)

Lab Sample ID: MB 440-477770/6
Matrix: Water
Analysis Batch: 477770

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			05/22/18 08:33	1

Lab Sample ID: LCS 440-477770/5
Matrix: Water
Analysis Batch: 477770

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	10.0	9.83		ug/L		98	85 - 115

Lab Sample ID: MRL 440-477770/4
Matrix: Water
Analysis Batch: 477770

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	1.00	0.776	J	ug/L		78	75 - 125

Lab Sample ID: MRL 440-477770/8
Matrix: Water
Analysis Batch: 477770

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	4.00	4.17		ug/L		104	75 - 125

Method: 8330A - Nitroaromatics and Nitramines

Lab Sample ID: MB 320-223301/1-A
Matrix: Water
Analysis Batch: 225011

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 223301

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dinitrobenzene	ND		0.10	0.050	ug/L		05/15/18 11:45	05/24/18 17:21	1
2,4-Dinitrotoluene	ND		0.10	0.050	ug/L		05/15/18 11:45	05/24/18 17:21	1
2,6-Dinitrotoluene	ND		0.10	0.050	ug/L		05/15/18 11:45	05/24/18 17:21	1
HMX	ND		0.10	0.036	ug/L		05/15/18 11:45	05/24/18 17:21	1
Nitrobenzene	ND		0.10	0.050	ug/L		05/15/18 11:45	05/24/18 17:21	1
Nitroglycerin	ND		0.65	0.33	ug/L		05/15/18 11:45	05/24/18 17:21	1
2-Nitrotoluene	ND		0.50	0.088	ug/L		05/15/18 11:45	05/24/18 17:21	1
3-Nitrotoluene	ND		0.50	0.057	ug/L		05/15/18 11:45	05/24/18 17:21	1
4-Nitrotoluene	ND		0.50	0.088	ug/L		05/15/18 11:45	05/24/18 17:21	1
RDX	ND		0.10	0.036	ug/L		05/15/18 11:45	05/24/18 17:21	1
1,3,5-Trinitrobenzene	ND		0.10	0.031	ug/L		05/15/18 11:45	05/24/18 17:21	1
2,4,6-Trinitrotoluene	ND		0.10	0.050	ug/L		05/15/18 11:45	05/24/18 17:21	1
PETN	ND		0.65	0.30	ug/L		05/15/18 11:45	05/24/18 17:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*86*		*79 - 111*	*05/15/18 11:45*	*05/24/18 17:21*	*1*

Method: 8330A - Nitroaromatics and Nitramines (Continued)

Lab Sample ID: LCS 320-223301/2-A
Matrix: Water
Analysis Batch: 225011

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 223301

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,3-Dinitrobenzene			1.00	0.926		ug/L		93	72 - 123		
2,4-Dinitrotoluene			1.00	0.888		ug/L		89	70 - 119		
2,6-Dinitrotoluene			1.00	0.887		ug/L		89	71 - 119		
HMX			1.00	0.892		ug/L		89	67 - 115		
Nitrobenzene			1.00	0.962		ug/L		96	69 - 119		
Nitroglycerin			5.00	4.55		ug/L		91	85 - 115		
2-Nitrotoluene			1.00	0.899		ug/L		90	64 - 120		
3-Nitrotoluene			1.00	0.907		ug/L		91	67 - 114		
4-Nitrotoluene			1.00	0.879		ug/L		88	67 - 115		
RDX			1.00	0.945		ug/L		94	68 - 122		
1,3,5-Trinitrobenzene			1.00	0.905		ug/L		90	74 - 120		
2,4,6-Trinitrotoluene			1.00	0.888		ug/L		89	69 - 111		
PETN			5.00	4.30		ug/L		86	84 - 117		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
3,4-Dinitrotoluene	*86*		*79 - 111*

Lab Sample ID: LCSD 320-223301/3-A
Matrix: Water
Analysis Batch: 225011

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 223301

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3-Dinitrobenzene			1.00	0.937		ug/L		94	72 - 123	1	29
2,4-Dinitrotoluene			1.00	0.894		ug/L		89	70 - 119	1	30
2,6-Dinitrotoluene			1.00	0.910		ug/L		91	71 - 119	3	29
HMX			1.00	0.895		ug/L		89	67 - 115	0	32
Nitrobenzene			1.00	0.932		ug/L		93	69 - 119	3	31
Nitroglycerin			5.00	4.47		ug/L		89	85 - 115	2	15
2-Nitrotoluene			1.00	0.874		ug/L		87	64 - 120	3	36
3-Nitrotoluene			1.00	0.867		ug/L		87	67 - 114	4	31
4-Nitrotoluene			1.00	0.855		ug/L		86	67 - 115	3	32
RDX			1.00	0.944		ug/L		94	68 - 122	0	32
1,3,5-Trinitrobenzene			1.00	0.918		ug/L		92	74 - 120	1	29
2,4,6-Trinitrotoluene			1.00	0.894		ug/L		89	69 - 111	1	28
PETN			5.00	4.23		ug/L		85	84 - 117	1	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
3,4-Dinitrotoluene	*84*		*79 - 111*

Method: 6010B - Metals (ICP)

Lab Sample ID: LCS 320-223675/2-A
Matrix: Water
Analysis Batch: 224395

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 223675

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfur			10.0	9.72		mg/L		97	80 - 120		

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 320-223220/1-B
Matrix: Water
Analysis Batch: 224395

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 223675

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	ND		0.50	0.30	mg/L		05/17/18 07:00	05/18/18 15:46	1

Lab Sample ID: 440-210940-1 MS
Matrix: Water
Analysis Batch: 224395

Client Sample ID: MW-6
Prep Type: Dissolved
Prep Batch: 223675

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfur	74		10.0	84.1	4	mg/L		99	80 - 120

Lab Sample ID: 440-210940-1 MSD
Matrix: Water
Analysis Batch: 224395

Client Sample ID: MW-6
Prep Type: Dissolved
Prep Batch: 223675

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfur	74		10.0	83.6	4	mg/L		93	80 - 120	1	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: LCS 320-223676/2-A
Matrix: Water
Analysis Batch: 223984

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 223676

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.0500	0.0507		mg/L		101	80 - 120
Aluminum	1.00	0.924		mg/L		92	80 - 120
Antimony	0.200	0.201		mg/L		101	80 - 120
Arsenic	0.200	0.197		mg/L		98	80 - 120
Barium	0.200	0.199		mg/L		99	80 - 120
Beryllium	0.200	0.202		mg/L		101	80 - 120
Cadmium	0.200	0.199		mg/L		100	80 - 120
Calcium	1.00	1.06		mg/L		106	80 - 120
Chromium	0.200	0.200		mg/L		100	80 - 120
Cobalt	0.200	0.208		mg/L		104	80 - 120
Copper	0.200	0.197		mg/L		99	80 - 120
Iron	1.00	0.980		mg/L		98	80 - 120
Lead	0.200	0.203		mg/L		101	80 - 120
Magnesium	1.00	0.982		mg/L		98	80 - 120
Manganese	0.200	0.197		mg/L		98	80 - 120
Molybdenum	0.200	0.201		mg/L		101	80 - 120
Nickel	0.200	0.199		mg/L		100	80 - 120
Potassium	1.00	0.956		mg/L		96	80 - 120
Selenium	0.200	0.192		mg/L		96	80 - 120
Sodium	1.00	0.963		mg/L		96	80 - 120
Thallium	0.0500	0.0503		mg/L		101	80 - 120
Vanadium	0.200	0.198		mg/L		99	80 - 120
Zinc	0.200	0.195		mg/L		98	80 - 120

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 320-223220/1-C
Matrix: Water
Analysis Batch: 225040

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 223676

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		05/17/18 07:00	05/22/18 14:44	1
Aluminum	ND		0.050	0.025	mg/L		05/17/18 07:00	05/22/18 14:44	1
Antimony	ND		0.0020	0.00020	mg/L		05/17/18 07:00	05/22/18 14:44	1
Arsenic	ND		0.0020	0.0010	mg/L		05/17/18 07:00	05/22/18 14:44	1
Barium	ND		0.0010	0.00050	mg/L		05/17/18 07:00	05/22/18 14:44	1
Beryllium	ND		0.0010	0.00010	mg/L		05/17/18 07:00	05/22/18 14:44	1
Cadmium	ND		0.0010	0.00050	mg/L		05/17/18 07:00	05/22/18 14:44	1
Calcium	ND		0.30	0.17	mg/L		05/17/18 07:00	05/22/18 14:44	1
Chromium	ND		0.0020	0.0010	mg/L		05/17/18 07:00	05/22/18 14:44	1
Cobalt	ND		0.0010	0.00060	mg/L		05/17/18 07:00	05/22/18 14:44	1
Copper	ND		0.0020	0.0010	mg/L		05/17/18 07:00	05/22/18 14:44	1
Iron	ND		0.050	0.025	mg/L		05/17/18 07:00	05/22/18 14:44	1
Lead	ND		0.0010	0.00060	mg/L		05/17/18 07:00	05/22/18 14:44	1
Magnesium	ND		0.050	0.025	mg/L		05/17/18 07:00	05/22/18 14:44	1
Manganese	ND		0.0025	0.0014	mg/L		05/17/18 07:00	05/22/18 14:44	1
Molybdenum	ND		0.0020	0.00060	mg/L		05/17/18 07:00	05/22/18 14:44	1
Nickel	ND		0.0020	0.0010	mg/L		05/17/18 07:00	05/22/18 14:44	1
Potassium	ND		0.050	0.025	mg/L		05/17/18 07:00	05/22/18 14:44	1
Selenium	ND		0.0020	0.0010	mg/L		05/17/18 07:00	05/22/18 14:44	1
Sodium	ND		0.10	0.080	mg/L		05/17/18 07:00	05/22/18 14:44	1
Thallium	ND		0.0010	0.00050	mg/L		05/17/18 07:00	05/22/18 14:44	1
Vanadium	ND		0.010	0.0030	mg/L		05/17/18 07:00	05/22/18 14:44	1
Zinc	ND		0.0050	0.0040	mg/L		05/17/18 07:00	05/22/18 14:44	1

Lab Sample ID: 440-210940-1 MS
Matrix: Water
Analysis Batch: 223984

Client Sample ID: MW-6
Prep Type: Dissolved
Prep Batch: 223676

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	ND		0.0500	0.0501		mg/L		100	80 - 120
Aluminum	ND		1.00	0.935		mg/L		94	80 - 120
Antimony	0.00033	J	0.200	0.205		mg/L		102	80 - 120
Arsenic	1.6		0.200	1.85	4	mg/L		123	80 - 120
Barium	0.041		0.200	0.248		mg/L		104	80 - 120
Beryllium	ND		0.200	0.212		mg/L		106	80 - 120
Cadmium	ND		0.200	0.199		mg/L		100	80 - 120
Calcium	130		1.00	129	4	mg/L		27	80 - 120
Chromium	ND		0.200	0.197		mg/L		99	80 - 120
Cobalt	0.0015		0.200	0.195		mg/L		97	80 - 120
Copper	ND		0.200	0.187		mg/L		94	80 - 120
Iron	0.87		1.00	1.84		mg/L		97	80 - 120
Lead	ND		0.200	0.202		mg/L		101	80 - 120
Magnesium	41		1.00	42.0	4	mg/L		84	80 - 120
Manganese	6.3		0.200	6.27	4	mg/L		4	80 - 120
Molybdenum	0.0032		0.200	0.216		mg/L		106	80 - 120
Nickel	0.0012	J	0.200	0.188		mg/L		93	80 - 120
Potassium	14		1.00	14.8	4	mg/L		87	80 - 120
Selenium	ND		0.200	0.189		mg/L		94	80 - 120

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 440-210940-1 MS
Matrix: Water
Analysis Batch: 223984

Client Sample ID: MW-6
Prep Type: Dissolved
Prep Batch: 223676

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium	130		1.00	127	4	mg/L		93	80 - 120
Thallium	ND		0.0500	0.0501		mg/L		100	80 - 120
Vanadium	ND		0.200	0.200		mg/L		100	80 - 120
Zinc	0.0099		0.200	0.202		mg/L		96	80 - 120

Lab Sample ID: 440-210940-1 MSD
Matrix: Water
Analysis Batch: 223984

Client Sample ID: MW-6
Prep Type: Dissolved
Prep Batch: 223676

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	ND		0.0500	0.0492		mg/L		98	80 - 120	2	15
Aluminum	ND		1.00	0.931		mg/L		93	80 - 120	0	15
Antimony	0.00033	J	0.200	0.203		mg/L		102	80 - 120	1	15
Arsenic	1.6		0.200	1.78	4	mg/L		89	80 - 120	4	15
Barium	0.041		0.200	0.243		mg/L		101	80 - 120	2	15
Beryllium	ND		0.200	0.210		mg/L		105	80 - 120	1	15
Cadmium	ND		0.200	0.197		mg/L		98	80 - 120	1	15
Calcium	130		1.00	127	4	mg/L		-128	80 - 120	1	15
Chromium	ND		0.200	0.193		mg/L		97	80 - 120	2	15
Cobalt	0.0015		0.200	0.193		mg/L		96	80 - 120	1	15
Copper	ND		0.200	0.184		mg/L		92	80 - 120	2	15
Iron	0.87		1.00	1.81		mg/L		94	80 - 120	2	15
Lead	ND		0.200	0.195		mg/L		98	80 - 120	3	15
Magnesium	41		1.00	43.5	4	mg/L		229	80 - 120	3	15
Manganese	6.3		0.200	6.30	4	mg/L		19	80 - 120	0	15
Molybdenum	0.0032		0.200	0.204		mg/L		101	80 - 120	5	15
Nickel	0.0012	J	0.200	0.185		mg/L		92	80 - 120	1	15
Potassium	14		1.00	14.9	4	mg/L		96	80 - 120	1	17
Selenium	ND		0.200	0.187		mg/L		93	80 - 120	1	15
Sodium	130		1.00	130	4	mg/L		383	80 - 120	2	15
Thallium	ND		0.0500	0.0483		mg/L		97	80 - 120	4	15
Vanadium	ND		0.200	0.198		mg/L		99	80 - 120	1	15
Zinc	0.0099		0.200	0.194		mg/L		92	80 - 120	4	15

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 320-225414/11-A
Matrix: Water
Analysis Batch: 225554

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 225414

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		05/24/18 19:30	05/25/18 09:44	1

Lab Sample ID: LCS 320-225414/12-A
Matrix: Water
Analysis Batch: 225554

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 225414

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00100	0.000943		mg/L		94	82 - 113

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 440-476437/77
Matrix: Water
Analysis Batch: 476437

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	ND		0.20	0.10	mg/L			05/15/18 23:23	1

Lab Sample ID: LCS 440-476437/78
Matrix: Water
Analysis Batch: 476437

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia (as N)	5.00	4.99		mg/L		100	90 - 110

Lab Sample ID: MRL 440-476437/9
Matrix: Water
Analysis Batch: 476437

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia (as N)	0.200	0.203		mg/L		102	50 - 150

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 440-475473/57
Matrix: Water
Analysis Batch: 475473

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	ND		4.0	4.0	mg/L			05/10/18 11:27	1
Bicarbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			05/10/18 11:27	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			05/10/18 11:27	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			05/10/18 11:27	1

Lab Sample ID: LCS 440-475473/56
Matrix: Water
Analysis Batch: 475473

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3	98.9	110		mg/L		111	80 - 120

Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: MB 440-477517/3
Matrix: Water
Analysis Batch: 477517

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		1.0	1.0	umhos/cm			05/21/18 09:08	1

Method: SM 2510B - Conductivity, Specific Conductance (Continued)

Lab Sample ID: LCS 440-477517/4
Matrix: Water
Analysis Batch: 477517

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Specific Conductance	953	1010		umhos/cm		106	90 - 110

Lab Sample ID: 440-210940-1 DU
Matrix: Water
Analysis Batch: 477517

Client Sample ID: MW-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Specific Conductance	1400		1420		umhos/cm		0.6	5

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 440-476534/1
Matrix: Water
Analysis Batch: 476534

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	5.0	mg/L			05/16/18 10:23	1

Lab Sample ID: LCS 440-476534/2
Matrix: Water
Analysis Batch: 476534

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1000	990		mg/L		99	90 - 110

Method: SM 4500 CN E - Cyanide, Total

Lab Sample ID: MB 440-476209/1-A
Matrix: Water
Analysis Batch: 476290

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 476209

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.025	0.013	mg/L		05/15/18 09:52	05/15/18 13:35	1

Lab Sample ID: LCS 440-476209/2-A
Matrix: Water
Analysis Batch: 476290

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 476209

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.200	0.189		mg/L		95	90 - 110

Method: WS-WC-0050 - Nitrocellulose

Lab Sample ID: MB 320-226828/1-B
Matrix: Water
Analysis Batch: 227238

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 227050

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrocellulose	ND		2.0	0.48	mg/L		06/04/18 13:48	06/05/18 09:44	1

Lab Sample ID: LCS 320-226828/2-B
Matrix: Water
Analysis Batch: 227238

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 227050

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrocellulose			5.06	4.31		mg/L		85	26 - 144		

Lab Sample ID: 440-210940-1 MS
Matrix: Water
Analysis Batch: 227238

Client Sample ID: MW-6
Prep Type: Total/NA
Prep Batch: 227050

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrocellulose	ND		5.06	4.37		mg/L		86	26 - 144		

Lab Sample ID: 440-210940-1 MSD
Matrix: Water
Analysis Batch: 227238

Client Sample ID: MW-6
Prep Type: Total/NA
Prep Batch: 227050

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrocellulose	ND		5.06	4.19		mg/L		83	26 - 144	4	45

QC Association Summary

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-210940-1

GC/MS VOA

Analysis Batch: 477761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-210940-1	MW-6	Total/NA	Water	8260B/CA_LUFT MS	
440-210940-2	MW-3	Total/NA	Water	8260B/CA_LUFT MS	
MB 440-477761/5	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	
LCS 440-477761/7	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	

Analysis Batch: 477762

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-210940-1	MW-6	Total/NA	Water	8260B	
440-210940-2	MW-3	Total/NA	Water	8260B	
MB 440-477762/5	Method Blank	Total/NA	Water	8260B	
LCS 440-477762/6	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 478001

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-210940-1 - RA	MW-6	Total/NA	Water	8260B	
MB 440-478001/4	Method Blank	Total/NA	Water	8260B	
LCS 440-478001/5	Lab Control Sample	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 514271

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-210940-1	MW-6	Total/NA	Water	8015B	
440-210940-2	MW-3	Total/NA	Water	8015B	
MB 490-514271/11	Method Blank	Total/NA	Water	8015B	
LCS 490-514271/12	Lab Control Sample	Total/NA	Water	8015B	
LCSD 490-514271/13	Lab Control Sample Dup	Total/NA	Water	8015B	

GC Semi VOA

Prep Batch: 223298

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-210940-1	MW-6	Total/NA	Water	3510C	
440-210940-2	MW-3	Total/NA	Water	3510C	
MB 320-223298/1-A	Method Blank	Total/NA	Water	3510C	
LCS 320-223298/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 320-223298/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 320-223298/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 320-223298/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 225024

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-210940-1	MW-6	Total/NA	Water	8015B	223298
440-210940-2	MW-3	Total/NA	Water	8015B	223298
MB 320-223298/1-A	Method Blank	Total/NA	Water	8015B	223298
LCS 320-223298/2-A	Lab Control Sample	Total/NA	Water	8015B	223298
LCS 320-223298/4-A	Lab Control Sample	Total/NA	Water	8015B	223298

GC Semi VOA (Continued)

Analysis Batch: 225024 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 320-223298/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	223298
LCSD 320-223298/5-A	Lab Control Sample Dup	Total/NA	Water	8015B	223298

HPLC/IC

Prep Batch: 223301

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-210940-1	MW-6	Total/NA	Water	8330-Prep	
440-210940-2	MW-3	Total/NA	Water	8330-Prep	
MB 320-223301/1-A	Method Blank	Total/NA	Water	8330-Prep	
LCS 320-223301/2-A	Lab Control Sample	Total/NA	Water	8330-Prep	
LCSD 320-223301/3-A	Lab Control Sample Dup	Total/NA	Water	8330-Prep	

Analysis Batch: 225011

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-210940-1	MW-6	Total/NA	Water	8330A	223301
440-210940-2	MW-3	Total/NA	Water	8330A	223301
MB 320-223301/1-A	Method Blank	Total/NA	Water	8330A	223301
LCS 320-223301/2-A	Lab Control Sample	Total/NA	Water	8330A	223301
LCSD 320-223301/3-A	Lab Control Sample Dup	Total/NA	Water	8330A	223301

Analysis Batch: 225769

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-210940-1	MW-6	Total/NA	Water	8330A	223301
440-210940-2	MW-3	Total/NA	Water	8330A	223301
MB 320-223301/1-A	Method Blank	Total/NA	Water	8330A	223301

Analysis Batch: 475046

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-210940-1	MW-6	Total/NA	Water	300.0	
440-210940-2	MW-3	Total/NA	Water	300.0	
MB 440-475046/41	Method Blank	Total/NA	Water	300.0	
LCS 440-475046/42	Lab Control Sample	Total/NA	Water	300.0	
440-210940-2 MS	MW-3	Total/NA	Water	300.0	
440-210940-2 MSD	MW-3	Total/NA	Water	300.0	

Analysis Batch: 475047

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-210940-1	MW-6	Total/NA	Water	300.0	
440-210940-1	MW-6	Total/NA	Water	300.0	
440-210940-2 - DL	MW-3	Total/NA	Water	300.0	
440-210940-2	MW-3	Total/NA	Water	300.0	
MB 440-475047/41	Method Blank	Total/NA	Water	300.0	
LCS 440-475047/42	Lab Control Sample	Total/NA	Water	300.0	
440-210940-2 MS - DL	MW-3	Total/NA	Water	300.0	
440-210940-2 MSD - DL	MW-3	Total/NA	Water	300.0	

Analysis Batch: 477770

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-210940-1	MW-6	Total/NA	Water	314.0 LL	

HPLC/IC (Continued)

Analysis Batch: 477770 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-210940-2	MW-3	Total/NA	Water	314.0 LL	
MB 440-477770/6	Method Blank	Total/NA	Water	314.0 LL	
LCS 440-477770/5	Lab Control Sample	Total/NA	Water	314.0 LL	
MRL 440-477770/4	Lab Control Sample	Total/NA	Water	314.0 LL	
MRL 440-477770/8	Lab Control Sample	Total/NA	Water	314.0 LL	

Metals

Filtration Batch: 223220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-210940-1	MW-6	Dissolved	Water	Filtration	
440-210940-2	MW-3	Dissolved	Water	Filtration	
MB 320-223220/1-B	Method Blank	Dissolved	Water	Filtration	
MB 320-223220/1-C	Method Blank	Dissolved	Water	Filtration	
440-210940-1 MS	MW-6	Dissolved	Water	Filtration	
440-210940-1 MSD	MW-6	Dissolved	Water	Filtration	

Prep Batch: 223675

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-210940-1	MW-6	Dissolved	Water	3010A	223220
440-210940-2	MW-3	Dissolved	Water	3010A	223220
MB 320-223220/1-B	Method Blank	Dissolved	Water	3010A	223220
LCS 320-223675/2-A	Lab Control Sample	Total/NA	Water	3010A	
440-210940-1 MS	MW-6	Dissolved	Water	3010A	223220
440-210940-1 MSD	MW-6	Dissolved	Water	3010A	223220

Prep Batch: 223676

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-210940-1	MW-6	Dissolved	Water	3005A	223220
440-210940-2	MW-3	Dissolved	Water	3005A	223220
MB 320-223220/1-C	Method Blank	Dissolved	Water	3005A	223220
LCS 320-223676/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
440-210940-1 MS	MW-6	Dissolved	Water	3005A	223220
440-210940-1 MSD	MW-6	Dissolved	Water	3005A	223220

Analysis Batch: 223984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-210940-1	MW-6	Dissolved	Water	6020	223676
440-210940-2	MW-3	Dissolved	Water	6020	223676
LCS 320-223676/2-A	Lab Control Sample	Total Recoverable	Water	6020	223676
440-210940-1 MS	MW-6	Dissolved	Water	6020	223676
440-210940-1 MSD	MW-6	Dissolved	Water	6020	223676

Analysis Batch: 224395

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-210940-1	MW-6	Dissolved	Water	6010B	223675
440-210940-2	MW-3	Dissolved	Water	6010B	223675
MB 320-223220/1-B	Method Blank	Dissolved	Water	6010B	223675
LCS 320-223675/2-A	Lab Control Sample	Total/NA	Water	6010B	223675
440-210940-1 MS	MW-6	Dissolved	Water	6010B	223675

Metals (Continued)

Analysis Batch: 224395 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-210940-1 MSD	MW-6	Dissolved	Water	6010B	223675

Analysis Batch: 225040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 320-223220/1-C	Method Blank	Dissolved	Water	6020	223676

Prep Batch: 225414

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-210940-1	MW-6	Dissolved	Water	7470A	223220
440-210940-2	MW-3	Dissolved	Water	7470A	223220
MB 320-225414/11-A	Method Blank	Total/NA	Water	7470A	
LCS 320-225414/12-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 225554

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-210940-1	MW-6	Dissolved	Water	7470A	225414
440-210940-2	MW-3	Dissolved	Water	7470A	225414
MB 320-225414/11-A	Method Blank	Total/NA	Water	7470A	225414
LCS 320-225414/12-A	Lab Control Sample	Total/NA	Water	7470A	225414

Analysis Batch: 225833

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-210940-1	MW-6	Dissolved	Water	SM 2340B	
440-210940-2	MW-3	Dissolved	Water	SM 2340B	

General Chemistry

Pre Prep Batch: 226828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-210940-1	MW-6	Total/NA	Water	353.2 (NCell)	
440-210940-2	MW-3	Total/NA	Water	353.2 (NCell)	
MB 320-226828/1-B	Method Blank	Total/NA	Water	353.2 (NCell)	
LCS 320-226828/2-B	Lab Control Sample	Total/NA	Water	353.2 (NCell)	
440-210940-1 MS	MW-6	Total/NA	Water	353.2 (NCell)	
440-210940-1 MSD	MW-6	Total/NA	Water	353.2 (NCell)	

Prep Batch: 227050

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-210940-1	MW-6	Total/NA	Water	353 (NCell-Hyd)	226828
440-210940-2	MW-3	Total/NA	Water	353 (NCell-Hyd)	226828
MB 320-226828/1-B	Method Blank	Total/NA	Water	353 (NCell-Hyd)	226828
LCS 320-226828/2-B	Lab Control Sample	Total/NA	Water	353 (NCell-Hyd)	226828
440-210940-1 MS	MW-6	Total/NA	Water	353 (NCell-Hyd)	226828
440-210940-1 MSD	MW-6	Total/NA	Water	353 (NCell-Hyd)	226828

Analysis Batch: 227238

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-210940-1	MW-6	Total/NA	Water	WS-WC-0050	227050
440-210940-2	MW-3	Total/NA	Water	WS-WC-0050	227050
MB 320-226828/1-B	Method Blank	Total/NA	Water	WS-WC-0050	227050

General Chemistry (Continued)

Analysis Batch: 227238 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 320-226828/2-B	Lab Control Sample	Total/NA	Water	WS-WC-0050	227050
440-210940-1 MS	MW-6	Total/NA	Water	WS-WC-0050	227050
440-210940-1 MSD	MW-6	Total/NA	Water	WS-WC-0050	227050

Analysis Batch: 475361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-210940-1	MW-6	Total/NA	Water	SM 4500 H+ B	
440-210940-2	MW-3	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 475473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-210940-1	MW-6	Total/NA	Water	SM 2320B	
440-210940-2	MW-3	Total/NA	Water	SM 2320B	
MB 440-475473/57	Method Blank	Total/NA	Water	SM 2320B	
LCS 440-475473/56	Lab Control Sample	Total/NA	Water	SM 2320B	

Prep Batch: 476209

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-210940-1	MW-6	Total/NA	Water	Distill/CN	
440-210940-2	MW-3	Total/NA	Water	Distill/CN	
MB 440-476209/1-A	Method Blank	Total/NA	Water	Distill/CN	
LCS 440-476209/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	

Analysis Batch: 476290

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-210940-1	MW-6	Total/NA	Water	SM 4500 CN E	476209
440-210940-2	MW-3	Total/NA	Water	SM 4500 CN E	476209
MB 440-476209/1-A	Method Blank	Total/NA	Water	SM 4500 CN E	476209
LCS 440-476209/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN E	476209

Analysis Batch: 476437

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-210940-1	MW-6	Total/NA	Water	350.1	
440-210940-2	MW-3	Total/NA	Water	350.1	
MB 440-476437/77	Method Blank	Total/NA	Water	350.1	
LCS 440-476437/78	Lab Control Sample	Total/NA	Water	350.1	
MRL 440-476437/9	Lab Control Sample	Total/NA	Water	350.1	

Analysis Batch: 476534

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-210940-1	MW-6	Total/NA	Water	SM 2540C	
440-210940-2	MW-3	Total/NA	Water	SM 2540C	
MB 440-476534/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 440-476534/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 477517

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-210940-1	MW-6	Total/NA	Water	SM 2510B	
440-210940-2	MW-3	Total/NA	Water	SM 2510B	
MB 440-477517/3	Method Blank	Total/NA	Water	SM 2510B	
LCS 440-477517/4	Lab Control Sample	Total/NA	Water	SM 2510B	

General Chemistry (Continued)

Analysis Batch: 477517 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-210940-1 DU	MW-6	Total/NA	Water	SM 2510B	

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
p1	The %Difference between the primary and confirmation column/detector is >40%. The lower value has been reported.
E	Result exceeded calibration range.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-210940-1

Laboratory: TestAmerica Irvine

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	CA ELAP 2706	06-30-18 *

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8260B		Water	m,p-Xylene
8260B		Water	Xylenes, Total
SM 2320B		Water	Bicarbonate Alkalinity as CaCO3
SM 2320B		Water	Carbonate Alkalinity as CaCO3
SM 2320B		Water	Hydroxide Alkalinity as CaCO3

Laboratory: TestAmerica Nashville

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2938	10-31-18

Laboratory: TestAmerica Sacramento

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2897	01-31-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6010B	3010A	Water	Sulfur
6020	3005A	Water	Aluminum
6020	3005A	Water	Calcium
6020	3005A	Water	Iron
6020	3005A	Water	Magnesium
6020	3005A	Water	Manganese
6020	3005A	Water	Potassium
6020	3005A	Water	Sodium
8015B	3510C	Water	Motor Oil Range Organics (C25-C36)
8330A	8330-Prep	Water	Nitroglycerin
8330A	8330-Prep	Water	PETN
WS-WC-0050	353 (NCell-Hyd)	Water	Nitrocellulose

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

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Suite 100
Irvine, CA 92614
Phone: 949.261.1022 Fax:

Chain of Custody Record

194890

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THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

6/12/2018

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☒ Other:

Client Contact	Project Manager: Eric Fordham	Site Contact:	Date:	COC No: 194890
Company Name: GeoPentech	Tel/Fax: 714-796-9100	Lab Contact:	Carrier:	____ of ____ COCs
Address: 5251 California Ave. Suite 210	Analysis Turnaround Time			Sampler:
City/State/Zip: Irvine, CA, 92617	☐ CALENDAR DAYS ☒ WORKING DAYS			For Lab Use Only:
Phone: 714-796-9100	TAT if different from Below: Standard			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling
Project Name: Blue Eagle Mine	☐ 1 week			
Site: Rosamond, CA	☐ 2 days			Job / SDG No
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	DRO/MRO	Energetics	Nitrocellulose	Dissolved Metals	Dissolved Hardness	Ethylene Glycol	Alkalinity	300, EC, pH, TDS	Ammonia	Cyanide	VOC +GRO	Perchlorate	Sample Specific Notes
MW-6	5-9-18	8:56	G	W	18			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
MW-3	5-9-18	11:09	G	W	18			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

440-210940 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____ — 3 5 2

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☒ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

All Samples were put on Ice after Collection

Quotation #: 32011123

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp (°C): Obs'd: _____ Corr'd. _____ Therm ID No.: _____

Relinquished by	Company	Date/Time	Received by:	Company	Date/Time.
Jennipher Von Stauffenberg JVS	GeoPentech	5-9-18/6:30			
Relinquished by.	Company.	Date/Time	Received by	Company	Date/Time.
Relinquished by.	Company:	Date/Time	Received in Laboratory by: TW CW	Company: TA IRV	Date/Time: 5/9/18 1850

3.8 | 3.2
3.3 | 2.7 IR-6

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Irvine CA 92614-5817
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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Laver, Linda C	Carrier Tracking No(s):	COC No: 440-121762.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: linda.laver@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon		Job #: 440-210940-1
Address: 880 Riverside Parkway,	Due Date Requested: 5/25/2018			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #			
Email:	WO #			
Project Name: Blue Eagle Lode Mine	Project #: 32011165			
Site:	SSOW#			

Analysis Requested

Preservation Codes:
A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Z - other (specify); Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Water, Solid, Oil, Tissue, Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015B_DRO/3510C_IVWT (MOD) CALUFT DRO/MRO	3330A/8330_SPE_P_IVWT (MOD) Standard List	353.2_NitrocatI/NCEL_Prep_A	6010B/Filtration_ME (MOD) Pick Four Analytes	7470A/Filtration_ME Dissolved Mercury	SM2340B/Filtration_AC (MOD) All Hardness Forms	6020/Filtration_ME Dissolved Metals Including Ca & Mg	Total Number of containers	Special Instructions/Note:
			Preservation Code:												
MW-6 (440-210940-1)	5/9/18	08:56 Pacific		Water			X	X	X	X	X	X	X	7	Project was quoted as DRO (C10-C24) and MRO (C25-C36).
MW-3 (440-210940-2)	5/9/18	11:09 Pacific		Water			X	X	X	X	X	X	X	7	Project was quoted as DRO (C10-C24) and MRO (C25-C36).

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification: *Unconfirmed*	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I, II, III, IV, Other (specify) — Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:	Time:		Method of Shipment:	
Relinquished by:	Date/Time: 5/10/18 1700	Company: FAHKV	Received by:	Date/Time: 5-11-18 840	Company: TA-Sac	
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:	
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:	

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No:	Cooler Temperature(s) °C and Other Remarks: 0.6

Ver: 09/20/2016

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

440-210940 Chain of Custody

Cooler Received/Opened On 5/11/2018 @ 10:00

Time Samples Removed From Cooler 15:32 Time Samples Placed In Storage 15:38 (2 Hour Window)

1. Tracking # 0860 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 160656838 pH Strip Lot N/A Chlorine Strip Lot N/A

2. Temperature of rep. sample or temp blank when opened: 1.9 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES..NO...NA

If yes, how many and where: 1 (Front)

5. Were the seals intact, signed, and dated correctly? YES..NO...NA

6. Were custody papers inside cooler? YES..NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) 2.2

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES..NO..NA MW-6 #D-1 BIS

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

Larger than this.

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) KD

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) KD

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) KD

I certify that I attached a label with the unique LIMS number to each container (intial) KD

21. Were there Non-Conformance issues at login? YES..NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment

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Chain of Custody Record

Loc: 440
210940

TestAmerica
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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Laver, Linda C.		COC No: 440-121761.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: linda.laver@testamericainc.com	State of Or.: California	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): NELAP - Oregon		Job #: 440-210940-1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 5/25/2018			
City: Nashville	TAT Requested (days):			
State, Zip: TN, 37204				
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:			
Email:	WO #:			
Project Name: Blue Eagle Lode Mine	Project #: 32011165			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015B_DAI_GLY/ (MOD) Custom Glycols List	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-6 (440-210940-1)	5/9/18	08:56 Pacific		Water			X	3	
MW-3 (440-210940-2)	5/9/18	11:09 Pacific		Water			X	3	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by:	Date/Time: 5/10/18 0700	Company: FedEx	Received by: Date/Time: 05-11-2018 10:00 Company: TA-IRV
Relinquished by:	Date/Time:	Company	Received by: Date/Time: Company
Relinquished by:	Date/Time:	Company	Received by: Date/Time: Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.9

Ver: 09/20/2016

Login Sample Receipt Checklist

Client: GeoPentech, Inc

Job Number: 440-210940-1

Login Number: 210940
List Number: 1
Creator: Escalante, Maria I

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	Not present
Sample custody seals, if present, are intact.	N/A	Not Present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: GeoPentech, Inc

Job Number: 440-210940-1

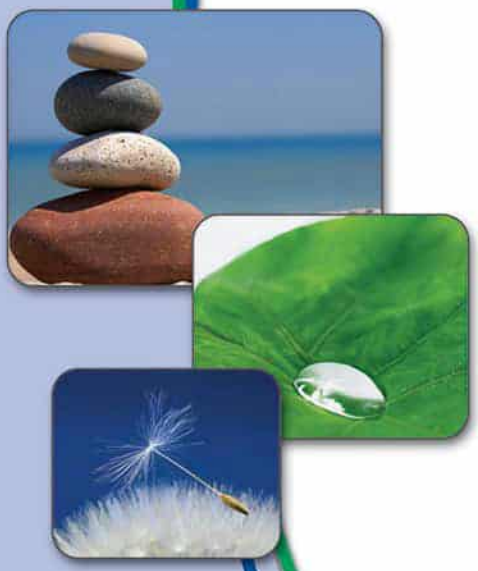
Login Number: 210940
List Number: 3
Creator: Gooch, Mayce

List Source: TestAmerica Sacramento
List Creation: 05/11/18 05:39 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.6c, 5.2c, 1.0c, 0.4c
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-212804-1
Client Project/Site: Blue Eagle Lode Mine

For:
GeoPentech, Inc
5251 California Ave
Suite 210
Irvine, California 92617

Attn: Eric Fordham

Linda C. Laver

Authorized for release by:
6/26/2018 10:25:22 AM

Linda C. Laver, Project Manager II
(916)374-4362
linda.laver@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-212804-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-212804-1	MW-5	Water	06/04/18 10:05	06/05/18 13:25
440-212804-2	MW-6	Water	06/04/18 11:22	06/05/18 13:25
440-212804-3	MW-3	Water	06/04/18 12:38	06/05/18 13:25
440-212804-4	MW-4	Water	06/04/18 13:49	06/05/18 13:25
440-212804-5	Equipment Blank	Water	06/04/18 13:15	06/05/18 13:25
440-212804-6	MW-1	Water	06/05/18 09:36	06/05/18 13:25
440-212804-7	MW-2	Water	06/05/18 08:40	06/05/18 13:25

Job ID: 440-212804-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-212804-1

Receipt
The samples were received on 6/5/2018 1:25 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.6° C.

HPLC/IC
Method(s) 314.0 LL: The following sample was diluted due to interferences of the sample matrix: MW-4 (440-212804-4). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
The requested analyses includes dissolved metals and hardness but samples were not filtered in the field. The following samples were filtered and preserved upon receipt to the laboratory:

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Client Sample ID: MW-5

Date Collected: 06/04/18 10:05
Date Received: 06/05/18 13:25

Lab Sample ID: 440-212804-1

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**19**		0.50	0.25	mg/L			06/05/18 19:30	1
Nitrate as N	**0.15**		0.11	0.055	mg/L			06/05/18 19:30	1
Fluoride	ND		0.50	0.25	mg/L			06/05/18 19:30	1
Nitrite as N	ND		0.15	0.070	mg/L			06/05/18 19:30	1
Sulfate	**250**		25	13	mg/L			06/05/18 22:32	50

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			06/07/18 16:00	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	**90**		0.50	0.30	mg/L		06/11/18 07:30	06/14/18 12:18	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		06/11/18 07:30	06/11/18 15:04	1
Aluminum	**0.036**	**J**	0.050	0.025	mg/L		06/11/18 07:30	06/11/18 15:04	1
Antimony	ND		0.0020	0.00020	mg/L		06/11/18 07:30	06/11/18 15:04	1
Arsenic	**0.86**		0.0020	0.0010	mg/L		06/11/18 07:30	06/11/18 15:04	1
Barium	**0.015**		0.0010	0.00050	mg/L		06/11/18 07:30	06/11/18 15:04	1
Beryllium	**0.00021**	**J**	0.0010	0.00010	mg/L		06/11/18 07:30	06/11/18 15:04	1
Cadmium	**0.00070**	**J**	0.0010	0.00050	mg/L		06/11/18 07:30	06/11/18 15:04	1
Calcium	**39**		0.30	0.17	mg/L		06/11/18 07:30	06/11/18 15:04	1
Chromium	ND		0.0020	0.0010	mg/L		06/11/18 07:30	06/11/18 15:04	1
Cobalt	**0.0086**		0.0010	0.00060	mg/L		06/11/18 07:30	06/11/18 15:04	1
Copper	**0.017**		0.0020	0.0010	mg/L		06/11/18 07:30	06/11/18 15:04	1
Iron	ND		0.050	0.025	mg/L		06/11/18 07:30	06/11/18 15:04	1
Lead	ND		0.0010	0.00060	mg/L		06/11/18 07:30	06/11/18 15:04	1
Magnesium	**17**		0.050	0.025	mg/L		06/11/18 07:30	06/11/18 15:04	1
Manganese	**0.45**		0.0025	0.0014	mg/L		06/11/18 07:30	06/11/18 15:04	1
Molybdenum	**0.0035**		0.0020	0.00060	mg/L		06/11/18 07:30	06/11/18 15:04	1
Nickel	**0.0095**		0.0020	0.0010	mg/L		06/11/18 07:30	06/11/18 15:04	1
Potassium	**18**		0.050	0.025	mg/L		06/11/18 07:30	06/11/18 15:04	1
Selenium	**0.0070**		0.0020	0.0010	mg/L		06/11/18 07:30	06/11/18 15:04	1
Sodium	**53**		0.10	0.080	mg/L		06/11/18 07:30	06/11/18 15:04	1
Thallium	ND		0.0010	0.00050	mg/L		06/11/18 07:30	06/11/18 15:04	1
Vanadium	ND		0.010	0.0030	mg/L		06/11/18 07:30	06/11/18 15:04	1
Zinc	**0.23**		0.0050	0.0040	mg/L		06/11/18 07:30	06/11/18 15:04	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		06/13/18 15:06	06/13/18 18:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.20	0.10	mg/L			06/07/18 18:02	1
Total Dissolved Solids	**570**		10	5.0	mg/L			06/06/18 08:57	1
Cyanide, Total	ND		0.025	0.013	mg/L		06/06/18 10:37	06/06/18 13:48	1

Client Sample Results

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-212804-1

Client Sample ID: MW-5
Date Collected: 06/04/18 10:05
Date Received: 06/05/18 13:25

Lab Sample ID: 440-212804-1
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	**60**		4.0	4.0	mg/L			06/06/18 09:36	1
Bicarbonate Alkalinity as CaCO3	**60**		4.0	4.0	mg/L			06/06/18 09:36	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			06/06/18 09:36	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			06/06/18 09:36	1
Specific Conductance	**780**		1.0	1.0	umhos/cm			06/13/18 08:08	1
pH adj. to 25 deg C	**7.3**	**HF**	0.1	0.1	SU			06/06/18 16:57	1

Client Sample ID: MW-6

Date Collected: 06/04/18 11:22
Date Received: 06/05/18 13:25

Lab Sample ID: 440-212804-2

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**26**		10	5.0	mg/L			06/05/18 22:48	20
Nitrate as N	ND		0.11	0.055	mg/L			06/05/18 19:47	1
Fluoride	**0.30**	**J**	0.50	0.25	mg/L			06/05/18 19:47	1
Nitrite as N	ND		0.15	0.070	mg/L			06/05/18 19:47	1
Sulfate	**210**		10	5.0	mg/L			06/05/18 22:48	20

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			06/07/18 16:20	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	**83**		0.50	0.30	mg/L		06/11/18 07:30	06/14/18 12:31	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		06/11/18 07:30	06/11/18 15:31	1
Aluminum	ND		0.050	0.025	mg/L		06/11/18 07:30	06/11/18 15:31	1
Antimony	ND		0.0020	0.00020	mg/L		06/11/18 07:30	06/11/18 15:31	1
Arsenic	**1.7**		0.0020	0.0010	mg/L		06/11/18 07:30	06/11/18 15:31	1
Barium	**0.029**		0.0010	0.00050	mg/L		06/11/18 07:30	06/11/18 15:31	1
Beryllium	ND		0.0010	0.00010	mg/L		06/11/18 07:30	06/11/18 15:31	1
Cadmium	ND		0.0010	0.00050	mg/L		06/11/18 07:30	06/11/18 15:31	1
Calcium	**110**		0.30	0.17	mg/L		06/11/18 07:30	06/11/18 15:31	1
Chromium	ND		0.0020	0.0010	mg/L		06/11/18 07:30	06/11/18 15:31	1
Cobalt	**0.0011**		0.0010	0.00060	mg/L		06/11/18 07:30	06/11/18 15:31	1
Copper	ND		0.0020	0.0010	mg/L		06/11/18 07:30	06/11/18 15:31	1
Iron	**0.040**	**J**	0.050	0.025	mg/L		06/11/18 07:30	06/11/18 15:31	1
Lead	ND		0.0010	0.00060	mg/L		06/11/18 07:30	06/11/18 15:31	1
Magnesium	**39**		0.050	0.025	mg/L		06/11/18 07:30	06/11/18 15:31	1
Manganese	**5.8**		0.0025	0.0014	mg/L		06/11/18 07:30	06/11/18 15:31	1
Molybdenum	**0.0019**	**J**	0.0020	0.00060	mg/L		06/11/18 07:30	06/11/18 15:31	1
Nickel	ND		0.0020	0.0010	mg/L		06/11/18 07:30	06/11/18 15:31	1
Potassium	**12**		0.050	0.025	mg/L		06/11/18 07:30	06/11/18 15:31	1
Selenium	ND		0.0020	0.0010	mg/L		06/11/18 07:30	06/11/18 15:31	1
Sodium	**120**		0.10	0.080	mg/L		06/11/18 07:30	06/11/18 15:31	1
Thallium	ND		0.0010	0.00050	mg/L		06/11/18 07:30	06/11/18 15:31	1
Vanadium	ND		0.010	0.0030	mg/L		06/11/18 07:30	06/11/18 15:31	1
Zinc	ND		0.0050	0.0040	mg/L		06/11/18 07:30	06/11/18 15:31	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		06/13/18 15:06	06/13/18 18:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.20	0.10	mg/L			06/07/18 18:07	1
Total Dissolved Solids	**1100**		10	5.0	mg/L			06/06/18 08:57	1
Cyanide, Total	ND		0.025	0.013	mg/L		06/06/18 10:37	06/06/18 13:48	1

Client Sample Results

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-212804-1

Client Sample ID: MW-6
Date Collected: 06/04/18 11:22
Date Received: 06/05/18 13:25

Lab Sample ID: 440-212804-2
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	**500**		4.0	4.0	mg/L			06/06/18 09:54	1
Bicarbonate Alkalinity as CaCO3	**500**		4.0	4.0	mg/L			06/06/18 09:54	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			06/06/18 09:54	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			06/06/18 09:54	1
Specific Conductance	**1400**		1.0	1.0	umhos/cm			06/13/18 08:11	1
pH adj. to 25 deg C	**7.4**	**HF**	0.1	0.1	SU			06/06/18 16:57	1

Client Sample ID: MW-3

Date Collected: 06/04/18 12:38
Date Received: 06/05/18 13:25

Lab Sample ID: 440-212804-3

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**18**		0.50	0.25	mg/L			06/05/18 20:03	1
Nitrate as N	ND		0.11	0.055	mg/L			06/05/18 20:03	1
Fluoride	**0.79**		0.50	0.25	mg/L			06/05/18 20:03	1
Nitrite as N	ND		0.15	0.070	mg/L			06/05/18 20:03	1
Sulfate	**180**		25	13	mg/L			06/05/18 23:04	50

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			06/07/18 16:41	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	**63**		0.50	0.30	mg/L		06/11/18 07:30	06/14/18 12:33	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		06/11/18 07:30	06/11/18 15:33	1
Aluminum	ND		0.050	0.025	mg/L		06/11/18 07:30	06/11/18 15:33	1
Antimony	ND		0.0020	0.00020	mg/L		06/11/18 07:30	06/11/18 15:33	1
Arsenic	**0.34**		0.0020	0.0010	mg/L		06/11/18 07:30	06/11/18 15:33	1
Barium	**0.0021**		0.0010	0.00050	mg/L		06/11/18 07:30	06/11/18 15:33	1
Beryllium	ND		0.0010	0.00010	mg/L		06/11/18 07:30	06/11/18 15:33	1
Cadmium	ND		0.0010	0.00050	mg/L		06/11/18 07:30	06/11/18 15:33	1
Calcium	**23**		0.30	0.17	mg/L		06/11/18 07:30	06/11/18 15:33	1
Chromium	ND		0.0020	0.0010	mg/L		06/11/18 07:30	06/11/18 15:33	1
Cobalt	ND		0.0010	0.00060	mg/L		06/11/18 07:30	06/11/18 15:33	1
Copper	ND		0.0020	0.0010	mg/L		06/11/18 07:30	06/11/18 15:33	1
Iron	ND		0.050	0.025	mg/L		06/11/18 07:30	06/11/18 15:33	1
Lead	ND		0.0010	0.00060	mg/L		06/11/18 07:30	06/11/18 15:33	1
Magnesium	**15**		0.050	0.025	mg/L		06/11/18 07:30	06/11/18 15:33	1
Manganese	**0.13**		0.0025	0.0014	mg/L		06/11/18 07:30	06/11/18 15:33	1
Molybdenum	ND		0.0020	0.00060	mg/L		06/11/18 07:30	06/11/18 15:33	1
Nickel	**0.0017**	**J**	0.0020	0.0010	mg/L		06/11/18 07:30	06/11/18 15:33	1
Potassium	**18**		0.050	0.025	mg/L		06/11/18 07:30	06/11/18 15:33	1
Selenium	ND		0.0020	0.0010	mg/L		06/11/18 07:30	06/11/18 15:33	1
Sodium	**38**		0.10	0.080	mg/L		06/11/18 07:30	06/11/18 15:33	1
Thallium	ND		0.0010	0.00050	mg/L		06/11/18 07:30	06/11/18 15:33	1
Vanadium	ND		0.010	0.0030	mg/L		06/11/18 07:30	06/11/18 15:33	1
Zinc	**0.69**		0.0050	0.0040	mg/L		06/11/18 07:30	06/11/18 15:33	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		06/13/18 15:06	06/13/18 18:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.20	0.10	mg/L			06/07/18 18:12	1
Total Dissolved Solids	**420**		10	5.0	mg/L			06/06/18 08:57	1
Cyanide, Total	ND		0.025	0.013	mg/L		06/06/18 10:37	06/06/18 13:48	1

Client Sample Results

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-212804-1

Client Sample ID: MW-3

Date Collected: 06/04/18 12:38
Date Received: 06/05/18 13:25

Lab Sample ID: 440-212804-3

Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	**47**		4.0	4.0	mg/L			06/06/18 10:01	1
Bicarbonate Alkalinity as CaCO3	**47**		4.0	4.0	mg/L			06/06/18 10:01	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			06/06/18 10:01	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			06/06/18 10:01	1
Specific Conductance	**570**		1.0	1.0	umhos/cm			06/13/18 08:11	1
pH adj. to 25 deg C	**6.9**	**HF**	0.1	0.1	SU			06/06/18 16:57	1

Client Sample ID: MW-4

Date Collected: 06/04/18 13:49
Date Received: 06/05/18 13:25

Lab Sample ID: 440-212804-4

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**19**		0.50	0.25	mg/L			06/05/18 20:19	1
Nitrate as N	ND		0.11	0.055	mg/L			06/05/18 20:19	1
Fluoride	**1.3**		0.50	0.25	mg/L			06/05/18 20:19	1
Nitrite as N	ND		0.15	0.070	mg/L			06/05/18 20:19	1
Sulfate	**1600**		100	50	mg/L			06/05/18 23:20	200

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		5.0	2.5	ug/L			06/07/18 18:46	5

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	**440**		0.50	0.30	mg/L		06/11/18 07:30	06/14/18 12:36	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		06/11/18 07:30	06/11/18 15:37	1
Aluminum	**59**		0.050	0.025	mg/L		06/11/18 07:30	06/11/18 15:37	1
Antimony	**0.0066**		0.0020	0.00020	mg/L		06/11/18 07:30	06/11/18 15:37	1
Arsenic	**140**		0.020	0.010	mg/L		06/11/18 07:30	06/11/18 16:42	10
Barium	**0.012**		0.0010	0.00050	mg/L		06/11/18 07:30	06/11/18 15:37	1
Beryllium	**0.012**		0.0010	0.00010	mg/L		06/11/18 07:30	06/11/18 15:37	1
Cadmium	**0.069**		0.0010	0.00050	mg/L		06/11/18 07:30	06/11/18 15:37	1
Calcium	**99**		0.30	0.17	mg/L		06/11/18 07:30	06/11/18 15:37	1
Chromium	ND		0.0020	0.0010	mg/L		06/11/18 07:30	06/11/18 15:37	1
Cobalt	**0.90**		0.0010	0.00060	mg/L		06/11/18 07:30	06/11/18 15:37	1
Copper	**1.3**		0.0020	0.0010	mg/L		06/11/18 07:30	06/11/18 15:37	1
Iron	**220**		0.50	0.25	mg/L		06/11/18 07:30	06/11/18 16:42	10
Lead	**0.0028**		0.0010	0.00060	mg/L		06/11/18 07:30	06/11/18 15:37	1
Magnesium	**32**		0.050	0.025	mg/L		06/11/18 07:30	06/11/18 15:37	1
Manganese	**3.6**		0.0025	0.0014	mg/L		06/11/18 07:30	06/11/18 15:37	1
Molybdenum	**0.0074**		0.0020	0.00060	mg/L		06/11/18 07:30	06/11/18 15:37	1
Nickel	**0.23**		0.0020	0.0010	mg/L		06/11/18 07:30	06/11/18 15:37	1
Potassium	**56**		0.050	0.025	mg/L		06/11/18 07:30	06/11/18 15:37	1
Selenium	**0.0019**	**J**	0.0020	0.0010	mg/L		06/11/18 07:30	06/11/18 15:37	1
Sodium	**98**		0.10	0.080	mg/L		06/11/18 07:30	06/11/18 15:37	1
Thallium	**0.0069**		0.0010	0.00050	mg/L		06/11/18 07:30	06/11/18 15:37	1
Vanadium	**0.030**		0.010	0.0030	mg/L		06/11/18 07:30	06/11/18 15:37	1
Zinc	**6.8**		0.0050	0.0040	mg/L		06/11/18 07:30	06/11/18 15:37	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		06/13/18 15:06	06/13/18 18:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	**1.8**		0.20	0.10	mg/L			06/07/18 18:18	1
Total Dissolved Solids	**2400**		20	10	mg/L			06/08/18 10:54	1
Cyanide, Total	ND		0.025	0.013	mg/L		06/06/18 10:37	06/06/18 13:48	1

Client Sample Results

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-212804-1

Client Sample ID: MW-4
Date Collected: 06/04/18 13:49
Date Received: 06/05/18 13:25

Lab Sample ID: 440-212804-4
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	ND		4.0	4.0	mg/L			06/06/18 10:04	1
Bicarbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			06/06/18 10:04	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			06/06/18 10:04	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			06/06/18 10:04	1
Specific Conductance	**2600**		1.0	1.0	umhos/cm			06/13/18 08:11	1
pH adj. to 25 deg C	**3.7**	**HF**	0.1	0.1	SU			06/06/18 17:38	1

Client Sample ID: Equipment Blank

Date Collected: 06/04/18 13:15
Date Received: 06/05/18 13:25

Lab Sample ID: 440-212804-5
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50	0.25	mg/L			06/05/18 19:15	1
Nitrate as N	ND		0.11	0.055	mg/L			06/05/18 19:15	1
Fluoride	ND		0.50	0.25	mg/L			06/05/18 19:15	1
Nitrite as N	ND		0.15	0.070	mg/L			06/05/18 19:15	1
Sulfate	ND		0.50	0.25	mg/L			06/05/18 19:15	1

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			06/07/18 17:21	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	ND		0.50	0.30	mg/L		06/11/18 07:30	06/14/18 12:39	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		06/11/18 07:30	06/11/18 15:39	1
Aluminum	ND		0.050	0.025	mg/L		06/11/18 07:30	06/11/18 15:39	1
Antimony	ND		0.0020	0.00020	mg/L		06/11/18 07:30	06/11/18 15:39	1
Arsenic	**0.0049**		0.0020	0.0010	mg/L		06/11/18 07:30	06/11/18 15:51	1
Barium	ND		0.0010	0.00050	mg/L		06/11/18 07:30	06/11/18 15:39	1
Beryllium	ND		0.0010	0.00010	mg/L		06/11/18 07:30	06/11/18 15:39	1
Cadmium	ND		0.0010	0.00050	mg/L		06/11/18 07:30	06/11/18 15:39	1
Calcium	ND		0.30	0.17	mg/L		06/11/18 07:30	06/11/18 15:39	1
Chromium	ND		0.0020	0.0010	mg/L		06/11/18 07:30	06/11/18 15:39	1
Cobalt	ND		0.0010	0.00060	mg/L		06/11/18 07:30	06/11/18 15:39	1
Copper	ND		0.0020	0.0010	mg/L		06/11/18 07:30	06/11/18 15:39	1
Iron	ND		0.050	0.025	mg/L		06/11/18 07:30	06/11/18 15:51	1
Lead	ND		0.0010	0.00060	mg/L		06/11/18 07:30	06/11/18 15:39	1
Magnesium	ND		0.050	0.025	mg/L		06/11/18 07:30	06/11/18 15:39	1
Manganese	ND		0.0025	0.0014	mg/L		06/11/18 07:30	06/11/18 15:39	1
Molybdenum	ND		0.0020	0.00060	mg/L		06/11/18 07:30	06/11/18 15:39	1
Nickel	ND		0.0020	0.0010	mg/L		06/11/18 07:30	06/11/18 15:39	1
Potassium	ND		0.050	0.025	mg/L		06/11/18 07:30	06/11/18 15:39	1
Selenium	ND		0.0020	0.0010	mg/L		06/11/18 07:30	06/11/18 15:39	1
Sodium	ND		0.10	0.080	mg/L		06/11/18 07:30	06/11/18 15:39	1
Thallium	ND		0.0010	0.00050	mg/L		06/11/18 07:30	06/11/18 15:39	1
Vanadium	ND		0.010	0.0030	mg/L		06/11/18 07:30	06/11/18 15:39	1
Zinc	ND		0.0050	0.0040	mg/L		06/11/18 07:30	06/11/18 15:39	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		06/13/18 15:06	06/13/18 18:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.20	0.10	mg/L			06/07/18 18:23	1
Total Dissolved Solids	ND		10	5.0	mg/L			06/06/18 08:57	1
Cyanide, Total	ND		0.025	0.013	mg/L		06/06/18 10:37	06/06/18 13:48	1

Client Sample Results

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-212804-1

Client Sample ID: Equipment Blank
Date Collected: 06/04/18 13:15
Date Received: 06/05/18 13:25

Lab Sample ID: 440-212804-5
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	ND		4.0	4.0	mg/L			06/06/18 10:10	1
Bicarbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			06/06/18 10:10	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			06/06/18 10:10	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			06/06/18 10:10	1
Specific Conductance	**1.3**		1.0	1.0	umhos/cm			06/13/18 08:11	1
pH adj. to 25 deg C	**5.8**	**HF**	0.1	0.1	SU			06/06/18 16:57	1

Client Sample ID: MW-1

Date Collected: 06/05/18 09:36
Date Received: 06/05/18 13:25

Lab Sample ID: 440-212804-6

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**12**		0.50	0.25	mg/L			06/05/18 20:35	1
Nitrate as N	ND		0.11	0.055	mg/L			06/05/18 20:35	1
Fluoride	**0.42**	**J**	0.50	0.25	mg/L			06/05/18 20:35	1
Nitrite as N	ND		0.15	0.070	mg/L			06/05/18 20:35	1
Sulfate	**700**		100	50	mg/L			06/05/18 23:36	200

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			06/07/18 17:42	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	**190**		0.50	0.30	mg/L		06/11/18 07:30	06/14/18 12:47	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		06/11/18 07:30	06/11/18 15:42	1
Aluminum	**40**		0.050	0.025	mg/L		06/11/18 07:30	06/11/18 15:42	1
Antimony	**0.0085**		0.0020	0.00020	mg/L		06/11/18 07:30	06/11/18 15:42	1
Arsenic	**7.5**		0.0020	0.0010	mg/L		06/11/18 07:30	06/11/18 15:42	1
Barium	**0.0092**		0.0010	0.00050	mg/L		06/11/18 07:30	06/11/18 15:42	1
Beryllium	**0.0085**		0.0010	0.00010	mg/L		06/11/18 07:30	06/11/18 15:42	1
Cadmium	**0.11**		0.0010	0.00050	mg/L		06/11/18 07:30	06/11/18 15:42	1
Calcium	**55**		0.30	0.17	mg/L		06/11/18 07:30	06/11/18 15:42	1
Chromium	**0.0016**	**J**	0.0020	0.0010	mg/L		06/11/18 07:30	06/11/18 15:42	1
Cobalt	**0.23**		0.0010	0.00060	mg/L		06/11/18 07:30	06/11/18 15:42	1
Copper	**0.0040**		0.0020	0.0010	mg/L		06/11/18 07:30	06/11/18 15:42	1
Iron	**35**		0.050	0.025	mg/L		06/11/18 07:30	06/11/18 15:42	1
Lead	**0.0063**		0.0010	0.00060	mg/L		06/11/18 07:30	06/11/18 15:42	1
Magnesium	**18**		0.050	0.025	mg/L		06/11/18 07:30	06/11/18 15:42	1
Manganese	**1.7**		0.0025	0.0014	mg/L		06/11/18 07:30	06/11/18 15:42	1
Molybdenum	**0.00062**	**J**	0.0020	0.00060	mg/L		06/11/18 07:30	06/11/18 15:42	1
Nickel	**0.093**		0.0020	0.0010	mg/L		06/11/18 07:30	06/11/18 15:42	1
Potassium	**43**		0.050	0.025	mg/L		06/11/18 07:30	06/11/18 15:42	1
Selenium	**0.0030**		0.0020	0.0010	mg/L		06/11/18 07:30	06/11/18 15:42	1
Sodium	**34**		0.10	0.080	mg/L		06/11/18 07:30	06/11/18 15:42	1
Thallium	**0.012**		0.0010	0.00050	mg/L		06/11/18 07:30	06/11/18 15:42	1
Vanadium	**0.051**		0.010	0.0030	mg/L		06/11/18 07:30	06/11/18 15:42	1
Zinc	**1.6**		0.0050	0.0040	mg/L		06/11/18 07:30	06/11/18 15:42	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		06/13/18 15:06	06/13/18 18:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.20	0.10	mg/L			06/07/18 18:28	1
Total Dissolved Solids	**1200**		10	5.0	mg/L			06/08/18 10:54	1
Cyanide, Total	ND		0.025	0.013	mg/L		06/06/18 10:37	06/06/18 13:48	1

Client Sample Results

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-212804-1

Client Sample ID: MW-1
Date Collected: 06/05/18 09:36
Date Received: 06/05/18 13:25

Lab Sample ID: 440-212804-6
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	ND		4.0	4.0	mg/L			06/06/18 10:14	1
Bicarbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			06/06/18 10:14	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			06/06/18 10:14	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			06/06/18 10:14	1
Specific Conductance	**1600**		1.0	1.0	umhos/cm			06/13/18 08:11	1
pH adj. to 25 deg C	**3.4**	**HF**	0.1	0.1	SU			06/06/18 17:44	1

Client Sample ID: MW-2

Date Collected: 06/05/18 08:40
Date Received: 06/05/18 13:25

Lab Sample ID: 440-212804-7

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**15**		0.50	0.25	mg/L			06/05/18 20:51	1
Nitrate as N	ND		0.11	0.055	mg/L			06/05/18 20:51	1
Fluoride	**0.37**	**J**	0.50	0.25	mg/L			06/05/18 20:51	1
Nitrite as N	ND		0.15	0.070	mg/L			06/05/18 20:51	1
Sulfate	**540**		50	25	mg/L			06/05/18 23:53	100

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			06/07/18 18:02	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	**190**		0.50	0.30	mg/L		06/11/18 07:30	06/14/18 12:50	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		06/11/18 07:30	06/11/18 15:45	1
Aluminum	**27**		0.050	0.025	mg/L		06/11/18 07:30	06/11/18 15:45	1
Antimony	**0.0011**	**J**	0.0020	0.00020	mg/L		06/11/18 07:30	06/11/18 15:45	1
Arsenic	**0.13**		0.0020	0.0010	mg/L		06/11/18 07:30	06/11/18 15:45	1
Barium	**0.0075**		0.0010	0.00050	mg/L		06/11/18 07:30	06/11/18 15:45	1
Beryllium	**0.0057**		0.0010	0.00010	mg/L		06/11/18 07:30	06/11/18 15:45	1
Cadmium	**0.0022**		0.0010	0.00050	mg/L		06/11/18 07:30	06/11/18 15:45	1
Calcium	**49**		0.30	0.17	mg/L		06/11/18 07:30	06/11/18 15:45	1
Chromium	ND		0.0020	0.0010	mg/L		06/11/18 07:30	06/11/18 15:45	1
Cobalt	**0.14**		0.0010	0.00060	mg/L		06/11/18 07:30	06/11/18 15:45	1
Copper	**0.079**		0.0020	0.0010	mg/L		06/11/18 07:30	06/11/18 15:45	1
Iron	**3.8**		0.050	0.025	mg/L		06/11/18 07:30	06/11/18 15:45	1
Lead	ND		0.0010	0.00060	mg/L		06/11/18 07:30	06/11/18 15:45	1
Magnesium	**14**		0.050	0.025	mg/L		06/11/18 07:30	06/11/18 15:45	1
Manganese	**1.4**		0.0025	0.0014	mg/L		06/11/18 07:30	06/11/18 15:45	1
Molybdenum	ND		0.0020	0.00060	mg/L		06/11/18 07:30	06/11/18 15:45	1
Nickel	**0.051**		0.0020	0.0010	mg/L		06/11/18 07:30	06/11/18 15:45	1
Potassium	**38**		0.050	0.025	mg/L		06/11/18 07:30	06/11/18 15:45	1
Selenium	ND		0.0020	0.0010	mg/L		06/11/18 07:30	06/11/18 15:45	1
Sodium	**45**		0.10	0.080	mg/L		06/11/18 07:30	06/11/18 15:45	1
Thallium	**0.0011**		0.0010	0.00050	mg/L		06/11/18 07:30	06/11/18 15:45	1
Vanadium	ND		0.010	0.0030	mg/L		06/11/18 07:30	06/11/18 15:45	1
Zinc	**1.2**		0.0050	0.0040	mg/L		06/11/18 07:30	06/11/18 15:45	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		06/13/18 15:06	06/13/18 18:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.20	0.10	mg/L			06/07/18 18:34	1
Total Dissolved Solids	**910**		10	5.0	mg/L			06/08/18 10:54	1
Cyanide, Total	ND		0.025	0.013	mg/L		06/06/18 10:37	06/06/18 13:48	1

Client Sample Results

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-212804-1

Client Sample ID: MW-2
Date Collected: 06/05/18 08:40
Date Received: 06/05/18 13:25

Lab Sample ID: 440-212804-7
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	ND		4.0	4.0	mg/L			06/06/18 10:20	1
Bicarbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			06/06/18 10:20	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			06/06/18 10:20	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			06/06/18 10:20	1
Specific Conductance	**1200**		1.0	1.0	umhos/cm			06/13/18 08:11	1
pH adj. to 25 deg C	**3.4**	**HF**	0.1	0.1	SU			06/06/18 17:44	1

Method Summary

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-212804-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	TAL IRV
314.0 LL	Perchlorate (IC)	EPA	TAL IRV
6010B	Metals (ICP)	SW846	TAL SAC
6020	Metals (ICP/MS)	SW846	TAL SAC
7470A	Mercury (CVAA)	SW846	TAL SAC
350.1	Nitrogen, Ammonia	MCAWW	TAL IRV
SM 2320B	Alkalinity	SM	TAL IRV
SM 2510B	Conductivity, Specific Conductance	SM	TAL IRV
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL IRV
SM 4500 CN E	Cyanide, Total	SM	TAL IRV
SM 4500 H+ B	pH	SM	TAL IRV
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL SAC
3010A	Preparation, Total Metals	SW846	TAL SAC
7470A	Preparation, Mercury	SW846	TAL SAC
Distill/CN	Distillation, Cyanide	None	TAL IRV
Filtration	Sample Filtration	None	TAL SAC

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Client Sample ID: MW-5

Date Collected: 06/04/18 10:05
Date Received: 06/05/18 13:25

Lab Sample ID: 440-212804-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	480319	06/05/18 19:30	NTN	TAL IRV
Total/NA	Analysis	300.0		1			480320	06/05/18 19:30	NTN	TAL IRV
Total/NA	Analysis	300.0		50			480320	06/05/18 22:32	NTN	TAL IRV
Total/NA	Analysis	314.0 LL		1			480768	06/07/18 16:00	PS	TAL IRV
Dissolved	Filtration	Filtration			500 mL	500 mL	227958	06/08/18 05:44	NIM	TAL SAC
Dissolved	Prep	3010A			50 mL	50 mL	228350	06/11/18 07:30	NIM	TAL SAC
Dissolved	Analysis	6010B		1			229151	06/14/18 12:18	CJH	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	227958	06/08/18 05:44	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	228348	06/11/18 07:30	NIM	TAL SAC
Dissolved	Analysis	6020		1			228510	06/11/18 15:04	CJH	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	227958	06/08/18 05:44	NIM	TAL SAC
Dissolved	Prep	7470A			30 mL	30 mL	228900	06/13/18 15:06	SSS	TAL SAC
Dissolved	Analysis	7470A		1			228979	06/13/18 18:09	SSS	TAL SAC
Total/NA	Analysis	350.1		1	0.8 mL	8 mL	480969	06/07/18 18:02	MMH	TAL IRV
Total/NA	Analysis	SM 2320B		1			480755	06/06/18 09:36	YZ	TAL IRV
Total/NA	Analysis	SM 2510B		1			481329	06/13/18 08:08	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	480572	06/06/18 08:57	XL	TAL IRV
Total/NA	Prep	Distill/CN			50 mL	50 mL	480604	06/06/18 10:37	KMY	TAL IRV
Total/NA	Analysis	SM 4500 CN E		1			480651	06/06/18 13:48	KMY	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			480649	06/06/18 16:57	CMM	TAL IRV

Client Sample ID: MW-6

Date Collected: 06/04/18 11:22
Date Received: 06/05/18 13:25

Lab Sample ID: 440-212804-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	480319	06/05/18 19:47	NTN	TAL IRV
Total/NA	Analysis	300.0		1			480320	06/05/18 19:47	NTN	TAL IRV
Total/NA	Analysis	300.0		20			480320	06/05/18 22:48	NTN	TAL IRV
Total/NA	Analysis	314.0 LL		1			480768	06/07/18 16:20	PS	TAL IRV
Dissolved	Filtration	Filtration			500 mL	500 mL	227958	06/08/18 05:44	NIM	TAL SAC
Dissolved	Prep	3010A			50 mL	50 mL	228350	06/11/18 07:30	NIM	TAL SAC
Dissolved	Analysis	6010B		1			229151	06/14/18 12:31	CJH	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	227958	06/08/18 05:44	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	228348	06/11/18 07:30	NIM	TAL SAC
Dissolved	Analysis	6020		1			228510	06/11/18 15:31	CJH	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	227958	06/08/18 05:44	NIM	TAL SAC
Dissolved	Prep	7470A			30 mL	30 mL	228900	06/13/18 15:06	SSS	TAL SAC
Dissolved	Analysis	7470A		1			228979	06/13/18 18:11	SSS	TAL SAC
Total/NA	Analysis	350.1		1	0.8 mL	8 mL	480969	06/07/18 18:07	MMH	TAL IRV
Total/NA	Analysis	SM 2320B		1			480755	06/06/18 09:54	YZ	TAL IRV
Total/NA	Analysis	SM 2510B		1			481329	06/13/18 08:11	XL	TAL IRV

Lab Chronicle

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-212804-1

Client Sample ID: MW-6

Date Collected: 06/04/18 11:22
Date Received: 06/05/18 13:25

Lab Sample ID: 440-212804-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	480572	06/06/18 08:57	XL	TAL IRV
Total/NA	Prep	Distill/CN			50 mL	50 mL	480604	06/06/18 10:37	KMY	TAL IRV
Total/NA	Analysis	SM 4500 CN E		1			480651	06/06/18 13:48	KMY	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			480649	06/06/18 16:57	CMM	TAL IRV

Client Sample ID: MW-3

Date Collected: 06/04/18 12:38
Date Received: 06/05/18 13:25

Lab Sample ID: 440-212804-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			480319	06/05/18 20:03	NTN	TAL IRV
Total/NA	Analysis	300.0		1			480320	06/05/18 20:03	NTN	TAL IRV
Total/NA	Analysis	300.0		50			480320	06/05/18 23:04	NTN	TAL IRV
Total/NA	Analysis	314.0 LL		1			480768	06/07/18 16:41	PS	TAL IRV
Dissolved	Filtration	Filtration			500 mL	500 mL	227958	06/08/18 05:44	NIM	TAL SAC
Dissolved	Prep	3010A			50 mL	50 mL	228350	06/11/18 07:30	NIM	TAL SAC
Dissolved	Analysis	6010B		1			229151	06/14/18 12:33	CJH	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	227958	06/08/18 05:44	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	228348	06/11/18 07:30	NIM	TAL SAC
Dissolved	Analysis	6020		1			228510	06/11/18 15:33	CJH	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	227958	06/08/18 05:44	NIM	TAL SAC
Dissolved	Prep	7470A			30 mL	30 mL	228900	06/13/18 15:06	SSS	TAL SAC
Dissolved	Analysis	7470A		1			228979	06/13/18 18:14	SSS	TAL SAC
Total/NA	Analysis	350.1		1	0.8 mL	8 mL	480969	06/07/18 18:12	MMH	TAL IRV
Total/NA	Analysis	SM 2320B		1			480755	06/06/18 10:01	YZ	TAL IRV
Total/NA	Analysis	SM 2510B		1			481329	06/13/18 08:11	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	480572	06/06/18 08:57	XL	TAL IRV
Total/NA	Prep	Distill/CN			50 mL	50 mL	480604	06/06/18 10:37	KMY	TAL IRV
Total/NA	Analysis	SM 4500 CN E		1			480651	06/06/18 13:48	KMY	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			480649	06/06/18 16:57	CMM	TAL IRV

Client Sample ID: MW-4

Date Collected: 06/04/18 13:49
Date Received: 06/05/18 13:25

Lab Sample ID: 440-212804-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			480319	06/05/18 20:19	NTN	TAL IRV
Total/NA	Analysis	300.0		1			480320	06/05/18 20:19	NTN	TAL IRV
Total/NA	Analysis	300.0		200			480320	06/05/18 23:20	NTN	TAL IRV
Total/NA	Analysis	314.0 LL		5			480768	06/07/18 18:46	PS	TAL IRV
Dissolved	Filtration	Filtration			500 mL	500 mL	227958	06/08/18 05:44	NIM	TAL SAC
Dissolved	Prep	3010A			50 mL	50 mL	228350	06/11/18 07:30	NIM	TAL SAC

Lab Chronicle

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-212804-1

Client Sample ID: MW-4

Lab Sample ID: 440-212804-4

Date Collected: 06/04/18 13:49
Matrix: Water
Date Received: 06/05/18 13:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	6010B		1			229151	06/14/18 12:36	CJH	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	227958	06/08/18 05:44	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	228348	06/11/18 07:30	NIM	TAL SAC
Dissolved	Analysis	6020		1			228510	06/11/18 15:37	CJH	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	227958	06/08/18 05:44	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	228348	06/11/18 07:30	NIM	TAL SAC
Dissolved	Analysis	6020		10			228510	06/11/18 16:42	CJH	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	227958	06/08/18 05:44	NIM	TAL SAC
Dissolved	Prep	7470A			30 mL	30 mL	228900	06/13/18 15:06	SSS	TAL SAC
Dissolved	Analysis	7470A		1			228979	06/13/18 18:16	SSS	TAL SAC
Total/NA	Analysis	350.1		1	0.8 mL	8 mL	480969	06/07/18 18:18	MMH	TAL IRV
Total/NA	Analysis	SM 2320B		1			480755	06/06/18 10:04	YZ	TAL IRV
Total/NA	Analysis	SM 2510B		1			481329	06/13/18 08:11	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	481070	06/08/18 10:54	XL	TAL IRV
Total/NA	Prep	Distill/CN			50 mL	50 mL	480604	06/06/18 10:37	KMY	TAL IRV
Total/NA	Analysis	SM 4500 CN E		1			480651	06/06/18 13:48	KMY	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			480649	06/06/18 17:38	CMM	TAL IRV

Client Sample ID: Equipment Blank

Lab Sample ID: 440-212804-5

Date Collected: 06/04/18 13:15
Matrix: Water
Date Received: 06/05/18 13:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			480319	06/05/18 19:15	NTN	TAL IRV
Total/NA	Analysis	300.0		1			480320	06/05/18 19:15	NTN	TAL IRV
Total/NA	Analysis	314.0 LL		1			480768	06/07/18 17:21	PS	TAL IRV
Dissolved	Filtration	Filtration			500 mL	500 mL	227958	06/08/18 05:45	NIM	TAL SAC
Dissolved	Prep	3010A			50 mL	50 mL	228350	06/11/18 07:30	NIM	TAL SAC
Dissolved	Analysis	6010B		1			229151	06/14/18 12:39	CJH	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	227958	06/08/18 05:45	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	228348	06/11/18 07:30	NIM	TAL SAC
Dissolved	Analysis	6020		1			228510	06/11/18 15:39	CJH	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	227958	06/08/18 05:45	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	228348	06/11/18 07:30	NIM	TAL SAC
Dissolved	Analysis	6020		1			228510	06/11/18 15:51	CJH	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	227958	06/08/18 05:45	NIM	TAL SAC
Dissolved	Prep	7470A			30 mL	30 mL	228900	06/13/18 15:06	SSS	TAL SAC
Dissolved	Analysis	7470A		1			228979	06/13/18 18:19	SSS	TAL SAC
Total/NA	Analysis	350.1		1	0.8 mL	8 mL	480969	06/07/18 18:23	MMH	TAL IRV
Total/NA	Analysis	SM 2320B		1			480755	06/06/18 10:10	YZ	TAL IRV
Total/NA	Analysis	SM 2510B		1			481329	06/13/18 08:11	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	480572	06/06/18 08:57	XL	TAL IRV
Total/NA	Prep	Distill/CN			50 mL	50 mL	480604	06/06/18 10:37	KMY	TAL IRV

Lab Chronicle

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-212804-1

Client Sample ID: Equipment Blank

Lab Sample ID: 440-212804-5

Date Collected: 06/04/18 13:15
Matrix: Water
Date Received: 06/05/18 13:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 CN E		1			480651	06/06/18 13:48	KMY	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			480649	06/06/18 16:57	CMM	TAL IRV

Client Sample ID: MW-1

Lab Sample ID: 440-212804-6

Date Collected: 06/05/18 09:36
Matrix: Water
Date Received: 06/05/18 13:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	480319	06/05/18 20:35	NTN	TAL IRV
Total/NA	Analysis	300.0		1			480320	06/05/18 20:35	NTN	TAL IRV
Total/NA	Analysis	300.0		200			480320	06/05/18 23:36	NTN	TAL IRV
Total/NA	Analysis	314.0 LL		1			480768	06/07/18 17:42	PS	TAL IRV
Dissolved	Filtration	Filtration			500 mL	500 mL	227958	06/08/18 05:45	NIM	TAL SAC
Dissolved	Prep	3010A			50 mL	50 mL	228350	06/11/18 07:30	NIM	TAL SAC
Dissolved	Analysis	6010B		1			229151	06/14/18 12:47	CJH	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	227958	06/08/18 05:45	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	228348	06/11/18 07:30	NIM	TAL SAC
Dissolved	Analysis	6020		1			228510	06/11/18 15:42	CJH	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	227958	06/08/18 05:45	NIM	TAL SAC
Dissolved	Prep	7470A			30 mL	30 mL	228900	06/13/18 15:06	SSS	TAL SAC
Dissolved	Analysis	7470A		1			228979	06/13/18 18:22	SSS	TAL SAC
Total/NA	Analysis	350.1		1	0.8 mL	8 mL	480969	06/07/18 18:28	MMH	TAL IRV
Total/NA	Analysis	SM 2320B		1			480755	06/06/18 10:14	YZ	TAL IRV
Total/NA	Analysis	SM 2510B		1			481329	06/13/18 08:11	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	481070	06/08/18 10:54	XL	TAL IRV
Total/NA	Prep	Distill/CN			50 mL	50 mL	480604	06/06/18 10:37	KMY	TAL IRV
Total/NA	Analysis	SM 4500 CN E		1			480651	06/06/18 13:48	KMY	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			480649	06/06/18 17:44	CMM	TAL IRV

Client Sample ID: MW-2

Lab Sample ID: 440-212804-7

Date Collected: 06/05/18 08:40
Matrix: Water
Date Received: 06/05/18 13:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	480319	06/05/18 20:51	NTN	TAL IRV
Total/NA	Analysis	300.0		1			480320	06/05/18 20:51	NTN	TAL IRV
Total/NA	Analysis	300.0		100			480320	06/05/18 23:53	NTN	TAL IRV
Total/NA	Analysis	314.0 LL		1			480768	06/07/18 18:02	PS	TAL IRV
Dissolved	Filtration	Filtration			500 mL	500 mL	227958	06/08/18 05:45	NIM	TAL SAC
Dissolved	Prep	3010A			50 mL	50 mL	228350	06/11/18 07:30	NIM	TAL SAC
Dissolved	Analysis	6010B		1			229151	06/14/18 12:50	CJH	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	227958	06/08/18 05:45	NIM	TAL SAC

Lab Chronicle

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-212804-1

Client Sample ID: MW-2

Date Collected: 06/05/18 08:40
Date Received: 06/05/18 13:25

Lab Sample ID: 440-212804-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			50 mL	50 mL	228348	06/11/18 07:30	NIM	TAL SAC
Dissolved	Analysis	6020		1			228510	06/11/18 15:45	CJH	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	227958	06/08/18 05:45	NIM	TAL SAC
Dissolved	Prep	7470A			30 mL	30 mL	228900	06/13/18 15:06	SSS	TAL SAC
Dissolved	Analysis	7470A		1			228979	06/13/18 18:24	SSS	TAL SAC
Total/NA	Analysis	350.1		1	0.8 mL	8 mL	480969	06/07/18 18:34	MMH	TAL IRV
Total/NA	Analysis	SM 2320B		1			480755	06/06/18 10:20	YZ	TAL IRV
Total/NA	Analysis	SM 2510B		1			481329	06/13/18 08:11	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	481070	06/08/18 10:54	XL	TAL IRV
Total/NA	Prep	Distill/CN			50 mL	50 mL	480604	06/06/18 10:37	KMY	TAL IRV
Total/NA	Analysis	SM 4500 CN E		1			480651	06/06/18 13:48	KMY	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			480649	06/06/18 17:44	CMM	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 440-480319/6
Matrix: Water
Analysis Batch: 480319

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.11	0.055	mg/L			06/05/18 11:47	1
Nitrite as N	ND		0.15	0.070	mg/L			06/05/18 11:47	1

Lab Sample ID: LCS 440-480319/5
Matrix: Water
Analysis Batch: 480319

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	1.13	1.11		mg/L		98	90 - 110
Nitrite as N	1.52	1.55		mg/L		102	90 - 110

Lab Sample ID: MB 440-480320/6
Matrix: Water
Analysis Batch: 480320

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50	0.25	mg/L			06/05/18 11:47	1
Fluoride	ND		0.50	0.25	mg/L			06/05/18 11:47	1
Sulfate	ND		0.50	0.25	mg/L			06/05/18 11:47	1

Lab Sample ID: LCS 440-480320/5
Matrix: Water
Analysis Batch: 480320

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	5.00	4.99		mg/L		100	90 - 110
Fluoride	5.00	4.67		mg/L		93	90 - 110
Sulfate	5.00	4.83		mg/L		97	90 - 110

Method: 314.0 LL - Perchlorate (IC)

Lab Sample ID: MB 440-480768/6
Matrix: Water
Analysis Batch: 480768

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			06/07/18 08:01	1

Lab Sample ID: LCS 440-480768/5
Matrix: Water
Analysis Batch: 480768

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	25.0	25.0		ug/L		100	85 - 115

Method: 314.0 LL - Perchlorate (IC) (Continued)

Lab Sample ID: MRL 440-480768/4
Matrix: Water
Analysis Batch: 480768

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits		
Perchlorate			1.00	0.973	J	ug/L		97	75 - 125		

Method: 6010B - Metals (ICP)

Lab Sample ID: LCS 320-228350/2-A
Matrix: Water
Analysis Batch: 229151

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 228350

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfur			10.0	9.86		mg/L		99	80 - 120		

Lab Sample ID: MB 320-227958/1-D
Matrix: Water
Analysis Batch: 229151

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 228350

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	ND		0.50	0.30	mg/L		06/11/18 07:30	06/14/18 11:53	1

Lab Sample ID: 440-212804-1 MS
Matrix: Water
Analysis Batch: 229151

Client Sample ID: MW-5
Prep Type: Dissolved
Prep Batch: 228350

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfur	90		10.0	98.2	4	mg/L		82	80 - 120		

Lab Sample ID: 440-212804-1 MSD
Matrix: Water
Analysis Batch: 229151

Client Sample ID: MW-5
Prep Type: Dissolved
Prep Batch: 228350

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfur	90		10.0	98.5	4	mg/L		86	80 - 120	0	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: LCS 320-228348/2-A
Matrix: Water
Analysis Batch: 228510

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 228348

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Silver			0.0500	0.0545		mg/L		109	80 - 120		
Aluminum			1.00	0.963		mg/L		96	80 - 120		
Antimony			0.200	0.208		mg/L		104	80 - 120		
Arsenic			0.200	0.194		mg/L		97	80 - 120		
Barium			0.200	0.207		mg/L		103	80 - 120		
Beryllium			0.200	0.207		mg/L		103	80 - 120		
Cadmium			0.200	0.213		mg/L		107	80 - 120		
Calcium			1.00	1.01		mg/L		101	80 - 120		
Chromium			0.200	0.212		mg/L		106	80 - 120		
Cobalt			0.200	0.217		mg/L		109	80 - 120		

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 320-228348/2-A
Matrix: Water
Analysis Batch: 228510

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 228348

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	0.200	0.213		mg/L		107	80 - 120
Iron	1.00	1.06		mg/L		106	80 - 120
Lead	0.200	0.204		mg/L		102	80 - 120
Magnesium	1.00	0.994		mg/L		99	80 - 120
Manganese	0.200	0.203		mg/L		101	80 - 120
Molybdenum	0.200	0.200		mg/L		100	80 - 120
Nickel	0.200	0.211		mg/L		106	80 - 120
Potassium	1.00	0.977		mg/L		98	80 - 120
Selenium	0.200	0.191		mg/L		95	80 - 120
Sodium	1.00	0.972		mg/L		97	80 - 120
Thallium	0.0500	0.0506		mg/L		101	80 - 120
Vanadium	0.200	0.205		mg/L		102	80 - 120
Zinc	0.200	0.193		mg/L		97	80 - 120

Lab Sample ID: MB 320-227958/1-C
Matrix: Water
Analysis Batch: 228510

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 228348

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		06/11/18 07:30	06/11/18 15:48	1
Aluminum	ND		0.050	0.025	mg/L		06/11/18 07:30	06/11/18 15:48	1
Antimony	ND		0.0020	0.00020	mg/L		06/11/18 07:30	06/11/18 15:48	1
Arsenic	ND		0.0020	0.0010	mg/L		06/11/18 07:30	06/11/18 15:48	1
Barium	ND		0.0010	0.00050	mg/L		06/11/18 07:30	06/11/18 15:48	1
Beryllium	ND		0.0010	0.00010	mg/L		06/11/18 07:30	06/11/18 15:48	1
Cadmium	ND		0.0010	0.00050	mg/L		06/11/18 07:30	06/11/18 15:48	1
Calcium	ND		0.30	0.17	mg/L		06/11/18 07:30	06/11/18 15:48	1
Chromium	ND		0.0020	0.0010	mg/L		06/11/18 07:30	06/11/18 15:48	1
Cobalt	ND		0.0010	0.00060	mg/L		06/11/18 07:30	06/11/18 15:48	1
Copper	ND		0.0020	0.0010	mg/L		06/11/18 07:30	06/11/18 15:48	1
Iron	ND		0.050	0.025	mg/L		06/11/18 07:30	06/11/18 15:48	1
Lead	ND		0.0010	0.00060	mg/L		06/11/18 07:30	06/11/18 15:48	1
Magnesium	ND		0.050	0.025	mg/L		06/11/18 07:30	06/11/18 15:48	1
Manganese	ND		0.0025	0.0014	mg/L		06/11/18 07:30	06/11/18 15:48	1
Molybdenum	ND		0.0020	0.00060	mg/L		06/11/18 07:30	06/11/18 15:48	1
Nickel	ND		0.0020	0.0010	mg/L		06/11/18 07:30	06/11/18 15:48	1
Potassium	ND		0.050	0.025	mg/L		06/11/18 07:30	06/11/18 15:48	1
Selenium	ND		0.0020	0.0010	mg/L		06/11/18 07:30	06/11/18 15:48	1
Sodium	ND		0.10	0.080	mg/L		06/11/18 07:30	06/11/18 15:48	1
Thallium	ND		0.0010	0.00050	mg/L		06/11/18 07:30	06/11/18 15:48	1
Vanadium	ND		0.010	0.0030	mg/L		06/11/18 07:30	06/11/18 15:48	1
Zinc	ND		0.0050	0.0040	mg/L		06/11/18 07:30	06/11/18 15:48	1

Lab Sample ID: 440-212804-1 MS
Matrix: Water
Analysis Batch: 228510

Client Sample ID: MW-5
Prep Type: Dissolved
Prep Batch: 228348

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	ND		0.0500	0.0525		mg/L		105	80 - 120

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 440-212804-1 MS
Matrix: Water
Analysis Batch: 228510

Client Sample ID: MW-5
Prep Type: Dissolved
Prep Batch: 228348

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	0.036	J	1.00	0.976		mg/L		94	80 - 120
Antimony	ND		0.200	0.208		mg/L		104	80 - 120
Arsenic	0.86		0.200	1.06	4	mg/L		103	80 - 120
Barium	0.015		0.200	0.225		mg/L		105	80 - 120
Beryllium	0.00021	J	0.200	0.199		mg/L		99	80 - 120
Cadmium	0.00070	J	0.200	0.208		mg/L		104	80 - 120
Calcium	39		1.00	42.4	4	mg/L		379	80 - 120
Chromium	ND		0.200	0.205		mg/L		103	80 - 120
Cobalt	0.0086		0.200	0.218		mg/L		105	80 - 120
Copper	0.017		0.200	0.222		mg/L		103	80 - 120
Iron	ND		1.00	1.01		mg/L		101	80 - 120
Lead	ND		0.200	0.189		mg/L		94	80 - 120
Magnesium	17		1.00	18.4	4	mg/L		192	80 - 120
Manganese	0.45		0.200	0.674		mg/L		111	80 - 120
Molybdenum	0.0035		0.200	0.233		mg/L		115	80 - 120
Nickel	0.0095		0.200	0.213		mg/L		102	80 - 120
Potassium	18		1.00	20.7	4	mg/L		227	80 - 120
Selenium	0.0070		0.200	0.213		mg/L		103	80 - 120
Sodium	53		1.00	57.9	4	mg/L		442	80 - 120
Thallium	ND		0.0500	0.0492		mg/L		98	80 - 120
Vanadium	ND		0.200	0.203		mg/L		101	80 - 120
Zinc	0.23		0.200	0.463		mg/L		116	80 - 120

Lab Sample ID: 440-212804-1 MSD
Matrix: Water
Analysis Batch: 228510

Client Sample ID: MW-5
Prep Type: Dissolved
Prep Batch: 228348

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	ND		0.0500	0.0530		mg/L		106	80 - 120	1	15
Aluminum	0.036	J	1.00	0.975		mg/L		94	80 - 120	0	15
Antimony	ND		0.200	0.210		mg/L		105	80 - 120	1	15
Arsenic	0.86		0.200	1.08	4	mg/L		114	80 - 120	2	15
Barium	0.015		0.200	0.226		mg/L		105	80 - 120	0	15
Beryllium	0.00021	J	0.200	0.200		mg/L		100	80 - 120	0	15
Cadmium	0.00070	J	0.200	0.207		mg/L		103	80 - 120	0	15
Calcium	39		1.00	43.6	4	mg/L		499	80 - 120	3	15
Chromium	ND		0.200	0.205		mg/L		102	80 - 120	0	15
Cobalt	0.0086		0.200	0.218		mg/L		105	80 - 120	0	15
Copper	0.017		0.200	0.222		mg/L		103	80 - 120	0	15
Iron	ND		1.00	1.02		mg/L		102	80 - 120	1	15
Lead	ND		0.200	0.189		mg/L		95	80 - 120	0	15
Magnesium	17		1.00	19.2	4	mg/L		273	80 - 120	4	15
Manganese	0.45		0.200	0.687		mg/L		118	80 - 120	2	15
Molybdenum	0.0035		0.200	0.234		mg/L		115	80 - 120	0	15
Nickel	0.0095		0.200	0.213		mg/L		101	80 - 120	0	15
Potassium	18		1.00	21.7	4	mg/L		332	80 - 120	5	17
Selenium	0.0070		0.200	0.212		mg/L		103	80 - 120	0	15
Sodium	53		1.00	60.1	4	mg/L		661	80 - 120	4	15

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 440-212804-1 MSD
Matrix: Water
Analysis Batch: 228510

Client Sample ID: MW-5
Prep Type: Dissolved
Prep Batch: 228348

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Thallium	ND		0.0500	0.0491		mg/L		98	80 - 120	0	15
Vanadium	ND		0.200	0.201		mg/L		101	80 - 120	1	15
Zinc	0.23		0.200	0.470		mg/L		119	80 - 120	1	15

Method: 7470A - Mercury (CVAA)

Lab Sample ID: LCS 320-228900/12-A
Matrix: Water
Analysis Batch: 228979

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 228900

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.00100	0.000993		mg/L		99	82 - 113		

Lab Sample ID: MB 320-227958/1-E
Matrix: Water
Analysis Batch: 228979

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 228900

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		06/13/18 15:06	06/13/18 18:26	1

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 440-480969/10
Matrix: Water
Analysis Batch: 480969

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.20	0.10	mg/L			06/07/18 16:59	1

Lab Sample ID: LCS 440-480969/11
Matrix: Water
Analysis Batch: 480969

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia as N			5.00	5.25		mg/L		105	90 - 110		

Lab Sample ID: MRL 440-480969/9
Matrix: Water
Analysis Batch: 480969

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia as N			0.200	0.126	J	mg/L		63	50 - 150		

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 440-480755/3
Matrix: Water
Analysis Batch: 480755

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	ND		4.0	4.0	mg/L			06/06/18 07:50	1
Bicarbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			06/06/18 07:50	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			06/06/18 07:50	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			06/06/18 07:50	1

Lab Sample ID: LCS 440-480755/2
Matrix: Water
Analysis Batch: 480755

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3	98.9	97.6		mg/L		99	80 - 120

Lab Sample ID: 440-212804-1 DU
Matrix: Water
Analysis Batch: 480755

Client Sample ID: MW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity as CaCO3	60		60.3		mg/L		0.1	20
Bicarbonate Alkalinity as CaCO3	60		60.3		mg/L		0.1	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20
Hydroxide Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: MB 440-481329/3
Matrix: Water
Analysis Batch: 481329

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		1.0	1.0	umhos/cm			06/13/18 08:00	1

Lab Sample ID: LCS 440-481329/4
Matrix: Water
Analysis Batch: 481329

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Specific Conductance	953	1000		umhos/cm		105	90 - 110

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 440-480572/1
Matrix: Water
Analysis Batch: 480572

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	5.0	mg/L			06/06/18 08:57	1

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 440-480572/2
Matrix: Water
Analysis Batch: 480572

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			1000	1000		mg/L		100	90 - 110		

Lab Sample ID: MB 440-481070/1
Matrix: Water
Analysis Batch: 481070

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	5.0	mg/L			06/08/18 10:54	1

Lab Sample ID: LCS 440-481070/2
Matrix: Water
Analysis Batch: 481070

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			1000	996		mg/L		100	90 - 110		

Lab Sample ID: 440-212804-4 DU
Matrix: Water
Analysis Batch: 481070

Client Sample ID: MW-4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	2400			2520		mg/L				3	5

Method: SM 4500 CN E - Cyanide, Total

Lab Sample ID: MB 440-480604/1-A
Matrix: Water
Analysis Batch: 480651

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 480604

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.025	0.013	mg/L		06/06/18 10:37	06/06/18 13:47	1

Lab Sample ID: LCS 440-480604/2-A
Matrix: Water
Analysis Batch: 480651

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 480604

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cyanide, Total			0.200	0.185		mg/L		93	90 - 110		

HPLC/IC

Analysis Batch: 480319

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-212804-1	MW-5	Total/NA	Water	300.0	
440-212804-2	MW-6	Total/NA	Water	300.0	
440-212804-3	MW-3	Total/NA	Water	300.0	
440-212804-4	MW-4	Total/NA	Water	300.0	
440-212804-5	Equipment Blank	Total/NA	Water	300.0	
440-212804-6	MW-1	Total/NA	Water	300.0	
440-212804-7	MW-2	Total/NA	Water	300.0	
MB 440-480319/6	Method Blank	Total/NA	Water	300.0	
LCS 440-480319/5	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 480320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-212804-1	MW-5	Total/NA	Water	300.0	
440-212804-1	MW-5	Total/NA	Water	300.0	
440-212804-2	MW-6	Total/NA	Water	300.0	
440-212804-2	MW-6	Total/NA	Water	300.0	
440-212804-3	MW-3	Total/NA	Water	300.0	
440-212804-3	MW-3	Total/NA	Water	300.0	
440-212804-4	MW-4	Total/NA	Water	300.0	
440-212804-4	MW-4	Total/NA	Water	300.0	
440-212804-5	Equipment Blank	Total/NA	Water	300.0	
440-212804-6	MW-1	Total/NA	Water	300.0	
440-212804-6	MW-1	Total/NA	Water	300.0	
440-212804-7	MW-2	Total/NA	Water	300.0	
440-212804-7	MW-2	Total/NA	Water	300.0	
MB 440-480320/6	Method Blank	Total/NA	Water	300.0	
LCS 440-480320/5	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 480768

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-212804-1	MW-5	Total/NA	Water	314.0 LL	
440-212804-2	MW-6	Total/NA	Water	314.0 LL	
440-212804-3	MW-3	Total/NA	Water	314.0 LL	
440-212804-4	MW-4	Total/NA	Water	314.0 LL	
440-212804-5	Equipment Blank	Total/NA	Water	314.0 LL	
440-212804-6	MW-1	Total/NA	Water	314.0 LL	
440-212804-7	MW-2	Total/NA	Water	314.0 LL	
MB 440-480768/6	Method Blank	Total/NA	Water	314.0 LL	
LCS 440-480768/5	Lab Control Sample	Total/NA	Water	314.0 LL	
MRL 440-480768/4	Lab Control Sample	Total/NA	Water	314.0 LL	

Metals

Filtration Batch: 227958

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-212804-1	MW-5	Dissolved	Water	Filtration	
440-212804-2	MW-6	Dissolved	Water	Filtration	
440-212804-3	MW-3	Dissolved	Water	Filtration	
440-212804-4	MW-4	Dissolved	Water	Filtration	
440-212804-5	Equipment Blank	Dissolved	Water	Filtration	

Metals (Continued)

Filtration Batch: 227958 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-212804-6	MW-1	Dissolved	Water	Filtration	
440-212804-7	MW-2	Dissolved	Water	Filtration	
MB 320-227958/1-C	Method Blank	Dissolved	Water	Filtration	
MB 320-227958/1-D	Method Blank	Dissolved	Water	Filtration	
MB 320-227958/1-E	Method Blank	Dissolved	Water	Filtration	
440-212804-1 MS	MW-5	Dissolved	Water	Filtration	
440-212804-1 MSD	MW-5	Dissolved	Water	Filtration	

Prep Batch: 228348

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-212804-1	MW-5	Dissolved	Water	3005A	227958
440-212804-2	MW-6	Dissolved	Water	3005A	227958
440-212804-3	MW-3	Dissolved	Water	3005A	227958
440-212804-4	MW-4	Dissolved	Water	3005A	227958
440-212804-5	Equipment Blank	Dissolved	Water	3005A	227958
440-212804-6	MW-1	Dissolved	Water	3005A	227958
440-212804-7	MW-2	Dissolved	Water	3005A	227958
MB 320-227958/1-C	Method Blank	Dissolved	Water	3005A	227958
LCS 320-228348/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
440-212804-1 MS	MW-5	Dissolved	Water	3005A	227958
440-212804-1 MSD	MW-5	Dissolved	Water	3005A	227958

Prep Batch: 228350

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-212804-1	MW-5	Dissolved	Water	3010A	227958
440-212804-2	MW-6	Dissolved	Water	3010A	227958
440-212804-3	MW-3	Dissolved	Water	3010A	227958
440-212804-4	MW-4	Dissolved	Water	3010A	227958
440-212804-5	Equipment Blank	Dissolved	Water	3010A	227958
440-212804-6	MW-1	Dissolved	Water	3010A	227958
440-212804-7	MW-2	Dissolved	Water	3010A	227958
MB 320-227958/1-D	Method Blank	Dissolved	Water	3010A	227958
LCS 320-228350/2-A	Lab Control Sample	Total/NA	Water	3010A	
440-212804-1 MS	MW-5	Dissolved	Water	3010A	227958
440-212804-1 MSD	MW-5	Dissolved	Water	3010A	227958

Analysis Batch: 228510

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-212804-1	MW-5	Dissolved	Water	6020	228348
440-212804-2	MW-6	Dissolved	Water	6020	228348
440-212804-3	MW-3	Dissolved	Water	6020	228348
440-212804-4	MW-4	Dissolved	Water	6020	228348
440-212804-4	MW-4	Dissolved	Water	6020	228348
440-212804-5	Equipment Blank	Dissolved	Water	6020	228348
440-212804-5	Equipment Blank	Dissolved	Water	6020	228348
440-212804-6	MW-1	Dissolved	Water	6020	228348
440-212804-7	MW-2	Dissolved	Water	6020	228348
MB 320-227958/1-C	Method Blank	Dissolved	Water	6020	228348
LCS 320-228348/2-A	Lab Control Sample	Total Recoverable	Water	6020	228348
440-212804-1 MS	MW-5	Dissolved	Water	6020	228348
440-212804-1 MSD	MW-5	Dissolved	Water	6020	228348

Prep Batch: 228900

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-212804-1	MW-5	Dissolved	Water	7470A	227958
440-212804-2	MW-6	Dissolved	Water	7470A	227958
440-212804-3	MW-3	Dissolved	Water	7470A	227958
440-212804-4	MW-4	Dissolved	Water	7470A	227958
440-212804-5	Equipment Blank	Dissolved	Water	7470A	227958
440-212804-6	MW-1	Dissolved	Water	7470A	227958
440-212804-7	MW-2	Dissolved	Water	7470A	227958
MB 320-227958/1-E	Method Blank	Dissolved	Water	7470A	227958
LCS 320-228900/12-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 228979

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-212804-1	MW-5	Dissolved	Water	7470A	228900
440-212804-2	MW-6	Dissolved	Water	7470A	228900
440-212804-3	MW-3	Dissolved	Water	7470A	228900
440-212804-4	MW-4	Dissolved	Water	7470A	228900
440-212804-5	Equipment Blank	Dissolved	Water	7470A	228900
440-212804-6	MW-1	Dissolved	Water	7470A	228900
440-212804-7	MW-2	Dissolved	Water	7470A	228900
MB 320-227958/1-E	Method Blank	Dissolved	Water	7470A	228900
LCS 320-228900/12-A	Lab Control Sample	Total/NA	Water	7470A	228900

Analysis Batch: 229151

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-212804-1	MW-5	Dissolved	Water	6010B	228350
440-212804-2	MW-6	Dissolved	Water	6010B	228350
440-212804-3	MW-3	Dissolved	Water	6010B	228350
440-212804-4	MW-4	Dissolved	Water	6010B	228350
440-212804-5	Equipment Blank	Dissolved	Water	6010B	228350
440-212804-6	MW-1	Dissolved	Water	6010B	228350
440-212804-7	MW-2	Dissolved	Water	6010B	228350
MB 320-227958/1-D	Method Blank	Dissolved	Water	6010B	228350
LCS 320-228350/2-A	Lab Control Sample	Total/NA	Water	6010B	228350
440-212804-1 MS	MW-5	Dissolved	Water	6010B	228350
440-212804-1 MSD	MW-5	Dissolved	Water	6010B	228350

General Chemistry

Analysis Batch: 480572

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-212804-1	MW-5	Total/NA	Water	SM 2540C	
440-212804-2	MW-6	Total/NA	Water	SM 2540C	
440-212804-3	MW-3	Total/NA	Water	SM 2540C	
440-212804-5	Equipment Blank	Total/NA	Water	SM 2540C	
MB 440-480572/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 440-480572/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Prep Batch: 480604

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-212804-1	MW-5	Total/NA	Water	Distill/CN	
440-212804-2	MW-6	Total/NA	Water	Distill/CN	
440-212804-3	MW-3	Total/NA	Water	Distill/CN	
440-212804-4	MW-4	Total/NA	Water	Distill/CN	

General Chemistry (Continued)

Prep Batch: 480604 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-212804-5	Equipment Blank	Total/NA	Water	Distill/CN	
440-212804-6	MW-1	Total/NA	Water	Distill/CN	
440-212804-7	MW-2	Total/NA	Water	Distill/CN	
MB 440-480604/1-A	Method Blank	Total/NA	Water	Distill/CN	
LCS 440-480604/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	

Analysis Batch: 480649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-212804-1	MW-5	Total/NA	Water	SM 4500 H+ B	
440-212804-2	MW-6	Total/NA	Water	SM 4500 H+ B	
440-212804-3	MW-3	Total/NA	Water	SM 4500 H+ B	
440-212804-4	MW-4	Total/NA	Water	SM 4500 H+ B	
440-212804-5	Equipment Blank	Total/NA	Water	SM 4500 H+ B	
440-212804-6	MW-1	Total/NA	Water	SM 4500 H+ B	
440-212804-7	MW-2	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 480651

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-212804-1	MW-5	Total/NA	Water	SM 4500 CN E	480604
440-212804-2	MW-6	Total/NA	Water	SM 4500 CN E	480604
440-212804-3	MW-3	Total/NA	Water	SM 4500 CN E	480604
440-212804-4	MW-4	Total/NA	Water	SM 4500 CN E	480604
440-212804-5	Equipment Blank	Total/NA	Water	SM 4500 CN E	480604
440-212804-6	MW-1	Total/NA	Water	SM 4500 CN E	480604
440-212804-7	MW-2	Total/NA	Water	SM 4500 CN E	480604
MB 440-480604/1-A	Method Blank	Total/NA	Water	SM 4500 CN E	480604
LCS 440-480604/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN E	480604

Analysis Batch: 480755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-212804-1	MW-5	Total/NA	Water	SM 2320B	
440-212804-2	MW-6	Total/NA	Water	SM 2320B	
440-212804-3	MW-3	Total/NA	Water	SM 2320B	
440-212804-4	MW-4	Total/NA	Water	SM 2320B	
440-212804-5	Equipment Blank	Total/NA	Water	SM 2320B	
440-212804-6	MW-1	Total/NA	Water	SM 2320B	
440-212804-7	MW-2	Total/NA	Water	SM 2320B	
MB 440-480755/3	Method Blank	Total/NA	Water	SM 2320B	
LCS 440-480755/2	Lab Control Sample	Total/NA	Water	SM 2320B	
440-212804-1 DU	MW-5	Total/NA	Water	SM 2320B	

Analysis Batch: 480969

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-212804-1	MW-5	Total/NA	Water	350.1	
440-212804-2	MW-6	Total/NA	Water	350.1	
440-212804-3	MW-3	Total/NA	Water	350.1	
440-212804-4	MW-4	Total/NA	Water	350.1	
440-212804-5	Equipment Blank	Total/NA	Water	350.1	
440-212804-6	MW-1	Total/NA	Water	350.1	
440-212804-7	MW-2	Total/NA	Water	350.1	
MB 440-480969/10	Method Blank	Total/NA	Water	350.1	

General Chemistry (Continued)

Analysis Batch: 480969 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 440-480969/11	Lab Control Sample	Total/NA	Water	350.1	
MRL 440-480969/9	Lab Control Sample	Total/NA	Water	350.1	

Analysis Batch: 481070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-212804-4	MW-4	Total/NA	Water	SM 2540C	
440-212804-6	MW-1	Total/NA	Water	SM 2540C	
440-212804-7	MW-2	Total/NA	Water	SM 2540C	
MB 440-481070/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 440-481070/2	Lab Control Sample	Total/NA	Water	SM 2540C	
440-212804-4 DU	MW-4	Total/NA	Water	SM 2540C	

Analysis Batch: 481329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-212804-1	MW-5	Total/NA	Water	SM 2510B	
440-212804-2	MW-6	Total/NA	Water	SM 2510B	
440-212804-3	MW-3	Total/NA	Water	SM 2510B	
440-212804-4	MW-4	Total/NA	Water	SM 2510B	
440-212804-5	Equipment Blank	Total/NA	Water	SM 2510B	
440-212804-6	MW-1	Total/NA	Water	SM 2510B	
440-212804-7	MW-2	Total/NA	Water	SM 2510B	
MB 440-481329/3	Method Blank	Total/NA	Water	SM 2510B	
LCS 440-481329/4	Lab Control Sample	Total/NA	Water	SM 2510B	

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-212804-1

Laboratory: TestAmerica Irvine

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	CA ELAP 2706	06-30-18 *

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
SM 2320B		Water	Bicarbonate Alkalinity as CaCO3
SM 2320B		Water	Carbonate Alkalinity as CaCO3
SM 2320B		Water	Hydroxide Alkalinity as CaCO3

Laboratory: TestAmerica Sacramento

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2897	01-31-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6010B	3010A	Water	Sulfur
6020	3005A	Water	Aluminum
6020	3005A	Water	Calcium
6020	3005A	Water	Iron
6020	3005A	Water	Magnesium
6020	3005A	Water	Manganese
6020	3005A	Water	Potassium
6020	3005A	Water	Sodium

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

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Phone: 949.261.1022 Fax:

Chain of Custody Record 195527

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TestAmerica Laboratories, Inc.

TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☒ Other:

Client Contact	Project Manager: Eric Fordham	Site Contact:	Date:	COC No 195527
Company Name: GeoPentech	Tel/Fax: 714-796-9100	Lab Contact: Linda Lavers	Carrier:	1 of 1 COCs
Address: 5251 California Ave	Analysis Turnaround Time			Sampler:
City/State/Zip: Irvine, CA	☐ CALENDAR DAYS ☒ WORKING DAYS			For Lab Use Only:
Phone: 714-796-9100	TAT if different from Below: Standard			Walk-in Client
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Blue Eagle Mine	☐ 1 week			
Site: Rosamond, CA	☐ 2 days			Job / SDG No.:
PO #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	300, EC, pH, TDS	Perchlorate	Cyanide	Alkalinity	Dissolved Metals	Ammonia	Sample Specific Notes:
MW-5	6-4-18	10:05	G	W	6			✓	✓	✓	✓	✓	✓	
MW-6	6-4-18	11:22	G	W	6			✓	✓	✓	✓	✓	✓	
MW-3	6-4-18	12:38	G	W	6			✓	✓	✓	✓	✓	✓	
MW-4	6-4-18	13:49	G	W	6			✓	✓	✓	✓	✓	✓	
Equip. Blank	6-4-18	13:15	G	W	6			✓	✓	✓	✓	✓	✓	
MW-1	6-5-18	09:36	G	W	6			✓	✓	✓	✓	✓	✓	
MW-2	6-5-18	08:40	G	W	6			✓	✓	✓	✓	✓	✓	

440-212804 Chain of Custody

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Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☒ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:
All Samples Were Put on Ice after Collection
Quotation #: 32011123

Custody Seals Intact ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp (°C): Obs'd: _____ Corr'd: _____ Therm ID No.: _____

Relinquished by:	Company	Date/Time	Received by:	Company	Date/Time
Jennifer Von Steuffiteeg	GeoPentech	6-5-18/1:25pm		TARV	6/5/18 1325
Relinquished by:	Company:	Date/Time:	Received by	Company:	Date/Time:
Relinquished by	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

6/12/2018

4.6/4.6 3.1/3.1 IR SC6

TestAmerica Irvine
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Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Laver, Linda C.	Carrier Tracking No(s):	COC No: 440-122520.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: linda.laver@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 440-212804-1
Address: 880 Riverside Parkway,	Due Date Requested: 6/21/2018			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: Blue Eagle Lode Mine	Project #: 32011165			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/Filtration_ME (MOD) Pick Your Analytes	7470A/Filtration_ME Dissolved Mercury	6020/Filtration_ME Dissolved Metals including Ca & Mg	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
MW-5 (440-212804-1)	6/4/18	10:05 Pacific		Water			X	X	X	1	Sulfur may be high, may want to see 6020 data, Sulfur may be high, may want to see
MW-6 (440-212804-2)	6/4/18	11:22 Pacific		Water			X	X	X	1	Sulfur may be high, may want to see 6020 data, Sulfur may be high, may want to see
MW-3 (440-212804-3)	6/4/18	12:38 Pacific		Water			X	X	X	1	Sulfur may be high, may want to see 6020 data, Sulfur may be high, may want to see
MW-4 (440-212804-4)	6/4/18	13:49 Pacific		Water			X	X	X	1	Sulfur may be high, may want to see 6020 data, Sulfur may be high, may want to see
Equipment Blank (440-212804-5)	6/4/18	13:15 Pacific		Water			X	X	X	1	Sulfur may be high, may want to see 6020 data, Sulfur may be high, may want to see
MW-1 (440-212804-6)	6/5/18	09:36 Pacific		Water			X	X	X	1	Sulfur may be high, may want to see 6020 data, Sulfur may be high, may want to see
MW-2 (440-212804-7)	6/5/18	08:40 Pacific		Water			X	X	X	1	Sulfur may be high, may want to see 6020 data, Sulfur may be high, may want to see

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		6/6/18 0700	TAL		6/7/18 955	TA-Sac
2	Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
3	Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.9

Ver: 09/20/2016

Login Sample Receipt Checklist

Client: GeoPentech, Inc

Job Number: 440-212804-1

Login Number: 212804
List Number: 1
Creator: Skinner, Alma D

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	Not present
Sample custody seals, if present, are intact.	N/A	Not Present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: GeoPentech, Inc

Job Number: 440-212804-1

Login Number: 212804
List Number: 2
Creator: Gooch, Mayce

List Source: TestAmerica Sacramento
List Creation: 06/07/18 12:46 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.9c
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

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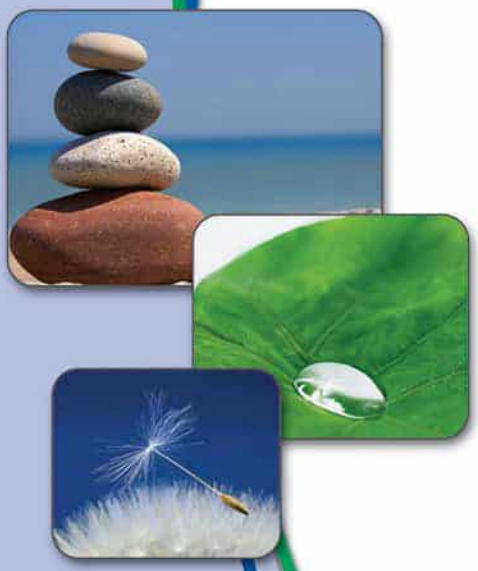

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-215185-1
Client Project/Site: Blue Eagle Lode Mine

For:
GeoPentech, Inc
5251 California Ave
Suite 210
Irvine, California 92617

Attn: Jennipher Von Stauffenberg



Authorized for release by:
8/3/2018 2:14:51 PM

Linda C. Laver, Project Manager II
(916)374-4362
linda.laver@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-215185-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-215185-1	MW-5	Water	07/05/18 10:10	07/06/18 16:35
440-215185-2	MW-4	Water	07/05/18 11:30	07/06/18 16:35
440-215185-4	MW-2	Water	07/05/18 12:44	07/06/18 16:35
440-215185-5	MW-1	Water	07/05/18 13:41	07/06/18 16:35
440-215185-6	MW-6	Water	07/06/18 08:21	07/06/18 16:35
440-215185-7	MW-3	Water	07/06/18 10:19	07/06/18 16:35

Job ID: 440-215185-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-215185-1

Receipt
The samples were received on 7/6/2018 4:35 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 6 coolers at receipt time were 8.5º C, 12.6º C, 13.4º C, 16.7º C, 22.0º C and 22.4º C.

Receipt Exceptions
The following samples were received at the laboratory outside the required temperature criteria: MW-5 (440-215185-1), MW-4 (440-215185-2), DUP (MW-4) (440-215185-3), MW-2 (440-215185-4) and MW-1 (440-215185-5).

The following samples were received at the laboratory outside the required temperature criteria: MW-6 (440-215185-6) and MW-3 (440-215185-7). These samples were collected and submitted to the laboratory on the same day.

GC/MS VOA
Method(s) 8260B/CA_LUFTMS: The following volatile sample was received and analyzed with significant headspace in the sample vial(s): MW-5 (440-215185-1). Significant headspace is defined as a bubble greater than 6 mm in diameter.

Method(s) 8260B: The following volatile sample was received and analyzed with significant headspace in the sample vial(s): MW-5 (440-215185-1). Significant headspace is defined as a bubble greater than 6 mm in diameter.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

HPLC
Method(s) 8330A: The %RPD between the primary and confirmation column exceeded 40% for the analytes listed below. The primary column results have been reported and qualified in accordance with the laboratory's SOP.

MW-1 (440-215185-5) for 1,3,5-Trinitrobenzene
MW-3 (440-215185-7) for 1,3,5-Trinitrobenzene and Nitrobenzene

Method(s) 8330A: The laboratory control sample (LCS) for preparation 320-233406 and analytical batch 320-234552 recovered outside control limits for the following analytes: o-Nitrotoluene and HMX . These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8330A: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 320-233406 and analytical batch 320-234552 was outside control limits for the following analyte: o-Nitrotoluene.

Method(s) 8330-Prep: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-233406.

Method(s) 8330A: The method blank for preparation batch 320-233648 and analytical batch 320-234552 contained 1,3,5-Trinitrobenzene above the method detection limit (MDL) but below the reporting limit (RL); therefore, re-extraction and re-analysis of samples was not performed.

Method(s) 8330A: The laboratory control sample duplicate (LCSD) for preparation batch 320-233648 and analytical batch 320-234552 recovered outside control limits for the following analyte: o-Nitrotoluene. This analyte was biased high in the LCSD and was not detected in the associated samples; therefore, the data have been reported.

Method(s) 8330-Prep: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-233648.

IC
Method(s) 314.0 LL: The continuing calibration verification (CCV) associated with batch 440-488947 recovered above the upper control limit for Perchlorate. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been

Job ID: 440-215185-1 (Continued)

Laboratory: TestAmerica Irvine (Continued)

reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
Method(s) 8015B (DRO/MRO): Surrogate recovery for the following sample was outside control limits: MW-6 (440-215185-6). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8015B (Ethylene Glycol): Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 490-527747.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
The requested analyses include dissolved metals and hardness but samples were not filtered in the field. The samples were filtered and preserved by the laboratory.

Method(s) 6020: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 320-233334 and 320-233579 and analytical batch 320-234266 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
Method(s) 3510C: The following sample formed emulsion during the extraction procedure: MW-5 (440-215185-1). The emulsion was broken up using sodium sulfate. This sample is associated with method 8015B (DRO/MRO) in preparation batch 320-233421.

Method(s) 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with method 8015B (DRO/MRO) in preparation batch 320-233421.

Method(s) 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with method 8015B (DRO/MRO) in preparation batch 320-233706.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Client Sample ID: MW-5
Date Collected: 07/05/18 10:10
Date Received: 07/06/18 16:35

Lab Sample ID: 440-215185-1
Matrix: Water

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50	35	ug/L			07/13/18 05:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*98*		*76 - 132*		*07/13/18 05:40*	*1*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*07/13/18 05:40*	*1*
Toluene-d8 (Surr)	*105*		*80 - 128*		*07/13/18 05:40*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.25	ug/L			07/13/18 05:40	1
Ethylbenzene	ND		0.50	0.25	ug/L			07/13/18 05:40	1
m,p-Xylene	ND		1.0	0.50	ug/L			07/13/18 05:40	1
o-Xylene	ND		0.50	0.25	ug/L			07/13/18 05:40	1
Toluene	ND		0.50	0.25	ug/L			07/13/18 05:40	1
Xylenes, Total	ND		1.0	0.50	ug/L			07/13/18 05:40	1
Naphthalene	ND		1.0	0.40	ug/L			07/13/18 05:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*07/13/18 05:40*	*1*
Dibromofluoromethane (Surr)	*98*		*76 - 132*		*07/13/18 05:40*	*1*
Toluene-d8 (Surr)	*105*		*80 - 128*		*07/13/18 05:40*	*1*

Method: 8015B - Glycols -Direct Injection (GC/FID)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene glycol	ND		10	1.0	mg/L			07/10/18 16:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-butyl alcohol (Surr)	*95*		*70 - 130*		*07/10/18 16:42*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	**22**	**J**	51	16	ug/L		07/11/18 11:38	07/31/18 01:55	1
Motor Oil Range Organics (C25-C36)	ND		510	170	ug/L		07/11/18 11:38	07/31/18 01:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*68*		*56 - 145*	*07/11/18 11:38*	*07/31/18 01:55*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**19**		0.50	0.25	mg/L			07/06/18 19:06	1
Fluoride	ND		0.50	0.25	mg/L			07/06/18 19:06	1
Nitrite as N	ND		0.15	0.070	mg/L			07/06/18 19:06	1
Sulfate	**260**		5.0	2.5	mg/L			07/06/18 19:21	10
Nitrate as N	**0.19**		0.11	0.055	mg/L			07/06/18 19:06	1

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND	^	1.0	0.50	ug/L			07/24/18 00:25	1

Method: 8330A - Nitroaromatics and Nitramines

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dinitrobenzene	ND		0.10	0.052	ug/L		07/11/18 10:15	07/18/18 08:11	1

Client Sample ID: MW-5
Date Collected: 07/05/18 10:10
Date Received: 07/06/18 16:35

Lab Sample ID: 440-215185-1
Matrix: Water

Method: 8330A - Nitroaromatics and Nitramines (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	ND		0.10	0.052	ug/L		07/11/18 10:15	07/18/18 08:11	1
2,6-Dinitrotoluene	ND		0.10	0.052	ug/L		07/11/18 10:15	07/18/18 08:11	1
HMX	ND	*	0.10	0.037	ug/L		07/11/18 10:15	07/18/18 08:11	1
Nitrobenzene	ND		0.10	0.052	ug/L		07/11/18 10:15	07/18/18 08:11	1
Nitroglycerin	ND		0.67	0.34	ug/L		07/11/18 10:15	07/18/18 08:11	1
2-Nitrotoluene	ND	*	0.52	0.091	ug/L		07/11/18 10:15	07/18/18 08:11	1
3-Nitrotoluene	ND		0.52	0.059	ug/L		07/11/18 10:15	07/18/18 08:11	1
4-Nitrotoluene	ND		0.52	0.091	ug/L		07/11/18 10:15	07/18/18 08:11	1
RDX	ND		0.10	0.037	ug/L		07/11/18 10:15	07/18/18 08:11	1
1,3,5-Trinitrobenzene	ND		0.10	0.032	ug/L		07/11/18 10:15	07/18/18 08:11	1
2,4,6-Trinitrotoluene	ND		0.10	0.052	ug/L		07/11/18 10:15	07/18/18 08:11	1
PETN	ND		0.67	0.31	ug/L		07/11/18 10:15	07/18/18 08:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*86*		*79 - 111*	*07/11/18 10:15*	*07/18/18 08:11*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	**86**		0.50	0.30	mg/L		07/13/18 07:20	07/16/18 17:47	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		07/13/18 07:20	07/13/18 14:08	1
Aluminum	ND		0.050	0.025	mg/L		07/13/18 07:20	07/13/18 14:08	1
Antimony	**0.00023**	**J**	0.0020	0.00020	mg/L		07/13/18 07:20	07/13/18 14:08	1
Arsenic	**0.70**	**F1**	0.0020	0.0010	mg/L		07/13/18 07:20	07/13/18 14:08	1
Barium	**0.025**		0.0010	0.00050	mg/L		07/13/18 07:20	07/13/18 14:08	1
Beryllium	ND		0.0010	0.00010	mg/L		07/13/18 07:20	07/13/18 14:08	1
Cadmium	ND		0.0010	0.00050	mg/L		07/13/18 07:20	07/13/18 14:08	1
Calcium	**62**		0.30	0.17	mg/L		07/13/18 07:20	07/13/18 14:08	1
Chromium	ND		0.0020	0.0010	mg/L		07/13/18 07:20	07/13/18 14:08	1
Cobalt	ND		0.0010	0.00060	mg/L		07/13/18 07:20	07/13/18 14:08	1
Copper	**0.0012**	**J**	0.0020	0.0010	mg/L		07/13/18 07:20	07/13/18 14:08	1
Iron	ND		0.050	0.025	mg/L		07/13/18 07:20	07/13/18 14:08	1
Lead	ND		0.0010	0.00060	mg/L		07/13/18 07:20	07/13/18 14:08	1
Magnesium	**20**		0.050	0.025	mg/L		07/13/18 07:20	07/13/18 14:08	1
Manganese	**0.052**		0.0025	0.0014	mg/L		07/13/18 07:20	07/13/18 14:08	1
Molybdenum	**0.0026**		0.0020	0.00060	mg/L		07/13/18 07:20	07/13/18 14:08	1
Nickel	**0.0038**		0.0020	0.0010	mg/L		07/13/18 07:20	07/13/18 14:08	1
Potassium	**23**		0.050	0.025	mg/L		07/13/18 07:20	07/13/18 14:08	1
Selenium	**0.0062**		0.0020	0.0010	mg/L		07/13/18 07:20	07/13/18 14:08	1
Sodium	**55**		0.10	0.080	mg/L		07/13/18 07:20	07/13/18 14:08	1
Thallium	ND		0.0010	0.00050	mg/L		07/13/18 07:20	07/13/18 14:08	1
Vanadium	ND		0.010	0.0030	mg/L		07/13/18 07:20	07/13/18 14:08	1
Zinc	**0.041**		0.0050	0.0040	mg/L		07/13/18 07:20	07/13/18 14:08	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		07/12/18 11:35	07/13/18 09:26	1

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-215185-1

Client Sample ID: MW-5
Date Collected: 07/05/18 10:10
Date Received: 07/06/18 16:35

Lab Sample ID: 440-215185-1
Matrix: Water

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**240**		2.5	2.5	mg/L			07/23/18 11:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	ND		0.20	0.10	mg/L			07/10/18 17:34	1
Total Dissolved Solids	**590**		10	5.0	mg/L			07/11/18 09:18	1
Cyanide, Total	ND		0.025	0.013	mg/L		07/10/18 10:47	07/10/18 14:59	1
Nitrocellulose	ND		2.0	0.48	mg/L		07/18/18 09:00	07/18/18 15:39	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	**100**		4.0	4.0	mg/L			07/07/18 14:02	1
Bicarbonate Alkalinity as CaCO3	**100**		4.0	4.0	mg/L			07/07/18 14:02	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			07/07/18 14:02	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			07/07/18 14:02	1
Specific Conductance	**810**		1.0	1.0	umhos/cm			07/25/18 12:00	1
pH adj. to 25 deg C	**7.5**	**HF**	0.1	0.1	SU			07/08/18 11:34	1

Client Sample ID: MW-4

Date Collected: 07/05/18 11:30
Date Received: 07/06/18 16:35

Lab Sample ID: 440-215185-2

Matrix: Water

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	**47**	**J**	50	35	ug/L			07/13/18 06:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*97*		*76 - 132*		*07/13/18 06:10*	*1*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*07/13/18 06:10*	*1*
Toluene-d8 (Surr)	*106*		*80 - 128*		*07/13/18 06:10*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.59**		0.50	0.25	ug/L			07/13/18 06:10	1
Ethylbenzene	ND		0.50	0.25	ug/L			07/13/18 06:10	1
m,p-Xylene	ND		1.0	0.50	ug/L			07/13/18 06:10	1
o-Xylene	ND		0.50	0.25	ug/L			07/13/18 06:10	1
Toluene	**1.8**		0.50	0.25	ug/L			07/13/18 06:10	1
Xylenes, Total	ND		1.0	0.50	ug/L			07/13/18 06:10	1
Naphthalene	**0.60**	**J**	1.0	0.40	ug/L			07/13/18 06:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*07/13/18 06:10*	*1*
Dibromofluoromethane (Surr)	*97*		*76 - 132*		*07/13/18 06:10*	*1*
Toluene-d8 (Surr)	*106*		*80 - 128*		*07/13/18 06:10*	*1*

Method: 8015B - Glycols -Direct Injection (GC/FID)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene glycol	ND		10	1.0	mg/L			07/10/18 16:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-butyl alcohol (Surr)	*103*		*70 - 130*		*07/10/18 16:59*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	**57**		48	15	ug/L		07/11/18 11:38	07/31/18 02:18	1
Motor Oil Range Organics (C25-C36)	ND		480	160	ug/L		07/11/18 11:38	07/31/18 02:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*70*		*56 - 145*	*07/11/18 11:38*	*07/31/18 02:18*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**19**		2.5	1.3	mg/L			07/06/18 20:57	5
Fluoride	**1.1**		0.50	0.25	mg/L			07/06/18 19:35	1
Nitrite as N	ND		0.15	0.070	mg/L			07/06/18 19:35	1
Sulfate	**1600**		25	13	mg/L			07/06/18 19:50	50
Nitrate as N	ND		0.11	0.055	mg/L			07/06/18 19:35	1

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			07/26/18 09:17	1

Client Sample ID: MW-4

Date Collected: 07/05/18 11:30
Date Received: 07/06/18 16:35

Lab Sample ID: 440-215185-2

Matrix: Water

Method: 8330A - Nitroaromatics and Nitramines

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dinitrobenzene	ND		0.10	0.052	ug/L		07/11/18 10:15	07/18/18 08:56	1
2,4-Dinitrotoluene	ND		0.10	0.052	ug/L		07/11/18 10:15	07/18/18 08:56	1
2,6-Dinitrotoluene	ND		0.10	0.052	ug/L		07/11/18 10:15	07/18/18 08:56	1
HMX	ND	*	0.10	0.038	ug/L		07/11/18 10:15	07/18/18 08:56	1
Nitrobenzene	ND		0.10	0.052	ug/L		07/11/18 10:15	07/18/18 08:56	1
Nitroglycerin	ND		0.68	0.34	ug/L		07/11/18 10:15	07/18/18 08:56	1
2-Nitrotoluene	ND	*	0.52	0.092	ug/L		07/11/18 10:15	07/18/18 08:56	1
3-Nitrotoluene	ND		0.52	0.059	ug/L		07/11/18 10:15	07/18/18 08:56	1
4-Nitrotoluene	ND		0.52	0.092	ug/L		07/11/18 10:15	07/18/18 08:56	1
RDX	ND		0.10	0.038	ug/L		07/11/18 10:15	07/18/18 08:56	1
1,3,5-Trinitrobenzene	ND		0.10	0.032	ug/L		07/11/18 10:15	07/18/18 08:56	1
2,4,6-Trinitrotoluene	ND		0.10	0.052	ug/L		07/11/18 10:15	07/18/18 08:56	1
PETN	ND		0.68	0.31	ug/L		07/11/18 10:15	07/18/18 08:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*95*		*79 - 111*	*07/11/18 10:15*	*07/18/18 08:56*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	**400**		0.50	0.30	mg/L		07/13/18 07:20	07/16/18 18:06	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		07/13/18 07:20	07/13/18 15:57	1
Aluminum	**51**		0.050	0.025	mg/L		07/13/18 07:20	07/13/18 15:57	1
Antimony	**0.0059**		0.0020	0.00020	mg/L		07/13/18 07:20	07/13/18 15:57	1
Arsenic	**130**		0.020	0.010	mg/L		07/13/18 07:20	07/13/18 16:00	10
Barium	**0.020**		0.0010	0.00050	mg/L		07/13/18 07:20	07/13/18 15:57	1
Beryllium	**0.011**		0.0010	0.00010	mg/L		07/13/18 07:20	07/13/18 15:57	1
Cadmium	**0.061**		0.0010	0.00050	mg/L		07/13/18 07:20	07/13/18 15:57	1
Calcium	**110**		0.30	0.17	mg/L		07/13/18 07:20	07/13/18 15:57	1
Chromium	**0.0010**	**J**	0.0020	0.0010	mg/L		07/13/18 07:20	07/13/18 15:57	1
Cobalt	**0.78**		0.0010	0.00060	mg/L		07/13/18 07:20	07/13/18 15:57	1
Copper	**0.84**		0.0020	0.0010	mg/L		07/13/18 07:20	07/13/18 15:57	1
Iron	**210**		0.50	0.25	mg/L		07/13/18 07:20	07/13/18 16:00	10
Lead	**0.0016**		0.0010	0.00060	mg/L		07/13/18 07:20	07/13/18 15:57	1
Magnesium	**31**		0.050	0.025	mg/L		07/13/18 07:20	07/13/18 15:57	1
Manganese	**3.5**		0.0025	0.0014	mg/L		07/13/18 07:20	07/13/18 15:57	1
Molybdenum	**0.012**		0.0020	0.00060	mg/L		07/13/18 07:20	07/13/18 15:57	1
Nickel	**0.22**		0.0020	0.0010	mg/L		07/13/18 07:20	07/13/18 15:57	1
Potassium	**66**		0.050	0.025	mg/L		07/13/18 07:20	07/13/18 15:57	1
Selenium	**0.0014**	**J**	0.0020	0.0010	mg/L		07/13/18 07:20	07/13/18 15:57	1
Sodium	**130**		0.10	0.080	mg/L		07/13/18 07:20	07/13/18 15:57	1
Thallium	**0.0072**		0.0010	0.00050	mg/L		07/13/18 07:20	07/13/18 15:57	1
Vanadium	**0.027**		0.010	0.0030	mg/L		07/13/18 07:20	07/13/18 15:57	1
Zinc	**5.9**		0.0050	0.0040	mg/L		07/13/18 07:20	07/13/18 15:57	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		07/12/18 11:35	07/13/18 09:36	1

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-215185-1

Client Sample ID: MW-4
Date Collected: 07/05/18 11:30
Date Received: 07/06/18 16:35

Lab Sample ID: 440-215185-2
Matrix: Water

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**410**		2.5	2.5	mg/L			07/23/18 11:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**1.8**		0.20	0.10	mg/L			07/10/18 18:04	1
Total Dissolved Solids	**2300**		20	10	mg/L			07/11/18 09:18	1
Cyanide, Total	ND		0.025	0.013	mg/L		07/10/18 10:47	07/10/18 15:00	1
Nitrocellulose	ND		2.0	0.48	mg/L		07/18/18 09:00	07/18/18 15:41	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	ND		4.0	4.0	mg/L			07/07/18 14:06	1
Bicarbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			07/07/18 14:06	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			07/07/18 14:06	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			07/07/18 14:06	1
Specific Conductance	**2400**		1.0	1.0	umhos/cm			07/25/18 12:00	1
pH adj. to 25 deg C	**3.7**	**HF**	0.1	0.1	SU			07/08/18 11:34	1

Client Sample ID: MW-2

Date Collected: 07/05/18 12:44
Date Received: 07/06/18 16:35

Lab Sample ID: 440-215185-4

Matrix: Water

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50	35	ug/L			07/13/18 07:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*95*		*76 - 132*		*07/13/18 07:10*	*1*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*07/13/18 07:10*	*1*
Toluene-d8 (Surr)	*108*		*80 - 128*		*07/13/18 07:10*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.25	ug/L			07/13/18 07:10	1
Ethylbenzene	ND		0.50	0.25	ug/L			07/13/18 07:10	1
m,p-Xylene	ND		1.0	0.50	ug/L			07/13/18 07:10	1
o-Xylene	ND		0.50	0.25	ug/L			07/13/18 07:10	1
Toluene	ND		0.50	0.25	ug/L			07/13/18 07:10	1
Xylenes, Total	ND		1.0	0.50	ug/L			07/13/18 07:10	1
Naphthalene	ND		1.0	0.40	ug/L			07/13/18 07:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*07/13/18 07:10*	*1*
Dibromofluoromethane (Surr)	*95*		*76 - 132*		*07/13/18 07:10*	*1*
Toluene-d8 (Surr)	*108*		*80 - 128*		*07/13/18 07:10*	*1*

Method: 8015B - Glycols -Direct Injection (GC/FID)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene glycol	ND		10	1.0	mg/L			07/10/18 17:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-butyl alcohol (Surr)	*99*		*70 - 130*		*07/10/18 17:15*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	**40**	**J**	47	15	ug/L		07/11/18 11:38	07/31/18 02:42	1
Motor Oil Range Organics (C25-C36)	**230**	**J**	470	160	ug/L		07/11/18 11:38	07/31/18 02:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*88*		*56 - 145*	*07/11/18 11:38*	*07/31/18 02:42*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**15**		0.50	0.25	mg/L			07/06/18 19:58	1
Fluoride	**0.50**		0.50	0.25	mg/L			07/06/18 19:58	1
Nitrite as N	ND		0.15	0.070	mg/L			07/06/18 19:58	1
Sulfate	**560**		10	5.0	mg/L			07/06/18 20:15	20
Nitrate as N	ND		0.11	0.055	mg/L			07/06/18 19:58	1

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			07/25/18 13:26	1

Client Sample ID: MW-2

Date Collected: 07/05/18 12:44
Date Received: 07/06/18 16:35

Lab Sample ID: 440-215185-4

Matrix: Water

Method: 8330A - Nitroaromatics and Nitramines

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dinitrobenzene	ND		0.10	0.052	ug/L		07/11/18 10:15	07/18/18 09:41	1
2,4-Dinitrotoluene	ND		0.10	0.052	ug/L		07/11/18 10:15	07/18/18 09:41	1
2,6-Dinitrotoluene	ND		0.10	0.052	ug/L		07/11/18 10:15	07/18/18 09:41	1
HMX	ND	*	0.10	0.037	ug/L		07/11/18 10:15	07/18/18 09:41	1
Nitrobenzene	ND		0.10	0.052	ug/L		07/11/18 10:15	07/18/18 09:41	1
Nitroglycerin	ND		0.67	0.34	ug/L		07/11/18 10:15	07/18/18 09:41	1
2-Nitrotoluene	ND	*	0.52	0.091	ug/L		07/11/18 10:15	07/18/18 09:41	1
3-Nitrotoluene	ND		0.52	0.059	ug/L		07/11/18 10:15	07/18/18 09:41	1
4-Nitrotoluene	ND		0.52	0.091	ug/L		07/11/18 10:15	07/18/18 09:41	1
RDX	ND		0.10	0.037	ug/L		07/11/18 10:15	07/18/18 09:41	1
1,3,5-Trinitrobenzene	ND		0.10	0.032	ug/L		07/11/18 10:15	07/18/18 09:41	1
2,4,6-Trinitrotoluene	ND		0.10	0.052	ug/L		07/11/18 10:15	07/18/18 09:41	1
PETN	ND		0.67	0.31	ug/L		07/11/18 10:15	07/18/18 09:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*95*		*79 - 111*	*07/11/18 10:15*	*07/18/18 09:41*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	**170**		0.50	0.30	mg/L		07/13/18 07:20	07/16/18 18:09	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		07/13/18 07:20	07/13/18 15:54	1
Aluminum	**31**		0.050	0.025	mg/L		07/13/18 07:20	07/13/18 15:54	1
Antimony	**0.0018**	**J**	0.0020	0.00020	mg/L		07/13/18 07:20	07/13/18 15:54	1
Arsenic	**0.10**		0.0020	0.0010	mg/L		07/13/18 07:20	07/13/18 15:54	1
Barium	**0.0088**		0.0010	0.00050	mg/L		07/13/18 07:20	07/13/18 15:54	1
Beryllium	**0.0061**		0.0010	0.00010	mg/L		07/13/18 07:20	07/13/18 15:54	1
Cadmium	**0.0023**		0.0010	0.00050	mg/L		07/13/18 07:20	07/13/18 15:54	1
Calcium	**56**		0.30	0.17	mg/L		07/13/18 07:20	07/13/18 15:54	1
Chromium	ND		0.0020	0.0010	mg/L		07/13/18 07:20	07/13/18 15:54	1
Cobalt	**0.15**		0.0010	0.00060	mg/L		07/13/18 07:20	07/13/18 15:54	1
Copper	**0.092**		0.0020	0.0010	mg/L		07/13/18 07:20	07/13/18 15:54	1
Iron	**4.9**		0.050	0.025	mg/L		07/13/18 07:20	07/13/18 15:54	1
Lead	ND		0.0010	0.00060	mg/L		07/13/18 07:20	07/13/18 15:54	1
Magnesium	**15**		0.050	0.025	mg/L		07/13/18 07:20	07/13/18 15:54	1
Manganese	**1.6**		0.0025	0.0014	mg/L		07/13/18 07:20	07/13/18 15:54	1
Molybdenum	ND		0.0020	0.00060	mg/L		07/13/18 07:20	07/13/18 15:54	1
Nickel	**0.056**		0.0020	0.0010	mg/L		07/13/18 07:20	07/13/18 15:54	1
Potassium	**48**		0.050	0.025	mg/L		07/13/18 07:20	07/13/18 15:54	1
Selenium	ND		0.0020	0.0010	mg/L		07/13/18 07:20	07/13/18 15:54	1
Sodium	**52**		0.10	0.080	mg/L		07/13/18 07:20	07/13/18 15:54	1
Thallium	**0.0013**		0.0010	0.00050	mg/L		07/13/18 07:20	07/13/18 15:54	1
Vanadium	ND		0.010	0.0030	mg/L		07/13/18 07:20	07/13/18 15:54	1
Zinc	**1.3**		0.0050	0.0040	mg/L		07/13/18 07:20	07/13/18 15:54	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		07/12/18 11:35	07/13/18 09:38	1

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-215185-1

Client Sample ID: MW-2
Date Collected: 07/05/18 12:44
Date Received: 07/06/18 16:35

Lab Sample ID: 440-215185-4
Matrix: Water

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**200**		2.5	2.5	mg/L			07/23/18 11:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**0.16**	**J**	0.20	0.10	mg/L			07/10/18 18:09	1
Total Dissolved Solids	**920**		10	5.0	mg/L			07/11/18 09:18	1
Cyanide, Total	ND		0.025	0.013	mg/L		07/10/18 10:47	07/10/18 15:00	1
Nitrocellulose	ND		2.0	0.48	mg/L		07/18/18 09:00	07/18/18 15:43	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	ND		4.0	4.0	mg/L			07/07/18 14:17	1
Bicarbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			07/07/18 14:17	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			07/07/18 14:17	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			07/07/18 14:17	1
Specific Conductance	**1200**		1.0	1.0	umhos/cm			07/25/18 12:00	1
pH adj. to 25 deg C	**3.5**	**HF**	0.1	0.1	SU			07/08/18 12:21	1

Client Sample ID: MW-1

Date Collected: 07/05/18 13:41
Date Received: 07/06/18 16:35

Lab Sample ID: 440-215185-5

Matrix: Water

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50	35	ug/L			07/19/18 12:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*120*		*76 - 132*		*07/19/18 12:41*	*1*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*07/19/18 12:41*	*1*
Toluene-d8 (Surr)	*96*		*80 - 128*		*07/19/18 12:41*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.25	ug/L			07/19/18 12:41	1
Ethylbenzene	ND		0.50	0.25	ug/L			07/19/18 12:41	1
m,p-Xylene	ND		1.0	0.50	ug/L			07/19/18 12:41	1
o-Xylene	ND		0.50	0.25	ug/L			07/19/18 12:41	1
Toluene	ND		0.50	0.25	ug/L			07/19/18 12:41	1
Xylenes, Total	ND		1.0	0.50	ug/L			07/19/18 12:41	1
Naphthalene	ND		1.0	0.40	ug/L			07/19/18 12:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*07/19/18 12:41*	*1*
Dibromofluoromethane (Surr)	*120*		*76 - 132*		*07/19/18 12:41*	*1*
Toluene-d8 (Surr)	*96*		*80 - 128*		*07/19/18 12:41*	*1*

Method: 8015B - Glycols -Direct Injection (GC/FID)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene glycol	ND		10	1.0	mg/L			07/10/18 17:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-butyl alcohol (Surr)	*106*		*70 - 130*		*07/10/18 17:32*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	**52**		48	15	ug/L		07/11/18 11:38	07/31/18 03:05	1
Motor Oil Range Organics (C25-C36)	ND		480	160	ug/L		07/11/18 11:38	07/31/18 03:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*75*		*56 - 145*	*07/11/18 11:38*	*07/31/18 03:05*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**11**		0.50	0.25	mg/L			07/06/18 20:30	1
Fluoride	**0.57**		0.50	0.25	mg/L			07/06/18 20:30	1
Nitrite as N	ND		0.15	0.070	mg/L			07/06/18 20:30	1
Sulfate	**730**		10	5.0	mg/L			07/06/18 20:46	20
Nitrate as N	ND		0.11	0.055	mg/L			07/06/18 20:30	1

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			07/25/18 13:46	1

Method: 8330A - Nitroaromatics and Nitramines

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dinitrobenzene	ND		0.11	0.053	ug/L		07/11/18 10:15	07/18/18 10:25	1

Client Sample ID: MW-1
Date Collected: 07/05/18 13:41
Date Received: 07/06/18 16:35

Lab Sample ID: 440-215185-5
Matrix: Water

Method: 8330A - Nitroaromatics and Nitramines (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	ND		0.11	0.053	ug/L		07/11/18 10:15	07/18/18 10:25	1
2,6-Dinitrotoluene	ND		0.11	0.053	ug/L		07/11/18 10:15	07/18/18 10:25	1
HMX	ND	*	0.11	0.038	ug/L		07/11/18 10:15	07/18/18 10:25	1
Nitrobenzene	**0.078**	**J**	0.11	0.053	ug/L		07/11/18 10:15	07/18/18 10:25	1
Nitroglycerin	ND		0.69	0.35	ug/L		07/11/18 10:15	07/18/18 10:25	1
2-Nitrotoluene	ND	*	0.53	0.093	ug/L		07/11/18 10:15	07/18/18 10:25	1
3-Nitrotoluene	ND		0.53	0.060	ug/L		07/11/18 10:15	07/18/18 10:25	1
4-Nitrotoluene	ND		0.53	0.093	ug/L		07/11/18 10:15	07/18/18 10:25	1
RDX	ND		0.11	0.038	ug/L		07/11/18 10:15	07/18/18 10:25	1
1,3,5-Trinitrobenzene	**0.046**	**J p1**	0.11	0.033	ug/L		07/11/18 10:15	07/18/18 10:25	1
2,4,6-Trinitrotoluene	ND		0.11	0.053	ug/L		07/11/18 10:15	07/18/18 10:25	1
PETN	ND		0.69	0.32	ug/L		07/11/18 10:15	07/18/18 10:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*91*		*79 - 111*	*07/11/18 10:15*	*07/18/18 10:25*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	**210**		2.5	1.5	mg/L		07/13/18 07:20	07/17/18 13:55	5

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		07/13/18 07:20	07/13/18 15:45	1
Aluminum	**46**		0.050	0.025	mg/L		07/13/18 07:20	07/13/18 15:45	1
Antimony	**0.0054**		0.0020	0.00020	mg/L		07/13/18 07:20	07/13/18 15:45	1
Arsenic	**1.7**		0.0020	0.0010	mg/L		07/13/18 07:20	07/13/18 15:45	1
Barium	**0.0092**		0.0010	0.00050	mg/L		07/13/18 07:20	07/13/18 15:45	1
Beryllium	**0.0092**		0.0010	0.00010	mg/L		07/13/18 07:20	07/13/18 15:45	1
Cadmium	**0.11**		0.0010	0.00050	mg/L		07/13/18 07:20	07/13/18 15:45	1
Calcium	**60**		0.30	0.17	mg/L		07/13/18 07:20	07/13/18 15:45	1
Chromium	**0.0015**	**J**	0.0020	0.0010	mg/L		07/13/18 07:20	07/13/18 15:45	1
Cobalt	**0.24**		0.0010	0.00060	mg/L		07/13/18 07:20	07/13/18 15:45	1
Copper	**0.0032**		0.0020	0.0010	mg/L		07/13/18 07:20	07/13/18 15:45	1
Iron	**32**		0.050	0.025	mg/L		07/13/18 07:20	07/13/18 15:45	1
Lead	**0.0023**		0.0010	0.00060	mg/L		07/13/18 07:20	07/13/18 15:45	1
Magnesium	**19**		0.050	0.025	mg/L		07/13/18 07:20	07/13/18 15:45	1
Manganese	**1.8**		0.0025	0.0014	mg/L		07/13/18 07:20	07/13/18 15:45	1
Molybdenum	ND		0.0020	0.00060	mg/L		07/13/18 07:20	07/13/18 15:45	1
Nickel	**0.098**		0.0020	0.0010	mg/L		07/13/18 07:20	07/13/18 15:45	1
Potassium	**52**		0.050	0.025	mg/L		07/13/18 07:20	07/13/18 15:45	1
Selenium	**0.0033**		0.0020	0.0010	mg/L		07/13/18 07:20	07/13/18 15:45	1
Sodium	**38**		0.10	0.080	mg/L		07/13/18 07:20	07/13/18 15:45	1
Thallium	**0.013**		0.0010	0.00050	mg/L		07/13/18 07:20	07/13/18 15:45	1
Vanadium	**0.055**		0.010	0.0030	mg/L		07/13/18 07:20	07/13/18 15:45	1
Zinc	**1.6**		0.0050	0.0040	mg/L		07/13/18 07:20	07/13/18 15:45	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		07/12/18 11:35	07/13/18 09:41	1

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-215185-1

Client Sample ID: MW-1
Date Collected: 07/05/18 13:41
Date Received: 07/06/18 16:35

Lab Sample ID: 440-215185-5
Matrix: Water

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**230**		2.5	2.5	mg/L			07/23/18 11:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**0.14**	**J**	0.20	0.10	mg/L			07/10/18 18:15	1
Total Dissolved Solids	**1100**		10	5.0	mg/L			07/11/18 09:18	1
Cyanide, Total	ND		0.025	0.013	mg/L		07/10/18 10:47	07/10/18 15:00	1
Nitrocellulose	ND		2.0	0.48	mg/L		07/18/18 09:00	07/18/18 15:51	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	ND		4.0	4.0	mg/L			07/07/18 14:22	1
Bicarbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			07/07/18 14:22	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			07/07/18 14:22	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			07/07/18 14:22	1
Specific Conductance	**1400**		1.0	1.0	umhos/cm			07/25/18 12:00	1
pH adj. to 25 deg C	**3.3**	**HF**	0.1	0.1	SU			07/08/18 12:21	1

Client Sample ID: MW-6

Date Collected: 07/06/18 08:21
Date Received: 07/06/18 16:35

Lab Sample ID: 440-215185-6

Matrix: Water

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	**120**		50	35	ug/L			07/19/18 13:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*121*		*76 - 132*		*07/19/18 13:09*	*1*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*07/19/18 13:09*	*1*
Toluene-d8 (Surr)	*103*		*80 - 128*		*07/19/18 13:09*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.25	ug/L			07/19/18 13:09	1
Ethylbenzene	ND		0.50	0.25	ug/L			07/19/18 13:09	1
m,p-Xylene	ND		1.0	0.50	ug/L			07/19/18 13:09	1
o-Xylene	ND		0.50	0.25	ug/L			07/19/18 13:09	1
Toluene	ND		0.50	0.25	ug/L			07/19/18 13:09	1
Xylenes, Total	ND		1.0	0.50	ug/L			07/19/18 13:09	1
Naphthalene	**4.4**		1.0	0.40	ug/L			07/19/18 13:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*07/19/18 13:09*	*1*
Dibromofluoromethane (Surr)	*121*		*76 - 132*		*07/19/18 13:09*	*1*
Toluene-d8 (Surr)	*103*		*80 - 128*		*07/19/18 13:09*	*1*

Method: 8015B - Glycols -Direct Injection (GC/FID)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene glycol	ND		10	1.0	mg/L			07/10/18 17:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-butyl alcohol (Surr)	*100*		*70 - 130*		*07/10/18 17:48*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	**7000**		240	76	ug/L		07/12/18 14:33	07/31/18 17:59	5
Motor Oil Range Organics (C25-C36)	ND		2400	790	ug/L		07/12/18 14:33	07/31/18 17:59	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*2385*	*X*	*56 - 145*	*07/12/18 14:33*	*07/31/18 17:59*	*5*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**23**		10	5.0	mg/L			07/06/18 19:42	20
Fluoride	**0.68**		0.50	0.25	mg/L			07/06/18 19:25	1
Nitrite as N	ND		0.15	0.070	mg/L			07/06/18 19:25	1
Sulfate	**25**		0.50	0.25	mg/L			07/06/18 19:25	1
Nitrate as N	ND		0.11	0.055	mg/L			07/06/18 19:25	1

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND	^	1.0	0.50	ug/L			07/24/18 01:38	1

Client Sample ID: MW-6

Date Collected: 07/06/18 08:21
Date Received: 07/06/18 16:35

Lab Sample ID: 440-215185-6

Matrix: Water

Method: 8330A - Nitroaromatics and Nitramines

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dinitrobenzene	ND		0.10	0.051	ug/L		07/11/18 10:15	07/18/18 11:10	1
2,4-Dinitrotoluene	ND		0.10	0.051	ug/L		07/11/18 10:15	07/18/18 11:10	1
2,6-Dinitrotoluene	ND		0.10	0.051	ug/L		07/11/18 10:15	07/18/18 11:10	1
HMX	ND	*	0.10	0.037	ug/L		07/11/18 10:15	07/18/18 11:10	1
Nitrobenzene	**3.1**		0.10	0.051	ug/L		07/11/18 10:15	07/18/18 11:10	1
Nitroglycerin	ND		0.67	0.34	ug/L		07/11/18 10:15	07/18/18 11:10	1
2-Nitrotoluene	ND	*	0.51	0.090	ug/L		07/11/18 10:15	07/18/18 11:10	1
3-Nitrotoluene	ND		0.51	0.058	ug/L		07/11/18 10:15	07/18/18 11:10	1
4-Nitrotoluene	ND		0.51	0.090	ug/L		07/11/18 10:15	07/18/18 11:10	1
RDX	ND		0.10	0.037	ug/L		07/11/18 10:15	07/18/18 11:10	1
1,3,5-Trinitrobenzene	ND		0.10	0.032	ug/L		07/11/18 10:15	07/18/18 11:10	1
2,4,6-Trinitrotoluene	ND		0.10	0.051	ug/L		07/11/18 10:15	07/18/18 11:10	1
PETN	ND		0.67	0.31	ug/L		07/11/18 10:15	07/18/18 11:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*90*		*79 - 111*	*07/11/18 10:15*	*07/18/18 11:10*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	**7.3**		0.50	0.30	mg/L		07/13/18 07:20	07/16/18 18:15	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		07/13/18 07:20	07/13/18 15:48	1
Aluminum	ND		0.050	0.025	mg/L		07/13/18 07:20	07/13/18 15:48	1
Antimony	ND		0.0020	0.00020	mg/L		07/13/18 07:20	07/13/18 15:48	1
Arsenic	**0.48**		0.0020	0.0010	mg/L		07/13/18 07:20	07/13/18 15:48	1
Barium	**0.015**		0.0010	0.00050	mg/L		07/13/18 07:20	07/13/18 15:48	1
Beryllium	ND		0.0010	0.00010	mg/L		07/13/18 07:20	07/13/18 15:48	1
Cadmium	ND		0.0010	0.00050	mg/L		07/13/18 07:20	07/13/18 15:48	1
Calcium	**110**		0.30	0.17	mg/L		07/13/18 07:20	07/13/18 15:48	1
Chromium	ND		0.0020	0.0010	mg/L		07/13/18 07:20	07/13/18 15:48	1
Cobalt	ND		0.0010	0.00060	mg/L		07/13/18 07:20	07/13/18 15:48	1
Copper	ND		0.0020	0.0010	mg/L		07/13/18 07:20	07/13/18 15:48	1
Iron	**0.10**		0.050	0.025	mg/L		07/13/18 07:20	07/13/18 15:48	1
Lead	ND		0.0010	0.00060	mg/L		07/13/18 07:20	07/13/18 15:48	1
Magnesium	**37**		0.050	0.025	mg/L		07/13/18 07:20	07/13/18 15:48	1
Manganese	**5.3**		0.0025	0.0014	mg/L		07/13/18 07:20	07/13/18 15:48	1
Molybdenum	**0.0019**	**J**	0.0020	0.00060	mg/L		07/13/18 07:20	07/13/18 15:48	1
Nickel	ND		0.0020	0.0010	mg/L		07/13/18 07:20	07/13/18 15:48	1
Potassium	**16**		0.050	0.025	mg/L		07/13/18 07:20	07/13/18 15:48	1
Selenium	ND		0.0020	0.0010	mg/L		07/13/18 07:20	07/13/18 15:48	1
Sodium	**130**		0.10	0.080	mg/L		07/13/18 07:20	07/13/18 15:48	1
Thallium	ND		0.0010	0.00050	mg/L		07/13/18 07:20	07/13/18 15:48	1
Vanadium	ND		0.010	0.0030	mg/L		07/13/18 07:20	07/13/18 15:48	1
Zinc	ND		0.0050	0.0040	mg/L		07/13/18 07:20	07/13/18 15:48	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		07/12/18 11:35	07/13/18 09:44	1

Client Sample ID: MW-6
Date Collected: 07/06/18 08:21
Date Received: 07/06/18 16:35

Lab Sample ID: 440-215185-6
Matrix: Water

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**420**		2.5	2.5	mg/L			07/23/18 11:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	ND		0.20	0.10	mg/L			07/10/18 18:25	1
Total Dissolved Solids	**850**		10	5.0	mg/L			07/11/18 09:18	1
Cyanide, Total	ND		0.025	0.013	mg/L		07/10/18 10:47	07/10/18 15:00	1
Nitrocellulose	ND		2.0	0.48	mg/L		07/18/18 09:00	07/18/18 15:53	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	**680**		4.0	4.0	mg/L			07/07/18 14:35	1
Bicarbonate Alkalinity as CaCO3	**680**		4.0	4.0	mg/L			07/07/18 14:35	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			07/07/18 14:35	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			07/07/18 14:35	1
Specific Conductance	**1300**		1.0	1.0	umhos/cm			07/25/18 12:00	1
pH adj. to 25 deg C	**7.6**	**HF**	0.1	0.1	SU			07/08/18 11:34	1

Client Sample ID: MW-3

Date Collected: 07/06/18 10:19
Date Received: 07/06/18 16:35

Lab Sample ID: 440-215185-7

Matrix: Water

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50	35	ug/L			07/19/18 13:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*125*		*76 - 132*		*07/19/18 13:37*	*1*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*07/19/18 13:37*	*1*
Toluene-d8 (Surr)	*96*		*80 - 128*		*07/19/18 13:37*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.25	ug/L			07/19/18 13:37	1
Ethylbenzene	ND		0.50	0.25	ug/L			07/19/18 13:37	1
m,p-Xylene	ND		1.0	0.50	ug/L			07/19/18 13:37	1
o-Xylene	ND		0.50	0.25	ug/L			07/19/18 13:37	1
Toluene	ND		0.50	0.25	ug/L			07/19/18 13:37	1
Xylenes, Total	ND		1.0	0.50	ug/L			07/19/18 13:37	1
Naphthalene	ND		1.0	0.40	ug/L			07/19/18 13:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*07/19/18 13:37*	*1*
Dibromofluoromethane (Surr)	*125*		*76 - 132*		*07/19/18 13:37*	*1*
Toluene-d8 (Surr)	*96*		*80 - 128*		*07/19/18 13:37*	*1*

Method: 8015B - Glycols -Direct Injection (GC/FID)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene glycol	ND		10	1.0	mg/L			07/10/18 18:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-butyl alcohol (Surr)	*109*		*70 - 130*		*07/10/18 18:05*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	**120**		47	15	ug/L		07/12/18 14:33	07/31/18 18:23	1
Motor Oil Range Organics (C25-C36)	**330**	**J**	470	160	ug/L		07/12/18 14:33	07/31/18 18:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*80*		*56 - 145*	*07/12/18 14:33*	*07/31/18 18:23*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	ND		0.15	0.070	mg/L			07/06/18 20:00	1
Sulfate	**180**		2.5	1.3	mg/L			07/06/18 20:53	5
Nitrate as N	ND		0.11	0.055	mg/L			07/06/18 20:00	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**17**		0.50	0.25	mg/L			07/06/18 20:00	1
Fluoride	**0.88**		0.50	0.25	mg/L			07/06/18 20:00	1

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND	^	1.0	0.50	ug/L			07/24/18 01:57	1

Method: 8330A - Nitroaromatics and Nitramines

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dinitrobenzene	ND		0.098	0.049	ug/L		07/12/18 11:36	07/18/18 01:29	1
2,4-Dinitrotoluene	ND		0.098	0.049	ug/L		07/12/18 11:36	07/18/18 01:29	1
2,6-Dinitrotoluene	ND		0.098	0.049	ug/L		07/12/18 11:36	07/18/18 01:29	1
HMX	ND		0.098	0.035	ug/L		07/12/18 11:36	07/18/18 01:29	1
Nitrobenzene	**0.16**	**P1**	0.098	0.049	ug/L		07/12/18 11:36	07/18/18 01:29	1
Nitroglycerin	ND		0.64	0.32	ug/L		07/12/18 11:36	07/18/18 01:29	1
2-Nitrotoluene	ND	*	0.49	0.086	ug/L		07/12/18 11:36	07/18/18 01:29	1
3-Nitrotoluene	ND		0.49	0.056	ug/L		07/12/18 11:36	07/18/18 01:29	1
4-Nitrotoluene	ND		0.49	0.086	ug/L		07/12/18 11:36	07/18/18 01:29	1
RDX	ND		0.098	0.035	ug/L		07/12/18 11:36	07/18/18 01:29	1
1,3,5-Trinitrobenzene	**0.043**	**J B p1**	0.098	0.030	ug/L		07/12/18 11:36	07/18/18 01:29	1
2,4,6-Trinitrotoluene	ND		0.098	0.049	ug/L		07/12/18 11:36	07/18/18 01:29	1
PETN	ND		0.64	0.29	ug/L		07/12/18 11:36	07/18/18 01:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*95*		*79 - 111*	*07/12/18 11:36*	*07/18/18 01:29*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	**57**		0.50	0.30	mg/L		07/13/18 07:20	07/16/18 18:17	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		07/13/18 07:20	07/13/18 15:51	1
Aluminum	ND		0.050	0.025	mg/L		07/13/18 07:20	07/13/18 15:51	1
Antimony	ND		0.0020	0.00020	mg/L		07/13/18 07:20	07/13/18 15:51	1
Arsenic	**0.30**		0.0020	0.0010	mg/L		07/13/18 07:20	07/13/18 15:51	1
Barium	**0.0060**		0.0010	0.00050	mg/L		07/13/18 07:20	07/13/18 15:51	1
Beryllium	ND		0.0010	0.00010	mg/L		07/13/18 07:20	07/13/18 15:51	1
Cadmium	ND		0.0010	0.00050	mg/L		07/13/18 07:20	07/13/18 15:51	1
Calcium	**27**		0.30	0.17	mg/L		07/13/18 07:20	07/13/18 15:51	1
Chromium	ND		0.0020	0.0010	mg/L		07/13/18 07:20	07/13/18 15:51	1
Cobalt	ND		0.0010	0.00060	mg/L		07/13/18 07:20	07/13/18 15:51	1
Copper	ND		0.0020	0.0010	mg/L		07/13/18 07:20	07/13/18 15:51	1
Iron	ND		0.050	0.025	mg/L		07/13/18 07:20	07/13/18 15:51	1
Lead	ND		0.0010	0.00060	mg/L		07/13/18 07:20	07/13/18 15:51	1
Magnesium	**16**		0.050	0.025	mg/L		07/13/18 07:20	07/13/18 15:51	1
Manganese	**0.47**		0.0025	0.0014	mg/L		07/13/18 07:20	07/13/18 15:51	1
Molybdenum	**0.00076**	**J**	0.0020	0.00060	mg/L		07/13/18 07:20	07/13/18 15:51	1
Nickel	**0.0037**		0.0020	0.0010	mg/L		07/13/18 07:20	07/13/18 15:51	1
Potassium	**23**		0.050	0.025	mg/L		07/13/18 07:20	07/13/18 15:51	1
Selenium	ND		0.0020	0.0010	mg/L		07/13/18 07:20	07/13/18 15:51	1
Sodium	**42**		0.10	0.080	mg/L		07/13/18 07:20	07/13/18 15:51	1
Thallium	ND		0.0010	0.00050	mg/L		07/13/18 07:20	07/13/18 15:51	1
Vanadium	ND		0.010	0.0030	mg/L		07/13/18 07:20	07/13/18 15:51	1
Zinc	**0.99**		0.0050	0.0040	mg/L		07/13/18 07:20	07/13/18 15:51	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		07/12/18 11:35	07/13/18 09:51	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**130**		2.5	2.5	mg/L			07/23/18 11:48	1

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-215185-1

Client Sample ID: MW-3
Date Collected: 07/06/18 10:19
Date Received: 07/06/18 16:35

Lab Sample ID: 440-215185-7
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	ND		0.20	0.10	mg/L			07/10/18 18:20	1
Total Dissolved Solids	**420**		10	5.0	mg/L			07/11/18 09:18	1
Cyanide, Total	ND		0.025	0.013	mg/L		07/10/18 10:49	07/10/18 15:00	1
Nitrocellulose	ND		2.0	0.48	mg/L		07/18/18 09:00	07/18/18 15:55	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	**49**		4.0	4.0	mg/L			07/07/18 14:42	1
Bicarbonate Alkalinity as CaCO3	**49**		4.0	4.0	mg/L			07/07/18 14:42	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			07/07/18 14:42	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			07/07/18 14:42	1
Specific Conductance	**580**		1.0	1.0	umhos/cm			07/25/18 13:27	1
pH adj. to 25 deg C	**6.9**	**HF**	0.1	0.1	SU			07/08/18 11:34	1

Method Summary

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-215185-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL IRV
8260B/CA_LUFTMS	Volatile Organic Compounds by GC/MS	SW846	TAL IRV
8015B	Glycols -Direct Injection (GC/FID)	SW846	TAL NSH
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL SAC
300.0	Anions, Ion Chromatography	MCAWW	TAL IRV
314.0 LL	Perchlorate (IC)	EPA	TAL IRV
8330A	Nitroaromatics and Nitramines	SW846	TAL SAC
6010B	Metals (ICP)	SW846	TAL SAC
6020	Metals (ICP/MS)	SW846	TAL SAC
7470A	Mercury (CVAA)	SW846	TAL SAC
SM 2340B	Total Hardness (as CaCO3) by calculation	SM	TAL SAC
350.1	Nitrogen, Ammonia	MCAWW	TAL IRV
SM 2320B	Alkalinity	SM	TAL IRV
SM 2510B	Conductivity, Specific Conductance	SM	TAL IRV
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL IRV
SM 4500 CN E	Cyanide, Total	SM	TAL IRV
SM 4500 H+ B	pH	SM	TAL IRV
WS-WC-0050	Nitrocellulose	TAL-SAC	TAL SAC
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL SAC
3010A	Preparation, Total Metals	SW846	TAL SAC
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL SAC
353 (NCell-Hyd)	Nitrocellulose Sample Preparation (Hydrolysis)	MCAWW	TAL SAC
353.2 (NCell)	Nitrocellulose Sample Preparation	MCAWW	TAL SAC
5030B	Purge and Trap	SW846	TAL IRV
7470A	Preparation, Mercury	SW846	TAL SAC
8330-Prep	Solid-Phase Extraction (Explosives)	SW846	TAL SAC
Distill/CN	Distillation, Cyanide	None	TAL IRV
Filtration	Sample Filtration	None	TAL SAC

Protocol References:

EPA = US Environmental Protection Agency
MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
TAL-SAC = TestAmerica Laboratories, West Sacramento, Facility Standard Operating Procedure.

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022
TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177
TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Lab Chronicle

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-215185-1

Client Sample ID: MW-5

Date Collected: 07/05/18 10:10
Date Received: 07/06/18 16:35

Lab Sample ID: 440-215185-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	487169	07/13/18 05:40	OH1	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	487170	07/13/18 05:40	OH1	TAL IRV
Total/NA	Analysis	8015B		1			527747	07/10/18 16:42	NMB	TAL NSH
Total/NA	Prep	3510C			970.9 mL	3.0 mL	233421	07/11/18 11:38	TJA	TAL SAC
Total/NA	Analysis	8015B		1			236853	07/31/18 01:55	RS1	TAL SAC
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	486070	07/06/18 19:06	NTN	TAL IRV
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	486071	07/06/18 19:06	NTN	TAL IRV
Total/NA	Analysis	300.0		10			486071	07/06/18 19:21	NTN	TAL IRV
Total/NA	Analysis	314.0 LL		1			488947	07/24/18 00:25	CTH	TAL IRV
Total/NA	Prep	8330-Prep			970.8 mL	20 mL	233406	07/11/18 10:15	TJA	TAL SAC
Total/NA	Analysis	8330A		1			234552	07/18/18 08:11	D1R	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	233334	07/11/18 06:00	NIM	TAL SAC
Dissolved	Prep	3010A			50 mL	50 mL	233618	07/13/18 07:20	NIM	TAL SAC
Dissolved	Analysis	6010B		1			234431	07/16/18 17:47	CJH	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	233334	07/11/18 06:00	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	233579	07/13/18 07:20	NIM	TAL SAC
Dissolved	Analysis	6020		1			234266	07/13/18 14:08	CJH	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	233334	07/11/18 06:00	NIM	TAL SAC
Dissolved	Prep	7470A			30 mL	30 mL	233703	07/12/18 11:35	GSH	TAL SAC
Dissolved	Analysis	7470A		1			233860	07/13/18 09:26	GSH	TAL SAC
Dissolved	Analysis	SM 2340B		1			235565	07/23/18 11:48	LW1	TAL SAC
Total/NA	Analysis	350.1		1	0.8 mL	8.0 mL	486707	07/10/18 17:34	MMH	TAL IRV
Total/NA	Analysis	SM 2320B		1			486246	07/07/18 14:02	YZ	TAL IRV
Total/NA	Analysis	SM 2510B		1			489536	07/25/18 12:00	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	486773	07/11/18 09:18	XL	TAL IRV
Total/NA	Prep	Distill/CN			50 mL	50 mL	486576	07/10/18 10:47	KMY	TAL IRV
Total/NA	Analysis	SM 4500 CN E		1			486643	07/10/18 14:59	KMY	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			486248	07/08/18 11:34	CMM	TAL IRV
Total/NA	Pre Prep	353.2 (NCell)			100.00 mL	50.00 mL	234328	07/16/18 15:18	JER	TAL SAC
Total/NA	Prep	353 (NCell-Hyd)			50.00 mL	40.00 mL	234740	07/18/18 09:00	JER	TAL SAC
Total/NA	Analysis	WS-WC-0050		1			234745	07/18/18 15:39	TCS	TAL SAC

Client Sample ID: MW-4

Date Collected: 07/05/18 11:30
Date Received: 07/06/18 16:35

Lab Sample ID: 440-215185-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	487169	07/13/18 06:10	OH1	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	487170	07/13/18 06:10	OH1	TAL IRV
Total/NA	Analysis	8015B		1			527747	07/10/18 16:59	NMB	TAL NSH
Total/NA	Prep	3510C			1050.9 mL	3.0 mL	233421	07/11/18 11:38	TJA	TAL SAC

Lab Chronicle

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-215185-1

Client Sample ID: MW-4

Date Collected: 07/05/18 11:30
Date Received: 07/06/18 16:35

Lab Sample ID: 440-215185-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015B		1			236853	07/31/18 02:18	RS1	TAL SAC
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	486070	07/06/18 19:35	NTN	TAL IRV
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	486071	07/06/18 19:35	NTN	TAL IRV
Total/NA	Analysis	300.0		50			486071	07/06/18 19:50	NTN	TAL IRV
Total/NA	Analysis	300.0		5			486071	07/06/18 20:57	NTN	TAL IRV
Total/NA	Analysis	314.0 LL		1			489424	07/26/18 09:17	CTH	TAL IRV
Total/NA	Prep	8330-Prep			958.9 mL	20 mL	233406	07/11/18 10:15	TJA	TAL SAC
Total/NA	Analysis	8330A		1			234552	07/18/18 08:56	D1R	TAL SAC
Total/NA	Prep	8330-Prep			958.9 mL	20 mL	233406	07/11/18 10:15	TJA	TAL SAC
Total/NA	Analysis	8330A		1			234933	07/20/18 19:06	D1R	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	233334	07/11/18 06:00	NIM	TAL SAC
Dissolved	Prep	3010A			50 mL	50 mL	233618	07/13/18 07:20	NIM	TAL SAC
Dissolved	Analysis	6010B		1			234431	07/16/18 18:06	CJH	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	233334	07/11/18 06:00	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	233579	07/13/18 07:20	NIM	TAL SAC
Dissolved	Analysis	6020		1			234266	07/13/18 15:57	CJH	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	233334	07/11/18 06:00	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	233579	07/13/18 07:20	NIM	TAL SAC
Dissolved	Analysis	6020		10			234266	07/13/18 16:00	CJH	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	233334	07/11/18 06:00	NIM	TAL SAC
Dissolved	Prep	7470A			30 mL	30 mL	233703	07/12/18 11:35	GSH	TAL SAC
Dissolved	Analysis	7470A		1			233860	07/13/18 09:36	GSH	TAL SAC
Dissolved	Analysis	SM 2340B		1			235565	07/23/18 11:48	LW1	TAL SAC
Total/NA	Analysis	350.1		1	0.8 mL	8.0 mL	486707	07/10/18 18:04	MMH	TAL IRV
Total/NA	Analysis	SM 2320B		1			486246	07/07/18 14:06	YZ	TAL IRV
Total/NA	Analysis	SM 2510B		1			489536	07/25/18 12:00	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	486773	07/11/18 09:18	XL	TAL IRV
Total/NA	Prep	Distill/CN			50 mL	50 mL	486576	07/10/18 10:47	KMY	TAL IRV
Total/NA	Analysis	SM 4500 CN E		1			486643	07/10/18 15:00	KMY	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			486248	07/08/18 11:34	CMM	TAL IRV
Total/NA	Pre Prep	353.2 (NCell)			100.00 mL	50.00 mL	234328	07/16/18 15:18	JER	TAL SAC
Total/NA	Prep	353 (NCell-Hyd)			50.00 mL	40.00 mL	234740	07/18/18 09:00	JER	TAL SAC
Total/NA	Analysis	WS-WC-0050		1			234745	07/18/18 15:41	TCS	TAL SAC

Client Sample ID: MW-2

Date Collected: 07/05/18 12:44
Date Received: 07/06/18 16:35

Lab Sample ID: 440-215185-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	487169	07/13/18 07:10	OH1	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	487170	07/13/18 07:10	OH1	TAL IRV
Total/NA	Analysis	8015B		1			527747	07/10/18 17:15	NMB	TAL NSH

Client Sample ID: MW-2

Lab Sample ID: 440-215185-4

Date Collected: 07/05/18 12:44

Matrix: Water

Date Received: 07/06/18 16:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			1055.3 mL	3.0 mL	233421	07/11/18 11:38	TJA	TAL SAC
Total/NA	Analysis	8015B		1			236853	07/31/18 02:42	RS1	TAL SAC
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	486068	07/06/18 19:58	NTN	TAL IRV
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	486069	07/06/18 19:58	NTN	TAL IRV
Total/NA	Analysis	300.0		20			486069	07/06/18 20:15	NTN	TAL IRV
Total/NA	Analysis	314.0 LL		1			489424	07/25/18 13:26	CTH	TAL IRV
Total/NA	Prep	8330-Prep			963.5 mL	20 mL	233406	07/11/18 10:15	TJA	TAL SAC
Total/NA	Analysis	8330A		1			234552	07/18/18 09:41	D1R	TAL SAC
Total/NA	Prep	8330-Prep			963.5 mL	20 mL	233406	07/11/18 10:15	TJA	TAL SAC
Total/NA	Analysis	8330A		1			234933	07/20/18 20:04	D1R	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	233334	07/11/18 06:00	NIM	TAL SAC
Dissolved	Prep	3010A			50 mL	50 mL	233618	07/13/18 07:20	NIM	TAL SAC
Dissolved	Analysis	6010B		1			234431	07/16/18 18:09	CJH	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	233334	07/11/18 06:00	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	233579	07/13/18 07:20	NIM	TAL SAC
Dissolved	Analysis	6020		1			234266	07/13/18 15:54	CJH	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	233334	07/11/18 06:00	NIM	TAL SAC
Dissolved	Prep	7470A			30 mL	30 mL	233703	07/12/18 11:35	GSH	TAL SAC
Dissolved	Analysis	7470A		1			233860	07/13/18 09:38	GSH	TAL SAC
Dissolved	Analysis	SM 2340B		1			235565	07/23/18 11:48	LW1	TAL SAC
Total/NA	Analysis	350.1		1	0.8 mL	8.0 mL	486707	07/10/18 18:09	MMH	TAL IRV
Total/NA	Analysis	SM 2320B		1			486246	07/07/18 14:17	YZ	TAL IRV
Total/NA	Analysis	SM 2510B		1			489536	07/25/18 12:00	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	486773	07/11/18 09:18	XL	TAL IRV
Total/NA	Prep	Distill/CN			50 mL	50 mL	486576	07/10/18 10:47	KMY	TAL IRV
Total/NA	Analysis	SM 4500 CN E		1			486643	07/10/18 15:00	KMY	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			486248	07/08/18 12:21	CMM	TAL IRV
Total/NA	Pre Prep	353.2 (NCell)			100.00 mL	50.00 mL	234328	07/16/18 15:18	JER	TAL SAC
Total/NA	Prep	353 (NCell-Hyd)			50.00 mL	40.00 mL	234740	07/18/18 09:00	JER	TAL SAC
Total/NA	Analysis	WS-WC-0050		1			234745	07/18/18 15:43	TCS	TAL SAC

Client Sample ID: MW-1

Lab Sample ID: 440-215185-5

Date Collected: 07/05/18 13:41

Matrix: Water

Date Received: 07/06/18 16:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	488400	07/19/18 12:41	RM	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	488416	07/19/18 12:41	HR	TAL IRV
Total/NA	Analysis	8015B		1			527747	07/10/18 17:32	NMB	TAL NSH
Total/NA	Prep	3510C			1043.9 mL	3.0 mL	233421	07/11/18 11:38	TJA	TAL SAC
Total/NA	Analysis	8015B		1			236853	07/31/18 03:05	RS1	TAL SAC
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	486068	07/06/18 20:30	NTN	TAL IRV

Lab Chronicle

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-215185-1

Client Sample ID: MW-1

Date Collected: 07/05/18 13:41
Date Received: 07/06/18 16:35

Lab Sample ID: 440-215185-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	486069	07/06/18 20:30	NTN	TAL IRV
Total/NA	Analysis	300.0		20	5 mL	1.0 mL	486069	07/06/18 20:46	NTN	TAL IRV
Total/NA	Analysis	314.0 LL		1			489424	07/25/18 13:46	CTH	TAL IRV
Total/NA	Prep	8330-Prep			946 mL	20 mL	233406	07/11/18 10:15	TJA	TAL SAC
Total/NA	Analysis	8330A		1			234552	07/18/18 10:25	D1R	TAL SAC
Total/NA	Prep	8330-Prep			946 mL	20 mL	233406	07/11/18 10:15	TJA	TAL SAC
Total/NA	Analysis	8330A		1			234933	07/20/18 21:02	D1R	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	233334	07/11/18 06:00	NIM	TAL SAC
Dissolved	Prep	3010A			50 mL	50 mL	233618	07/13/18 07:20	NIM	TAL SAC
Dissolved	Analysis	6010B		5			234556	07/17/18 13:55	JMD	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	233334	07/11/18 06:00	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	233579	07/13/18 07:20	NIM	TAL SAC
Dissolved	Analysis	6020		1			234266	07/13/18 15:45	CJH	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	233334	07/11/18 06:00	NIM	TAL SAC
Dissolved	Prep	7470A			30 mL	30 mL	233703	07/12/18 11:35	GSH	TAL SAC
Dissolved	Analysis	7470A		1			233860	07/13/18 09:41	GSH	TAL SAC
Dissolved	Analysis	SM 2340B		1			235565	07/23/18 11:48	LW1	TAL SAC
Total/NA	Analysis	350.1		1	0.8 mL	8.0 mL	486707	07/10/18 18:15	MMH	TAL IRV
Total/NA	Analysis	SM 2320B		1			486246	07/07/18 14:22	YZ	TAL IRV
Total/NA	Analysis	SM 2510B		1			489536	07/25/18 12:00	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	486773	07/11/18 09:18	XL	TAL IRV
Total/NA	Prep	Distill/CN			50 mL	50 mL	486576	07/10/18 10:47	KMY	TAL IRV
Total/NA	Analysis	SM 4500 CN E		1			486643	07/10/18 15:00	KMY	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			486248	07/08/18 12:21	CMM	TAL IRV
Total/NA	Pre Prep	353.2 (NCell)			100.00 mL	50.00 mL	234328	07/16/18 15:18	JER	TAL SAC
Total/NA	Prep	353 (NCell-Hyd)			50.00 mL	40.00 mL	234740	07/18/18 09:00	JER	TAL SAC
Total/NA	Analysis	WS-WC-0050		1			234745	07/18/18 15:51	TCS	TAL SAC

Client Sample ID: MW-6

Date Collected: 07/06/18 08:21
Date Received: 07/06/18 16:35

Lab Sample ID: 440-215185-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	488400	07/19/18 13:09	RM	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	488416	07/19/18 13:09	HR	TAL IRV
Total/NA	Analysis	8015B		1			527747	07/10/18 17:48	NMB	TAL NSH
Total/NA	Prep	3510C			1050.7 mL	3 mL	233706	07/12/18 14:33	FDB	TAL SAC
Total/NA	Analysis	8015B		5			237088	07/31/18 17:59	RS1	TAL SAC
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	486074	07/06/18 19:25	NTN	TAL IRV
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	486075	07/06/18 19:25	NTN	TAL IRV
Total/NA	Analysis	300.0		20			486075	07/06/18 19:42	NTN	TAL IRV
Total/NA	Analysis	314.0 LL		1			488947	07/24/18 01:38	CTH	TAL IRV

Lab Chronicle

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-215185-1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8330-Prep			976 mL	20 mL	233406	07/11/18 10:15	TJA	TAL SAC
Total/NA	Analysis	8330A		1			234552	07/18/18 11:10	D1R	TAL SAC
Total/NA	Prep	8330-Prep			976 mL	20 mL	233406	07/11/18 10:15	TJA	TAL SAC
Total/NA	Analysis	8330A		1			234933	07/20/18 21:59	D1R	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	233334	07/11/18 06:00	NIM	TAL SAC
Dissolved	Prep	3010A			50 mL	50 mL	233618	07/13/18 07:20	NIM	TAL SAC
Dissolved	Analysis	6010B		1			234431	07/16/18 18:15	CJH	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	233334	07/11/18 06:00	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	233579	07/13/18 07:20	NIM	TAL SAC
Dissolved	Analysis	6020		1			234266	07/13/18 15:48	CJH	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	233334	07/11/18 06:00	NIM	TAL SAC
Dissolved	Prep	7470A			30 mL	30 mL	233703	07/12/18 11:35	GSH	TAL SAC
Dissolved	Analysis	7470A		1			233860	07/13/18 09:44	GSH	TAL SAC
Dissolved	Analysis	SM 2340B		1			235565	07/23/18 11:48	LW1	TAL SAC
Total/NA	Analysis	350.1		1	0.8 mL	8.0 mL	486707	07/10/18 18:25	MMH	TAL IRV
Total/NA	Analysis	SM 2320B		1			486246	07/07/18 14:35	YZ	TAL IRV
Total/NA	Analysis	SM 2510B		1			489536	07/25/18 12:00	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	486773	07/11/18 09:18	XL	TAL IRV
Total/NA	Prep	Distill/CN			50 mL	50 mL	486576	07/10/18 10:47	KMY	TAL IRV
Total/NA	Analysis	SM 4500 CN E		1			486643	07/10/18 15:00	KMY	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			486248	07/08/18 11:34	CMM	TAL IRV
Total/NA	Pre Prep	353.2 (NCell)			100.00 mL	50.00 mL	234328	07/16/18 15:18	JER	TAL SAC
Total/NA	Prep	353 (NCell-Hyd)			50.00 mL	40.00 mL	234740	07/18/18 09:00	JER	TAL SAC
Total/NA	Analysis	WS-WC-0050		1			234745	07/18/18 15:53	TCS	TAL SAC

Client Sample ID: MW-3

Date Collected: 07/06/18 10:19
Date Received: 07/06/18 16:35

Lab Sample ID: 440-215185-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	488400	07/19/18 13:37	RM	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	488416	07/19/18 13:37	HR	TAL IRV
Total/NA	Analysis	8015B		1			527747	07/10/18 18:05	NMB	TAL NSH
Total/NA	Prep	3510C			1055.4 mL	3 mL	233706	07/12/18 14:33	FDB	TAL SAC
Total/NA	Analysis	8015B		1			237088	07/31/18 18:23	RS1	TAL SAC
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	486074	07/06/18 20:00	NTN	TAL IRV
Total/NA	Analysis	300.0	DL	1	5 mL	1.0 mL	486075	07/06/18 20:00	NTN	TAL IRV
Total/NA	Analysis	300.0		5			486075	07/06/18 20:53	NTN	TAL IRV
Total/NA	Analysis	314.0 LL		1			488947	07/24/18 01:57	CTH	TAL IRV
Total/NA	Prep	8330-Prep			1020.6 mL	20 mL	233648	07/12/18 11:36	TJA	TAL SAC
Total/NA	Analysis	8330A		1			234552	07/18/18 01:29	D1R	TAL SAC
Total/NA	Prep	8330-Prep			1020.6 mL	20 mL	233648	07/12/18 11:36	TJA	TAL SAC
Total/NA	Analysis	8330A		1			234933	07/20/18 13:21	D1R	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	233334	07/11/18 06:00	NIM	TAL SAC
Dissolved	Prep	3010A			50 mL	50 mL	233618	07/13/18 07:20	NIM	TAL SAC
Dissolved	Analysis	6010B		1			234431	07/16/18 18:17	CJH	TAL SAC

Lab Chronicle

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-215185-1

Client Sample ID: MW-3

Date Collected: 07/06/18 10:19
Date Received: 07/06/18 16:35

Lab Sample ID: 440-215185-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Filtration	Filtration			500 mL	500 mL	233334	07/11/18 06:00	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	233579	07/13/18 07:20	NIM	TAL SAC
Dissolved	Analysis	6020		1			234266	07/13/18 15:51	CJH	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	233334	07/11/18 06:00	NIM	TAL SAC
Dissolved	Prep	7470A			30 mL	30 mL	233703	07/12/18 11:35	GSH	TAL SAC
Dissolved	Analysis	7470A		1			233860	07/13/18 09:51	GSH	TAL SAC
Dissolved	Analysis	SM 2340B		1			235565	07/23/18 11:48	LW1	TAL SAC
Total/NA	Analysis	350.1		1	0.8 mL	8.0 mL	486707	07/10/18 18:20	MMH	TAL IRV
Total/NA	Analysis	SM 2320B		1			486246	07/07/18 14:42	YZ	TAL IRV
Total/NA	Analysis	SM 2510B		1			489536	07/25/18 13:27	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	486773	07/11/18 09:18	XL	TAL IRV
Total/NA	Prep	Distill/CN			50 mL	50 mL	486576	07/10/18 10:49	KMY	TAL IRV
Total/NA	Analysis	SM 4500 CN E		1			486643	07/10/18 15:00	KMY	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			486248	07/08/18 11:34	CMM	TAL IRV
Total/NA	Pre Prep	353.2 (NCell)			100.00 mL	50.00 mL	234328	07/16/18 15:18	JER	TAL SAC
Total/NA	Prep	353 (NCell-Hyd)			50.00 mL	40.00 mL	234740	07/18/18 09:00	JER	TAL SAC
Total/NA	Analysis	WS-WC-0050		1			234745	07/18/18 15:55	TCS	TAL SAC

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022
TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177
TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-487169/4
Matrix: Water
Analysis Batch: 487169

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.25	ug/L			07/12/18 20:40	1
Ethylbenzene	ND		0.50	0.25	ug/L			07/12/18 20:40	1
m,p-Xylene	ND		1.0	0.50	ug/L			07/12/18 20:40	1
o-Xylene	ND		0.50	0.25	ug/L			07/12/18 20:40	1
Toluene	ND		0.50	0.25	ug/L			07/12/18 20:40	1
Xylenes, Total	ND		1.0	0.50	ug/L			07/12/18 20:40	1
Naphthalene	ND		1.0	0.40	ug/L			07/12/18 20:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*		*07/12/18 20:40*	*1*
Dibromofluoromethane (Surr)	*97*		*76 - 132*		*07/12/18 20:40*	*1*
Toluene-d8 (Surr)	*105*		*80 - 128*		*07/12/18 20:40*	*1*

Lab Sample ID: LCS 440-487169/5
Matrix: Water
Analysis Batch: 487169

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	25.0	24.6		ug/L		98	68 - 130
Ethylbenzene	25.0	24.1		ug/L		96	70 - 130
m,p-Xylene	25.0	25.3		ug/L		101	70 - 130
o-Xylene	25.0	26.3		ug/L		105	70 - 130
Toluene	25.0	24.2		ug/L		97	70 - 130
Naphthalene	25.0	21.4		ug/L		86	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*
Dibromofluoromethane (Surr)	*96*		*76 - 132*
Toluene-d8 (Surr)	*101*		*80 - 128*

Lab Sample ID: MB 440-488400/5
Matrix: Water
Analysis Batch: 488400

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.25	ug/L			07/19/18 08:54	1
Ethylbenzene	ND		0.50	0.25	ug/L			07/19/18 08:54	1
m,p-Xylene	ND		1.0	0.50	ug/L			07/19/18 08:54	1
o-Xylene	ND		0.50	0.25	ug/L			07/19/18 08:54	1
Toluene	ND		0.50	0.25	ug/L			07/19/18 08:54	1
Xylenes, Total	ND		1.0	0.50	ug/L			07/19/18 08:54	1
Naphthalene	ND		1.0	0.40	ug/L			07/19/18 08:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*07/19/18 08:54*	*1*
Dibromofluoromethane (Surr)	*115*		*76 - 132*		*07/19/18 08:54*	*1*
Toluene-d8 (Surr)	*97*		*80 - 128*		*07/19/18 08:54*	*1*

Lab Sample ID: LCS 440-488400/6
Matrix: Water
Analysis Batch: 488400

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	25.0	22.2		ug/L		89	68 - 130
Ethylbenzene	25.0	25.4		ug/L		102	70 - 130
m,p-Xylene	25.0	24.5		ug/L		98	70 - 130
o-Xylene	25.0	23.7		ug/L		95	70 - 130
Toluene	25.0	23.5		ug/L		94	70 - 130
Naphthalene	25.0	23.7		ug/L		95	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*
Dibromofluoromethane (Surr)	*114*		*76 - 132*
Toluene-d8 (Surr)	*95*		*80 - 128*

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 440-487170/4
Matrix: Water
Analysis Batch: 487170

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50	35	ug/L			07/12/18 20:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*97*		*76 - 132*		*07/12/18 20:40*	*1*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*		*07/12/18 20:40*	*1*
Toluene-d8 (Surr)	*105*		*80 - 128*		*07/12/18 20:40*	*1*

Lab Sample ID: LCS 440-487170/6
Matrix: Water
Analysis Batch: 487170

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Volatile Fuel Hydrocarbons (C4-C12)	500	441		ug/L		88	55 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*95*		*76 - 132*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*
Toluene-d8 (Surr)	*105*		*80 - 128*

Lab Sample ID: MB 440-488416/5
Matrix: Water
Analysis Batch: 488416

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50	35	ug/L			07/19/18 08:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*115*		*76 - 132*		*07/19/18 08:54*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*07/19/18 08:54*	*1*

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 440-488416/5
Matrix: Water
Analysis Batch: 488416

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 128		07/19/18 08:54	1

Lab Sample ID: LCS 440-488416/7
Matrix: Water
Analysis Batch: 488416

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Volatile Fuel Hydrocarbons (C4-C12)			500	515		ug/L		103	55 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane (Surr)	116		76 - 132
4-Bromofluorobenzene (Surr)	101		80 - 120
Toluene-d8 (Surr)	100		80 - 128

Method: 8015B - Glycols -Direct Injection (GC/FID)

Lab Sample ID: MB 490-527747/15
Matrix: Water
Analysis Batch: 527747

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene glycol	ND		10	1.0	mg/L			07/10/18 12:17	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-butyl alcohol (Surr)	101		70 - 130		07/10/18 12:17	1

Lab Sample ID: LCS 490-527747/16
Matrix: Water
Analysis Batch: 527747

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ethylene glycol			50.0	49.0		mg/L		98	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
n-butyl alcohol (Surr)	106		70 - 130

Lab Sample ID: LCSD 490-527747/17
Matrix: Water
Analysis Batch: 527747

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylene glycol			50.0	49.4		mg/L		99	70 - 130	1	36

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
n-butyl alcohol (Surr)	101		70 - 130

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 320-233421/1-A
Matrix: Water
Analysis Batch: 236853

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 233421

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	ND		50	16	ug/L		07/11/18 11:38	07/30/18 22:01	1
Motor Oil Range Organics (C25-C36)	ND		500	170	ug/L		07/11/18 11:38	07/30/18 22:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*69*		*56 - 145*	*07/11/18 11:38*	*07/30/18 22:01*	*1*

Lab Sample ID: LCS 320-233421/2-A
Matrix: Water
Analysis Batch: 236853

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 233421

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics (C10-C24)			300	200		ug/L		67	53 - 123		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl (Surr)	*71*		*56 - 145*

Lab Sample ID: LCS 320-233421/4-A
Matrix: Water
Analysis Batch: 236853

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 233421

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Motor Oil Range Organics (C25-C36)			900	711		ug/L		79	50 - 150		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl (Surr)	*74*		*56 - 145*

Lab Sample ID: LCSD 320-233421/3-A
Matrix: Water
Analysis Batch: 236853

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 233421

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (C10-C24)			300	175		ug/L		58	53 - 123	13	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
o-Terphenyl (Surr)	*60*		*56 - 145*

Lab Sample ID: LCSD 320-233421/5-A
Matrix: Water
Analysis Batch: 236853

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 233421

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Motor Oil Range Organics (C25-C36)			900	714		ug/L		79	50 - 150	0	30

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCSD 320-233421/5-A
Matrix: Water
Analysis Batch: 236853

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 233421

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
o-Terphenyl (Surr)	*74*		*56 - 145*

Lab Sample ID: MB 320-233706/1-A
Matrix: Water
Analysis Batch: 237088

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 233706

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	ND		50	16	ug/L		07/12/18 14:33	07/31/18 14:01	1
Motor Oil Range Organics (C25-C36)	ND		500	170	ug/L		07/12/18 14:33	07/31/18 14:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*76*		*56 - 145*	*07/12/18 14:33*	*07/31/18 14:01*	*1*

Lab Sample ID: LCS 320-233706/2-A
Matrix: Water
Analysis Batch: 237088

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 233706

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics (C10-C24)	300	262		ug/L		87	53 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl (Surr)	*83*		*56 - 145*

Lab Sample ID: LCS 320-233706/4-A
Matrix: Water
Analysis Batch: 237088

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 233706

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Motor Oil Range Organics (C25-C36)	900	901		ug/L		100	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl (Surr)	*80*		*56 - 145*

Lab Sample ID: LCSD 320-233706/3-A
Matrix: Water
Analysis Batch: 237088

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 233706

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (C10-C24)	300	246		ug/L		82	53 - 123	6	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
o-Terphenyl (Surr)	*81*		*56 - 145*

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCSD 320-233706/5-A
Matrix: Water
Analysis Batch: 237088

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 233706

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Motor Oil Range Organics (C25-C36)			900	909		ug/L		101	50 - 150	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
o-Terphenyl (Surr)	*78*		*56 - 145*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 440-486068/6
Matrix: Water
Analysis Batch: 486068

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	ND		0.15	0.070	mg/L			07/06/18 11:51	1
Nitrate as N	ND		0.11	0.055	mg/L			07/06/18 11:51	1

Lab Sample ID: LCS 440-486068/5
Matrix: Water
Analysis Batch: 486068

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrite as N	1.52	1.62		mg/L		106	90 - 110
Nitrate as N	1.13	1.15		mg/L		102	90 - 110

Lab Sample ID: MB 440-486069/6
Matrix: Water
Analysis Batch: 486069

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50	0.25	mg/L			07/06/18 11:51	1
Fluoride	ND		0.50	0.25	mg/L			07/06/18 11:51	1
Sulfate	ND		0.50	0.25	mg/L			07/06/18 11:51	1

Lab Sample ID: LCS 440-486069/5
Matrix: Water
Analysis Batch: 486069

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	5.00	5.07		mg/L		101	90 - 110
Fluoride	5.00	4.54		mg/L		91	90 - 110
Sulfate	5.00	4.80		mg/L		96	90 - 110

Lab Sample ID: MB 440-486070/6
Matrix: Water
Analysis Batch: 486070

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	ND		0.15	0.070	mg/L			07/06/18 11:49	1
Nitrate as N	ND		0.11	0.055	mg/L			07/06/18 11:49	1

Lab Sample ID: LCS 440-486070/5
Matrix: Water
Analysis Batch: 486070

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrite as N	1.52	1.54		mg/L		101	90 - 110
Nitrate as N	1.13	1.08		mg/L		96	90 - 110

Lab Sample ID: MB 440-486071/6
Matrix: Water
Analysis Batch: 486071

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50	0.25	mg/L			07/06/18 11:49	1
Fluoride	ND		0.50	0.25	mg/L			07/06/18 11:49	1
Sulfate	ND		0.50	0.25	mg/L			07/06/18 11:49	1

Lab Sample ID: LCS 440-486071/5
Matrix: Water
Analysis Batch: 486071

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	5.00	4.93		mg/L		99	90 - 110
Fluoride	5.00	4.53		mg/L		91	90 - 110
Sulfate	5.00	4.80		mg/L		96	90 - 110

Lab Sample ID: MB 440-486074/6
Matrix: Water
Analysis Batch: 486074

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	ND		0.15	0.070	mg/L			07/06/18 11:55	1
Nitrate as N	ND		0.11	0.055	mg/L			07/06/18 11:55	1

Lab Sample ID: LCS 440-486074/5
Matrix: Water
Analysis Batch: 486074

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrite as N	1.52	1.45		mg/L		95	90 - 110
Nitrate as N	1.13	1.04		mg/L		92	90 - 110

Lab Sample ID: 440-215185-7 MS
Matrix: Water
Analysis Batch: 486074

Client Sample ID: MW-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrite as N	ND		1.52	1.47		mg/L		96	80 - 120
Nitrate as N	ND		1.13	1.05		mg/L		93	80 - 120

Lab Sample ID: 440-215185-7 MSD
Matrix: Water
Analysis Batch: 486074

Client Sample ID: MW-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrite as N	ND		1.52	1.40		mg/L		92	80 - 120	5	20
Nitrate as N	ND		1.13	1.03		mg/L		91	80 - 120	2	20

Lab Sample ID: MB 440-486075/6
Matrix: Water
Analysis Batch: 486075

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50	0.25	mg/L			07/06/18 11:55	1
Fluoride	ND		0.50	0.25	mg/L			07/06/18 11:55	1
Sulfate	ND		0.50	0.25	mg/L			07/06/18 11:55	1

Lab Sample ID: LCS 440-486075/5
Matrix: Water
Analysis Batch: 486075

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	5.00	4.57		mg/L		91	90 - 110
Fluoride	5.00	4.66		mg/L		93	90 - 110
Sulfate	5.00	4.65		mg/L		93	90 - 110

Method: 300.0 - Anions, Ion Chromatography - DL

Lab Sample ID: 440-215185-7 MS
Matrix: Water
Analysis Batch: 486075

Client Sample ID: MW-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride - DL	17		5.00	22.6	E	mg/L		114	80 - 120
Fluoride - DL	0.88		5.00	5.59		mg/L		94	80 - 120
Sulfate - DL	220	E	5.00	227	E 4	mg/L		105	80 - 120

Lab Sample ID: 440-215185-7 MSD
Matrix: Water
Analysis Batch: 486075

Client Sample ID: MW-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride - DL	17		5.00	22.3	E	mg/L		110	80 - 120	1	20
Fluoride - DL	0.88		5.00	5.48		mg/L		92	80 - 120	2	20
Sulfate - DL	220	E	5.00	227	E 4	mg/L		104	80 - 120	0	20

Method: 314.0 LL - Perchlorate (IC)

Lab Sample ID: MB 440-488947/6
Matrix: Water
Analysis Batch: 488947

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			07/23/18 08:05	1

Lab Sample ID: LCS 440-488947/5
Matrix: Water
Analysis Batch: 488947

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	25.0	26.3		ug/L		105	85 - 115

Method: 314.0 LL - Perchlorate (IC) (Continued)

Lab Sample ID: MRL 440-488947/4
Matrix: Water
Analysis Batch: 488947

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	1.00	1.19		ug/L		119	75 - 125

Lab Sample ID: MB 440-489424/6
Matrix: Water
Analysis Batch: 489424

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			07/25/18 09:08	1

Lab Sample ID: MB 440-489424/64
Matrix: Water
Analysis Batch: 489424

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			07/26/18 08:57	1

Lab Sample ID: LCS 440-489424/5
Matrix: Water
Analysis Batch: 489424

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	25.0	25.0		ug/L		100	85 - 115

Lab Sample ID: LCS 440-489424/63
Matrix: Water
Analysis Batch: 489424

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	25.0	26.6		ug/L		106	85 - 115

Lab Sample ID: MRL 440-489424/8
Matrix: Water
Analysis Batch: 489424

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	1.00	0.824	J	ug/L		82	75 - 125

Lab Sample ID: 440-215185-2 MS
Matrix: Water
Analysis Batch: 489424

Client Sample ID: MW-4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	ND		25.0	26.7		ug/L		107	80 - 120

Lab Sample ID: 440-215185-2 MSD
Matrix: Water
Analysis Batch: 489424

Client Sample ID: MW-4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perchlorate	ND		25.0	26.9		ug/L		108	80 - 120	1	20

Method: 8330A - Nitroaromatics and Nitramines

Lab Sample ID: MB 320-233406/1-A
Matrix: Water
Analysis Batch: 234552

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 233406

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dinitrobenzene	ND		0.10	0.050	ug/L		07/11/18 10:15	07/18/18 04:28	1
2,4-Dinitrotoluene	ND		0.10	0.050	ug/L		07/11/18 10:15	07/18/18 04:28	1
2,6-Dinitrotoluene	ND		0.10	0.050	ug/L		07/11/18 10:15	07/18/18 04:28	1
HMX	ND		0.10	0.036	ug/L		07/11/18 10:15	07/18/18 04:28	1
Nitrobenzene	ND		0.10	0.050	ug/L		07/11/18 10:15	07/18/18 04:28	1
Nitroglycerin	ND		0.65	0.33	ug/L		07/11/18 10:15	07/18/18 04:28	1
2-Nitrotoluene	ND		0.50	0.088	ug/L		07/11/18 10:15	07/18/18 04:28	1
3-Nitrotoluene	ND		0.50	0.057	ug/L		07/11/18 10:15	07/18/18 04:28	1
4-Nitrotoluene	ND		0.50	0.088	ug/L		07/11/18 10:15	07/18/18 04:28	1
RDX	ND		0.10	0.036	ug/L		07/11/18 10:15	07/18/18 04:28	1
1,3,5-Trinitrobenzene	ND		0.10	0.031	ug/L		07/11/18 10:15	07/18/18 04:28	1
2,4,6-Trinitrotoluene	ND		0.10	0.050	ug/L		07/11/18 10:15	07/18/18 04:28	1
PETN	ND		0.65	0.30	ug/L		07/11/18 10:15	07/18/18 04:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*94*		*79 - 111*	*07/11/18 10:15*	*07/18/18 04:28*	*1*

Lab Sample ID: LCS 320-233406/2-A
Matrix: Water
Analysis Batch: 234552

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 233406

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,3-Dinitrobenzene			1.00	1.05		ug/L		105	72 - 123		
2,4-Dinitrotoluene			1.00	0.978		ug/L		98	70 - 119		
2,6-Dinitrotoluene			1.00	0.976		ug/L		98	71 - 119		
HMX			1.00	1.23	*	ug/L		123	67 - 115		
Nitrobenzene			1.00	1.15		ug/L		115	69 - 119		
Nitroglycerin			5.00	4.77		ug/L		95	85 - 115		
2-Nitrotoluene			1.00	1.56	*	ug/L		156	64 - 120		
3-Nitrotoluene			1.00	0.971		ug/L		97	67 - 114		
4-Nitrotoluene			1.00	0.934		ug/L		93	67 - 115		
RDX			1.00	1.11		ug/L		111	68 - 122		
1,3,5-Trinitrobenzene			1.00	1.04		ug/L		104	74 - 120		
2,4,6-Trinitrotoluene			1.00	0.974		ug/L		97	69 - 111		
PETN			5.00	4.36		ug/L		87	84 - 117		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
3,4-Dinitrotoluene	*96*		*79 - 111*

Lab Sample ID: LCSD 320-233406/3-A
Matrix: Water
Analysis Batch: 234552

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 233406

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3-Dinitrobenzene			1.00	1.09		ug/L		109	72 - 123	4	29
2,4-Dinitrotoluene			1.00	1.04		ug/L		104	70 - 119	6	30
2,6-Dinitrotoluene			1.00	1.03		ug/L		103	71 - 119	5	29

Method: 8330A - Nitroaromatics and Nitramines (Continued)

Lab Sample ID: LCSD 320-233406/3-A
Matrix: Water
Analysis Batch: 234552

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 233406

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HMX			1.00	1.05		ug/L		105	67 - 115	16	32
Nitrobenzene			1.00	1.11		ug/L		111	69 - 119	4	31
Nitroglycerin			5.00	4.80		ug/L		96	85 - 115	1	15
2-Nitrotoluene			1.00	1.03	*	ug/L		103	64 - 120	41	36
3-Nitrotoluene			1.00	1.02		ug/L		102	67 - 114	5	31
4-Nitrotoluene			1.00	0.983		ug/L		98	67 - 115	5	32
RDX			1.00	1.17		ug/L		117	68 - 122	6	32
1,3,5-Trinitrobenzene			1.00	1.12		ug/L		112	74 - 120	7	29
2,4,6-Trinitrotoluene			1.00	1.03		ug/L		103	69 - 111	5	28
PETN			5.00	4.45		ug/L		89	84 - 117	2	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
3,4-Dinitrotoluene	*96*		*79 - 111*

Lab Sample ID: MB 320-233648/1-A
Matrix: Water
Analysis Batch: 234552

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 233648

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dinitrobenzene	ND		0.10	0.050	ug/L		07/12/18 11:35	07/17/18 23:15	1
2,4-Dinitrotoluene	ND		0.10	0.050	ug/L		07/12/18 11:35	07/17/18 23:15	1
2,6-Dinitrotoluene	ND		0.10	0.050	ug/L		07/12/18 11:35	07/17/18 23:15	1
HMX	ND		0.10	0.036	ug/L		07/12/18 11:35	07/17/18 23:15	1
Nitrobenzene	ND		0.10	0.050	ug/L		07/12/18 11:35	07/17/18 23:15	1
Nitroglycerin	ND		0.65	0.33	ug/L		07/12/18 11:35	07/17/18 23:15	1
2-Nitrotoluene	ND		0.50	0.088	ug/L		07/12/18 11:35	07/17/18 23:15	1
3-Nitrotoluene	ND		0.50	0.057	ug/L		07/12/18 11:35	07/17/18 23:15	1
4-Nitrotoluene	ND		0.50	0.088	ug/L		07/12/18 11:35	07/17/18 23:15	1
RDX	ND		0.10	0.036	ug/L		07/12/18 11:35	07/17/18 23:15	1
1,3,5-Trinitrobenzene	0.0532	J	0.10	0.031	ug/L		07/12/18 11:35	07/17/18 23:15	1
2,4,6-Trinitrotoluene	ND		0.10	0.050	ug/L		07/12/18 11:35	07/17/18 23:15	1
PETN	ND		0.65	0.30	ug/L		07/12/18 11:35	07/17/18 23:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*91*		*79 - 111*	*07/12/18 11:35*	*07/17/18 23:15*	*1*

Lab Sample ID: LCS 320-233648/2-A
Matrix: Water
Analysis Batch: 234552

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 233648

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dinitrobenzene			1.00	1.07		ug/L		107	72 - 123
2,4-Dinitrotoluene			1.00	1.02		ug/L		102	70 - 119
2,6-Dinitrotoluene			1.00	1.00		ug/L		100	71 - 119
HMX			1.00	1.03		ug/L		103	67 - 115
Nitrobenzene			1.00	1.10		ug/L		110	69 - 119
Nitroglycerin			5.00	4.84		ug/L		97	85 - 115
2-Nitrotoluene			1.00	1.01		ug/L		101	64 - 120

Method: 8330A - Nitroaromatics and Nitramines (Continued)

Lab Sample ID: LCS 320-233648/2-A
Matrix: Water
Analysis Batch: 234552

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 233648

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
3-Nitrotoluene			1.00	1.02		ug/L		102	67 - 114		
4-Nitrotoluene			1.00	0.972		ug/L		97	67 - 115		
RDX			1.00	1.14		ug/L		114	68 - 122		
1,3,5-Trinitrobenzene			1.00	1.10		ug/L		110	74 - 120		
2,4,6-Trinitrotoluene			1.00	1.00		ug/L		100	69 - 111		
PETN			5.00	4.43		ug/L		89	84 - 117		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
3,4-Dinitrotoluene	*96*		*79 - 111*

Lab Sample ID: LCSD 320-233648/3-A
Matrix: Water
Analysis Batch: 234552

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 233648

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3-Dinitrobenzene			1.00	1.09		ug/L		109	72 - 123	2	29
2,4-Dinitrotoluene			1.00	1.02		ug/L		102	70 - 119	1	30
2,6-Dinitrotoluene			1.00	1.02		ug/L		102	71 - 119	1	29
HMX			1.00	1.10		ug/L		110	67 - 115	7	32
Nitrobenzene			1.00	1.19		ug/L		119	69 - 119	8	31
Nitroglycerin			5.00	4.78		ug/L		96	85 - 115	1	15
2-Nitrotoluene			1.00	1.24	*	ug/L		124	64 - 120	21	36
3-Nitrotoluene			1.00	1.02		ug/L		102	67 - 114	1	31
4-Nitrotoluene			1.00	0.973		ug/L		97	67 - 115	0	32
RDX			1.00	1.15		ug/L		115	68 - 122	1	32
1,3,5-Trinitrobenzene			1.00	1.11		ug/L		111	74 - 120	0	29
2,4,6-Trinitrotoluene			1.00	1.01		ug/L		101	69 - 111	0	28
PETN			5.00	4.34		ug/L		87	84 - 117	2	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
3,4-Dinitrotoluene	*95*		*79 - 111*

Method: 6010B - Metals (ICP)

Lab Sample ID: LCS 320-233618/2-A
Matrix: Water
Analysis Batch: 234431

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 233618

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfur			10.0	10.1		mg/L		101	80 - 120		

Lab Sample ID: MB 320-233334/1-C
Matrix: Water
Analysis Batch: 234431

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 233618

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	ND		0.50	0.30	mg/L		07/13/18 07:20	07/16/18 17:17	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 440-215185-1 MS
Matrix: Water
Analysis Batch: 234431

Client Sample ID: MW-5
Prep Type: Dissolved
Prep Batch: 233618

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfur	86		10.0	95.9	4	mg/L		97	80 - 120

Lab Sample ID: 440-215185-1 MSD
Matrix: Water
Analysis Batch: 234431

Client Sample ID: MW-5
Prep Type: Dissolved
Prep Batch: 233618

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfur	86		10.0	97.3	4	mg/L		112	80 - 120	2	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 320-233579/1-A
Matrix: Water
Analysis Batch: 234266

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 233579

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		07/13/18 07:20	07/13/18 14:01	1
Aluminum	ND		0.050	0.025	mg/L		07/13/18 07:20	07/13/18 14:01	1
Antimony	ND		0.0020	0.00020	mg/L		07/13/18 07:20	07/13/18 14:01	1
Arsenic	ND		0.0020	0.0010	mg/L		07/13/18 07:20	07/13/18 14:01	1
Barium	ND		0.0010	0.00050	mg/L		07/13/18 07:20	07/13/18 14:01	1
Beryllium	ND		0.0010	0.00010	mg/L		07/13/18 07:20	07/13/18 14:01	1
Cadmium	ND		0.0010	0.00050	mg/L		07/13/18 07:20	07/13/18 14:01	1
Calcium	ND		0.30	0.17	mg/L		07/13/18 07:20	07/13/18 14:01	1
Chromium	ND		0.0020	0.0010	mg/L		07/13/18 07:20	07/13/18 14:01	1
Cobalt	ND		0.0010	0.00060	mg/L		07/13/18 07:20	07/13/18 14:01	1
Copper	ND		0.0020	0.0010	mg/L		07/13/18 07:20	07/13/18 14:01	1
Iron	ND		0.050	0.025	mg/L		07/13/18 07:20	07/13/18 14:01	1
Lead	ND		0.0010	0.00060	mg/L		07/13/18 07:20	07/13/18 14:01	1
Magnesium	ND		0.050	0.025	mg/L		07/13/18 07:20	07/13/18 14:01	1
Manganese	ND		0.0025	0.0014	mg/L		07/13/18 07:20	07/13/18 14:01	1
Molybdenum	ND		0.0020	0.00060	mg/L		07/13/18 07:20	07/13/18 14:01	1
Nickel	ND		0.0020	0.0010	mg/L		07/13/18 07:20	07/13/18 14:01	1
Potassium	ND		0.050	0.025	mg/L		07/13/18 07:20	07/13/18 14:01	1
Selenium	ND		0.0020	0.0010	mg/L		07/13/18 07:20	07/13/18 14:01	1
Sodium	ND		0.10	0.080	mg/L		07/13/18 07:20	07/13/18 14:01	1
Thallium	ND		0.0010	0.00050	mg/L		07/13/18 07:20	07/13/18 14:01	1
Vanadium	ND		0.010	0.0030	mg/L		07/13/18 07:20	07/13/18 14:01	1
Zinc	ND		0.0050	0.0040	mg/L		07/13/18 07:20	07/13/18 14:01	1

Lab Sample ID: LCS 320-233579/2-A
Matrix: Water
Analysis Batch: 234266

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 233579

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.0500	0.0503		mg/L		101	80 - 120
Aluminum	1.00	0.957		mg/L		96	80 - 120
Antimony	0.200	0.200		mg/L		100	80 - 120

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 320-233579/2-A
Matrix: Water
Analysis Batch: 234266

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 233579

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.200	0.212		mg/L		106	80 - 120
Barium	0.200	0.202		mg/L		101	80 - 120
Beryllium	0.200	0.199		mg/L		100	80 - 120
Cadmium	0.200	0.201		mg/L		100	80 - 120
Calcium	1.00	1.00		mg/L		100	80 - 120
Chromium	0.200	0.204		mg/L		102	80 - 120
Cobalt	0.200	0.206		mg/L		103	80 - 120
Copper	0.200	0.202		mg/L		101	80 - 120
Iron	1.00	1.02		mg/L		102	80 - 120
Lead	0.200	0.207		mg/L		103	80 - 120
Magnesium	1.00	0.981		mg/L		98	80 - 120
Manganese	0.200	0.199		mg/L		99	80 - 120
Molybdenum	0.200	0.221		mg/L		111	80 - 120
Nickel	0.200	0.201		mg/L		100	80 - 120
Potassium	1.00	0.972		mg/L		97	80 - 120
Selenium	0.200	0.210		mg/L		105	80 - 120
Sodium	1.00	0.990		mg/L		99	80 - 120
Thallium	0.0500	0.0508		mg/L		102	80 - 120
Vanadium	0.200	0.200		mg/L		100	80 - 120
Zinc	0.200	0.214		mg/L		107	80 - 120

Lab Sample ID: 440-215185-1 MS
Matrix: Water
Analysis Batch: 234266

Client Sample ID: MW-5
Prep Type: Dissolved
Prep Batch: 233579

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	ND		0.0500	0.0504		mg/L		101	80 - 120
Aluminum	ND		1.00	0.989		mg/L		99	80 - 120
Antimony	0.00023	J	0.200	0.204		mg/L		102	80 - 120
Arsenic	0.70	F1	0.200	0.903		mg/L		99	80 - 120
Barium	0.025		0.200	0.234		mg/L		104	80 - 120
Beryllium	ND		0.200	0.199		mg/L		100	80 - 120
Cadmium	ND		0.200	0.202		mg/L		101	80 - 120
Calcium	62		1.00	63.8	4	mg/L		161	80 - 120
Chromium	ND		0.200	0.201		mg/L		101	80 - 120
Cobalt	ND		0.200	0.209		mg/L		104	80 - 120
Copper	0.0012	J	0.200	0.198		mg/L		99	80 - 120
Iron	ND		1.00	1.04		mg/L		104	80 - 120
Lead	ND		0.200	0.198		mg/L		99	80 - 120
Magnesium	20		1.00	20.6	4	mg/L		76	80 - 120
Manganese	0.052		0.200	0.251		mg/L		100	80 - 120
Molybdenum	0.0026		0.200	0.219		mg/L		108	80 - 120
Nickel	0.0038		0.200	0.200		mg/L		98	80 - 120
Potassium	23		1.00	24.3	4	mg/L		139	80 - 120
Selenium	0.0062		0.200	0.204		mg/L		99	80 - 120
Sodium	55		1.00	55.0	4	mg/L		16	80 - 120
Thallium	ND		0.0500	0.0493		mg/L		99	80 - 120
Vanadium	ND		0.200	0.205		mg/L		102	80 - 120

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 440-215185-1 MS
Matrix: Water
Analysis Batch: 234266

Client Sample ID: MW-5
Prep Type: Dissolved
Prep Batch: 233579

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Zinc	0.041		0.200	0.241		mg/L		100	80 - 120

Lab Sample ID: 440-215185-1 MSD
Matrix: Water
Analysis Batch: 234266

Client Sample ID: MW-5
Prep Type: Dissolved
Prep Batch: 233579

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	ND		0.0500	0.0505		mg/L		101	80 - 120	0	15
Aluminum	ND		1.00	0.981		mg/L		98	80 - 120	1	15
Antimony	0.00023	J	0.200	0.202		mg/L		101	80 - 120	1	15
Arsenic	0.70	F1	0.200	0.947	F1	mg/L		121	80 - 120	5	15
Barium	0.025		0.200	0.232		mg/L		103	80 - 120	1	15
Beryllium	ND		0.200	0.203		mg/L		101	80 - 120	2	15
Cadmium	ND		0.200	0.200		mg/L		100	80 - 120	1	15
Calcium	62		1.00	65.3	4	mg/L		312	80 - 120	2	15
Chromium	ND		0.200	0.201		mg/L		100	80 - 120	0	15
Cobalt	ND		0.200	0.206		mg/L		103	80 - 120	1	15
Copper	0.0012	J	0.200	0.196		mg/L		98	80 - 120	1	15
Iron	ND		1.00	1.02		mg/L		102	80 - 120	1	15
Lead	ND		0.200	0.203		mg/L		101	80 - 120	2	15
Magnesium	20		1.00	20.6	4	mg/L		68	80 - 120	0	15
Manganese	0.052		0.200	0.250		mg/L		99	80 - 120	1	15
Molybdenum	0.0026		0.200	0.224		mg/L		111	80 - 120	2	15
Nickel	0.0038		0.200	0.200		mg/L		98	80 - 120	0	15
Potassium	23		1.00	24.4	4	mg/L		145	80 - 120	0	17
Selenium	0.0062		0.200	0.211		mg/L		102	80 - 120	3	15
Sodium	55		1.00	56.0	4	mg/L		115	80 - 120	2	15
Thallium	ND		0.0500	0.0508		mg/L		102	80 - 120	3	15
Vanadium	ND		0.200	0.204		mg/L		102	80 - 120	1	15
Zinc	0.041		0.200	0.250		mg/L		105	80 - 120	4	15

Method: 7470A - Mercury (CVAA)

Lab Sample ID: LCS 320-233703/12-A
Matrix: Water
Analysis Batch: 233860

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 233703

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00100	0.000956		mg/L		96	82 - 113

Lab Sample ID: MB 320-233334/1-D
Matrix: Water
Analysis Batch: 233860

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 233703

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		07/12/18 11:35	07/13/18 08:59	1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 440-215185-1 MS
Matrix: Water
Analysis Batch: 233860

Client Sample ID: MW-5
Prep Type: Dissolved
Prep Batch: 233703

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		0.00100	0.000989		mg/L		99	82 - 113

Lab Sample ID: 440-215185-1 MSD
Matrix: Water
Analysis Batch: 233860

Client Sample ID: MW-5
Prep Type: Dissolved
Prep Batch: 233703

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.00100	0.00100		mg/L		100	82 - 113	1	17

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 440-486707/10
Matrix: Water
Analysis Batch: 486707

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	ND		0.20	0.10	mg/L			07/10/18 16:44	1

Lab Sample ID: LCS 440-486707/11
Matrix: Water
Analysis Batch: 486707

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia (as N)	5.00	5.42		mg/L		108	90 - 110

Lab Sample ID: MRL 440-486707/9
Matrix: Water
Analysis Batch: 486707

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia (as N)	0.200	0.219		mg/L		110	50 - 150

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 440-486246/3
Matrix: Water
Analysis Batch: 486246

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	ND		4.0	4.0	mg/L			07/07/18 10:16	1
Bicarbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			07/07/18 10:16	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			07/07/18 10:16	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			07/07/18 10:16	1

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCS 440-486246/2
Matrix: Water
Analysis Batch: 486246

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3	98.9	96.9		mg/L		98	80 - 120

Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: MB 440-489536/3
Matrix: Water
Analysis Batch: 489536

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		1.0	1.0	umhos/cm			07/25/18 12:00	1

Lab Sample ID: LCS 440-489536/4
Matrix: Water
Analysis Batch: 489536

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Specific Conductance	953	1010		umhos/cm		106	90 - 110

Lab Sample ID: 440-215185-1 DU
Matrix: Water
Analysis Batch: 489536

Client Sample ID: MW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Specific Conductance	810		800		umhos/cm		0.9	5

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 440-486773/1
Matrix: Water
Analysis Batch: 486773

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	5.0	mg/L			07/11/18 09:18	1

Lab Sample ID: LCS 440-486773/2
Matrix: Water
Analysis Batch: 486773

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1000	978		mg/L		98	90 - 110

Lab Sample ID: MB 440-487035/1
Matrix: Water
Analysis Batch: 487035

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	5.0	mg/L			07/12/18 10:59	1

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 440-487035/2
Matrix: Water
Analysis Batch: 487035

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1000	978		mg/L		98	90 - 110

Method: SM 4500 CN E - Cyanide, Total

Lab Sample ID: MB 440-486576/1-A
Matrix: Water
Analysis Batch: 486643

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486576

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.025	0.013	mg/L		07/10/18 10:47	07/10/18 14:59	1

Lab Sample ID: LCS 440-486576/2-A
Matrix: Water
Analysis Batch: 486643

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486576

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.200	0.197		mg/L		99	90 - 110

Method: WS-WC-0050 - Nitrocellulose

Lab Sample ID: MB 320-234328/1-B
Matrix: Water
Analysis Batch: 234745

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 234740

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrocellulose	ND		2.0	0.48	mg/L		07/18/18 09:00	07/18/18 15:01	1

Lab Sample ID: LCS 320-234328/2-B
Matrix: Water
Analysis Batch: 234745

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 234740

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrocellulose	5.06	5.68		mg/L		112	26 - 144

GC/MS VOA

Analysis Batch: 487169

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-215185-1	MW-5	Total/NA	Water	8260B	
440-215185-2	MW-4	Total/NA	Water	8260B	
440-215185-4	MW-2	Total/NA	Water	8260B	
MB 440-487169/4	Method Blank	Total/NA	Water	8260B	
LCS 440-487169/5	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 487170

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-215185-1	MW-5	Total/NA	Water	8260B/CA_LUFT MS	
440-215185-2	MW-4	Total/NA	Water	8260B/CA_LUFT MS	
440-215185-4	MW-2	Total/NA	Water	8260B/CA_LUFT MS	
MB 440-487170/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	
LCS 440-487170/6	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	

Analysis Batch: 488400

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-215185-5	MW-1	Total/NA	Water	8260B	
440-215185-6	MW-6	Total/NA	Water	8260B	
440-215185-7	MW-3	Total/NA	Water	8260B	
MB 440-488400/5	Method Blank	Total/NA	Water	8260B	
LCS 440-488400/6	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 488416

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-215185-5	MW-1	Total/NA	Water	8260B/CA_LUFT MS	
440-215185-6	MW-6	Total/NA	Water	8260B/CA_LUFT MS	
440-215185-7	MW-3	Total/NA	Water	8260B/CA_LUFT MS	
MB 440-488416/5	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	
LCS 440-488416/7	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	

GC VOA

Analysis Batch: 527747

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-215185-1	MW-5	Total/NA	Water	8015B	
440-215185-2	MW-4	Total/NA	Water	8015B	
440-215185-4	MW-2	Total/NA	Water	8015B	
440-215185-5	MW-1	Total/NA	Water	8015B	
440-215185-6	MW-6	Total/NA	Water	8015B	
440-215185-7	MW-3	Total/NA	Water	8015B	
MB 490-527747/15	Method Blank	Total/NA	Water	8015B	
LCS 490-527747/16	Lab Control Sample	Total/NA	Water	8015B	
LCSD 490-527747/17	Lab Control Sample Dup	Total/NA	Water	8015B	

GC Semi VOA

Prep Batch: 233421

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-215185-1	MW-5	Total/NA	Water	3510C	
440-215185-2	MW-4	Total/NA	Water	3510C	
440-215185-4	MW-2	Total/NA	Water	3510C	
440-215185-5	MW-1	Total/NA	Water	3510C	
MB 320-233421/1-A	Method Blank	Total/NA	Water	3510C	
LCS 320-233421/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 320-233421/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 320-233421/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 320-233421/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Prep Batch: 233706

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-215185-6	MW-6	Total/NA	Water	3510C	
440-215185-7	MW-3	Total/NA	Water	3510C	
MB 320-233706/1-A	Method Blank	Total/NA	Water	3510C	
LCS 320-233706/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 320-233706/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 320-233706/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 320-233706/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 236853

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-215185-1	MW-5	Total/NA	Water	8015B	233421
440-215185-2	MW-4	Total/NA	Water	8015B	233421
440-215185-4	MW-2	Total/NA	Water	8015B	233421
440-215185-5	MW-1	Total/NA	Water	8015B	233421
MB 320-233421/1-A	Method Blank	Total/NA	Water	8015B	233421
LCS 320-233421/2-A	Lab Control Sample	Total/NA	Water	8015B	233421
LCS 320-233421/4-A	Lab Control Sample	Total/NA	Water	8015B	233421
LCSD 320-233421/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	233421
LCSD 320-233421/5-A	Lab Control Sample Dup	Total/NA	Water	8015B	233421

Analysis Batch: 237088

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-215185-6	MW-6	Total/NA	Water	8015B	233706
440-215185-7	MW-3	Total/NA	Water	8015B	233706
MB 320-233706/1-A	Method Blank	Total/NA	Water	8015B	233706
LCS 320-233706/2-A	Lab Control Sample	Total/NA	Water	8015B	233706
LCS 320-233706/4-A	Lab Control Sample	Total/NA	Water	8015B	233706
LCSD 320-233706/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	233706
LCSD 320-233706/5-A	Lab Control Sample Dup	Total/NA	Water	8015B	233706

HPLC/IC

Prep Batch: 233406

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-215185-1	MW-5	Total/NA	Water	8330-Prep	
440-215185-2	MW-4	Total/NA	Water	8330-Prep	
440-215185-4	MW-2	Total/NA	Water	8330-Prep	
440-215185-5	MW-1	Total/NA	Water	8330-Prep	

HPLC/IC (Continued)

Prep Batch: 233406 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-215185-6	MW-6	Total/NA	Water	8330-Prep	
MB 320-233406/1-A	Method Blank	Total/NA	Water	8330-Prep	
LCS 320-233406/2-A	Lab Control Sample	Total/NA	Water	8330-Prep	
LCSD 320-233406/3-A	Lab Control Sample Dup	Total/NA	Water	8330-Prep	

Prep Batch: 233648

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-215185-7	MW-3	Total/NA	Water	8330-Prep	
MB 320-233648/1-A	Method Blank	Total/NA	Water	8330-Prep	
LCS 320-233648/2-A	Lab Control Sample	Total/NA	Water	8330-Prep	
LCSD 320-233648/3-A	Lab Control Sample Dup	Total/NA	Water	8330-Prep	

Analysis Batch: 234552

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-215185-1	MW-5	Total/NA	Water	8330A	233406
440-215185-2	MW-4	Total/NA	Water	8330A	233406
440-215185-4	MW-2	Total/NA	Water	8330A	233406
440-215185-5	MW-1	Total/NA	Water	8330A	233406
440-215185-6	MW-6	Total/NA	Water	8330A	233406
440-215185-7	MW-3	Total/NA	Water	8330A	233648
MB 320-233406/1-A	Method Blank	Total/NA	Water	8330A	233406
MB 320-233648/1-A	Method Blank	Total/NA	Water	8330A	233648
LCS 320-233406/2-A	Lab Control Sample	Total/NA	Water	8330A	233406
LCS 320-233648/2-A	Lab Control Sample	Total/NA	Water	8330A	233648
LCSD 320-233406/3-A	Lab Control Sample Dup	Total/NA	Water	8330A	233406
LCSD 320-233648/3-A	Lab Control Sample Dup	Total/NA	Water	8330A	233648

Analysis Batch: 234933

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-215185-2	MW-4	Total/NA	Water	8330A	233406
440-215185-4	MW-2	Total/NA	Water	8330A	233406
440-215185-5	MW-1	Total/NA	Water	8330A	233406
440-215185-6	MW-6	Total/NA	Water	8330A	233406
440-215185-7	MW-3	Total/NA	Water	8330A	233648
MB 320-233406/1-A	Method Blank	Total/NA	Water	8330A	233406
MB 320-233648/1-A	Method Blank	Total/NA	Water	8330A	233648

Analysis Batch: 486068

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-215185-4	MW-2	Total/NA	Water	300.0	
440-215185-5	MW-1	Total/NA	Water	300.0	
MB 440-486068/6	Method Blank	Total/NA	Water	300.0	
LCS 440-486068/5	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 486069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-215185-4	MW-2	Total/NA	Water	300.0	
440-215185-4	MW-2	Total/NA	Water	300.0	
440-215185-5	MW-1	Total/NA	Water	300.0	
440-215185-5	MW-1	Total/NA	Water	300.0	
MB 440-486069/6	Method Blank	Total/NA	Water	300.0	

HPLC/IC (Continued)

Analysis Batch: 486069 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 440-486069/5	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 486070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-215185-1	MW-5	Total/NA	Water	300.0	
440-215185-2	MW-4	Total/NA	Water	300.0	
MB 440-486070/6	Method Blank	Total/NA	Water	300.0	
LCS 440-486070/5	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 486071

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-215185-1	MW-5	Total/NA	Water	300.0	
440-215185-1	MW-5	Total/NA	Water	300.0	
440-215185-2	MW-4	Total/NA	Water	300.0	
440-215185-2	MW-4	Total/NA	Water	300.0	
440-215185-2	MW-4	Total/NA	Water	300.0	
MB 440-486071/6	Method Blank	Total/NA	Water	300.0	
LCS 440-486071/5	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 486074

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-215185-6	MW-6	Total/NA	Water	300.0	
440-215185-7	MW-3	Total/NA	Water	300.0	
MB 440-486074/6	Method Blank	Total/NA	Water	300.0	
LCS 440-486074/5	Lab Control Sample	Total/NA	Water	300.0	
440-215185-7 MS	MW-3	Total/NA	Water	300.0	
440-215185-7 MSD	MW-3	Total/NA	Water	300.0	

Analysis Batch: 486075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-215185-6	MW-6	Total/NA	Water	300.0	
440-215185-6	MW-6	Total/NA	Water	300.0	
440-215185-7 - DL	MW-3	Total/NA	Water	300.0	
440-215185-7	MW-3	Total/NA	Water	300.0	
MB 440-486075/6	Method Blank	Total/NA	Water	300.0	
LCS 440-486075/5	Lab Control Sample	Total/NA	Water	300.0	
440-215185-7 MS - DL	MW-3	Total/NA	Water	300.0	
440-215185-7 MSD - DL	MW-3	Total/NA	Water	300.0	

Analysis Batch: 488947

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-215185-1	MW-5	Total/NA	Water	314.0 LL	
440-215185-6	MW-6	Total/NA	Water	314.0 LL	
440-215185-7	MW-3	Total/NA	Water	314.0 LL	
MB 440-488947/6	Method Blank	Total/NA	Water	314.0 LL	
LCS 440-488947/5	Lab Control Sample	Total/NA	Water	314.0 LL	
MRL 440-488947/4	Lab Control Sample	Total/NA	Water	314.0 LL	

Analysis Batch: 489424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-215185-2	MW-4	Total/NA	Water	314.0 LL	

HPLC/IC (Continued)

Analysis Batch: 489424 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-215185-4	MW-2	Total/NA	Water	314.0 LL	
440-215185-5	MW-1	Total/NA	Water	314.0 LL	
MB 440-489424/6	Method Blank	Total/NA	Water	314.0 LL	
MB 440-489424/64	Method Blank	Total/NA	Water	314.0 LL	
LCS 440-489424/5	Lab Control Sample	Total/NA	Water	314.0 LL	
LCS 440-489424/63	Lab Control Sample	Total/NA	Water	314.0 LL	
MRL 440-489424/8	Lab Control Sample	Total/NA	Water	314.0 LL	
440-215185-2 MS	MW-4	Total/NA	Water	314.0 LL	
440-215185-2 MSD	MW-4	Total/NA	Water	314.0 LL	

Metals

Filtration Batch: 233334

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-215185-1	MW-5	Dissolved	Water	Filtration	
440-215185-2	MW-4	Dissolved	Water	Filtration	
440-215185-4	MW-2	Dissolved	Water	Filtration	
440-215185-5	MW-1	Dissolved	Water	Filtration	
440-215185-6	MW-6	Dissolved	Water	Filtration	
440-215185-7	MW-3	Dissolved	Water	Filtration	
MB 320-233334/1-C	Method Blank	Dissolved	Water	Filtration	
MB 320-233334/1-D	Method Blank	Dissolved	Water	Filtration	
440-215185-1 MS	MW-5	Dissolved	Water	Filtration	
440-215185-1 MSD	MW-5	Dissolved	Water	Filtration	

Prep Batch: 233579

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-215185-1	MW-5	Dissolved	Water	3005A	233334
440-215185-2	MW-4	Dissolved	Water	3005A	233334
440-215185-4	MW-2	Dissolved	Water	3005A	233334
440-215185-5	MW-1	Dissolved	Water	3005A	233334
440-215185-6	MW-6	Dissolved	Water	3005A	233334
440-215185-7	MW-3	Dissolved	Water	3005A	233334
MB 320-233579/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 320-233579/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
440-215185-1 MS	MW-5	Dissolved	Water	3005A	233334
440-215185-1 MSD	MW-5	Dissolved	Water	3005A	233334

Prep Batch: 233618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-215185-1	MW-5	Dissolved	Water	3010A	233334
440-215185-2	MW-4	Dissolved	Water	3010A	233334
440-215185-4	MW-2	Dissolved	Water	3010A	233334
440-215185-5	MW-1	Dissolved	Water	3010A	233334
440-215185-6	MW-6	Dissolved	Water	3010A	233334
440-215185-7	MW-3	Dissolved	Water	3010A	233334
MB 320-233334/1-C	Method Blank	Dissolved	Water	3010A	233334
LCS 320-233618/2-A	Lab Control Sample	Total/NA	Water	3010A	
440-215185-1 MS	MW-5	Dissolved	Water	3010A	233334
440-215185-1 MSD	MW-5	Dissolved	Water	3010A	233334

Metals (Continued)

Prep Batch: 233703

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-215185-1	MW-5	Dissolved	Water	7470A	233334
440-215185-2	MW-4	Dissolved	Water	7470A	233334
440-215185-4	MW-2	Dissolved	Water	7470A	233334
440-215185-5	MW-1	Dissolved	Water	7470A	233334
440-215185-6	MW-6	Dissolved	Water	7470A	233334
440-215185-7	MW-3	Dissolved	Water	7470A	233334
MB 320-233334/1-D	Method Blank	Dissolved	Water	7470A	233334
LCS 320-233703/12-A	Lab Control Sample	Total/NA	Water	7470A	
440-215185-1 MS	MW-5	Dissolved	Water	7470A	233334
440-215185-1 MSD	MW-5	Dissolved	Water	7470A	233334

Analysis Batch: 233860

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-215185-1	MW-5	Dissolved	Water	7470A	233703
440-215185-2	MW-4	Dissolved	Water	7470A	233703
440-215185-4	MW-2	Dissolved	Water	7470A	233703
440-215185-5	MW-1	Dissolved	Water	7470A	233703
440-215185-6	MW-6	Dissolved	Water	7470A	233703
440-215185-7	MW-3	Dissolved	Water	7470A	233703
MB 320-233334/1-D	Method Blank	Dissolved	Water	7470A	233703
LCS 320-233703/12-A	Lab Control Sample	Total/NA	Water	7470A	233703
440-215185-1 MS	MW-5	Dissolved	Water	7470A	233703
440-215185-1 MSD	MW-5	Dissolved	Water	7470A	233703

Analysis Batch: 234266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-215185-1	MW-5	Dissolved	Water	6020	233579
440-215185-2	MW-4	Dissolved	Water	6020	233579
440-215185-2	MW-4	Dissolved	Water	6020	233579
440-215185-4	MW-2	Dissolved	Water	6020	233579
440-215185-5	MW-1	Dissolved	Water	6020	233579
440-215185-6	MW-6	Dissolved	Water	6020	233579
440-215185-7	MW-3	Dissolved	Water	6020	233579
MB 320-233579/1-A	Method Blank	Total Recoverable	Water	6020	233579
LCS 320-233579/2-A	Lab Control Sample	Total Recoverable	Water	6020	233579
440-215185-1 MS	MW-5	Dissolved	Water	6020	233579
440-215185-1 MSD	MW-5	Dissolved	Water	6020	233579

Analysis Batch: 234431

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-215185-1	MW-5	Dissolved	Water	6010B	233618
440-215185-2	MW-4	Dissolved	Water	6010B	233618
440-215185-4	MW-2	Dissolved	Water	6010B	233618
440-215185-6	MW-6	Dissolved	Water	6010B	233618
440-215185-7	MW-3	Dissolved	Water	6010B	233618
MB 320-233334/1-C	Method Blank	Dissolved	Water	6010B	233618
LCS 320-233618/2-A	Lab Control Sample	Total/NA	Water	6010B	233618
440-215185-1 MS	MW-5	Dissolved	Water	6010B	233618
440-215185-1 MSD	MW-5	Dissolved	Water	6010B	233618

Metals (Continued)

Analysis Batch: 234556

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-215185-5	MW-1	Dissolved	Water	6010B	233618

Analysis Batch: 235565

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-215185-1	MW-5	Dissolved	Water	SM 2340B	
440-215185-2	MW-4	Dissolved	Water	SM 2340B	
440-215185-4	MW-2	Dissolved	Water	SM 2340B	
440-215185-5	MW-1	Dissolved	Water	SM 2340B	
440-215185-6	MW-6	Dissolved	Water	SM 2340B	
440-215185-7	MW-3	Dissolved	Water	SM 2340B	

General Chemistry

Pre Prep Batch: 234328

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-215185-1	MW-5	Total/NA	Water	353.2 (NCell)	
440-215185-2	MW-4	Total/NA	Water	353.2 (NCell)	
440-215185-4	MW-2	Total/NA	Water	353.2 (NCell)	
440-215185-5	MW-1	Total/NA	Water	353.2 (NCell)	
440-215185-6	MW-6	Total/NA	Water	353.2 (NCell)	
440-215185-7	MW-3	Total/NA	Water	353.2 (NCell)	
MB 320-234328/1-B	Method Blank	Total/NA	Water	353.2 (NCell)	
LCS 320-234328/2-B	Lab Control Sample	Total/NA	Water	353.2 (NCell)	

Prep Batch: 234740

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-215185-1	MW-5	Total/NA	Water	353 (NCell-Hyd)	234328
440-215185-2	MW-4	Total/NA	Water	353 (NCell-Hyd)	234328
440-215185-4	MW-2	Total/NA	Water	353 (NCell-Hyd)	234328
440-215185-5	MW-1	Total/NA	Water	353 (NCell-Hyd)	234328
440-215185-6	MW-6	Total/NA	Water	353 (NCell-Hyd)	234328
440-215185-7	MW-3	Total/NA	Water	353 (NCell-Hyd)	234328
MB 320-234328/1-B	Method Blank	Total/NA	Water	353 (NCell-Hyd)	234328
LCS 320-234328/2-B	Lab Control Sample	Total/NA	Water	353 (NCell-Hyd)	234328

Analysis Batch: 234745

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-215185-1	MW-5	Total/NA	Water	WS-WC-0050	234740
440-215185-2	MW-4	Total/NA	Water	WS-WC-0050	234740
440-215185-4	MW-2	Total/NA	Water	WS-WC-0050	234740
440-215185-5	MW-1	Total/NA	Water	WS-WC-0050	234740
440-215185-6	MW-6	Total/NA	Water	WS-WC-0050	234740
440-215185-7	MW-3	Total/NA	Water	WS-WC-0050	234740
MB 320-234328/1-B	Method Blank	Total/NA	Water	WS-WC-0050	234740
LCS 320-234328/2-B	Lab Control Sample	Total/NA	Water	WS-WC-0050	234740

Analysis Batch: 486246

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-215185-1	MW-5	Total/NA	Water	SM 2320B	
440-215185-2	MW-4	Total/NA	Water	SM 2320B	

General Chemistry (Continued)

Analysis Batch: 486246 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-215185-4	MW-2	Total/NA	Water	SM 2320B	
440-215185-5	MW-1	Total/NA	Water	SM 2320B	
440-215185-6	MW-6	Total/NA	Water	SM 2320B	
440-215185-7	MW-3	Total/NA	Water	SM 2320B	
MB 440-486246/3	Method Blank	Total/NA	Water	SM 2320B	
LCS 440-486246/2	Lab Control Sample	Total/NA	Water	SM 2320B	

Analysis Batch: 486248

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-215185-1	MW-5	Total/NA	Water	SM 4500 H+ B	
440-215185-2	MW-4	Total/NA	Water	SM 4500 H+ B	
440-215185-4	MW-2	Total/NA	Water	SM 4500 H+ B	
440-215185-5	MW-1	Total/NA	Water	SM 4500 H+ B	
440-215185-6	MW-6	Total/NA	Water	SM 4500 H+ B	
440-215185-7	MW-3	Total/NA	Water	SM 4500 H+ B	

Prep Batch: 486576

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-215185-1	MW-5	Total/NA	Water	Distill/CN	
440-215185-2	MW-4	Total/NA	Water	Distill/CN	
440-215185-4	MW-2	Total/NA	Water	Distill/CN	
440-215185-5	MW-1	Total/NA	Water	Distill/CN	
440-215185-6	MW-6	Total/NA	Water	Distill/CN	
440-215185-7	MW-3	Total/NA	Water	Distill/CN	
MB 440-486576/1-A	Method Blank	Total/NA	Water	Distill/CN	
LCS 440-486576/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	

Analysis Batch: 486643

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-215185-1	MW-5	Total/NA	Water	SM 4500 CN E	486576
440-215185-2	MW-4	Total/NA	Water	SM 4500 CN E	486576
440-215185-4	MW-2	Total/NA	Water	SM 4500 CN E	486576
440-215185-5	MW-1	Total/NA	Water	SM 4500 CN E	486576
440-215185-6	MW-6	Total/NA	Water	SM 4500 CN E	486576
440-215185-7	MW-3	Total/NA	Water	SM 4500 CN E	486576
MB 440-486576/1-A	Method Blank	Total/NA	Water	SM 4500 CN E	486576
LCS 440-486576/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN E	486576

Analysis Batch: 486707

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-215185-1	MW-5	Total/NA	Water	350.1	
440-215185-2	MW-4	Total/NA	Water	350.1	
440-215185-4	MW-2	Total/NA	Water	350.1	
440-215185-5	MW-1	Total/NA	Water	350.1	
440-215185-6	MW-6	Total/NA	Water	350.1	
440-215185-7	MW-3	Total/NA	Water	350.1	
MB 440-486707/10	Method Blank	Total/NA	Water	350.1	
LCS 440-486707/11	Lab Control Sample	Total/NA	Water	350.1	
MRL 440-486707/9	Lab Control Sample	Total/NA	Water	350.1	

General Chemistry (Continued)

Analysis Batch: 486773

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-215185-1	MW-5	Total/NA	Water	SM 2540C	
440-215185-2	MW-4	Total/NA	Water	SM 2540C	
440-215185-4	MW-2	Total/NA	Water	SM 2540C	
440-215185-5	MW-1	Total/NA	Water	SM 2540C	
440-215185-6	MW-6	Total/NA	Water	SM 2540C	
440-215185-7	MW-3	Total/NA	Water	SM 2540C	
MB 440-486773/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 440-486773/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 487035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 440-487035/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 440-487035/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 489536

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-215185-1	MW-5	Total/NA	Water	SM 2510B	
440-215185-2	MW-4	Total/NA	Water	SM 2510B	
440-215185-4	MW-2	Total/NA	Water	SM 2510B	
440-215185-5	MW-1	Total/NA	Water	SM 2510B	
440-215185-6	MW-6	Total/NA	Water	SM 2510B	
440-215185-7	MW-3	Total/NA	Water	SM 2510B	
MB 440-489536/3	Method Blank	Total/NA	Water	SM 2510B	
LCS 440-489536/4	Lab Control Sample	Total/NA	Water	SM 2510B	
440-215185-1 DU	MW-5	Total/NA	Water	SM 2510B	

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

HPLC/IC

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
*	RPD of the LCS and LCSD exceeds the control limits
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
p1	The %Difference between the primary and confirmation column/detector is >40%. The lower value has been reported.
B	Compound was found in the blank and sample.
P1	The %Difference between the primary and confirmation column/detector is >40%. The higher value has been reported.
E	Result exceeded calibration range.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-215185-1

Laboratory: TestAmerica Irvine

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	CA ELAP 2706	06-30-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8260B		Water	m,p-Xylene
8260B		Water	Xylenes, Total
SM 2320B		Water	Bicarbonate Alkalinity as CaCO3
SM 2320B		Water	Carbonate Alkalinity as CaCO3
SM 2320B		Water	Hydroxide Alkalinity as CaCO3

Laboratory: TestAmerica Nashville

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2938	10-31-18

Laboratory: TestAmerica Sacramento

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2897	01-31-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6010B	3010A	Water	Sulfur
6020	3005A	Water	Aluminum
6020	3005A	Water	Calcium
6020	3005A	Water	Iron
6020	3005A	Water	Magnesium
6020	3005A	Water	Manganese
6020	3005A	Water	Potassium
6020	3005A	Water	Sodium
8015B	3510C	Water	Motor Oil Range Organics (C25-C36)
8330A	8330-Prep	Water	Nitroglycerin
8330A	8330-Prep	Water	PETN
WS-WC-0050	353 (NCell-Hyd)	Water	Nitrocellulose

TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614
Phone: 949.261.1022 Fax:

Chain of Custody Record 208922

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

8/3/2018

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☒ Other.

Client Contact	Project Manager: Eric Fordham	Site Contact:	Date:	COC No: 208922
Company Name: Geopentech	Tel/Fax: 714-796-9100	Lab Contact: Linda Laver	Carrier:	1 of 1 COCs
Address: 5251 California Ave.	Analysis Turnaround Time			Sampler
City/State/Zip: Irvine, CA	☐ CALENDAR DAYS ☒ WORKING DAYS			For Lab Use Only:
Phone: 714-796-9100	TAT if different from Below Std.			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Blue Eagle Mine	☐ 1 week			
Site: Rosamond, CA	☐ 2 days			Job / SDG No.
PO #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	DRO/MRO	Energetics	Nitrocellulose	Dissolved Metals	Dissolved Hardness	Ethylene Glycol	Alkalinity	300, EC, pH, TDS	Ammonia	Cyanide	VOC + GRO	Perchlorate	Sample Specific Notes
MW-5	7-5-18	10:10	G	W	18			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
MW-4	7-5-18	11:30	G	W	18			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
DUP (MW-4)	7-5-18	11:40	G	W	18			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Hold
MW-2	7-5-18	12:45	G	W	18			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
MW-1	7-5-18	13:41	G	W	18			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
MW-6	7-6-18	08:21	G	W	18			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
MW-3	7-6-18	10:19	G	W	18			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

440-215185 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☒ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:
All Samples Were Put on Ice after Collection * High temp in Mojave ~113°F Quotation: 32011123

Custody Seals Intact ☐ Yes ☐ No	Custody Seal No	Cooler Temp (°C) Obs'd: _____ Corr'd: _____ Therm ID No.: _____		
Relinquished by: Jennifer Von Stauffenberg	Company: GeoPentech	Date/Time: 7-6-18/1:35	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TA-IRV	Date/Time: 7/6/18 16:35

IR- 89 21.8/22.4 12.0/12.6° 16.1/16.7 21.4/22.0 7/8.5° No melted 12-8/13.4

Page 61 of 67

TestAmerica Irvine
17461 Derian Ave Suite 100
Irvine, CA 92614-5817
Phone (949) 261-1022 Fax (949) 260-3297

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Laver, Linda C.	Carrier Tracking No(s):	COC No: 440-123635.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: linda.laver@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 440-215185-1
Address: 880 Riverside Parkway,	Due Date Requested: 7/24/2018			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: Blue Eagle Lode Mine	Project #: 32011165			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015B_DRO/3510C_IVWT (MOD) CALUFT DRO/MRO	8330A/8330_SPE_P_IVWT (MOD) Standard List	353.2_Nitrocell/NCEL_Prep_A	6010B/Filtration_ME (MOD) Pick Your Analytes	7470A/Filtration_ME Dissolved Mercury	SM2340B/Filtration_AC (MOD) All Hardness Forms	6020/Filtration_ME Dissolved Metals including Ca & Mg	Total Number of containers	Special Instructions/Note:
			Preservation Code:												
MW-5 (440-215185-1)	7/5/18	10:10 Pacific		Water			X	X	X	X	X	X	X	7	Project was quoted as DRO (C10-C24) and MRO (C25-C35). Sulfur may be high, may
MW-4 (440-215185-2)	7/5/18	11:30 Pacific		Water			X	X	X	X	X	X	X	7	Project was quoted as DRO (C10-C24) and MRO (C25-C35). Sulfur may be high, may
MW-2 (440-215185-4)	7/5/18	12:44 Pacific		Water			X	X	X	X	X	X	X	7	Project was quoted as DRO (C10-C24) and MRO (C25-C36). Sulfur may be high, may
MW-1 (440-215185-5)	7/5/18	13:41 Pacific		Water			X	X	X	X	X	X	X	7	Project was quoted as DRO (C10-C24) and MRO (C25-C36). Sulfur may be high, may
MW-6 (440-215185-6)	7/6/18	08:21 Pacific		Water			X	X	X	X	X	X	X	7	Project was quoted as DRO (C10-C24) and MRO (C25-C36). Sulfur may be high, may
MW-3 (440-215185-7)	7/6/18	10:19 Pacific		Water			X	X	X	X	X	X	X	7	Project was quoted as DRO (C10-C24) and MRO (C25-C36). Sulfur may be high, may

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	7/9/18 @1700	TAIRV		7/10/18 940	TA Sac
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.3c 1.4c 2.4c 2.8c 1.0c

Ver: 09/20/2016

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM



Cooler Received/Opened On 07-10-2018 @ 09:50

Time Samples Removed From Cooler 1215 Time Samples Placed In Storage 1237 (2 Hour Window)

1. Tracking # 7090 (last 4 digits, FedEx) Courier: _FedEx_

   IR Gun ID 31470368 pH Strip Lot NA Chlorine Strip Lot NA

2. Temperature of rep. sample or temp blank when opened: 3.2 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...(NA)

4. Were custody seals on outside of cooler? (YES)...NO...NA

   If yes, how many and where: 2 front + back

5. Were the seals intact, signed, and dated correctly? (YES)...NO...NA

6. Were custody papers inside cooler? (YES)...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) Eng

7. Were custody seals on containers: YES (NO) and Intact YES...NO...(NA)

   Were these signed and dated correctly? YES...NO...(NA)

8. Packing mat'l used? (Bubblewrap) Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: (Ice) Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)...NO...NA

12. Did all container labels and tags agree with custody papers? (YES)...NO...NA

13a. Were VOA vials received? (YES)...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...(NO)...NA

● ⬅ Larger than this.

14. Was there a Trip Blank in this cooler? YES...(NO)...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) [signature]

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? (YES)...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used (YES)...NO...NA

16. Was residual chlorine present? YES...NO...(NA)

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) [signature]

17. Were custody papers properly filled out (ink, signed, etc)? (YES)...NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)...NO...NA

19. Were correct containers used for the analysis requested? (YES)...NO...NA

20. Was sufficient amount of sample sent in each container? (YES)...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) [signature]

I certify that I attached a label with the unique LIMS number to each container (intial) [signature]

21. Were there Non-Conformance issues at login? YES...(NO) Was a NCM generated? YES...(NO)#_____

BIS = Broken in shipment

TestAmerica Irvine
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Phone (949) 261-1022 Fax (949) 260-3297

Chain of Custody Record

Loc: 440
215185

Loc: 440
215185

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Laver, Linda C.	COC No: 440-123640.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: linda.laver@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): State Program - California	Job #: 440-215185-1
Address: 2960 Foster Creighton Drive,	Due Date Requested: 7/24/2018		
City: Nashville	TAT Requested (days):		
State, Zip: TN, 37204			
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:		
Email:	WO #:		
Project Name: Blue Eagle Lode Mine	Project #: 32011165		
Site:	SSOW#:		

Analysis Requested

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015B_DAI_GLY/ (MOD) Custom Glycols List	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-5 (440-215185-1)	7/5/18	10:10 Pacific		Water			X	3	
MW-4 (440-215185-2)	7/5/18	11:30 Pacific		Water			X	3	
MW-2 (440-215185-4)	7/5/18	12:44 Pacific		Water			X	3	
MW-1 (440-215185-5)	7/5/18	13:41 Pacific		Water			X	3	
MW-6 (440-215185-6)	7/6/18	08:21 Pacific		Water			X	3	
MW-3 (440-215185-7)	7/6/18	10:19 Pacific		Water			X	3	

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Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	7/6/18 0700				
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 7-10-18 0950	Company TA-IRS

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.2

Ver: 09/20/2016

8/3/2018

Login Sample Receipt Checklist

Client: GeoPentech, Inc

Job Number: 440-215185-1

Login Number: 215185
List Number: 1
Creator: Soderblom, Tim

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	Extreme heat conditions noted on COC
Cooler Temperature is acceptable.	False	Cooler temperature outside required temperature criteria.
Cooler Temperature is recorded.	True	8.5º C, 12.6º C, 13.4º C, 16.7º C, 22.0º C, 22.4º C.
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: GeoPentech, Inc

Job Number: 440-215185-1

Login Number: 215185
List Number: 2
Creator: West, Derrick D

List Source: TestAmerica Nashville
List Creation: 07/10/18 12:29 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: GeoPentech, Inc

Job Number: 440-215185-1

Login Number: 215185
List Number: 3
Creator: Gooch, Mayce

List Source: TestAmerica Sacramento
List Creation: 07/10/18 12:51 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.3c 1.4c 2.4c 2.8c 1.0c
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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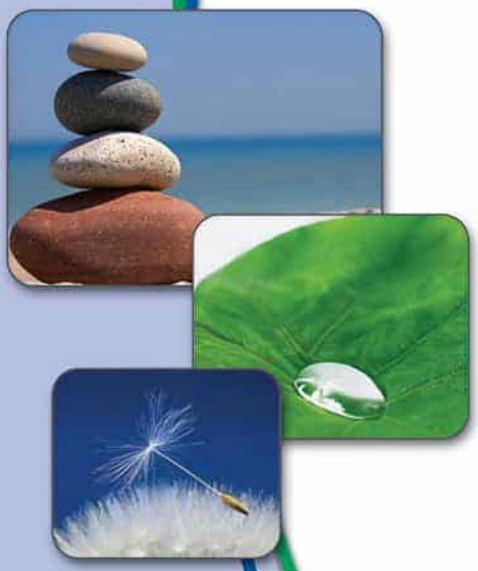
TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-217510-1
Client Project/Site: Blue Eagle Mine

For:
GeoPentech, Inc
5251 California Ave
Suite 210
Irvine, California 92617

Attn: Eric Fordham

Linda C. Laver

Authorized for release by:
8/28/2018 3:42:29 PM

Linda C. Laver, Project Manager II
(916)374-4362
linda.laver@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: GeoPentech, Inc
Project/Site: Blue Eagle Mine

TestAmerica Job ID: 440-217510-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-217510-1	MW-5	Water	08/06/18 10:00	08/07/18 13:08
440-217510-2	Duplicate MW-5	Water	08/06/18 10:10	08/07/18 13:08
440-217510-3	MW-6	Water	08/06/18 11:00	08/07/18 13:08
440-217510-4	MW-3	Water	08/06/18 12:03	08/07/18 13:08
440-217510-5	MW-1	Water	08/06/18 12:49	08/07/18 13:08
440-217510-6	MW-2	Water	08/07/18 08:06	08/07/18 13:08
440-217510-7	MW-4	Water	08/07/18 08:46	08/07/18 13:08

Job ID: 440-217510-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-217510-1

Receipt
The samples were received on 8/7/2018 1:08 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 0.8º C and 3.4º C.

IC
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
The requested analyses include dissolved metals and hardness but samples were not filtered in the field. The samples were filtered and preserved by the laboratory.

Method(s) 6020: The method blank for filtration batch 320-239472, preparation batch 320-239718 and analytical batch 320-240529 contained Potassium above the reporting limit (RL). Associated sample was not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Client Sample ID: MW-5

Date Collected: 08/06/18 10:00
Date Received: 08/07/18 13:08

Lab Sample ID: 440-217510-1

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**19**		0.50	0.25	mg/L			08/07/18 21:59	1
Nitrate as N	**0.13**		0.11	0.055	mg/L			08/07/18 21:59	1
Fluoride	**0.32**	**J**	0.50	0.25	mg/L			08/07/18 21:59	1
Nitrite as N	ND		0.15	0.025	mg/L			08/07/18 21:59	1
Sulfate	**250**		25	13	mg/L			08/08/18 06:31	50

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			08/20/18 17:44	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	**81**		0.50	0.30	mg/L		08/14/18 07:00	08/15/18 15:28	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		08/14/18 07:00	08/14/18 16:29	1
Aluminum	**0.030**	**J**	0.050	0.025	mg/L		08/14/18 07:00	08/14/18 16:29	1
Antimony	**0.00060**	**J**	0.0020	0.00020	mg/L		08/14/18 07:00	08/14/18 16:29	1
Arsenic	**0.66**		0.0020	0.0010	mg/L		08/14/18 07:00	08/14/18 16:29	1
Barium	**0.018**		0.0010	0.00050	mg/L		08/14/18 07:00	08/14/18 16:29	1
Beryllium	**0.00020**	**J**	0.0010	0.00010	mg/L		08/14/18 07:00	08/14/18 16:29	1
Cadmium	**0.00051**	**J**	0.0010	0.00050	mg/L		08/14/18 07:00	08/14/18 16:29	1
Calcium	**55**		0.30	0.17	mg/L		08/14/18 07:00	08/14/18 16:29	1
Chromium	ND		0.0020	0.0010	mg/L		08/14/18 07:00	08/14/18 16:29	1
Cobalt	**0.0015**		0.0010	0.00060	mg/L		08/14/18 07:00	08/14/18 16:29	1
Copper	**0.012**		0.0020	0.0010	mg/L		08/14/18 07:00	08/14/18 16:29	1
Iron	ND		0.050	0.025	mg/L		08/14/18 07:00	08/14/18 16:29	1
Lead	**0.00068**	**J**	0.0010	0.00060	mg/L		08/14/18 07:00	08/14/18 16:29	1
Magnesium	**19**		0.050	0.025	mg/L		08/14/18 07:00	08/14/18 16:29	1
Manganese	**0.13**		0.0025	0.0014	mg/L		08/14/18 07:00	08/14/18 16:29	1
Molybdenum	**0.0026**		0.0020	0.00060	mg/L		08/14/18 07:00	08/14/18 16:29	1
Nickel	**0.0059**		0.0020	0.0010	mg/L		08/14/18 07:00	08/14/18 16:29	1
Potassium	**23**	**B**	0.050	0.025	mg/L		08/14/18 07:00	08/14/18 16:29	1
Selenium	**0.0051**		0.0020	0.0010	mg/L		08/14/18 07:00	08/14/18 16:29	1
Sodium	**55**		0.10	0.080	mg/L		08/14/18 07:00	08/14/18 16:29	1
Thallium	ND		0.0010	0.00050	mg/L		08/14/18 07:00	08/14/18 16:29	1
Vanadium	ND		0.010	0.0030	mg/L		08/14/18 07:00	08/14/18 16:29	1
Zinc	**0.059**		0.0050	0.0040	mg/L		08/14/18 07:00	08/14/18 16:29	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		08/14/18 09:40	08/14/18 12:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.20	0.10	mg/L			08/09/18 18:24	1
Total Dissolved Solids	**570**		10	5.0	mg/L			08/13/18 10:05	1
Cyanide, Total	ND		0.025	0.013	mg/L		08/15/18 10:41	08/16/18 15:07	1

Client Sample Results

Client: GeoPentech, Inc
Project/Site: Blue Eagle Mine

TestAmerica Job ID: 440-217510-1

Client Sample ID: MW-5
Date Collected: 08/06/18 10:00
Date Received: 08/07/18 13:08

Lab Sample ID: 440-217510-1
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	**92**		4.0	4.0	mg/L			08/09/18 15:18	1
Bicarbonate Alkalinity as CaCO3	**92**		4.0	4.0	mg/L			08/09/18 15:18	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			08/09/18 15:18	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			08/09/18 15:18	1
Specific Conductance	**780**		1.0	1.0	umhos/cm			08/23/18 08:15	1
pH adj. to 25 deg C	**7.7**	**HF**	0.1	0.1	SU			08/10/18 17:51	1

Client Sample ID: Duplicate MW-5
Date Collected: 08/06/18 10:10
Date Received: 08/07/18 13:08

Lab Sample ID: 440-217510-2
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	19		0.50	0.25	mg/L			08/07/18 22:33	1
Nitrate as N	0.15		0.11	0.055	mg/L			08/07/18 22:33	1
Fluoride	0.33	J	0.50	0.25	mg/L			08/07/18 22:33	1
Nitrite as N	ND		0.15	0.025	mg/L			08/07/18 22:33	1
Sulfate	250		25	13	mg/L			08/08/18 06:48	50

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			08/20/18 18:02	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	81		0.50	0.30	mg/L		08/14/18 07:00	08/15/18 15:47	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		08/14/18 07:00	08/14/18 16:02	1
Aluminum	0.029	J	0.050	0.025	mg/L		08/14/18 07:00	08/14/18 16:02	1
Antimony	0.00058	J	0.0020	0.00020	mg/L		08/14/18 07:00	08/14/18 16:02	1
Arsenic	0.64		0.0020	0.0010	mg/L		08/14/18 07:00	08/14/18 16:02	1
Barium	0.018		0.0010	0.00050	mg/L		08/14/18 07:00	08/14/18 16:02	1
Beryllium	0.00020	J	0.0010	0.00010	mg/L		08/14/18 07:00	08/14/18 16:02	1
Cadmium	ND		0.0010	0.00050	mg/L		08/14/18 07:00	08/14/18 16:02	1
Calcium	55		0.30	0.17	mg/L		08/14/18 07:00	08/14/18 16:02	1
Chromium	ND		0.0020	0.0010	mg/L		08/14/18 07:00	08/14/18 16:02	1
Cobalt	0.0014		0.0010	0.00060	mg/L		08/14/18 07:00	08/14/18 16:02	1
Copper	0.012		0.0020	0.0010	mg/L		08/14/18 07:00	08/14/18 16:02	1
Iron	ND		0.050	0.025	mg/L		08/14/18 07:00	08/14/18 16:02	1
Lead	ND		0.0010	0.00060	mg/L		08/14/18 07:00	08/14/18 16:02	1
Magnesium	19		0.050	0.025	mg/L		08/14/18 07:00	08/14/18 16:02	1
Manganese	0.12		0.0025	0.0014	mg/L		08/14/18 07:00	08/14/18 16:02	1
Molybdenum	0.0024		0.0020	0.00060	mg/L		08/14/18 07:00	08/14/18 16:02	1
Nickel	0.0066		0.0020	0.0010	mg/L		08/14/18 07:00	08/14/18 16:02	1
Potassium	23	B	0.050	0.025	mg/L		08/14/18 07:00	08/14/18 16:02	1
Selenium	0.0051		0.0020	0.0010	mg/L		08/14/18 07:00	08/14/18 16:02	1
Sodium	53		0.10	0.080	mg/L		08/14/18 07:00	08/14/18 16:02	1
Thallium	ND		0.0010	0.00050	mg/L		08/14/18 07:00	08/14/18 16:02	1
Vanadium	ND		0.010	0.0030	mg/L		08/14/18 07:00	08/14/18 16:02	1
Zinc	0.056		0.0050	0.0040	mg/L		08/14/18 07:00	08/14/18 16:02	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		08/14/18 09:40	08/14/18 12:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.20	0.10	mg/L			08/09/18 18:56	1
Total Dissolved Solids	570		10	5.0	mg/L			08/13/18 10:05	1
Cyanide, Total	ND		0.025	0.013	mg/L		08/15/18 10:41	08/16/18 15:07	1

Client Sample Results

Client: GeoPentech, Inc
Project/Site: Blue Eagle Mine

TestAmerica Job ID: 440-217510-1

Client Sample ID: Duplicate MW-5
Date Collected: 08/06/18 10:10
Date Received: 08/07/18 13:08

Lab Sample ID: 440-217510-2
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	**93**		4.0	4.0	mg/L			08/09/18 15:33	1
Bicarbonate Alkalinity as CaCO3	**93**		4.0	4.0	mg/L			08/09/18 15:33	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			08/09/18 15:33	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			08/09/18 15:33	1
Specific Conductance	**780**		1.0	1.0	umhos/cm			08/23/18 08:15	1
pH adj. to 25 deg C	**7.5**	**HF**	0.1	0.1	SU			08/10/18 17:51	1

Client: GeoPentech, Inc
Project/Site: Blue Eagle Mine

TestAmerica Job ID: 440-217510-1

Client Sample ID: MW-6

Date Collected: 08/06/18 11:00
Date Received: 08/07/18 13:08

Lab Sample ID: 440-217510-3

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**25**		10	5.0	mg/L			08/07/18 23:24	20
Nitrate as N	ND		0.11	0.055	mg/L			08/07/18 23:07	1
Fluoride	**0.71**		0.50	0.25	mg/L			08/07/18 23:07	1
Nitrite as N	**0.055**	**J**	0.15	0.025	mg/L			08/07/18 23:07	1
Sulfate	**4.7**		0.50	0.25	mg/L			08/07/18 23:07	1

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			08/20/18 18:20	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	**0.37**	**J**	0.50	0.30	mg/L		08/14/18 07:00	08/15/18 15:50	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		08/14/18 07:00	08/14/18 16:32	1
Aluminum	ND		0.050	0.025	mg/L		08/14/18 07:00	08/14/18 16:32	1
Antimony	ND		0.0020	0.00020	mg/L		08/14/18 07:00	08/14/18 16:32	1
Arsenic	**0.22**		0.0020	0.0010	mg/L		08/14/18 07:00	08/14/18 16:32	1
Barium	**0.0057**		0.0010	0.00050	mg/L		08/14/18 07:00	08/14/18 16:32	1
Beryllium	ND		0.0010	0.00010	mg/L		08/14/18 07:00	08/14/18 16:32	1
Cadmium	ND		0.0010	0.00050	mg/L		08/14/18 07:00	08/14/18 16:32	1
Calcium	**100**		0.30	0.17	mg/L		08/14/18 07:00	08/14/18 16:32	1
Chromium	ND		0.0020	0.0010	mg/L		08/14/18 07:00	08/14/18 16:32	1
Cobalt	ND		0.0010	0.00060	mg/L		08/14/18 07:00	08/14/18 16:32	1
Copper	**0.0026**		0.0020	0.0010	mg/L		08/14/18 07:00	08/14/18 16:32	1
Iron	ND		0.050	0.025	mg/L		08/14/18 07:00	08/14/18 16:32	1
Lead	**0.00071**	**J**	0.0010	0.00060	mg/L		08/14/18 07:00	08/14/18 16:32	1
Magnesium	**38**		0.050	0.025	mg/L		08/14/18 07:00	08/14/18 16:32	1
Manganese	**5.3**		0.0025	0.0014	mg/L		08/14/18 07:00	08/14/18 16:32	1
Molybdenum	**0.0012**	**J**	0.0020	0.00060	mg/L		08/14/18 07:00	08/14/18 16:32	1
Nickel	ND		0.0020	0.0010	mg/L		08/14/18 07:00	08/14/18 16:32	1
Potassium	**16**	**B**	0.050	0.025	mg/L		08/14/18 07:00	08/14/18 16:32	1
Selenium	ND		0.0020	0.0010	mg/L		08/14/18 07:00	08/14/18 16:32	1
Sodium	**130**		0.10	0.080	mg/L		08/14/18 07:00	08/14/18 16:32	1
Thallium	ND		0.0010	0.00050	mg/L		08/14/18 07:00	08/14/18 16:32	1
Vanadium	ND		0.010	0.0030	mg/L		08/14/18 07:00	08/14/18 16:32	1
Zinc	ND		0.0050	0.0040	mg/L		08/14/18 07:00	08/14/18 16:32	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		08/14/18 09:40	08/14/18 12:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.20	0.10	mg/L			08/09/18 19:53	1
Total Dissolved Solids	**860**		10	5.0	mg/L			08/13/18 10:05	1
Cyanide, Total	ND		0.025	0.013	mg/L		08/15/18 10:41	08/16/18 15:07	1

Client Sample Results

Client: GeoPentech, Inc
Project/Site: Blue Eagle Mine

TestAmerica Job ID: 440-217510-1

Client Sample ID: MW-6
Date Collected: 08/06/18 11:00
Date Received: 08/07/18 13:08

Lab Sample ID: 440-217510-3
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	**730**		4.0	4.0	mg/L			08/09/18 15:47	1
Bicarbonate Alkalinity as CaCO3	**730**		4.0	4.0	mg/L			08/09/18 15:47	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			08/09/18 15:47	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			08/09/18 15:47	1
Specific Conductance	**1300**		1.0	1.0	umhos/cm			08/23/18 08:07	1
pH adj. to 25 deg C	**7.7**	**HF**	0.1	0.1	SU			08/10/18 17:51	1

Client: GeoPentech, Inc
Project/Site: Blue Eagle Mine

TestAmerica Job ID: 440-217510-1

Client Sample ID: MW-3
Date Collected: 08/06/18 12:03
Date Received: 08/07/18 13:08

Lab Sample ID: 440-217510-4
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18		0.50	0.25	mg/L			08/07/18 23:41	1
Nitrate as N	ND		0.11	0.055	mg/L			08/07/18 23:41	1
Fluoride	0.94		0.50	0.25	mg/L			08/07/18 23:41	1
Nitrite as N	ND		0.15	0.025	mg/L			08/07/18 23:41	1
Sulfate	190		2.5	1.3	mg/L			08/07/18 23:58	5

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			08/20/18 18:39	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	52		0.50	0.30	mg/L		08/14/18 07:00	08/15/18 15:53	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		08/14/18 07:00	08/14/18 16:35	1
Aluminum	ND		0.050	0.025	mg/L		08/14/18 07:00	08/14/18 16:35	1
Antimony	0.00022	J	0.0020	0.00020	mg/L		08/14/18 07:00	08/14/18 16:35	1
Arsenic	0.29		0.0020	0.0010	mg/L		08/14/18 07:00	08/14/18 16:35	1
Barium	0.0030		0.0010	0.00050	mg/L		08/14/18 07:00	08/14/18 16:35	1
Beryllium	0.00011	J	0.0010	0.00010	mg/L		08/14/18 07:00	08/14/18 16:35	1
Cadmium	ND		0.0010	0.00050	mg/L		08/14/18 07:00	08/14/18 16:35	1
Calcium	24		0.30	0.17	mg/L		08/14/18 07:00	08/14/18 16:35	1
Chromium	0.0012	J	0.0020	0.0010	mg/L		08/14/18 07:00	08/14/18 16:35	1
Cobalt	0.0011		0.0010	0.00060	mg/L		08/14/18 07:00	08/14/18 16:35	1
Copper	0.0029		0.0020	0.0010	mg/L		08/14/18 07:00	08/14/18 16:35	1
Iron	0.027	J B	0.050	0.025	mg/L		08/14/18 07:00	08/14/18 16:35	1
Lead	ND		0.0010	0.00060	mg/L		08/14/18 07:00	08/14/18 16:35	1
Magnesium	16		0.050	0.025	mg/L		08/14/18 07:00	08/14/18 16:35	1
Manganese	2.0		0.0025	0.0014	mg/L		08/14/18 07:00	08/14/18 16:35	1
Molybdenum	0.0014	J	0.0020	0.00060	mg/L		08/14/18 07:00	08/14/18 16:35	1
Nickel	0.0047		0.0020	0.0010	mg/L		08/14/18 07:00	08/14/18 16:35	1
Potassium	21	B	0.050	0.025	mg/L		08/14/18 07:00	08/14/18 16:35	1
Selenium	ND		0.0020	0.0010	mg/L		08/14/18 07:00	08/14/18 16:35	1
Sodium	40		0.10	0.080	mg/L		08/14/18 07:00	08/14/18 16:35	1
Thallium	ND		0.0010	0.00050	mg/L		08/14/18 07:00	08/14/18 16:35	1
Vanadium	ND		0.010	0.0030	mg/L		08/14/18 07:00	08/14/18 16:35	1
Zinc	1.9		0.0050	0.0040	mg/L		08/14/18 07:00	08/14/18 16:35	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		08/14/18 09:40	08/14/18 12:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	0.24		0.20	0.10	mg/L			08/09/18 19:37	1
Total Dissolved Solids	420		10	5.0	mg/L			08/13/18 10:05	1
Cyanide, Total	ND		0.025	0.013	mg/L		08/16/18 11:12	08/17/18 13:31	1

Client Sample Results

Client: GeoPentech, Inc
Project/Site: Blue Eagle Mine

TestAmerica Job ID: 440-217510-1

Client Sample ID: MW-3
Date Collected: 08/06/18 12:03
Date Received: 08/07/18 13:08

Lab Sample ID: 440-217510-4
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	**56**		4.0	4.0	mg/L			08/09/18 15:54	1
Bicarbonate Alkalinity as CaCO3	**56**		4.0	4.0	mg/L			08/09/18 15:54	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			08/09/18 15:54	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			08/09/18 15:54	1
Specific Conductance	**570**		1.0	1.0	umhos/cm			08/23/18 08:07	1
pH adj. to 25 deg C	**6.9**	**HF**	0.1	0.1	SU			08/10/18 17:51	1

Client Sample Results

Client: GeoPentech, Inc
Project/Site: Blue Eagle Mine

TestAmerica Job ID: 440-217510-1

Client Sample ID: MW-1

Date Collected: 08/06/18 12:49
Date Received: 08/07/18 13:08

Lab Sample ID: 440-217510-5

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**11**		0.50	0.25	mg/L			08/08/18 00:15	1
Nitrate as N	ND		0.11	0.055	mg/L			08/08/18 00:15	1
Fluoride	**0.59**		0.50	0.25	mg/L			08/08/18 00:15	1
Nitrite as N	ND		0.15	0.025	mg/L			08/08/18 00:15	1
Sulfate	**780**		10	5.0	mg/L			08/08/18 00:32	20

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			08/20/18 18:57	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	**210**		2.5	1.5	mg/L		08/14/18 07:00	08/15/18 16:10	5

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		08/14/18 07:00	08/14/18 16:37	1
Aluminum	**43**		0.050	0.025	mg/L		08/14/18 07:00	08/14/18 16:37	1
Antimony	**0.0054**		0.0020	0.00020	mg/L		08/14/18 07:00	08/14/18 16:37	1
Arsenic	**1.1**		0.0020	0.0010	mg/L		08/14/18 07:00	08/14/18 16:37	1
Barium	**0.010**		0.0010	0.00050	mg/L		08/14/18 07:00	08/14/18 16:37	1
Beryllium	**0.0089**		0.0010	0.00010	mg/L		08/14/18 07:00	08/14/18 16:37	1
Cadmium	**0.11**		0.0010	0.00050	mg/L		08/14/18 07:00	08/14/18 16:37	1
Calcium	**58**		0.30	0.17	mg/L		08/14/18 07:00	08/14/18 16:37	1
Chromium	**0.0024**		0.0020	0.0010	mg/L		08/14/18 07:00	08/14/18 16:37	1
Cobalt	**0.24**		0.0010	0.00060	mg/L		08/14/18 07:00	08/14/18 16:37	1
Copper	**0.0067**		0.0020	0.0010	mg/L		08/14/18 07:00	08/14/18 16:37	1
Iron	**30**	**B**	0.050	0.025	mg/L		08/14/18 07:00	08/14/18 16:37	1
Lead	**0.0046**		0.0010	0.00060	mg/L		08/14/18 07:00	08/14/18 16:37	1
Magnesium	**19**		0.050	0.025	mg/L		08/14/18 07:00	08/14/18 16:37	1
Manganese	**1.8**		0.0025	0.0014	mg/L		08/14/18 07:00	08/14/18 16:37	1
Molybdenum	ND		0.0020	0.00060	mg/L		08/14/18 07:00	08/14/18 16:37	1
Nickel	**0.099**		0.0020	0.0010	mg/L		08/14/18 07:00	08/14/18 16:37	1
Potassium	**51**	**B**	0.050	0.025	mg/L		08/14/18 07:00	08/14/18 16:37	1
Selenium	**0.0029**		0.0020	0.0010	mg/L		08/14/18 07:00	08/14/18 16:37	1
Sodium	**37**		0.10	0.080	mg/L		08/14/18 07:00	08/14/18 16:37	1
Thallium	**0.013**		0.0010	0.00050	mg/L		08/14/18 07:00	08/14/18 16:37	1
Vanadium	**0.050**		0.010	0.0030	mg/L		08/14/18 07:00	08/14/18 16:37	1
Zinc	**1.3**		0.0050	0.0040	mg/L		08/14/18 07:00	08/14/18 16:37	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		08/14/18 09:40	08/14/18 12:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.20	0.10	mg/L			08/09/18 19:43	1
Total Dissolved Solids	**1100**		10	5.0	mg/L			08/13/18 10:05	1
Cyanide, Total	ND		0.025	0.013	mg/L		08/16/18 11:12	08/17/18 13:31	1

Client Sample Results

Client: GeoPentech, Inc
Project/Site: Blue Eagle Mine

TestAmerica Job ID: 440-217510-1

Client Sample ID: MW-1
Date Collected: 08/06/18 12:49
Date Received: 08/07/18 13:08

Lab Sample ID: 440-217510-5
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	ND		4.0	4.0	mg/L			08/09/18 15:58	1
Bicarbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			08/09/18 15:58	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			08/09/18 15:58	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			08/09/18 15:58	1
Specific Conductance	**1300**		1.0	1.0	umhos/cm			08/23/18 08:07	1
pH adj. to 25 deg C	**3.3**	**HF**	0.1	0.1	SU			08/10/18 17:51	1

Client Sample Results

Client: GeoPentech, Inc
Project/Site: Blue Eagle Mine

TestAmerica Job ID: 440-217510-1

Client Sample ID: MW-2

Date Collected: 08/07/18 08:06
Date Received: 08/07/18 13:08

Lab Sample ID: 440-217510-6

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**15**		0.50	0.25	mg/L			08/07/18 19:39	1
Nitrate as N	ND		0.11	0.055	mg/L			08/07/18 19:39	1
Fluoride	**0.54**		0.50	0.25	mg/L			08/07/18 19:39	1
Nitrite as N	ND		0.15	0.025	mg/L			08/07/18 19:39	1
Sulfate	**550**		50	25	mg/L			08/08/18 05:23	100

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			08/20/18 19:16	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	**160**		0.50	0.30	mg/L		08/14/18 07:00	08/15/18 15:58	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		08/14/18 07:00	08/14/18 16:40	1
Aluminum	**29**		0.050	0.025	mg/L		08/14/18 07:00	08/14/18 16:40	1
Antimony	**0.0025**		0.0020	0.00020	mg/L		08/14/18 07:00	08/14/18 16:40	1
Arsenic	**0.14**		0.0020	0.0010	mg/L		08/14/18 07:00	08/14/18 16:40	1
Barium	**0.0078**		0.0010	0.00050	mg/L		08/14/18 07:00	08/14/18 16:40	1
Beryllium	**0.0059**		0.0010	0.00010	mg/L		08/14/18 07:00	08/14/18 16:40	1
Cadmium	**0.0035**		0.0010	0.00050	mg/L		08/14/18 07:00	08/14/18 16:40	1
Calcium	**51**		0.30	0.17	mg/L		08/14/18 07:00	08/14/18 16:40	1
Chromium	ND		0.0020	0.0010	mg/L		08/14/18 07:00	08/14/18 16:40	1
Cobalt	**0.15**		0.0010	0.00060	mg/L		08/14/18 07:00	08/14/18 16:40	1
Copper	**0.10**		0.0020	0.0010	mg/L		08/14/18 07:00	08/14/18 16:40	1
Iron	**8.2**	**B**	0.050	0.025	mg/L		08/14/18 07:00	08/14/18 16:40	1
Lead	**0.0011**		0.0010	0.00060	mg/L		08/14/18 07:00	08/14/18 16:40	1
Magnesium	**15**		0.050	0.025	mg/L		08/14/18 07:00	08/14/18 16:40	1
Manganese	**1.6**		0.0025	0.0014	mg/L		08/14/18 07:00	08/14/18 16:40	1
Molybdenum	ND		0.0020	0.00060	mg/L		08/14/18 07:00	08/14/18 16:40	1
Nickel	**0.057**		0.0020	0.0010	mg/L		08/14/18 07:00	08/14/18 16:40	1
Potassium	**46**	**B**	0.050	0.025	mg/L		08/14/18 07:00	08/14/18 16:40	1
Selenium	**0.0011**	**J**	0.0020	0.0010	mg/L		08/14/18 07:00	08/14/18 16:40	1
Sodium	**49**		0.10	0.080	mg/L		08/14/18 07:00	08/14/18 16:40	1
Thallium	**0.0015**		0.0010	0.00050	mg/L		08/14/18 07:00	08/14/18 16:40	1
Vanadium	ND		0.010	0.0030	mg/L		08/14/18 07:00	08/14/18 16:40	1
Zinc	**1.1**		0.0050	0.0040	mg/L		08/14/18 07:00	08/14/18 16:40	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		08/14/18 09:40	08/14/18 12:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.20	0.10	mg/L			08/09/18 19:48	1
Total Dissolved Solids	**930**		10	5.0	mg/L			08/13/18 10:05	1
Cyanide, Total	ND		0.025	0.013	mg/L		08/16/18 11:12	08/17/18 13:31	1

Client Sample Results

Client: GeoPentech, Inc
Project/Site: Blue Eagle Mine

TestAmerica Job ID: 440-217510-1

Client Sample ID: MW-2
Date Collected: 08/07/18 08:06
Date Received: 08/07/18 13:08

Lab Sample ID: 440-217510-6
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	ND		4.0	4.0	mg/L			08/09/18 16:03	1
Bicarbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			08/09/18 16:03	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			08/09/18 16:03	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			08/09/18 16:03	1
Specific Conductance	**1200**		1.0	1.0	umhos/cm			08/23/18 08:07	1
pH adj. to 25 deg C	**3.4**	**HF**	0.1	0.1	SU			08/10/18 18:08	1

Client Sample Results

Client: GeoPentech, Inc
Project/Site: Blue Eagle Mine

TestAmerica Job ID: 440-217510-1

Client Sample ID: MW-4

Date Collected: 08/07/18 08:46
Date Received: 08/07/18 13:08

Lab Sample ID: 440-217510-7

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	32		2.5	1.3	mg/L			08/08/18 05:40	5
Nitrate as N	0.087	J	0.11	0.055	mg/L			08/07/18 19:56	1
Fluoride	0.77		0.50	0.25	mg/L			08/07/18 19:56	1
Nitrite as N	ND		0.15	0.025	mg/L			08/07/18 19:56	1
Sulfate	1500		250	130	mg/L			08/08/18 05:57	500

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			08/26/18 14:31	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	380		0.50	0.30	mg/L		08/14/18 07:00	08/15/18 16:01	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		08/14/18 07:00	08/14/18 16:43	1
Aluminum	38		0.050	0.025	mg/L		08/14/18 07:00	08/14/18 16:43	1
Antimony	0.0055		0.0020	0.00020	mg/L		08/14/18 07:00	08/14/18 16:43	1
Arsenic	130		0.10	0.050	mg/L		08/14/18 07:00	08/21/18 16:00	50
Barium	0.013		0.0010	0.00050	mg/L		08/14/18 07:00	08/14/18 16:43	1
Beryllium	0.0091		0.0010	0.00010	mg/L		08/14/18 07:00	08/14/18 16:43	1
Cadmium	0.050		0.0010	0.00050	mg/L		08/14/18 07:00	08/14/18 16:43	1
Calcium	87		0.30	0.17	mg/L		08/14/18 07:00	08/14/18 16:43	1
Chromium	ND		0.0020	0.0010	mg/L		08/14/18 07:00	08/14/18 16:43	1
Cobalt	0.74		0.0010	0.00060	mg/L		08/14/18 07:00	08/14/18 16:43	1
Copper	0.63		0.0020	0.0010	mg/L		08/14/18 07:00	08/14/18 16:43	1
Iron	350	B	0.50	0.25	mg/L		08/14/18 07:00	08/16/18 17:48	10
Lead	0.00066	J	0.0010	0.00060	mg/L		08/14/18 07:00	08/14/18 16:43	1
Magnesium	26		0.050	0.025	mg/L		08/14/18 07:00	08/14/18 16:43	1
Manganese	3.0		0.0025	0.0014	mg/L		08/14/18 07:00	08/14/18 16:43	1
Molybdenum	0.027		0.0020	0.00060	mg/L		08/14/18 07:00	08/14/18 16:43	1
Nickel	0.19		0.0020	0.0010	mg/L		08/14/18 07:00	08/14/18 16:43	1
Potassium	52	B	0.050	0.025	mg/L		08/14/18 07:00	08/14/18 16:43	1
Selenium	0.0014	J	0.0020	0.0010	mg/L		08/14/18 07:00	08/14/18 16:43	1
Sodium	390		1.0	0.80	mg/L		08/14/18 07:00	08/16/18 17:48	10
Thallium	0.0063		0.0010	0.00050	mg/L		08/14/18 07:00	08/14/18 16:43	1
Vanadium	0.021		0.010	0.0030	mg/L		08/14/18 07:00	08/14/18 16:43	1
Zinc	4.7		0.0050	0.0040	mg/L		08/14/18 07:00	08/14/18 16:43	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		08/14/18 09:40	08/14/18 12:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	2.0		2.0	1.0	mg/L			08/09/18 18:51	10
Total Dissolved Solids	2400		20	10	mg/L			08/13/18 10:05	1
Cyanide, Total	ND		0.025	0.013	mg/L		08/16/18 11:12	08/17/18 13:31	1

Client: GeoPentech, Inc
Project/Site: Blue Eagle Mine

TestAmerica Job ID: 440-217510-1

Client Sample ID: MW-4
Date Collected: 08/07/18 08:46
Date Received: 08/07/18 13:08

Lab Sample ID: 440-217510-7
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	ND		4.0	4.0	mg/L			08/09/18 16:07	1
Bicarbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			08/09/18 16:07	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			08/09/18 16:07	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			08/09/18 16:07	1
Specific Conductance	**2500**		1.0	1.0	umhos/cm			08/23/18 08:07	1
pH adj. to 25 deg C	**3.8**	**HF**	0.1	0.1	SU			08/10/18 18:10	1

Method Summary

Client: GeoPentech, Inc
Project/Site: Blue Eagle Mine

TestAmerica Job ID: 440-217510-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	TAL IRV
314.0 LL	Perchlorate (IC)	EPA	TAL IRV
6010B	Metals (ICP)	SW846	TAL SAC
6020	Metals (ICP/MS)	SW846	TAL SAC
7470A	Mercury (CVAA)	SW846	TAL SAC
350.1	Nitrogen, Ammonia	MCAWW	TAL IRV
SM 2320B	Alkalinity	SM	TAL IRV
SM 2510B	Conductivity, Specific Conductance	SM	TAL IRV
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL IRV
SM 4500 CN E	Cyanide, Total	SM	TAL IRV
SM 4500 H+ B	pH	SM	TAL IRV
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL SAC
3010A	Preparation, Total Metals	SW846	TAL SAC
7470A	Preparation, Mercury	SW846	TAL SAC
Distill/CN	Distillation, Cyanide	None	TAL IRV
Filtration	Sample Filtration	None	TAL SAC

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Lab Chronicle

Client: GeoPentech, Inc
Project/Site: Blue Eagle Mine

TestAmerica Job ID: 440-217510-1

Client Sample ID: MW-5

Date Collected: 08/06/18 10:00
Date Received: 08/07/18 13:08

Lab Sample ID: 440-217510-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			491942	08/07/18 21:59	NTN	TAL IRV
Total/NA	Analysis	300.0		1			491943	08/07/18 21:59	NTN	TAL IRV
Total/NA	Analysis	300.0		50			491943	08/08/18 06:31	NTN	TAL IRV
Total/NA	Analysis	314.0 LL		1			494429	08/20/18 17:44	CTH	TAL IRV
Dissolved	Filtration	Filtration			250 mL	250 mL	239472	08/13/18 05:00	NIM	TAL SAC
Dissolved	Prep	3010A			50 mL	50 mL	239717	08/14/18 07:00	NIM	TAL SAC
Dissolved	Analysis	6010B		1			240220	08/15/18 15:28	CJH	TAL SAC
Dissolved	Filtration	Filtration			250 mL	250 mL	239472	08/13/18 05:00	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	239718	08/14/18 07:00	NIM	TAL SAC
Dissolved	Analysis	6020		1			239965	08/14/18 16:29	CJH	TAL SAC
Dissolved	Filtration	Filtration			250 mL	250 mL	239472	08/13/18 05:00	NIM	TAL SAC
Dissolved	Prep	7470A			30 mL	30 mL	239752	08/14/18 09:40	GSH	TAL SAC
Dissolved	Analysis	7470A		1			239891	08/14/18 12:26	GSH	TAL SAC
Total/NA	Analysis	350.1		1	0.8 mL	8.0 mL	492673	08/09/18 18:24	HTL	TAL IRV
Total/NA	Analysis	SM 2320B		1			492681	08/09/18 15:18	YZ	TAL IRV
Total/NA	Analysis	SM 2510B		1			495227	08/23/18 08:15	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	493073	08/13/18 10:05	XL	TAL IRV
Total/NA	Prep	Distill/CN			50 mL	50 mL	493615	08/15/18 10:41	QTN	TAL IRV
Total/NA	Analysis	SM 4500 CN E		1			493960	08/16/18 15:07	KMY	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			492843	08/10/18 17:51	CMM	TAL IRV

Client Sample ID: Duplicate MW-5

Date Collected: 08/06/18 10:10
Date Received: 08/07/18 13:08

Lab Sample ID: 440-217510-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			491942	08/07/18 22:33	NTN	TAL IRV
Total/NA	Analysis	300.0		1			491943	08/07/18 22:33	NTN	TAL IRV
Total/NA	Analysis	300.0		50			491943	08/08/18 06:48	NTN	TAL IRV
Total/NA	Analysis	314.0 LL		1			494429	08/20/18 18:02	CTH	TAL IRV
Dissolved	Filtration	Filtration			250 mL	250 mL	239472	08/13/18 05:00	NIM	TAL SAC
Dissolved	Prep	3010A			50 mL	50 mL	239717	08/14/18 07:00	NIM	TAL SAC
Dissolved	Analysis	6010B		1			240220	08/15/18 15:47	CJH	TAL SAC
Dissolved	Filtration	Filtration			250 mL	250 mL	239472	08/13/18 05:00	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	239718	08/14/18 07:00	NIM	TAL SAC
Dissolved	Analysis	6020		1			239965	08/14/18 16:02	CJH	TAL SAC
Dissolved	Filtration	Filtration			250 mL	250 mL	239472	08/13/18 05:00	NIM	TAL SAC
Dissolved	Prep	7470A			30 mL	30 mL	239752	08/14/18 09:40	GSH	TAL SAC
Dissolved	Analysis	7470A		1			239891	08/14/18 12:36	GSH	TAL SAC
Total/NA	Analysis	350.1		1	0.8 mL	8.0 mL	492673	08/09/18 18:56	HTL	TAL IRV
Total/NA	Analysis	SM 2320B		1			492681	08/09/18 15:33	YZ	TAL IRV
Total/NA	Analysis	SM 2510B		1			495227	08/23/18 08:15	XL	TAL IRV

Lab Chronicle

Client: GeoPentech, Inc
Project/Site: Blue Eagle Mine

TestAmerica Job ID: 440-217510-1

Client Sample ID: Duplicate MW-5

Date Collected: 08/06/18 10:10
Date Received: 08/07/18 13:08

Lab Sample ID: 440-217510-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	493073	08/13/18 10:05	XL	TAL IRV
Total/NA	Prep	Distill/CN			50 mL	50 mL	493615	08/15/18 10:41	QTN	TAL IRV
Total/NA	Analysis	SM 4500 CN E		1			493960	08/16/18 15:07	KMY	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			492843	08/10/18 17:51	CMM	TAL IRV

Client Sample ID: MW-6

Date Collected: 08/06/18 11:00
Date Received: 08/07/18 13:08

Lab Sample ID: 440-217510-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	491942	08/07/18 23:07	NTN	TAL IRV
Total/NA	Analysis	300.0		1			491943	08/07/18 23:07	NTN	TAL IRV
Total/NA	Analysis	300.0		20			491943	08/07/18 23:24	NTN	TAL IRV
Total/NA	Analysis	314.0 LL		1			494429	08/20/18 18:20	CTH	TAL IRV
Dissolved	Filtration	Filtration			250 mL	250 mL	239472	08/13/18 05:00	NIM	TAL SAC
Dissolved	Prep	3010A			50 mL	50 mL	239717	08/14/18 07:00	NIM	TAL SAC
Dissolved	Analysis	6010B		1			240220	08/15/18 15:50	CJH	TAL SAC
Dissolved	Filtration	Filtration			250 mL	250 mL	239472	08/13/18 05:00	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	239718	08/14/18 07:00	NIM	TAL SAC
Dissolved	Analysis	6020		1			239965	08/14/18 16:32	CJH	TAL SAC
Dissolved	Filtration	Filtration			250 mL	250 mL	239472	08/13/18 05:00	NIM	TAL SAC
Dissolved	Prep	7470A			30 mL	30 mL	239752	08/14/18 09:40	GSH	TAL SAC
Dissolved	Analysis	7470A		1			239891	08/14/18 12:39	GSH	TAL SAC
Total/NA	Analysis	350.1		1	0.8 mL	8.0 mL	492673	08/09/18 19:53	HTL	TAL IRV
Total/NA	Analysis	SM 2320B		1			492681	08/09/18 15:47	YZ	TAL IRV
Total/NA	Analysis	SM 2510B		1			495227	08/23/18 08:07	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	493073	08/13/18 10:05	XL	TAL IRV
Total/NA	Prep	Distill/CN			50 mL	50 mL	493615	08/15/18 10:41	QTN	TAL IRV
Total/NA	Analysis	SM 4500 CN E		1			493960	08/16/18 15:07	KMY	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			492843	08/10/18 17:51	CMM	TAL IRV

Client Sample ID: MW-3

Date Collected: 08/06/18 12:03
Date Received: 08/07/18 13:08

Lab Sample ID: 440-217510-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			491942	08/07/18 23:41	NTN	TAL IRV
Total/NA	Analysis	300.0		1			491943	08/07/18 23:41	NTN	TAL IRV
Total/NA	Analysis	300.0		5			491943	08/07/18 23:58	NTN	TAL IRV
Total/NA	Analysis	314.0 LL		1			494429	08/20/18 18:39	CTH	TAL IRV
Dissolved	Filtration	Filtration			250 mL	250 mL	239472	08/13/18 05:00	NIM	TAL SAC
Dissolved	Prep	3010A			50 mL	50 mL	239717	08/14/18 07:00	NIM	TAL SAC

Lab Chronicle

Client: GeoPentech, Inc
Project/Site: Blue Eagle Mine

TestAmerica Job ID: 440-217510-1

Client Sample ID: MW-3

Lab Sample ID: 440-217510-4

Date Collected: 08/06/18 12:03
Date Received: 08/07/18 13:08

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	6010B		1			240220	08/15/18 15:53	CJH	TAL SAC
Dissolved	Filtration	Filtration			250 mL	250 mL	239472	08/13/18 05:00	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	239718	08/14/18 07:00	NIM	TAL SAC
Dissolved	Analysis	6020		1			239965	08/14/18 16:35	CJH	TAL SAC
Dissolved	Filtration	Filtration			250 mL	250 mL	239472	08/13/18 05:00	NIM	TAL SAC
Dissolved	Prep	7470A			30 mL	30 mL	239752	08/14/18 09:40	GSH	TAL SAC
Dissolved	Analysis	7470A		1			239891	08/14/18 12:41	GSH	TAL SAC
Total/NA	Analysis	350.1		1	0.8 mL	8.0 mL	492673	08/09/18 19:37	HTL	TAL IRV
Total/NA	Analysis	SM 2320B		1			492681	08/09/18 15:54	YZ	TAL IRV
Total/NA	Analysis	SM 2510B		1			495227	08/23/18 08:07	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	493073	08/13/18 10:05	XL	TAL IRV
Total/NA	Prep	Distill/CN			50 mL	50 mL	493890	08/16/18 11:12	KMY	TAL IRV
Total/NA	Analysis	SM 4500 CN E		1			494184	08/17/18 13:31	KMY	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			492843	08/10/18 17:51	CMM	TAL IRV

Client Sample ID: MW-1

Lab Sample ID: 440-217510-5

Date Collected: 08/06/18 12:49
Date Received: 08/07/18 13:08

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			491942	08/08/18 00:15	NTN	TAL IRV
Total/NA	Analysis	300.0		1			491943	08/08/18 00:15	NTN	TAL IRV
Total/NA	Analysis	300.0		20			491943	08/08/18 00:32	NTN	TAL IRV
Total/NA	Analysis	314.0 LL		1			494429	08/20/18 18:57	CTH	TAL IRV
Dissolved	Filtration	Filtration			250 mL	250 mL	239472	08/13/18 05:00	NIM	TAL SAC
Dissolved	Prep	3010A			50 mL	50 mL	239717	08/14/18 07:00	NIM	TAL SAC
Dissolved	Analysis	6010B		5			240220	08/15/18 16:10	CJH	TAL SAC
Dissolved	Filtration	Filtration			250 mL	250 mL	239472	08/13/18 05:00	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	239718	08/14/18 07:00	NIM	TAL SAC
Dissolved	Analysis	6020		1			239965	08/14/18 16:37	CJH	TAL SAC
Dissolved	Filtration	Filtration			250 mL	250 mL	239472	08/13/18 05:00	NIM	TAL SAC
Dissolved	Prep	7470A			30 mL	30 mL	239752	08/14/18 09:40	GSH	TAL SAC
Dissolved	Analysis	7470A		1			239891	08/14/18 12:44	GSH	TAL SAC
Total/NA	Analysis	350.1		1	0.8 mL	8.0 mL	492673	08/09/18 19:43	HTL	TAL IRV
Total/NA	Analysis	SM 2320B		1			492681	08/09/18 15:58	YZ	TAL IRV
Total/NA	Analysis	SM 2510B		1			495227	08/23/18 08:07	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	493073	08/13/18 10:05	XL	TAL IRV
Total/NA	Prep	Distill/CN			50 mL	50 mL	493890	08/16/18 11:12	KMY	TAL IRV
Total/NA	Analysis	SM 4500 CN E		1			494184	08/17/18 13:31	KMY	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			492843	08/10/18 17:51	CMM	TAL IRV

Lab Chronicle

Client: GeoPentech, Inc
Project/Site: Blue Eagle Mine

TestAmerica Job ID: 440-217510-1

Client Sample ID: MW-2

Date Collected: 08/07/18 08:06
Date Received: 08/07/18 13:08

Lab Sample ID: 440-217510-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			491942	08/07/18 19:39	NTN	TAL IRV
Total/NA	Analysis	300.0		1			491943	08/07/18 19:39	NTN	TAL IRV
Total/NA	Analysis	300.0		100			491943	08/08/18 05:23	NTN	TAL IRV
Total/NA	Analysis	314.0 LL		1			494429	08/20/18 19:16	CTH	TAL IRV
Dissolved	Filtration	Filtration			250 mL	250 mL	239472	08/13/18 05:00	NIM	TAL SAC
Dissolved	Prep	3010A			50 mL	50 mL	239717	08/14/18 07:00	NIM	TAL SAC
Dissolved	Analysis	6010B		1			240220	08/15/18 15:58	CJH	TAL SAC
Dissolved	Filtration	Filtration			250 mL	250 mL	239472	08/13/18 05:00	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	239718	08/14/18 07:00	NIM	TAL SAC
Dissolved	Analysis	6020		1			239965	08/14/18 16:40	CJH	TAL SAC
Dissolved	Filtration	Filtration			250 mL	250 mL	239472	08/13/18 05:00	NIM	TAL SAC
Dissolved	Prep	7470A			30 mL	30 mL	239752	08/14/18 09:40	GSH	TAL SAC
Dissolved	Analysis	7470A		1			239891	08/14/18 12:51	GSH	TAL SAC
Total/NA	Analysis	350.1		1	0.8 mL	8.0 mL	492673	08/09/18 19:48	HTL	TAL IRV
Total/NA	Analysis	SM 2320B		1			492681	08/09/18 16:03	YZ	TAL IRV
Total/NA	Analysis	SM 2510B		1			495227	08/23/18 08:07	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	493073	08/13/18 10:05	XL	TAL IRV
Total/NA	Prep	Distill/CN			50 mL	50 mL	493890	08/16/18 11:12	KMY	TAL IRV
Total/NA	Analysis	SM 4500 CN E		1			494184	08/17/18 13:31	KMY	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			492843	08/10/18 18:08	CMM	TAL IRV

Client Sample ID: MW-4

Date Collected: 08/07/18 08:46
Date Received: 08/07/18 13:08

Lab Sample ID: 440-217510-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			491942	08/07/18 19:56	NTN	TAL IRV
Total/NA	Analysis	300.0		1			491943	08/07/18 19:56	NTN	TAL IRV
Total/NA	Analysis	300.0		5			491943	08/08/18 05:40	NTN	TAL IRV
Total/NA	Analysis	300.0		500			491943	08/08/18 05:57	NTN	TAL IRV
Total/NA	Analysis	314.0 LL		1			495732	08/26/18 14:31	PS	TAL IRV
Dissolved	Filtration	Filtration			250 mL	250 mL	239472	08/13/18 05:00	NIM	TAL SAC
Dissolved	Prep	3010A			50 mL	50 mL	239717	08/14/18 07:00	NIM	TAL SAC
Dissolved	Analysis	6010B		1			240220	08/15/18 16:01	CJH	TAL SAC
Dissolved	Filtration	Filtration			250 mL	250 mL	239472	08/13/18 05:00	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	239718	08/14/18 07:00	NIM	TAL SAC
Dissolved	Analysis	6020		1			239965	08/14/18 16:43	CJH	TAL SAC
Dissolved	Filtration	Filtration			250 mL	250 mL	239472	08/13/18 05:00	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	239718	08/14/18 07:00	NIM	TAL SAC
Dissolved	Analysis	6020		10			240529	08/16/18 17:48	JMD	TAL SAC
Dissolved	Filtration	Filtration			250 mL	250 mL	239472	08/13/18 05:00	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	239718	08/14/18 07:00	NIM	TAL SAC
Dissolved	Analysis	6020		50			241333	08/21/18 16:00	CJH	TAL SAC

Lab Chronicle

Client: GeoPentech, Inc
Project/Site: Blue Eagle Mine

TestAmerica Job ID: 440-217510-1

Client Sample ID: MW-4

Date Collected: 08/07/18 08:46
Date Received: 08/07/18 13:08

Lab Sample ID: 440-217510-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Filtration	Filtration			250 mL	250 mL	239472	08/13/18 05:00	NIM	TAL SAC
Dissolved	Prep	7470A			30 mL	30 mL	239752	08/14/18 09:40	GSH	TAL SAC
Dissolved	Analysis	7470A		1			239891	08/14/18 12:53	GSH	TAL SAC
Total/NA	Analysis	350.1		10	0.8 mL	8.0 mL	492673	08/09/18 18:51	HTL	TAL IRV
Total/NA	Analysis	SM 2320B		1			492681	08/09/18 16:07	YZ	TAL IRV
Total/NA	Analysis	SM 2510B		1			495227	08/23/18 08:07	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	493073	08/13/18 10:05	XL	TAL IRV
Total/NA	Prep	Distill/CN			50 mL	50 mL	493890	08/16/18 11:12	KMY	TAL IRV
Total/NA	Analysis	SM 4500 CN E		1			494184	08/17/18 13:31	KMY	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			492843	08/10/18 18:10	CMM	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 440-491942/6
Matrix: Water
Analysis Batch: 491942

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.11	0.055	mg/L			08/07/18 11:44	1
Nitrite as N	ND		0.15	0.025	mg/L			08/07/18 11:44	1

Lab Sample ID: LCS 440-491942/5
Matrix: Water
Analysis Batch: 491942

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	1.13	1.05		mg/L		93	90 - 110
Nitrite as N	1.52	1.46		mg/L		96	90 - 110

Lab Sample ID: MB 440-491943/6
Matrix: Water
Analysis Batch: 491943

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50	0.25	mg/L			08/07/18 11:44	1
Fluoride	ND		0.50	0.25	mg/L			08/07/18 11:44	1
Sulfate	ND		0.50	0.25	mg/L			08/07/18 11:44	1

Lab Sample ID: LCS 440-491943/5
Matrix: Water
Analysis Batch: 491943

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	5.00	4.58		mg/L		92	90 - 110
Fluoride	5.00	4.60		mg/L		92	90 - 110
Sulfate	5.00	4.70		mg/L		94	90 - 110

Method: 314.0 LL - Perchlorate (IC)

Lab Sample ID: MB 440-494429/6
Matrix: Water
Analysis Batch: 494429

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			08/20/18 09:09	1

Lab Sample ID: LCS 440-494429/5
Matrix: Water
Analysis Batch: 494429

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	25.0	24.3		ug/L		97	85 - 115

Method: 314.0 LL - Perchlorate (IC) (Continued)

Lab Sample ID: MRL 440-494429/4
Matrix: Water
Analysis Batch: 494429

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	1.00	0.914	J	ug/L		91	75 - 125

Lab Sample ID: MB 440-495732/10
Matrix: Water
Analysis Batch: 495732

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			08/26/18 14:04	1

Lab Sample ID: LCS 440-495732/9
Matrix: Water
Analysis Batch: 495732

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	25.0	26.8		ug/L		107	85 - 115

Lab Sample ID: MRL 440-495732/4
Matrix: Water
Analysis Batch: 495732

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	1.00	0.801	J	ug/L		80	75 - 125

Lab Sample ID: 440-217510-7 MS
Matrix: Water
Analysis Batch: 495732

Client Sample ID: MW-4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	ND		25.0	23.4		ug/L		94	80 - 120

Lab Sample ID: 440-217510-7 MSD
Matrix: Water
Analysis Batch: 495732

Client Sample ID: MW-4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perchlorate	ND		25.0	22.7		ug/L		91	80 - 120	3	20

Method: 6010B - Metals (ICP)

Lab Sample ID: LCS 320-239717/2-A
Matrix: Water
Analysis Batch: 240220

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 239717

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfur	10.0	9.58		mg/L		96	80 - 120

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 320-239472/1-B
Matrix: Water
Analysis Batch: 240220

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 239717

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	ND		0.50	0.30	mg/L		08/14/18 07:00	08/15/18 15:22	1

Lab Sample ID: 440-217510-1 MS
Matrix: Water
Analysis Batch: 240220

Client Sample ID: MW-5
Prep Type: Dissolved
Prep Batch: 239717

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfur	81		10.0	93.8	4	mg/L		125	80 - 120

Lab Sample ID: 440-217510-1 MSD
Matrix: Water
Analysis Batch: 240220

Client Sample ID: MW-5
Prep Type: Dissolved
Prep Batch: 239717

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfur	81		10.0	94.3	4	mg/L		130	80 - 120	0	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 320-239718/1-A
Matrix: Water
Analysis Batch: 240529

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 239718

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		08/14/18 07:00	08/16/18 16:24	1
Aluminum	ND		0.050	0.025	mg/L		08/14/18 07:00	08/16/18 16:24	1
Antimony	ND		0.0020	0.00020	mg/L		08/14/18 07:00	08/16/18 16:24	1
Arsenic	ND		0.0020	0.0010	mg/L		08/14/18 07:00	08/16/18 16:24	1
Barium	ND		0.0010	0.00050	mg/L		08/14/18 07:00	08/16/18 16:24	1
Beryllium	ND		0.0010	0.00010	mg/L		08/14/18 07:00	08/16/18 16:24	1
Cadmium	ND		0.0010	0.00050	mg/L		08/14/18 07:00	08/16/18 16:24	1
Calcium	ND		0.30	0.17	mg/L		08/14/18 07:00	08/16/18 16:24	1
Chromium	ND		0.0020	0.0010	mg/L		08/14/18 07:00	08/16/18 16:24	1
Cobalt	ND		0.0010	0.00060	mg/L		08/14/18 07:00	08/16/18 16:24	1
Copper	ND		0.0020	0.0010	mg/L		08/14/18 07:00	08/16/18 16:24	1
Iron	0.0278	J	0.050	0.025	mg/L		08/14/18 07:00	08/16/18 16:24	1
Lead	ND		0.0010	0.00060	mg/L		08/14/18 07:00	08/16/18 16:24	1
Magnesium	ND		0.050	0.025	mg/L		08/14/18 07:00	08/16/18 16:24	1
Manganese	ND		0.0025	0.0014	mg/L		08/14/18 07:00	08/16/18 16:24	1
Molybdenum	ND		0.0020	0.00060	mg/L		08/14/18 07:00	08/16/18 16:24	1
Nickel	ND		0.0020	0.0010	mg/L		08/14/18 07:00	08/16/18 16:24	1
Potassium	0.0642		0.050	0.025	mg/L		08/14/18 07:00	08/16/18 16:24	1
Selenium	ND		0.0020	0.0010	mg/L		08/14/18 07:00	08/16/18 16:24	1
Sodium	ND		0.10	0.080	mg/L		08/14/18 07:00	08/16/18 16:24	1
Thallium	ND		0.0010	0.00050	mg/L		08/14/18 07:00	08/16/18 16:24	1
Vanadium	ND		0.010	0.0030	mg/L		08/14/18 07:00	08/16/18 16:24	1
Zinc	ND		0.0050	0.0040	mg/L		08/14/18 07:00	08/16/18 16:24	1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 320-239718/2-A
Matrix: Water
Analysis Batch: 239965

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 239718

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.0500	0.0493		mg/L		99	80 - 120
Aluminum	1.00	0.922		mg/L		92	80 - 120
Antimony	0.200	0.199		mg/L		99	80 - 120
Arsenic	0.200	0.181		mg/L		91	80 - 120
Barium	0.200	0.201		mg/L		100	80 - 120
Beryllium	0.200	0.199		mg/L		100	80 - 120
Cadmium	0.200	0.207		mg/L		103	80 - 120
Calcium	1.00	1.02		mg/L		102	80 - 120
Chromium	0.200	0.208		mg/L		104	80 - 120
Cobalt	0.200	0.218		mg/L		109	80 - 120
Copper	0.200	0.212		mg/L		106	80 - 120
Iron	1.00	1.07		mg/L		107	80 - 120
Lead	0.200	0.213		mg/L		107	80 - 120
Magnesium	1.00	0.987		mg/L		99	80 - 120
Manganese	0.200	0.202		mg/L		101	80 - 120
Molybdenum	0.200	0.183		mg/L		91	80 - 120
Nickel	0.200	0.210		mg/L		105	80 - 120
Potassium	1.00	1.02		mg/L		102	80 - 120
Selenium	0.200	0.181		mg/L		90	80 - 120
Sodium	1.00	0.985		mg/L		98	80 - 120
Thallium	0.0500	0.0516		mg/L		103	80 - 120
Vanadium	0.200	0.204		mg/L		102	80 - 120
Zinc	0.200	0.177		mg/L		89	80 - 120

Lab Sample ID: 440-217510-2 MS
Matrix: Water
Analysis Batch: 239965

Client Sample ID: Duplicate MW-5
Prep Type: Dissolved
Prep Batch: 239718

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	ND		0.0500	0.0492		mg/L		98	80 - 120
Aluminum	0.029	J	1.00	0.950		mg/L		92	80 - 120
Antimony	0.00058	J	0.200	0.201		mg/L		100	80 - 120
Arsenic	0.64		0.200	0.859		mg/L		109	80 - 120
Barium	0.018		0.200	0.224		mg/L		103	80 - 120
Beryllium	0.00020	J	0.200	0.196		mg/L		98	80 - 120
Cadmium	ND		0.200	0.205		mg/L		102	80 - 120
Calcium	55		1.00	55.2	4	mg/L		1	80 - 120
Chromium	ND		0.200	0.205		mg/L		102	80 - 120
Cobalt	0.0014		0.200	0.216		mg/L		107	80 - 120
Copper	0.012		0.200	0.211		mg/L		100	80 - 120
Iron	ND		1.00	1.02	B	mg/L		102	80 - 120
Lead	ND		0.200	0.208		mg/L		104	80 - 120
Magnesium	19		1.00	20.3	4	mg/L		127	80 - 120
Manganese	0.12		0.200	0.319		mg/L		100	80 - 120
Molybdenum	0.0024		0.200	0.193		mg/L		95	80 - 120
Nickel	0.0066		0.200	0.206		mg/L		100	80 - 120
Potassium	23	B	1.00	23.7	4 B	mg/L		81	80 - 120
Selenium	0.0051		0.200	0.181		mg/L		88	80 - 120

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 440-217510-2 MS
Matrix: Water
Analysis Batch: 239965

Client Sample ID: Duplicate MW-5
Prep Type: Dissolved
Prep Batch: 239718

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium	53		1.00	54.7	4	mg/L		144	80 - 120
Thallium	ND		0.0500	0.0516		mg/L		103	80 - 120
Vanadium	ND		0.200	0.206		mg/L		103	80 - 120
Zinc	0.056		0.200	0.233		mg/L		89	80 - 120

Lab Sample ID: 440-217510-2 MSD
Matrix: Water
Analysis Batch: 239965

Client Sample ID: Duplicate MW-5
Prep Type: Dissolved
Prep Batch: 239718

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	ND		0.0500	0.0486		mg/L		97	80 - 120	1	15
Aluminum	0.029	J	1.00	0.954		mg/L		93	80 - 120	0	15
Antimony	0.00058	J	0.200	0.203		mg/L		101	80 - 120	1	15
Arsenic	0.64		0.200	0.845		mg/L		102	80 - 120	2	15
Barium	0.018		0.200	0.222		mg/L		102	80 - 120	1	15
Beryllium	0.00020	J	0.200	0.192		mg/L		96	80 - 120	2	15
Cadmium	ND		0.200	0.203		mg/L		102	80 - 120	1	15
Calcium	55		1.00	56.4	4	mg/L		118	80 - 120	2	15
Chromium	ND		0.200	0.204		mg/L		102	80 - 120	0	15
Cobalt	0.0014		0.200	0.210		mg/L		104	80 - 120	3	15
Copper	0.012		0.200	0.214		mg/L		101	80 - 120	1	15
Iron	ND		1.00	1.04	B	mg/L		104	80 - 120	1	15
Lead	ND		0.200	0.201		mg/L		100	80 - 120	4	15
Magnesium	19		1.00	20.6	4	mg/L		151	80 - 120	1	15
Manganese	0.12		0.200	0.325		mg/L		103	80 - 120	2	15
Molybdenum	0.0024		0.200	0.187		mg/L		92	80 - 120	3	15
Nickel	0.0066		0.200	0.207		mg/L		100	80 - 120	0	15
Potassium	23	B	1.00	24.6	4 B	mg/L		168	80 - 120	4	17
Selenium	0.0051		0.200	0.176		mg/L		86	80 - 120	3	15
Sodium	53		1.00	55.5	4	mg/L		225	80 - 120	1	15
Thallium	ND		0.0500	0.0498		mg/L		100	80 - 120	4	15
Vanadium	ND		0.200	0.207		mg/L		103	80 - 120	0	15
Zinc	0.056		0.200	0.228		mg/L		86	80 - 120	2	15

Method: 7470A - Mercury (CVAA)

Lab Sample ID: LCS 320-239752/12-A
Matrix: Water
Analysis Batch: 239891

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 239752

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury			0.00100	0.000969		mg/L		97	82 - 113

Lab Sample ID: MB 320-239472/1-C
Matrix: Water
Analysis Batch: 239891

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 239752

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		08/14/18 09:40	08/14/18 12:24	1

Lab Sample ID: 440-217510-1 MS
Matrix: Water
Analysis Batch: 239891

Client Sample ID: MW-5
Prep Type: Dissolved
Prep Batch: 239752

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		0.00100	0.00101		mg/L		101	82 - 113

Lab Sample ID: 440-217510-1 MSD
Matrix: Water
Analysis Batch: 239891

Client Sample ID: MW-5
Prep Type: Dissolved
Prep Batch: 239752

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.00100	0.000954		mg/L		95	82 - 113	6	17

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 440-492673/10
Matrix: Water
Analysis Batch: 492673

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.20	0.10	mg/L			08/09/18 18:14	1

Lab Sample ID: LCS 440-492673/11
Matrix: Water
Analysis Batch: 492673

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	5.00	5.09		mg/L		102	90 - 110

Lab Sample ID: MRL 440-492673/9
Matrix: Water
Analysis Batch: 492673

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	0.200	0.150	J	mg/L		75	50 - 150

Lab Sample ID: 440-217510-1 MS
Matrix: Water
Analysis Batch: 492673

Client Sample ID: MW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	ND		5.00	5.05		mg/L		101	90 - 110

Lab Sample ID: 440-217510-1 MSD
Matrix: Water
Analysis Batch: 492673

Client Sample ID: MW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N	ND		5.00	5.24		mg/L		105	90 - 110	4	15

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 440-492681/71
Matrix: Water
Analysis Batch: 492681

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	ND		4.0	4.0	mg/L			08/09/18 15:11	1
Bicarbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			08/09/18 15:11	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			08/09/18 15:11	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			08/09/18 15:11	1

Lab Sample ID: LCS 440-492681/70
Matrix: Water
Analysis Batch: 492681

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3	80.7	80.7		mg/L		100	80 - 120

Lab Sample ID: 440-217510-1 DU
Matrix: Water
Analysis Batch: 492681

Client Sample ID: MW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity as CaCO3	92		92.8		mg/L		0.5	20
Bicarbonate Alkalinity as CaCO3	92		92.8		mg/L		0.5	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20
Hydroxide Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: MB 440-495227/3
Matrix: Water
Analysis Batch: 495227

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		1.0	1.0	umhos/cm			08/23/18 08:15	1

Lab Sample ID: LCS 440-495227/4
Matrix: Water
Analysis Batch: 495227

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Specific Conductance	953	981		umhos/cm		103	90 - 110

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 440-493073/1
Matrix: Water
Analysis Batch: 493073

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	5.0	mg/L			08/13/18 10:05	1

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 440-493073/2
Matrix: Water
Analysis Batch: 493073

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1000	968		mg/L		97	90 - 110

Lab Sample ID: 440-217510-1 DU
Matrix: Water
Analysis Batch: 493073

Client Sample ID: MW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	570		575		mg/L		0.3	5

Method: SM 4500 CN E - Cyanide, Total

Lab Sample ID: MB 440-493615/1-A
Matrix: Water
Analysis Batch: 493960

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 493615

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.025	0.013	mg/L		08/15/18 10:41	08/16/18 15:05	1

Lab Sample ID: LCS 440-493615/2-A
Matrix: Water
Analysis Batch: 493960

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 493615

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.200	0.192		mg/L		96	90 - 110

Lab Sample ID: MB 440-493890/1-A
Matrix: Water
Analysis Batch: 494184

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 493890

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.025	0.013	mg/L		08/16/18 11:12	08/17/18 13:30	1

Lab Sample ID: LCS 440-493890/2-A
Matrix: Water
Analysis Batch: 494184

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 493890

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.200	0.189		mg/L		95	90 - 110

Method: SM 4500 H+ B - pH

Lab Sample ID: 440-217510-1 DU
Matrix: Water
Analysis Batch: 492843

Client Sample ID: MW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH adj. to 25 deg C	7.7	HF	7.7		SU		0.3	2

HPLC/IC

Analysis Batch: 491942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-217510-1	MW-5	Total/NA	Water	300.0	
440-217510-2	Duplicate MW-5	Total/NA	Water	300.0	
440-217510-3	MW-6	Total/NA	Water	300.0	
440-217510-4	MW-3	Total/NA	Water	300.0	
440-217510-5	MW-1	Total/NA	Water	300.0	
440-217510-6	MW-2	Total/NA	Water	300.0	
440-217510-7	MW-4	Total/NA	Water	300.0	
MB 440-491942/6	Method Blank	Total/NA	Water	300.0	
LCS 440-491942/5	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 491943

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-217510-1	MW-5	Total/NA	Water	300.0	
440-217510-1	MW-5	Total/NA	Water	300.0	
440-217510-2	Duplicate MW-5	Total/NA	Water	300.0	
440-217510-2	Duplicate MW-5	Total/NA	Water	300.0	
440-217510-3	MW-6	Total/NA	Water	300.0	
440-217510-3	MW-6	Total/NA	Water	300.0	
440-217510-4	MW-3	Total/NA	Water	300.0	
440-217510-4	MW-3	Total/NA	Water	300.0	
440-217510-5	MW-1	Total/NA	Water	300.0	
440-217510-5	MW-1	Total/NA	Water	300.0	
440-217510-6	MW-2	Total/NA	Water	300.0	
440-217510-6	MW-2	Total/NA	Water	300.0	
440-217510-7	MW-4	Total/NA	Water	300.0	
440-217510-7	MW-4	Total/NA	Water	300.0	
440-217510-7	MW-4	Total/NA	Water	300.0	
MB 440-491943/6	Method Blank	Total/NA	Water	300.0	
LCS 440-491943/5	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 494429

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-217510-1	MW-5	Total/NA	Water	314.0 LL	
440-217510-2	Duplicate MW-5	Total/NA	Water	314.0 LL	
440-217510-3	MW-6	Total/NA	Water	314.0 LL	
440-217510-4	MW-3	Total/NA	Water	314.0 LL	
440-217510-5	MW-1	Total/NA	Water	314.0 LL	
440-217510-6	MW-2	Total/NA	Water	314.0 LL	
MB 440-494429/6	Method Blank	Total/NA	Water	314.0 LL	
LCS 440-494429/5	Lab Control Sample	Total/NA	Water	314.0 LL	
MRL 440-494429/4	Lab Control Sample	Total/NA	Water	314.0 LL	

Analysis Batch: 495732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-217510-7	MW-4	Total/NA	Water	314.0 LL	
MB 440-495732/10	Method Blank	Total/NA	Water	314.0 LL	
LCS 440-495732/9	Lab Control Sample	Total/NA	Water	314.0 LL	
MRL 440-495732/4	Lab Control Sample	Total/NA	Water	314.0 LL	
440-217510-7 MS	MW-4	Total/NA	Water	314.0 LL	
440-217510-7 MSD	MW-4	Total/NA	Water	314.0 LL	

Metals

Filtration Batch: 239472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-217510-1	MW-5	Dissolved	Water	Filtration	
440-217510-2	Duplicate MW-5	Dissolved	Water	Filtration	
440-217510-3	MW-6	Dissolved	Water	Filtration	
440-217510-4	MW-3	Dissolved	Water	Filtration	
440-217510-5	MW-1	Dissolved	Water	Filtration	
440-217510-6	MW-2	Dissolved	Water	Filtration	
440-217510-7	MW-4	Dissolved	Water	Filtration	
MB 320-239472/1-B	Method Blank	Dissolved	Water	Filtration	
MB 320-239472/1-C	Method Blank	Dissolved	Water	Filtration	
440-217510-1 MS	MW-5	Dissolved	Water	Filtration	
440-217510-1 MSD	MW-5	Dissolved	Water	Filtration	
440-217510-2 MS	Duplicate MW-5	Dissolved	Water	Filtration	
440-217510-2 MSD	Duplicate MW-5	Dissolved	Water	Filtration	

Prep Batch: 239717

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-217510-1	MW-5	Dissolved	Water	3010A	239472
440-217510-2	Duplicate MW-5	Dissolved	Water	3010A	239472
440-217510-3	MW-6	Dissolved	Water	3010A	239472
440-217510-4	MW-3	Dissolved	Water	3010A	239472
440-217510-5	MW-1	Dissolved	Water	3010A	239472
440-217510-6	MW-2	Dissolved	Water	3010A	239472
440-217510-7	MW-4	Dissolved	Water	3010A	239472
MB 320-239472/1-B	Method Blank	Dissolved	Water	3010A	239472
LCS 320-239717/2-A	Lab Control Sample	Total/NA	Water	3010A	
440-217510-1 MS	MW-5	Dissolved	Water	3010A	239472
440-217510-1 MSD	MW-5	Dissolved	Water	3010A	239472

Prep Batch: 239718

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-217510-1	MW-5	Dissolved	Water	3005A	239472
440-217510-2	Duplicate MW-5	Dissolved	Water	3005A	239472
440-217510-3	MW-6	Dissolved	Water	3005A	239472
440-217510-4	MW-3	Dissolved	Water	3005A	239472
440-217510-5	MW-1	Dissolved	Water	3005A	239472
440-217510-6	MW-2	Dissolved	Water	3005A	239472
440-217510-7	MW-4	Dissolved	Water	3005A	239472
MB 320-239718/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 320-239718/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
440-217510-2 MS	Duplicate MW-5	Dissolved	Water	3005A	239472
440-217510-2 MSD	Duplicate MW-5	Dissolved	Water	3005A	239472

Prep Batch: 239752

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-217510-1	MW-5	Dissolved	Water	7470A	239472
440-217510-2	Duplicate MW-5	Dissolved	Water	7470A	239472
440-217510-3	MW-6	Dissolved	Water	7470A	239472
440-217510-4	MW-3	Dissolved	Water	7470A	239472
440-217510-5	MW-1	Dissolved	Water	7470A	239472
440-217510-6	MW-2	Dissolved	Water	7470A	239472
440-217510-7	MW-4	Dissolved	Water	7470A	239472

Metals (Continued)

Prep Batch: 239752 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 320-239472/1-C	Method Blank	Dissolved	Water	7470A	239472
LCS 320-239752/12-A	Lab Control Sample	Total/NA	Water	7470A	
440-217510-1 MS	MW-5	Dissolved	Water	7470A	239472
440-217510-1 MSD	MW-5	Dissolved	Water	7470A	239472

Analysis Batch: 239891

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-217510-1	MW-5	Dissolved	Water	7470A	239752
440-217510-2	Duplicate MW-5	Dissolved	Water	7470A	239752
440-217510-3	MW-6	Dissolved	Water	7470A	239752
440-217510-4	MW-3	Dissolved	Water	7470A	239752
440-217510-5	MW-1	Dissolved	Water	7470A	239752
440-217510-6	MW-2	Dissolved	Water	7470A	239752
440-217510-7	MW-4	Dissolved	Water	7470A	239752
MB 320-239472/1-C	Method Blank	Dissolved	Water	7470A	239752
LCS 320-239752/12-A	Lab Control Sample	Total/NA	Water	7470A	239752
440-217510-1 MS	MW-5	Dissolved	Water	7470A	239752
440-217510-1 MSD	MW-5	Dissolved	Water	7470A	239752

Analysis Batch: 239965

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-217510-1	MW-5	Dissolved	Water	6020	239718
440-217510-2	Duplicate MW-5	Dissolved	Water	6020	239718
440-217510-3	MW-6	Dissolved	Water	6020	239718
440-217510-4	MW-3	Dissolved	Water	6020	239718
440-217510-5	MW-1	Dissolved	Water	6020	239718
440-217510-6	MW-2	Dissolved	Water	6020	239718
440-217510-7	MW-4	Dissolved	Water	6020	239718
LCS 320-239718/2-A	Lab Control Sample	Total Recoverable	Water	6020	239718
440-217510-2 MS	Duplicate MW-5	Dissolved	Water	6020	239718
440-217510-2 MSD	Duplicate MW-5	Dissolved	Water	6020	239718

Analysis Batch: 240220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-217510-1	MW-5	Dissolved	Water	6010B	239717
440-217510-2	Duplicate MW-5	Dissolved	Water	6010B	239717
440-217510-3	MW-6	Dissolved	Water	6010B	239717
440-217510-4	MW-3	Dissolved	Water	6010B	239717
440-217510-5	MW-1	Dissolved	Water	6010B	239717
440-217510-6	MW-2	Dissolved	Water	6010B	239717
440-217510-7	MW-4	Dissolved	Water	6010B	239717
MB 320-239472/1-B	Method Blank	Dissolved	Water	6010B	239717
LCS 320-239717/2-A	Lab Control Sample	Total/NA	Water	6010B	239717
440-217510-1 MS	MW-5	Dissolved	Water	6010B	239717
440-217510-1 MSD	MW-5	Dissolved	Water	6010B	239717

Analysis Batch: 240529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-217510-7	MW-4	Dissolved	Water	6020	239718
MB 320-239718/1-A	Method Blank	Total Recoverable	Water	6020	239718

Metals (Continued)

Analysis Batch: 241333

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-217510-7	MW-4	Dissolved	Water	6020	239718

General Chemistry

Analysis Batch: 492673

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-217510-1	MW-5	Total/NA	Water	350.1	
440-217510-2	Duplicate MW-5	Total/NA	Water	350.1	
440-217510-3	MW-6	Total/NA	Water	350.1	
440-217510-4	MW-3	Total/NA	Water	350.1	
440-217510-5	MW-1	Total/NA	Water	350.1	
440-217510-6	MW-2	Total/NA	Water	350.1	
440-217510-7	MW-4	Total/NA	Water	350.1	
MB 440-492673/10	Method Blank	Total/NA	Water	350.1	
LCS 440-492673/11	Lab Control Sample	Total/NA	Water	350.1	
MRL 440-492673/9	Lab Control Sample	Total/NA	Water	350.1	
440-217510-1 MS	MW-5	Total/NA	Water	350.1	
440-217510-1 MSD	MW-5	Total/NA	Water	350.1	

Analysis Batch: 492681

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-217510-1	MW-5	Total/NA	Water	SM 2320B	
440-217510-2	Duplicate MW-5	Total/NA	Water	SM 2320B	
440-217510-3	MW-6	Total/NA	Water	SM 2320B	
440-217510-4	MW-3	Total/NA	Water	SM 2320B	
440-217510-5	MW-1	Total/NA	Water	SM 2320B	
440-217510-6	MW-2	Total/NA	Water	SM 2320B	
440-217510-7	MW-4	Total/NA	Water	SM 2320B	
MB 440-492681/71	Method Blank	Total/NA	Water	SM 2320B	
LCS 440-492681/70	Lab Control Sample	Total/NA	Water	SM 2320B	
440-217510-1 DU	MW-5	Total/NA	Water	SM 2320B	

Analysis Batch: 492843

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-217510-1	MW-5	Total/NA	Water	SM 4500 H+ B	
440-217510-2	Duplicate MW-5	Total/NA	Water	SM 4500 H+ B	
440-217510-3	MW-6	Total/NA	Water	SM 4500 H+ B	
440-217510-4	MW-3	Total/NA	Water	SM 4500 H+ B	
440-217510-5	MW-1	Total/NA	Water	SM 4500 H+ B	
440-217510-6	MW-2	Total/NA	Water	SM 4500 H+ B	
440-217510-7	MW-4	Total/NA	Water	SM 4500 H+ B	
440-217510-1 DU	MW-5	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 493073

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-217510-1	MW-5	Total/NA	Water	SM 2540C	
440-217510-2	Duplicate MW-5	Total/NA	Water	SM 2540C	
440-217510-3	MW-6	Total/NA	Water	SM 2540C	
440-217510-4	MW-3	Total/NA	Water	SM 2540C	
440-217510-5	MW-1	Total/NA	Water	SM 2540C	

General Chemistry (Continued)

Analysis Batch: 493073 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-217510-6	MW-2	Total/NA	Water	SM 2540C	
440-217510-7	MW-4	Total/NA	Water	SM 2540C	
MB 440-493073/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 440-493073/2	Lab Control Sample	Total/NA	Water	SM 2540C	
440-217510-1 DU	MW-5	Total/NA	Water	SM 2540C	

Prep Batch: 493615

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-217510-1	MW-5	Total/NA	Water	Distill/CN	
440-217510-2	Duplicate MW-5	Total/NA	Water	Distill/CN	
440-217510-3	MW-6	Total/NA	Water	Distill/CN	
MB 440-493615/1-A	Method Blank	Total/NA	Water	Distill/CN	
LCS 440-493615/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	

Prep Batch: 493890

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-217510-4	MW-3	Total/NA	Water	Distill/CN	
440-217510-5	MW-1	Total/NA	Water	Distill/CN	
440-217510-6	MW-2	Total/NA	Water	Distill/CN	
440-217510-7	MW-4	Total/NA	Water	Distill/CN	
MB 440-493890/1-A	Method Blank	Total/NA	Water	Distill/CN	
LCS 440-493890/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	

Analysis Batch: 493960

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-217510-1	MW-5	Total/NA	Water	SM 4500 CN E	493615
440-217510-2	Duplicate MW-5	Total/NA	Water	SM 4500 CN E	493615
440-217510-3	MW-6	Total/NA	Water	SM 4500 CN E	493615
MB 440-493615/1-A	Method Blank	Total/NA	Water	SM 4500 CN E	493615
LCS 440-493615/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN E	493615

Analysis Batch: 494184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-217510-4	MW-3	Total/NA	Water	SM 4500 CN E	493890
440-217510-5	MW-1	Total/NA	Water	SM 4500 CN E	493890
440-217510-6	MW-2	Total/NA	Water	SM 4500 CN E	493890
440-217510-7	MW-4	Total/NA	Water	SM 4500 CN E	493890
MB 440-493890/1-A	Method Blank	Total/NA	Water	SM 4500 CN E	493890
LCS 440-493890/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN E	493890

Analysis Batch: 495227

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-217510-1	MW-5	Total/NA	Water	SM 2510B	
440-217510-2	Duplicate MW-5	Total/NA	Water	SM 2510B	
440-217510-3	MW-6	Total/NA	Water	SM 2510B	
440-217510-4	MW-3	Total/NA	Water	SM 2510B	
440-217510-5	MW-1	Total/NA	Water	SM 2510B	
440-217510-6	MW-2	Total/NA	Water	SM 2510B	
440-217510-7	MW-4	Total/NA	Water	SM 2510B	
MB 440-495227/3	Method Blank	Total/NA	Water	SM 2510B	
LCS 440-495227/4	Lab Control Sample	Total/NA	Water	SM 2510B	

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: GeoPentech, Inc
Project/Site: Blue Eagle Mine

TestAmerica Job ID: 440-217510-1

Laboratory: TestAmerica Irvine

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	CA ELAP 2706	06-30-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
SM 2320B		Water	Bicarbonate Alkalinity as CaCO3
SM 2320B		Water	Carbonate Alkalinity as CaCO3
SM 2320B		Water	Hydroxide Alkalinity as CaCO3

Laboratory: TestAmerica Sacramento

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2897	01-31-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6010B	3010A	Water	Sulfur
6020	3005A	Water	Aluminum
6020	3005A	Water	Calcium
6020	3005A	Water	Iron
6020	3005A	Water	Magnesium
6020	3005A	Water	Manganese
6020	3005A	Water	Potassium
6020	3005A	Water	Sodium

TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614
Phone: 949.261.1022 Fax:

Chain of Custody Record 209750

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TestAmerica Laboratories, Inc.
TAL-8210 (0713)

8/28/2018

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☒ Other.

Client Contact	Project Manager: Eric Fordham	Site Contact:	Date:	COC No. 209750
Company Name Geopentech	Tel/Fax: 714-796-9100	Lab Contact: Linda Laver	Carrier:	1 of 1 COCs
Address 101 Academy Drive	Analysis Turnaround Time			Sampler.
City/State/Zip Irvine, CA	☐ CALENDAR DAYS ☒ WORKING DAYS			For Lab Use Only:
Phone 714-796-9100	TAT if different from Below standard			Walk-in Client:
Fax	☐ 2 weeks			Lab Sampling.
Project Name: Blue Eagle Mine	☐ 1 week			
Site Rosamond, CA	☐ 2 days			Job / SDG No.:
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	300.0 Cl, pH, TDS	perchlorate	cyanide	alkalinity	dissolved metals	ammonia	Sample Specific Notes
MW-5	8/6/18	10:00	G	W	6			✓	✓	✓	✓	✓	✓	
duplicate MW-5	8/6/18	10:10	G	W	6			✓	✓	✓	✓	✓	✓	
MW-6	8/6/18	11:00	G	W	6			✓	✓	✓	✓	✓	✓	
MW-3	8/6/18	12:03	G	W	6			✓	✓	✓	✓	✓	✓	
MW-1	8/6/18	12:49	G	W	6			✓	✓	✓	✓	✓	✓	
MW-2	8/7/18	8:06	G	W	6			✓	✓	✓	✓	✓	✓	
MW-4	8/7/18	8:46	G	W	6			✓	✓	✓	✓	✓	✓	

440-217510 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other 1, 3, 5

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☒ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:
All samples were put on ice after collection * temperatures over 100°F in Mojave. 3.1/0.5 3.4-66/0.8 Quotation #: 32011123

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp (°C) Obs'd: _____ Corr'd: _____ Therm ID No.: _____

Relinquished by	Company	Date/Time	Received by	Company	Date/Time
Ryan Wakefield	Geopentech	8/7/18 13:08			
Relinquished by	Company	Date/Time:	Received by:	Company	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by	Company	Date/Time:
				TAIRV	8/7/18 1308

TestAmerica Irvine
17461 Derian Ave Suite 100
Irvine, CA 92614-5817
Phone (949) 261-1022 Fax (949) 260-3297

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Laver, Linda C.	Carrier Tracking No(s):	COC No: 440-124883.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: linda.laver@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 440-217510-1
Address: 880 Riverside Parkway,	Due Date Requested: 8/23/2018			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: Blue Eagle Mine	Project #: 32011165			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/Filtration_ME (MOD) Pick Your Analytes	7470A/Filtration_ME Dissolved Mercury	6020/Filtration_ME Dissolved Metals including Ca & Mg	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
MW-5 (440-217510-1)	8/6/18	10:00 Pacific		Water			X	X	X	1	Sulfur may be high, may want to see 6020 data, Sulfur may be high, may want to see
Duplicate MW-5 (440-217510-2)	8/6/18	10:10 Pacific		Water			X	X	X	1	Sulfur may be high, may want to see 6020 data, Sulfur may be high, may want to see
MW-6 (440-217510-3)	8/6/18	11:00 Pacific		Water			X	X	X	1	Sulfur may be high, may want to see 6020 data, Sulfur may be high, may want to see
MW-3 (440-217510-4)	8/6/18	12:03 Pacific		Water			X	X	X	1	Sulfur may be high, may want to see 6020 data, Sulfur may be high, may want to see
MW-1 (440-217510-5)	8/6/18	12:49 Pacific		Water			X	X	X	1	Sulfur may be high, may want to see 6020 data, Sulfur may be high, may want to see
MW-2 (440-217510-6)	8/7/18	08:06 Pacific		Water			X	X	X	1	Sulfur may be high, may want to see 6020 data, Sulfur may be high, may want to see
MW-4 (440-217510-7)	8/7/18	08:46 Pacific		Water			X	X	X	1	Sulfur may be high, may want to see 6020 data, Sulfur may be high, may want to see

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	[signature]	8/8/18 1700	[illegible]	[signature]	8/10/18 950	TA-Sac
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☒ Yes △ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 0.5

Ver: 09/20/2016

Login Sample Receipt Checklist

Client: GeoPentech, Inc

Job Number: 440-217510-1

Login Number: 217510
List Number: 1
Creator: Ortiz, Teresa

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	Not present
Sample custody seals, if present, are intact.	N/A	Not Present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: GeoPentech, Inc

Job Number: 440-217510-1

Login Number: 217510
List Number: 2
Creator: Gooch, Mayce

List Source: TestAmerica Sacramento
List Creation: 08/10/18 01:15 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.5c
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-220348-1
TestAmerica Sample Delivery Group: September 2018
Client Project/Site: Blue Eagle Lode Mine

For:
GeoPentech, Inc
101 Academy Dr
Suite 100
Irvine, California 92617

Attn: Eric Fordham

Linda C. Laver

Authorized for release by:
10/8/2018 3:47:01 PM

Linda C. Laver, Project Manager II
(916)374-4362
linda.laver@testamericainc.com

LINKS
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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-220348-1
SDG: September 2018

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-220348-1	MW-5	Water	09/17/18 09:44	09/18/18 13:14
440-220348-2	MW-6	Water	09/17/18 10:44	09/18/18 13:14
440-220348-3	MW-3	Water	09/17/18 12:13	09/18/18 13:14
440-220348-4	EQUIPMENT BLANK	Water	09/17/18 12:55	09/18/18 13:14
440-220348-5	MW-1	Water	09/17/18 13:31	09/18/18 13:14
440-220348-6	MW-2	Water	09/18/18 09:06	09/18/18 13:14
440-220348-7	MW-4	Water	09/18/18 09:49	09/18/18 13:14

Job ID: 440-220348-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-220348-1

Receipt
The samples were received on 9/18/2018 1:14 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 0.2º C and 0.6º C.

HPLC/IC
Method(s) 314.0 LL: Due to high sulfate concentration, the following sample had to be pre-treated before analysis: MW-4 (440-220348-7, -7MS, -7MSD). The associated method blank and laboratory control sample ()LCS) was treated the same as the samples in analysis batch 440-501429.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
The requested analyses include dissolved metals and hardness but samples were not filtered in the field. The samples were filtered and preserved by the laboratory.

Method(s) 6010B: The continuing calibration verification (CCV) associated with analytical batch 320-248059 recovered above the upper control limit for Sulfur (S). The sample associated with this CCV was non-detect for the affected analyte; therefore, the data have been reported. (CCV 320-248059/117).

Method(s) 6010B: The post digestion spike associated with analytical batch 320-248059 for Sulfur (S) had a recovery outside of control limits in the following sample: MW-5 (440-220348-1-PDS).

Method(s) 6010B: Due to the high concentration of Sulfur (S) in the parent sample, the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 320-247044 and 320-247846 and analytical batch 320-248363 could not be evaluated for accuracy (%Rec) and precision (RPD). The associated laboratory control sample (LCS) met acceptance criteria. The data have been flagged with "4" qualifier.

Method(s) 6020: Due to the high concentration of some analytes in the parent sample, the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 320-247044 and 320-247845 and analytical batch 320-249007 could not be evaluated for accuracy (%Rec) and precision (RPD). The associated laboratory control sample (LCS) met acceptance criteria. The data of the affected analytes in the MS/MSD have been flagged with "4" qualifier.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
Method(s) Distill/CN: The reference method requires samples to be preserved to a pH of at least 12. The following sample was received with insufficient preservation at about pH 9: MW-6 (440-220348-2). The affected sample was preserved to the appropriate pH in the laboratory with additional sodium hydroxide.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Client Sample ID: MW-5

Date Collected: 09/17/18 09:44
Date Received: 09/18/18 13:14

Lab Sample ID: 440-220348-1

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**18**		0.50	0.25	mg/L			09/18/18 16:56	1
Nitrate as N	**0.17**		0.11	0.055	mg/L			09/18/18 16:56	1
Fluoride	ND		0.50	0.25	mg/L			09/18/18 16:56	1
Nitrite as N	ND		0.15	0.025	mg/L			09/18/18 16:56	1
Sulfate	**250**		25	13	mg/L			09/18/18 18:01	50

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			09/26/18 14:38	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	**92**		0.50	0.30	mg/L		09/26/18 06:45	09/26/18 19:47	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		09/26/18 06:45	10/01/18 14:37	1
Aluminum	ND		0.050	0.025	mg/L		09/26/18 06:45	10/01/18 14:37	1
Antimony	**0.00044**	**J**	0.0020	0.00020	mg/L		09/26/18 06:45	10/01/18 14:37	1
Arsenic	**0.78**		0.0020	0.0010	mg/L		09/26/18 06:45	10/01/18 14:37	1
Barium	**0.021**		0.0010	0.00050	mg/L		09/26/18 06:45	10/01/18 14:37	1
Beryllium	ND		0.0010	0.00010	mg/L		09/26/18 06:45	10/01/18 14:37	1
Cadmium	ND		0.0010	0.00050	mg/L		09/26/18 06:45	10/01/18 14:37	1
Calcium	**61**		0.30	0.17	mg/L		09/26/18 06:45	10/01/18 14:37	1
Chromium	ND		0.0020	0.0010	mg/L		09/26/18 06:45	10/01/18 14:37	1
Cobalt	ND		0.0010	0.00060	mg/L		09/26/18 06:45	10/01/18 14:37	1
Copper	**0.0017**	**J**	0.0020	0.0010	mg/L		09/26/18 06:45	10/01/18 14:37	1
Iron	ND		0.050	0.025	mg/L		09/26/18 06:45	10/01/18 14:37	1
Lead	ND		0.0010	0.00060	mg/L		09/26/18 06:45	10/01/18 14:37	1
Magnesium	**20**		0.050	0.025	mg/L		09/26/18 06:45	10/01/18 14:37	1
Manganese	**0.022**		0.0025	0.0014	mg/L		09/26/18 06:45	10/01/18 14:37	1
Molybdenum	**0.0032**		0.0020	0.00060	mg/L		09/26/18 06:45	10/01/18 14:37	1
Nickel	**0.0029**		0.0020	0.0010	mg/L		09/26/18 06:45	10/01/18 14:37	1
Potassium	**23**		0.050	0.025	mg/L		09/26/18 06:45	10/01/18 14:37	1
Selenium	**0.0060**		0.0020	0.0010	mg/L		09/26/18 06:45	10/01/18 14:37	1
Sodium	**56**		0.10	0.080	mg/L		09/26/18 06:45	10/01/18 14:37	1
Thallium	ND		0.0010	0.00050	mg/L		09/26/18 06:45	10/01/18 14:37	1
Vanadium	ND		0.010	0.0030	mg/L		09/26/18 06:45	10/01/18 14:37	1
Zinc	**0.029**		0.0050	0.0040	mg/L		09/26/18 06:45	10/01/18 14:37	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		09/26/18 13:05	09/26/18 16:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.20	0.10	mg/L			09/26/18 17:52	1
Total Dissolved Solids	**590**		10	5.0	mg/L			09/24/18 09:41	1
Cyanide, Total	ND		0.025	0.013	mg/L		09/25/18 13:35	09/25/18 19:08	1

Client Sample Results

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-220348-1
SDG: September 2018

Client Sample ID: MW-5
Date Collected: 09/17/18 09:44
Date Received: 09/18/18 13:14

Lab Sample ID: 440-220348-1
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	**110**		4.0	4.0	mg/L			09/20/18 11:28	1
Bicarbonate Alkalinity as CaCO3	**110**		4.0	4.0	mg/L			09/20/18 11:28	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			09/20/18 11:28	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			09/20/18 11:28	1
Specific Conductance	**760**		1.0	1.0	umhos/cm			10/02/18 09:54	1
pH adj. to 25 deg C	**7.3**	**HF**	0.1	0.1	SU			09/19/18 16:26	1

Client Sample ID: MW-6

Date Collected: 09/17/18 10:44
Date Received: 09/18/18 13:14

Lab Sample ID: 440-220348-2

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**28**		0.50	0.25	mg/L			09/18/18 18:16	1
Nitrate as N	ND		0.11	0.055	mg/L			09/18/18 18:16	1
Fluoride	**0.69**		0.50	0.25	mg/L			09/18/18 18:16	1
Nitrite as N	ND		0.15	0.025	mg/L			09/18/18 18:16	1
Sulfate	**0.67**		0.50	0.25	mg/L			09/18/18 18:16	1

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			09/26/18 15:41	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	**4.6**		0.50	0.30	mg/L		09/26/18 06:45	09/27/18 17:11	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		09/26/18 06:45	10/01/18 15:04	1
Aluminum	ND		0.050	0.025	mg/L		09/26/18 06:45	10/01/18 15:04	1
Antimony	ND		0.0020	0.00020	mg/L		09/26/18 06:45	10/01/18 15:04	1
Arsenic	**0.039**		0.0020	0.0010	mg/L		09/26/18 06:45	10/01/18 15:04	1
Barium	**0.011**		0.0010	0.00050	mg/L		09/26/18 06:45	10/01/18 15:04	1
Beryllium	ND		0.0010	0.00010	mg/L		09/26/18 06:45	10/01/18 15:04	1
Cadmium	ND		0.0010	0.00050	mg/L		09/26/18 06:45	10/01/18 15:04	1
Calcium	**100**		0.30	0.17	mg/L		09/26/18 06:45	10/01/18 15:04	1
Chromium	ND		0.0020	0.0010	mg/L		09/26/18 06:45	10/01/18 15:04	1
Cobalt	ND		0.0010	0.00060	mg/L		09/26/18 06:45	10/01/18 15:04	1
Copper	ND		0.0020	0.0010	mg/L		09/26/18 06:45	10/01/18 15:04	1
Iron	**0.19**		0.050	0.025	mg/L		09/26/18 06:45	10/01/18 15:04	1
Lead	ND		0.0010	0.00060	mg/L		09/26/18 06:45	10/01/18 15:04	1
Magnesium	**39**		0.050	0.025	mg/L		09/26/18 06:45	10/01/18 15:04	1
Manganese	**4.6**		0.0025	0.0014	mg/L		09/26/18 06:45	10/01/18 15:04	1
Molybdenum	**0.0012**	**J**	0.0020	0.00060	mg/L		09/26/18 06:45	10/01/18 15:04	1
Nickel	ND		0.0020	0.0010	mg/L		09/26/18 06:45	10/01/18 15:04	1
Potassium	**17**		0.050	0.025	mg/L		09/26/18 06:45	10/01/18 15:04	1
Selenium	ND		0.0020	0.0010	mg/L		09/26/18 06:45	10/01/18 15:04	1
Sodium	**140**		0.10	0.080	mg/L		09/26/18 06:45	10/01/18 15:04	1
Thallium	ND		0.0010	0.00050	mg/L		09/26/18 06:45	10/01/18 15:04	1
Vanadium	ND		0.010	0.0030	mg/L		09/26/18 06:45	10/01/18 15:04	1
Zinc	ND		0.0050	0.0040	mg/L		09/26/18 06:45	10/01/18 15:04	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		09/26/18 13:05	09/26/18 16:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.20	0.10	mg/L			09/26/18 17:58	1
Total Dissolved Solids	**900**		10	5.0	mg/L			09/24/18 09:41	1
Cyanide, Total	ND		0.025	0.013	mg/L		09/25/18 13:35	09/25/18 19:08	1

Client Sample Results

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-220348-1
SDG: September 2018

Client Sample ID: MW-6
Date Collected: 09/17/18 10:44
Date Received: 09/18/18 13:14

Lab Sample ID: 440-220348-2
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	**710**		4.0	4.0	mg/L			09/20/18 11:50	1
Bicarbonate Alkalinity as CaCO3	**710**		4.0	4.0	mg/L			09/20/18 11:50	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			09/20/18 11:50	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			09/20/18 11:50	1
Specific Conductance	**1300**		1.0	1.0	umhos/cm			10/02/18 09:54	1
pH adj. to 25 deg C	**7.2**	**HF**	0.1	0.1	SU			09/19/18 16:26	1

Client Sample ID: MW-3

Date Collected: 09/17/18 12:13
Date Received: 09/18/18 13:14

Lab Sample ID: 440-220348-3

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**17**		0.50	0.25	mg/L			09/18/18 18:46	1
Nitrate as N	ND		0.11	0.055	mg/L			09/18/18 18:46	1
Fluoride	**0.85**		0.50	0.25	mg/L			09/18/18 18:46	1
Nitrite as N	ND		0.15	0.025	mg/L			09/18/18 18:46	1
Sulfate	**190**		2.5	1.3	mg/L			09/18/18 19:01	5

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			09/26/18 16:01	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	**58**		0.50	0.30	mg/L		09/26/18 06:45	09/27/18 17:15	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		09/26/18 06:45	10/01/18 15:07	1
Aluminum	ND		0.050	0.025	mg/L		09/26/18 06:45	10/01/18 15:07	1
Antimony	ND		0.0020	0.00020	mg/L		09/26/18 06:45	10/01/18 15:07	1
Arsenic	**0.34**		0.0020	0.0010	mg/L		09/26/18 06:45	10/01/18 15:07	1
Barium	**0.0080**		0.0010	0.00050	mg/L		09/26/18 06:45	10/01/18 15:07	1
Beryllium	ND		0.0010	0.00010	mg/L		09/26/18 06:45	10/01/18 15:07	1
Cadmium	ND		0.0010	0.00050	mg/L		09/26/18 06:45	10/01/18 15:07	1
Calcium	**27**		0.30	0.17	mg/L		09/26/18 06:45	10/01/18 15:07	1
Chromium	ND		0.0020	0.0010	mg/L		09/26/18 06:45	10/01/18 15:07	1
Cobalt	**0.0013**		0.0010	0.00060	mg/L		09/26/18 06:45	10/01/18 15:07	1
Copper	**0.0010**	**J**	0.0020	0.0010	mg/L		09/26/18 06:45	10/01/18 15:07	1
Iron	ND		0.050	0.025	mg/L		09/26/18 06:45	10/01/18 15:07	1
Lead	ND		0.0010	0.00060	mg/L		09/26/18 06:45	10/01/18 15:07	1
Magnesium	**17**		0.050	0.025	mg/L		09/26/18 06:45	10/01/18 15:07	1
Manganese	**3.4**		0.0025	0.0014	mg/L		09/26/18 06:45	10/01/18 15:07	1
Molybdenum	**0.0028**		0.0020	0.00060	mg/L		09/26/18 06:45	10/01/18 15:07	1
Nickel	**0.0048**		0.0020	0.0010	mg/L		09/26/18 06:45	10/01/18 15:07	1
Potassium	**21**		0.050	0.025	mg/L		09/26/18 06:45	10/01/18 15:07	1
Selenium	ND		0.0020	0.0010	mg/L		09/26/18 06:45	10/01/18 15:07	1
Sodium	**40**		0.10	0.080	mg/L		09/26/18 06:45	10/01/18 15:07	1
Thallium	ND		0.0010	0.00050	mg/L		09/26/18 06:45	10/01/18 15:07	1
Vanadium	ND		0.010	0.0030	mg/L		09/26/18 06:45	10/01/18 15:07	1
Zinc	**2.0**		0.0050	0.0040	mg/L		09/26/18 06:45	10/01/18 15:07	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		09/26/18 13:05	09/26/18 16:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	**0.22**		0.20	0.10	mg/L			09/26/18 18:03	1
Total Dissolved Solids	**440**		10	5.0	mg/L			09/24/18 09:41	1
Cyanide, Total	ND		0.025	0.013	mg/L		09/25/18 13:35	09/25/18 19:08	1

Client Sample Results

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-220348-1
SDG: September 2018

Client Sample ID: MW-3
Date Collected: 09/17/18 12:13
Date Received: 09/18/18 13:14

Lab Sample ID: 440-220348-3
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	**62**		4.0	4.0	mg/L			09/20/18 11:56	1
Bicarbonate Alkalinity as CaCO3	**62**		4.0	4.0	mg/L			09/20/18 11:56	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			09/20/18 11:56	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			09/20/18 11:56	1
Specific Conductance	**580**		1.0	1.0	umhos/cm			10/02/18 09:54	1
pH adj. to 25 deg C	**6.9**	**HF**	0.1	0.1	SU			09/19/18 16:26	1

Client Sample ID: EQUIPMENT BLANK

Date Collected: 09/17/18 12:55
Date Received: 09/18/18 13:14

Lab Sample ID: 440-220348-4

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50	0.25	mg/L			09/18/18 17:47	1
Nitrate as N	ND		0.11	0.055	mg/L			09/18/18 17:47	1
Fluoride	ND		0.50	0.25	mg/L			09/18/18 17:47	1
Nitrite as N	ND		0.15	0.025	mg/L			09/18/18 17:47	1
Sulfate	**0.30**	**J**	0.50	0.25	mg/L			09/18/18 17:47	1

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			09/26/18 17:02	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	ND	^	0.50	0.30	mg/L		09/26/18 06:45	09/26/18 20:20	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		09/26/18 06:45	10/01/18 15:10	1
Aluminum	ND		0.050	0.025	mg/L		09/26/18 06:45	10/01/18 15:10	1
Antimony	ND		0.0020	0.00020	mg/L		09/26/18 06:45	10/01/18 15:10	1
Arsenic	**0.0010**	**J**	0.0020	0.0010	mg/L		09/26/18 06:45	10/01/18 15:10	1
Barium	ND		0.0010	0.00050	mg/L		09/26/18 06:45	10/01/18 15:10	1
Beryllium	ND		0.0010	0.00010	mg/L		09/26/18 06:45	10/01/18 15:10	1
Cadmium	ND		0.0010	0.00050	mg/L		09/26/18 06:45	10/01/18 15:10	1
Calcium	ND		0.30	0.17	mg/L		09/26/18 06:45	10/01/18 15:10	1
Chromium	ND		0.0020	0.0010	mg/L		09/26/18 06:45	10/01/18 15:10	1
Cobalt	ND		0.0010	0.00060	mg/L		09/26/18 06:45	10/01/18 15:10	1
Copper	ND		0.0020	0.0010	mg/L		09/26/18 06:45	10/01/18 15:10	1
Iron	ND		0.050	0.025	mg/L		09/26/18 06:45	10/01/18 15:10	1
Lead	ND		0.0010	0.00060	mg/L		09/26/18 06:45	10/01/18 15:10	1
Magnesium	ND		0.050	0.025	mg/L		09/26/18 06:45	10/01/18 15:10	1
Manganese	**0.0038**		0.0025	0.0014	mg/L		09/26/18 06:45	10/01/18 15:10	1
Molybdenum	ND		0.0020	0.00060	mg/L		09/26/18 06:45	10/01/18 15:10	1
Nickel	ND		0.0020	0.0010	mg/L		09/26/18 06:45	10/01/18 15:10	1
Potassium	ND		0.050	0.025	mg/L		09/26/18 06:45	10/01/18 15:10	1
Selenium	ND		0.0020	0.0010	mg/L		09/26/18 06:45	10/01/18 15:10	1
Sodium	ND		0.10	0.080	mg/L		09/26/18 06:45	10/01/18 15:10	1
Thallium	ND		0.0010	0.00050	mg/L		09/26/18 06:45	10/01/18 15:10	1
Vanadium	ND		0.010	0.0030	mg/L		09/26/18 06:45	10/01/18 15:10	1
Zinc	**0.012**		0.0050	0.0040	mg/L		09/26/18 06:45	10/01/18 15:10	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		09/26/18 13:05	09/26/18 16:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.20	0.10	mg/L			09/26/18 19:03	1
Total Dissolved Solids	ND		10	5.0	mg/L			09/24/18 09:41	1
Cyanide, Total	ND		0.025	0.013	mg/L		09/25/18 13:35	09/25/18 19:08	1

Client Sample Results

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-220348-1
SDG: September 2018

Client Sample ID: EQUIPMENT BLANK
Date Collected: 09/17/18 12:55
Date Received: 09/18/18 13:14

Lab Sample ID: 440-220348-4
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	ND		4.0	4.0	mg/L			09/20/18 12:02	1
Bicarbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			09/20/18 12:02	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			09/20/18 12:02	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			09/20/18 12:02	1
Specific Conductance	**1.1**		1.0	1.0	umhos/cm			10/02/18 09:54	1
pH adj. to 25 deg C	**5.5**	**HF**	0.1	0.1	SU			09/19/18 16:26	1

Client Sample ID: MW-1

Date Collected: 09/17/18 13:31
Date Received: 09/18/18 13:14

Lab Sample ID: 440-220348-5

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**11**		0.50	0.25	mg/L			09/18/18 19:16	1
Nitrate as N	ND		0.11	0.055	mg/L			09/18/18 19:16	1
Fluoride	**0.71**		0.50	0.25	mg/L			09/18/18 19:16	1
Nitrite as N	ND		0.15	0.025	mg/L			09/18/18 19:16	1
Sulfate	**700**		50	25	mg/L			09/18/18 21:46	100

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			09/26/18 17:23	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	**220**		2.5	1.5	mg/L		09/26/18 06:45	09/27/18 17:38	5

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		09/26/18 06:45	10/01/18 15:14	1
Aluminum	**48**		0.050	0.025	mg/L		09/26/18 06:45	10/01/18 15:14	1
Antimony	**0.0074**		0.0020	0.00020	mg/L		09/26/18 06:45	10/01/18 15:14	1
Arsenic	**5.6**		0.0020	0.0010	mg/L		09/26/18 06:45	10/01/18 15:14	1
Barium	**0.0097**		0.0010	0.00050	mg/L		09/26/18 06:45	10/01/18 15:14	1
Beryllium	**0.0093**		0.0010	0.00010	mg/L		09/26/18 06:45	10/01/18 15:14	1
Cadmium	**0.11**		0.0010	0.00050	mg/L		09/26/18 06:45	10/01/18 15:14	1
Calcium	**58**		0.30	0.17	mg/L		09/26/18 06:45	10/01/18 15:14	1
Chromium	**0.0016**	**J**	0.0020	0.0010	mg/L		09/26/18 06:45	10/01/18 15:14	1
Cobalt	**0.22**		0.0010	0.00060	mg/L		09/26/18 06:45	10/01/18 15:14	1
Copper	**0.0043**		0.0020	0.0010	mg/L		09/26/18 06:45	10/01/18 15:14	1
Iron	**34**		0.050	0.025	mg/L		09/26/18 06:45	10/01/18 15:14	1
Lead	**0.0054**		0.0010	0.00060	mg/L		09/26/18 06:45	10/01/18 15:14	1
Magnesium	**19**		0.050	0.025	mg/L		09/26/18 06:45	10/01/18 15:14	1
Manganese	**1.7**		0.0025	0.0014	mg/L		09/26/18 06:45	10/01/18 15:14	1
Molybdenum	ND		0.0020	0.00060	mg/L		09/26/18 06:45	10/01/18 15:14	1
Nickel	**0.094**		0.0020	0.0010	mg/L		09/26/18 06:45	10/01/18 15:14	1
Potassium	**49**		0.050	0.025	mg/L		09/26/18 06:45	10/01/18 15:14	1
Selenium	**0.0030**		0.0020	0.0010	mg/L		09/26/18 06:45	10/01/18 15:14	1
Sodium	**37**		0.10	0.080	mg/L		09/26/18 06:45	10/01/18 15:14	1
Thallium	**0.013**		0.0010	0.00050	mg/L		09/26/18 06:45	10/01/18 15:14	1
Vanadium	**0.052**		0.010	0.0030	mg/L		09/26/18 06:45	10/01/18 15:14	1
Zinc	**1.5**		0.0050	0.0040	mg/L		09/26/18 06:45	10/01/18 15:14	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		09/26/18 13:05	09/26/18 16:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	**0.16**	**J**	0.20	0.10	mg/L			09/26/18 18:14	1
Total Dissolved Solids	**1200**		10	5.0	mg/L			09/24/18 09:41	1
Cyanide, Total	ND		0.025	0.013	mg/L		09/25/18 13:35	09/25/18 19:08	1

Client Sample Results

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-220348-1
SDG: September 2018

Client Sample ID: MW-1
Date Collected: 09/17/18 13:31
Date Received: 09/18/18 13:14

Lab Sample ID: 440-220348-5
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	ND		4.0	4.0	mg/L			09/20/18 12:06	1
Bicarbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			09/20/18 12:06	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			09/20/18 12:06	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			09/20/18 12:06	1
Specific Conductance	**1300**		1.0	1.0	umhos/cm			10/02/18 09:54	1
pH adj. to 25 deg C	**3.4**	**HF**	0.1	0.1	SU			09/19/18 17:05	1

Client Sample ID: MW-2

Date Collected: 09/18/18 09:06
Date Received: 09/18/18 13:14

Lab Sample ID: 440-220348-6

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**14**		0.50	0.25	mg/L			09/18/18 19:45	1
Nitrate as N	ND		0.11	0.055	mg/L			09/18/18 19:45	1
Fluoride	**0.51**		0.50	0.25	mg/L			09/18/18 19:45	1
Nitrite as N	ND		0.15	0.025	mg/L			09/18/18 19:45	1
Sulfate	**550**		50	25	mg/L			09/18/18 21:17	100

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			09/26/18 17:43	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	**160**		0.50	0.30	mg/L		09/26/18 06:45	09/27/18 17:30	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		09/26/18 06:45	10/01/18 15:17	1
Aluminum	**32**		0.050	0.025	mg/L		09/26/18 06:45	10/01/18 15:17	1
Antimony	**0.0036**		0.0020	0.00020	mg/L		09/26/18 06:45	10/01/18 15:17	1
Arsenic	**2.2**		0.0020	0.0010	mg/L		09/26/18 06:45	10/01/18 15:17	1
Barium	**0.0067**		0.0010	0.00050	mg/L		09/26/18 06:45	10/01/18 15:17	1
Beryllium	**0.0060**		0.0010	0.00010	mg/L		09/26/18 06:45	10/01/18 15:17	1
Cadmium	**0.0022**		0.0010	0.00050	mg/L		09/26/18 06:45	10/01/18 15:17	1
Calcium	**48**		0.30	0.17	mg/L		09/26/18 06:45	10/01/18 15:17	1
Chromium	ND		0.0020	0.0010	mg/L		09/26/18 06:45	10/01/18 15:17	1
Cobalt	**0.15**		0.0010	0.00060	mg/L		09/26/18 06:45	10/01/18 15:17	1
Copper	**0.13**		0.0020	0.0010	mg/L		09/26/18 06:45	10/01/18 15:17	1
Iron	**9.4**		0.050	0.025	mg/L		09/26/18 06:45	10/01/18 15:17	1
Lead	ND		0.0010	0.00060	mg/L		09/26/18 06:45	10/01/18 15:17	1
Magnesium	**15**		0.050	0.025	mg/L		09/26/18 06:45	10/01/18 15:17	1
Manganese	**1.6**		0.0025	0.0014	mg/L		09/26/18 06:45	10/01/18 15:17	1
Molybdenum	ND		0.0020	0.00060	mg/L		09/26/18 06:45	10/01/18 15:17	1
Nickel	**0.054**		0.0020	0.0010	mg/L		09/26/18 06:45	10/01/18 15:17	1
Potassium	**45**		0.050	0.025	mg/L		09/26/18 06:45	10/01/18 15:17	1
Selenium	ND		0.0020	0.0010	mg/L		09/26/18 06:45	10/01/18 15:17	1
Sodium	**51**		0.10	0.080	mg/L		09/26/18 06:45	10/01/18 15:17	1
Thallium	**0.0015**		0.0010	0.00050	mg/L		09/26/18 06:45	10/01/18 15:17	1
Vanadium	ND		0.010	0.0030	mg/L		09/26/18 06:45	10/01/18 15:17	1
Zinc	**1.2**		0.0050	0.0040	mg/L		09/26/18 06:45	10/01/18 15:17	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		09/26/18 13:05	09/26/18 16:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	**0.13**	**J**	0.20	0.10	mg/L			09/26/18 19:24	1
Total Dissolved Solids	**900**		10	5.0	mg/L			09/24/18 09:41	1
Cyanide, Total	ND		0.025	0.013	mg/L		10/01/18 11:03	10/01/18 18:12	1

Client Sample Results

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-220348-1
SDG: September 2018

Client Sample ID: MW-2
Date Collected: 09/18/18 09:06
Date Received: 09/18/18 13:14

Lab Sample ID: 440-220348-6
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	ND		4.0	4.0	mg/L			09/20/18 12:11	1
Bicarbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			09/20/18 12:11	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			09/20/18 12:11	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			09/20/18 12:11	1
Specific Conductance	**1100**		1.0	1.0	umhos/cm			10/02/18 09:54	1
pH adj. to 25 deg C	**3.4**	**HF**	0.1	0.1	SU			09/19/18 17:19	1

Client Sample ID: MW-4

Date Collected: 09/18/18 09:49
Date Received: 09/18/18 13:14

Lab Sample ID: 440-220348-7

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**20**		0.50	0.25	mg/L			09/18/18 20:00	1
Nitrate as N	ND		0.11	0.055	mg/L			09/18/18 20:00	1
Fluoride	**2.6**		0.50	0.25	mg/L			09/18/18 20:00	1
Nitrite as N	**0.19**		0.15	0.025	mg/L			09/18/18 20:00	1
Sulfate	**2800**		250	130	mg/L			09/19/18 01:14	500

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			09/27/18 13:29	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	**790**		2.5	1.5	mg/L		09/26/18 06:45	09/27/18 17:42	5

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		09/26/18 06:45	10/01/18 15:20	1
Aluminum	**160**		0.050	0.025	mg/L		09/26/18 06:45	10/01/18 15:20	1
Antimony	**0.0043**		0.0020	0.00020	mg/L		09/26/18 06:45	10/01/18 15:20	1
Arsenic	**76**		0.010	0.0050	mg/L		09/26/18 06:45	10/01/18 15:22	5
Barium	**0.034**		0.0010	0.00050	mg/L		09/26/18 06:45	10/01/18 15:20	1
Beryllium	**0.026**		0.0010	0.00010	mg/L		09/26/18 06:45	10/01/18 15:20	1
Cadmium	**0.22**		0.0010	0.00050	mg/L		09/26/18 06:45	10/01/18 15:20	1
Calcium	**320**		1.5	0.85	mg/L		09/26/18 06:45	10/01/18 15:22	5
Chromium	**0.0017**	**J**	0.0020	0.0010	mg/L		09/26/18 06:45	10/01/18 15:20	1
Cobalt	**1.8**		0.0010	0.00060	mg/L		09/26/18 06:45	10/01/18 15:20	1
Copper	**0.066**		0.0020	0.0010	mg/L		09/26/18 06:45	10/01/18 15:20	1
Iron	**320**		0.25	0.13	mg/L		09/26/18 06:45	10/01/18 15:22	5
Lead	**0.0047**		0.0010	0.00060	mg/L		09/26/18 06:45	10/01/18 15:20	1
Magnesium	**65**		0.050	0.025	mg/L		09/26/18 06:45	10/01/18 15:20	1
Manganese	**7.2**		0.0025	0.0014	mg/L		09/26/18 06:45	10/01/18 15:20	1
Molybdenum	**0.0021**		0.0020	0.00060	mg/L		09/26/18 06:45	10/01/18 15:20	1
Nickel	**0.48**		0.0020	0.0010	mg/L		09/26/18 06:45	10/01/18 15:20	1
Potassium	**67**		0.050	0.025	mg/L		09/26/18 06:45	10/01/18 15:20	1
Selenium	**0.0061**		0.0020	0.0010	mg/L		09/26/18 06:45	10/01/18 15:20	1
Sodium	**94**		0.10	0.080	mg/L		09/26/18 06:45	10/01/18 15:20	1
Thallium	**0.0085**		0.0010	0.00050	mg/L		09/26/18 06:45	10/01/18 15:20	1
Vanadium	**0.054**		0.010	0.0030	mg/L		09/26/18 06:45	10/01/18 15:20	1
Zinc	**15**		0.0050	0.0040	mg/L		09/26/18 06:45	10/01/18 15:20	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		09/26/18 13:05	09/26/18 16:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	**1.5**		0.20	0.10	mg/L			09/26/18 19:13	1
Total Dissolved Solids	**4600**		50	25	mg/L			09/25/18 14:20	1
Cyanide, Total	ND		0.025	0.013	mg/L		10/01/18 11:03	10/01/18 18:12	1

Client Sample Results

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-220348-1
SDG: September 2018

Client Sample ID: MW-4
Date Collected: 09/18/18 09:49
Date Received: 09/18/18 13:14

Lab Sample ID: 440-220348-7
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	ND		4.0	4.0	mg/L			09/20/18 12:15	1
Bicarbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			09/20/18 12:15	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			09/20/18 12:15	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			09/20/18 12:15	1
Specific Conductance	**3600**		1.0	1.0	umhos/cm			10/02/18 09:54	1
pH adj. to 25 deg C	**4.0**	**HF**	0.1	0.1	SU			09/19/18 16:26	1

Method Summary

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-220348-1
SDG: September 2018

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	TAL IRV
314.0 LL	Perchlorate (IC)	EPA	TAL IRV
6010B	Metals (ICP)	SW846	TAL SAC
6020	Metals (ICP/MS)	SW846	TAL SAC
7470A	Mercury (CVAA)	SW846	TAL SAC
350.1	Nitrogen, Ammonia	MCAWW	TAL IRV
SM 2320B	Alkalinity	SM	TAL IRV
SM 2510B	Conductivity, Specific Conductance	SM	TAL IRV
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL IRV
SM 4500 CN E	Cyanide, Total	SM	TAL IRV
SM 4500 H+ B	pH	SM	TAL IRV
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL SAC
3010A	Preparation, Total Metals	SW846	TAL SAC
7470A	Preparation, Mercury	SW846	TAL SAC
Distill/CN	Distillation, Cyanide	None	TAL IRV
Filtration	Sample Filtration	None	TAL SAC

Protocol References:

EPA = US Environmental Protection Agency
MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022
TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Lab Chronicle

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-220348-1
SDG: September 2018

Client Sample ID: MW-5

Date Collected: 09/17/18 09:44
Date Received: 09/18/18 13:14

Lab Sample ID: 440-220348-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			499598	09/18/18 16:56	NTN	TAL IRV
Total/NA	Analysis	300.0		1			499599	09/18/18 16:56	NTN	TAL IRV
Total/NA	Analysis	300.0		50			499599	09/18/18 18:01	NTN	TAL IRV
Total/NA	Analysis	314.0 LL		1			501234	09/26/18 14:38	PS	TAL IRV
Dissolved	Filtration	Filtration			1.0 mL	500 mL	247044	09/21/18 12:20	NIM	TAL SAC
Dissolved	Prep	3010A			50 mL	50 mL	247846	09/26/18 06:45	NIM	TAL SAC
Dissolved	Analysis	6010B		1			248059	09/26/18 19:47	CJH	TAL SAC
Dissolved	Filtration	Filtration			1.0 mL	500 mL	247044	09/21/18 12:20	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	247845	09/26/18 06:45	NIM	TAL SAC
Dissolved	Analysis	6020		1			249007	10/01/18 14:37	LW1	TAL SAC
Dissolved	Filtration	Filtration			1.0 mL	500 mL	247044	09/21/18 12:20	NIM	TAL SAC
Dissolved	Prep	7470A			30 mL	30 mL	247933	09/26/18 13:05	GSH	TAL SAC
Dissolved	Analysis	7470A		1			248081	09/26/18 16:16	GSH	TAL SAC
Total/NA	Analysis	350.1		1	0.8 mL	8.0 mL	501393	09/26/18 17:52	HTL	TAL IRV
Total/NA	Analysis	SM 2320B		1			500301	09/20/18 11:28	YZ	TAL IRV
Total/NA	Analysis	SM 2510B		1			502149	10/02/18 09:54	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	500689	09/24/18 09:41	XL	TAL IRV
Total/NA	Prep	Distill/CN			50 mL	50 mL	501021	09/25/18 13:35	QTN	TAL IRV
Total/NA	Analysis	SM 4500 CN E		1			501093	09/25/18 19:08	QTN	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			499933	09/19/18 16:26	CMM	TAL IRV

Client Sample ID: MW-6

Date Collected: 09/17/18 10:44
Date Received: 09/18/18 13:14

Lab Sample ID: 440-220348-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	499598	09/18/18 18:16	NTN	TAL IRV
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	499599	09/18/18 18:16	NTN	TAL IRV
Total/NA	Analysis	314.0 LL		1			501234	09/26/18 15:41	PS	TAL IRV
Dissolved	Filtration	Filtration			1.0 mL	500 mL	247044	09/21/18 12:20	NIM	TAL SAC
Dissolved	Prep	3010A			50 mL	50 mL	247846	09/26/18 06:45	NIM	TAL SAC
Dissolved	Analysis	6010B		1			248363	09/27/18 17:11	CJH	TAL SAC
Dissolved	Filtration	Filtration			1.0 mL	500 mL	247044	09/21/18 12:20	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	247845	09/26/18 06:45	NIM	TAL SAC
Dissolved	Analysis	6020		1			249007	10/01/18 15:04	LW1	TAL SAC
Dissolved	Filtration	Filtration			1.0 mL	500 mL	247044	09/21/18 12:20	NIM	TAL SAC
Dissolved	Prep	7470A			30 mL	30 mL	247933	09/26/18 13:05	GSH	TAL SAC
Dissolved	Analysis	7470A		1			248081	09/26/18 16:31	GSH	TAL SAC
Total/NA	Analysis	350.1		1	0.8 mL	8.0 mL	501393	09/26/18 17:58	HTL	TAL IRV
Total/NA	Analysis	SM 2320B		1			500301	09/20/18 11:50	YZ	TAL IRV
Total/NA	Analysis	SM 2510B		1			502149	10/02/18 09:54	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	500689	09/24/18 09:41	XL	TAL IRV

Lab Chronicle

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-220348-1
SDG: September 2018

Client Sample ID: MW-6

Date Collected: 09/17/18 10:44
Date Received: 09/18/18 13:14

Lab Sample ID: 440-220348-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	Distill/CN			50 mL	50 mL	501021	09/25/18 13:35	QTN	TAL IRV
Total/NA	Analysis	SM 4500 CN E		1			501093	09/25/18 19:08	QTN	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			499933	09/19/18 16:26	CMM	TAL IRV

Client Sample ID: MW-3

Date Collected: 09/17/18 12:13
Date Received: 09/18/18 13:14

Lab Sample ID: 440-220348-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	499598	09/18/18 18:46	NTN	TAL IRV
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	499599	09/18/18 18:46	NTN	TAL IRV
Total/NA	Analysis	300.0		5			499599	09/18/18 19:01	NTN	TAL IRV
Total/NA	Analysis	314.0 LL		1			501234	09/26/18 16:01	PS	TAL IRV
Dissolved	Filtration	Filtration			1.0 mL	500 mL	247044	09/21/18 12:20	NIM	TAL SAC
Dissolved	Prep	3010A			50 mL	50 mL	247846	09/26/18 06:45	NIM	TAL SAC
Dissolved	Analysis	6010B		1			248363	09/27/18 17:15	CJH	TAL SAC
Dissolved	Filtration	Filtration			1.0 mL	500 mL	247044	09/21/18 12:20	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	247845	09/26/18 06:45	NIM	TAL SAC
Dissolved	Analysis	6020		1			249007	10/01/18 15:07	LW1	TAL SAC
Dissolved	Filtration	Filtration			1.0 mL	500 mL	247044	09/21/18 12:20	NIM	TAL SAC
Dissolved	Prep	7470A			30 mL	30 mL	247933	09/26/18 13:05	GSH	TAL SAC
Dissolved	Analysis	7470A		1			248081	09/26/18 16:33	GSH	TAL SAC
Total/NA	Analysis	350.1		1	0.8 mL	8.0 mL	501393	09/26/18 18:03	HTL	TAL IRV
Total/NA	Analysis	SM 2320B		1			500301	09/20/18 11:56	YZ	TAL IRV
Total/NA	Analysis	SM 2510B		1			502149	10/02/18 09:54	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	500689	09/24/18 09:41	XL	TAL IRV
Total/NA	Prep	Distill/CN			50 mL	50 mL	501021	09/25/18 13:35	QTN	TAL IRV
Total/NA	Analysis	SM 4500 CN E		1			501093	09/25/18 19:08	QTN	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			499933	09/19/18 16:26	CMM	TAL IRV

Client Sample ID: EQUIPMENT BLANK

Date Collected: 09/17/18 12:55
Date Received: 09/18/18 13:14

Lab Sample ID: 440-220348-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			499598	09/18/18 17:47	NTN	TAL IRV
Total/NA	Analysis	300.0		1			499599	09/18/18 17:47	NTN	TAL IRV
Total/NA	Analysis	314.0 LL		1			501234	09/26/18 17:02	PS	TAL IRV
Dissolved	Filtration	Filtration			1.0 mL	500 mL	247044	09/21/18 12:20	NIM	TAL SAC
Dissolved	Prep	3010A			50 mL	50 mL	247846	09/26/18 06:45	NIM	TAL SAC
Dissolved	Analysis	6010B		1			248059	09/26/18 20:20	CJH	TAL SAC
Dissolved	Filtration	Filtration			1.0 mL	500 mL	247044	09/21/18 12:20	NIM	TAL SAC

Client Sample ID: EQUIPMENT BLANK

Lab Sample ID: 440-220348-4

Date Collected: 09/17/18 12:55
Matrix: Water
Date Received: 09/18/18 13:14

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			50 mL	50 mL	247845	09/26/18 06:45	NIM	TAL SAC
Dissolved	Analysis	6020		1			249007	10/01/18 15:10	LW1	TAL SAC
Dissolved	Filtration	Filtration			1.0 mL	500 mL	247044	09/21/18 12:20	NIM	TAL SAC
Dissolved	Prep	7470A			30 mL	30 mL	247933	09/26/18 13:05	GSH	TAL SAC
Dissolved	Analysis	7470A		1			248081	09/26/18 16:36	GSH	TAL SAC
Total/NA	Analysis	350.1		1	0.8 mL	8.0 mL	501393	09/26/18 19:03	HTL	TAL IRV
Total/NA	Analysis	SM 2320B		1			500301	09/20/18 12:02	YZ	TAL IRV
Total/NA	Analysis	SM 2510B		1			502149	10/02/18 09:54	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	500689	09/24/18 09:41	XL	TAL IRV
Total/NA	Prep	Distill/CN			50 mL	50 mL	501021	09/25/18 13:35	QTN	TAL IRV
Total/NA	Analysis	SM 4500 CN E		1			501093	09/25/18 19:08	QTN	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			499933	09/19/18 16:26	CMM	TAL IRV

Client Sample ID: MW-1

Lab Sample ID: 440-220348-5

Date Collected: 09/17/18 13:31
Matrix: Water
Date Received: 09/18/18 13:14

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	499598	09/18/18 19:16	NTN	TAL IRV
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	499599	09/18/18 19:16	NTN	TAL IRV
Total/NA	Analysis	300.0		100			499599	09/18/18 21:46	NTN	TAL IRV
Total/NA	Analysis	314.0 LL		1			501234	09/26/18 17:23	PS	TAL IRV
Dissolved	Filtration	Filtration			1.0 mL	500 mL	247044	09/21/18 12:20	NIM	TAL SAC
Dissolved	Prep	3010A			50 mL	50 mL	247846	09/26/18 06:45	NIM	TAL SAC
Dissolved	Analysis	6010B		5			248363	09/27/18 17:38	CJH	TAL SAC
Dissolved	Filtration	Filtration			1.0 mL	500 mL	247044	09/21/18 12:20	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	247845	09/26/18 06:45	NIM	TAL SAC
Dissolved	Analysis	6020		1			249007	10/01/18 15:14	LW1	TAL SAC
Dissolved	Filtration	Filtration			1.0 mL	500 mL	247044	09/21/18 12:20	NIM	TAL SAC
Dissolved	Prep	7470A			30 mL	30 mL	247933	09/26/18 13:05	GSH	TAL SAC
Dissolved	Analysis	7470A		1			248081	09/26/18 16:38	GSH	TAL SAC
Total/NA	Analysis	350.1		1	0.8 mL	8.0 mL	501393	09/26/18 18:14	HTL	TAL IRV
Total/NA	Analysis	SM 2320B		1			500301	09/20/18 12:06	YZ	TAL IRV
Total/NA	Analysis	SM 2510B		1			502149	10/02/18 09:54	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	500689	09/24/18 09:41	XL	TAL IRV
Total/NA	Prep	Distill/CN			50 mL	50 mL	501021	09/25/18 13:35	QTN	TAL IRV
Total/NA	Analysis	SM 4500 CN E		1			501093	09/25/18 19:08	QTN	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			499933	09/19/18 17:05	CMM	TAL IRV

Lab Chronicle

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-220348-1
SDG: September 2018

Client Sample ID: MW-2

Date Collected: 09/18/18 09:06
Date Received: 09/18/18 13:14

Lab Sample ID: 440-220348-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	499598	09/18/18 19:45	NTN	TAL IRV
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	499599	09/18/18 19:45	NTN	TAL IRV
Total/NA	Analysis	300.0		100			499599	09/18/18 21:17	NTN	TAL IRV
Total/NA	Analysis	314.0 LL		1			501234	09/26/18 17:43	PS	TAL IRV
Dissolved	Filtration	Filtration			1.0 mL	500 mL	247044	09/21/18 12:20	NIM	TAL SAC
Dissolved	Prep	3010A			50 mL	50 mL	247846	09/26/18 06:45	NIM	TAL SAC
Dissolved	Analysis	6010B		1			248363	09/27/18 17:30	CJH	TAL SAC
Dissolved	Filtration	Filtration			1.0 mL	500 mL	247044	09/21/18 12:20	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	247845	09/26/18 06:45	NIM	TAL SAC
Dissolved	Analysis	6020		1			249007	10/01/18 15:17	LW1	TAL SAC
Dissolved	Filtration	Filtration			1.0 mL	500 mL	247044	09/21/18 12:20	NIM	TAL SAC
Dissolved	Prep	7470A			30 mL	30 mL	247933	09/26/18 13:05	GSH	TAL SAC
Dissolved	Analysis	7470A		1			248081	09/26/18 16:40	GSH	TAL SAC
Total/NA	Analysis	350.1		1	0.8 mL	8.0 mL	501393	09/26/18 19:24	HTL	TAL IRV
Total/NA	Analysis	SM 2320B		1			500301	09/20/18 12:11	YZ	TAL IRV
Total/NA	Analysis	SM 2510B		1			502149	10/02/18 09:54	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	500689	09/24/18 09:41	XL	TAL IRV
Total/NA	Prep	Distill/CN			50 mL	50 mL	502174	10/01/18 11:03	KMY	TAL IRV
Total/NA	Analysis	SM 4500 CN E		1			502279	10/01/18 18:12	KMY	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			499933	09/19/18 17:19	CMM	TAL IRV

Client Sample ID: MW-4

Date Collected: 09/18/18 09:49
Date Received: 09/18/18 13:14

Lab Sample ID: 440-220348-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	499598	09/18/18 20:00	NTN	TAL IRV
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	499599	09/18/18 20:00	NTN	TAL IRV
Total/NA	Analysis	300.0		500			499599	09/19/18 01:14	NTN	TAL IRV
Total/NA	Analysis	314.0 LL		1			501429	09/27/18 13:29	PS	TAL IRV
Dissolved	Filtration	Filtration			1.0 mL	500 mL	247044	09/21/18 12:20	NIM	TAL SAC
Dissolved	Prep	3010A			50 mL	50 mL	247846	09/26/18 06:45	NIM	TAL SAC
Dissolved	Analysis	6010B		5			248363	09/27/18 17:42	CJH	TAL SAC
Dissolved	Filtration	Filtration			1.0 mL	500 mL	247044	09/21/18 12:20	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	247845	09/26/18 06:45	NIM	TAL SAC
Dissolved	Analysis	6020		1			249007	10/01/18 15:20	LW1	TAL SAC
Dissolved	Filtration	Filtration			1.0 mL	500 mL	247044	09/21/18 12:20	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	247845	09/26/18 06:45	NIM	TAL SAC
Dissolved	Analysis	6020		5			249007	10/01/18 15:22	LW1	TAL SAC
Dissolved	Filtration	Filtration			1.0 mL	500 mL	247044	09/21/18 12:20	NIM	TAL SAC
Dissolved	Prep	7470A			30 mL	30 mL	247933	09/26/18 13:05	GSH	TAL SAC
Dissolved	Analysis	7470A		1			248081	09/26/18 16:43	GSH	TAL SAC
Total/NA	Analysis	350.1		1	0.8 mL	8.0 mL	501393	09/26/18 19:13	HTL	TAL IRV

Lab Chronicle

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-220348-1
SDG: September 2018

Client Sample ID: MW-4

Date Collected: 09/18/18 09:49
Date Received: 09/18/18 13:14

Lab Sample ID: 440-220348-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2320B		1			500301	09/20/18 12:15	YZ	TAL IRV
Total/NA	Analysis	SM 2510B		1			502149	10/02/18 09:54	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	20 mL	100 mL	500927	09/25/18 14:20	XL	TAL IRV
Total/NA	Prep	Distill/CN			50 mL	50 mL	502174	10/01/18 11:03	KMY	TAL IRV
Total/NA	Analysis	SM 4500 CN E		1			502279	10/01/18 18:12	KMY	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			499933	09/19/18 16:26	CMM	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 440-499598/6
Matrix: Water
Analysis Batch: 499598

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.11	0.055	mg/L			09/18/18 11:17	1
Nitrite as N	ND		0.15	0.025	mg/L			09/18/18 11:17	1

Lab Sample ID: LCS 440-499598/5
Matrix: Water
Analysis Batch: 499598

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	1.13	1.18		mg/L		104	90 - 110
Nitrite as N	1.52	1.55		mg/L		102	90 - 110

Lab Sample ID: MB 440-499599/6
Matrix: Water
Analysis Batch: 499599

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50	0.25	mg/L			09/18/18 11:17	1
Fluoride	ND		0.50	0.25	mg/L			09/18/18 11:17	1
Sulfate	ND		0.50	0.25	mg/L			09/18/18 11:17	1

Lab Sample ID: LCS 440-499599/5
Matrix: Water
Analysis Batch: 499599

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	5.00	4.92		mg/L		98	90 - 110
Fluoride	5.00	4.74		mg/L		95	90 - 110
Sulfate	5.00	4.97		mg/L		99	90 - 110

Method: 314.0 LL - Perchlorate (IC)

Lab Sample ID: MB 440-501234/6
Matrix: Water
Analysis Batch: 501234

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			09/26/18 13:54	1

Lab Sample ID: LCS 440-501234/5
Matrix: Water
Analysis Batch: 501234

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	25.0	23.3		ug/L		93	85 - 115

Method: 314.0 LL - Perchlorate (IC) (Continued)

Lab Sample ID: MRL 440-501234/4
Matrix: Water
Analysis Batch: 501234

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits		
Perchlorate			1.00	0.988	J	ug/L		99	75 - 125		

Lab Sample ID: 440-220348-1 MS
Matrix: Water
Analysis Batch: 501234

Client Sample ID: MW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Perchlorate	ND		25.0	28.0		ug/L		112	80 - 120		

Lab Sample ID: 440-220348-1 MSD
Matrix: Water
Analysis Batch: 501234

Client Sample ID: MW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perchlorate	ND		25.0	28.2		ug/L		113	80 - 120	1	20

Lab Sample ID: MB 440-501429/13
Matrix: Water
Analysis Batch: 501429

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			09/27/18 12:18	1

Lab Sample ID: LCS 440-501429/14
Matrix: Water
Analysis Batch: 501429

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Perchlorate			25.0	25.0		ug/L		100	85 - 115		

Lab Sample ID: MRL 440-501429/4
Matrix: Water
Analysis Batch: 501429

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits		
Perchlorate			1.00	1.12		ug/L		112	75 - 125		

Lab Sample ID: 440-220348-7 MS
Matrix: Water
Analysis Batch: 501429

Client Sample ID: MW-4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Perchlorate	ND		25.0	27.6		ug/L		110	80 - 120		

Lab Sample ID: 440-220348-7 MSD
Matrix: Water
Analysis Batch: 501429

Client Sample ID: MW-4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perchlorate	ND		25.0	26.7		ug/L		107	80 - 120	3	20

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 320-247846/1-A
Matrix: Water
Analysis Batch: 248059

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 247846

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	ND		0.50	0.30	mg/L		09/26/18 06:45	09/26/18 19:39	1

Lab Sample ID: LCS 320-247846/2-A
Matrix: Water
Analysis Batch: 248059

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 247846

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfur	10.0	10.8		mg/L		108	80 - 120

Lab Sample ID: 440-220348-1 MS
Matrix: Water
Analysis Batch: 248363

Client Sample ID: MW-5
Prep Type: Dissolved
Prep Batch: 247846

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfur	92		10.0	95.0	4	mg/L		32	80 - 120

Lab Sample ID: 440-220348-1 MSD
Matrix: Water
Analysis Batch: 248363

Client Sample ID: MW-5
Prep Type: Dissolved
Prep Batch: 247846

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfur	92		10.0	96.4	4	mg/L		46	80 - 120	1	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: LCS 320-247845/2-A
Matrix: Water
Analysis Batch: 249007

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 247845

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.0500	0.0506		mg/L		101	80 - 120
Aluminum	1.00	1.02		mg/L		102	80 - 120
Antimony	0.200	0.208		mg/L		104	80 - 120
Arsenic	0.200	0.208		mg/L		104	80 - 120
Barium	0.200	0.211		mg/L		105	80 - 120
Beryllium	0.200	0.202		mg/L		101	80 - 120
Cadmium	0.200	0.214		mg/L		107	80 - 120
Calcium	1.00	1.02		mg/L		102	80 - 120
Chromium	0.200	0.207		mg/L		104	80 - 120
Cobalt	0.200	0.207		mg/L		104	80 - 120
Copper	0.200	0.205		mg/L		103	80 - 120
Iron	1.00	1.03		mg/L		103	80 - 120
Lead	0.200	0.215		mg/L		108	80 - 120
Magnesium	1.00	0.995		mg/L		100	80 - 120
Manganese	0.200	0.202		mg/L		101	80 - 120
Molybdenum	0.200	0.211		mg/L		106	80 - 120
Nickel	0.200	0.206		mg/L		103	80 - 120
Potassium	1.00	0.940		mg/L		94	80 - 120
Selenium	0.200	0.204		mg/L		102	80 - 120

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 320-247845/2-A
Matrix: Water
Analysis Batch: 249007

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 247845

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium	1.00	0.991		mg/L		99	80 - 120
Thallium	0.0500	0.0530		mg/L		106	80 - 120
Vanadium	0.200	0.205		mg/L		102	80 - 120
Zinc	0.200	0.211		mg/L		106	80 - 120

Lab Sample ID: MB 320-247044/1-B
Matrix: Water
Analysis Batch: 249007

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 247845

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		09/26/18 06:45	10/01/18 14:31	1
Aluminum	ND		0.050	0.025	mg/L		09/26/18 06:45	10/01/18 14:31	1
Antimony	ND		0.0020	0.00020	mg/L		09/26/18 06:45	10/01/18 14:31	1
Arsenic	ND		0.0020	0.0010	mg/L		09/26/18 06:45	10/01/18 14:31	1
Barium	ND		0.0010	0.00050	mg/L		09/26/18 06:45	10/01/18 14:31	1
Beryllium	ND		0.0010	0.00010	mg/L		09/26/18 06:45	10/01/18 14:31	1
Cadmium	ND		0.0010	0.00050	mg/L		09/26/18 06:45	10/01/18 14:31	1
Calcium	ND		0.30	0.17	mg/L		09/26/18 06:45	10/01/18 14:31	1
Chromium	ND		0.0020	0.0010	mg/L		09/26/18 06:45	10/01/18 14:31	1
Cobalt	ND		0.0010	0.00060	mg/L		09/26/18 06:45	10/01/18 14:31	1
Copper	ND		0.0020	0.0010	mg/L		09/26/18 06:45	10/01/18 14:31	1
Iron	ND		0.050	0.025	mg/L		09/26/18 06:45	10/01/18 14:31	1
Lead	ND		0.0010	0.00060	mg/L		09/26/18 06:45	10/01/18 14:31	1
Magnesium	ND		0.050	0.025	mg/L		09/26/18 06:45	10/01/18 14:31	1
Manganese	ND		0.0025	0.0014	mg/L		09/26/18 06:45	10/01/18 14:31	1
Molybdenum	ND		0.0020	0.00060	mg/L		09/26/18 06:45	10/01/18 14:31	1
Nickel	ND		0.0020	0.0010	mg/L		09/26/18 06:45	10/01/18 14:31	1
Potassium	ND		0.050	0.025	mg/L		09/26/18 06:45	10/01/18 14:31	1
Selenium	ND		0.0020	0.0010	mg/L		09/26/18 06:45	10/01/18 14:31	1
Sodium	ND		0.10	0.080	mg/L		09/26/18 06:45	10/01/18 14:31	1
Thallium	ND		0.0010	0.00050	mg/L		09/26/18 06:45	10/01/18 14:31	1
Vanadium	ND		0.010	0.0030	mg/L		09/26/18 06:45	10/01/18 14:31	1
Zinc	ND		0.0050	0.0040	mg/L		09/26/18 06:45	10/01/18 14:31	1

Lab Sample ID: 440-220348-1 MS
Matrix: Water
Analysis Batch: 249007

Client Sample ID: MW-5
Prep Type: Dissolved
Prep Batch: 247845

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	ND		0.0500	0.0487		mg/L		97	80 - 120
Aluminum	ND		1.00	1.07		mg/L		107	80 - 120
Antimony	0.00044	J	0.200	0.208		mg/L		104	80 - 120
Arsenic	0.78		0.200	0.996		mg/L		109	80 - 120
Barium	0.021		0.200	0.228		mg/L		104	80 - 120
Beryllium	ND		0.200	0.199		mg/L		99	80 - 120
Cadmium	ND		0.200	0.204		mg/L		102	80 - 120
Calcium	61		1.00	62.1	4	mg/L		65	80 - 120
Chromium	ND		0.200	0.207		mg/L		104	80 - 120
Cobalt	ND		0.200	0.206		mg/L		103	80 - 120

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 440-220348-1 MS
Matrix: Water
Analysis Batch: 249007

Client Sample ID: MW-5
Prep Type: Dissolved
Prep Batch: 247845

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	0.0017	J	0.200	0.203		mg/L		101	80 - 120
Iron	ND		1.00	1.11		mg/L		111	80 - 120
Lead	ND		0.200	0.205		mg/L		102	80 - 120
Magnesium	20		1.00	21.7	4	mg/L		189	80 - 120
Manganese	0.022		0.200	0.226		mg/L		102	80 - 120
Molybdenum	0.0032		0.200	0.217		mg/L		107	80 - 120
Nickel	0.0029		0.200	0.204		mg/L		101	80 - 120
Potassium	23		1.00	24.3	4	mg/L		137	80 - 120
Selenium	0.0060		0.200	0.198		mg/L		96	80 - 120
Sodium	56		1.00	58.3	4	mg/L		213	80 - 120
Thallium	ND		0.0500	0.0515		mg/L		103	80 - 120
Vanadium	ND		0.200	0.210		mg/L		105	80 - 120
Zinc	0.029		0.200	0.230		mg/L		101	80 - 120

Lab Sample ID: 440-220348-1 MSD
Matrix: Water
Analysis Batch: 249007

Client Sample ID: MW-5
Prep Type: Dissolved
Prep Batch: 247845

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	ND		0.0500	0.0491		mg/L		98	80 - 120	1	15
Aluminum	ND		1.00	1.07		mg/L		107	80 - 120	0	15
Antimony	0.00044	J	0.200	0.213		mg/L		106	80 - 120	2	15
Arsenic	0.78		0.200	0.985		mg/L		103	80 - 120	1	15
Barium	0.021		0.200	0.232		mg/L		105	80 - 120	2	15
Beryllium	ND		0.200	0.198		mg/L		99	80 - 120	0	15
Cadmium	ND		0.200	0.208		mg/L		104	80 - 120	2	15
Calcium	61		1.00	63.1	4	mg/L		159	80 - 120	2	15
Chromium	ND		0.200	0.205		mg/L		102	80 - 120	1	15
Cobalt	ND		0.200	0.204		mg/L		102	80 - 120	1	15
Copper	0.0017	J	0.200	0.200		mg/L		99	80 - 120	2	15
Iron	ND		1.00	1.09		mg/L		109	80 - 120	2	15
Lead	ND		0.200	0.208		mg/L		104	80 - 120	1	15
Magnesium	20		1.00	21.4	4	mg/L		160	80 - 120	1	15
Manganese	0.022		0.200	0.224		mg/L		101	80 - 120	1	15
Molybdenum	0.0032		0.200	0.216		mg/L		106	80 - 120	1	15
Nickel	0.0029		0.200	0.201		mg/L		99	80 - 120	1	15
Potassium	23		1.00	24.3	4	mg/L		135	80 - 120	0	17
Selenium	0.0060		0.200	0.198		mg/L		96	80 - 120	0	15
Sodium	56		1.00	58.5	4	mg/L		231	80 - 120	0	15
Thallium	ND		0.0500	0.0528		mg/L		106	80 - 120	2	15
Vanadium	ND		0.200	0.207		mg/L		103	80 - 120	2	15
Zinc	0.029		0.200	0.227		mg/L		99	80 - 120	1	15

Method: 7470A - Mercury (CVAA)

Lab Sample ID: LCS 320-247933/12-A
Matrix: Water
Analysis Batch: 248081

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 247933

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00100	0.00100		mg/L		100	82 - 113

Lab Sample ID: MB 320-247044/1-C
Matrix: Water
Analysis Batch: 248081

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 247933

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		09/26/18 13:05	09/26/18 16:01	1

Lab Sample ID: 440-220348-1 MS
Matrix: Water
Analysis Batch: 248081

Client Sample ID: MW-5
Prep Type: Dissolved
Prep Batch: 247933

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		0.00100	0.00102		mg/L		102	82 - 113

Lab Sample ID: 440-220348-1 MSD
Matrix: Water
Analysis Batch: 248081

Client Sample ID: MW-5
Prep Type: Dissolved
Prep Batch: 247933

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.00100	0.00105		mg/L		105	82 - 113	3	17

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 440-501393/10
Matrix: Water
Analysis Batch: 501393

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.20	0.10	mg/L			09/26/18 16:14	1

Lab Sample ID: MB 440-501393/34
Matrix: Water
Analysis Batch: 501393

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.20	0.10	mg/L			09/26/18 18:52	1

Lab Sample ID: LCS 440-501393/11
Matrix: Water
Analysis Batch: 501393

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	5.00	5.03		mg/L		101	90 - 110

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: LCS 440-501393/35
Matrix: Water
Analysis Batch: 501393

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	5.00	5.36		mg/L		107	90 - 110

Lab Sample ID: MRL 440-501393/9
Matrix: Water
Analysis Batch: 501393

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	0.200	0.209		mg/L		105	50 - 150

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 440-500301/30
Matrix: Water
Analysis Batch: 500301

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	ND		4.0	4.0	mg/L			09/20/18 09:23	1
Bicarbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			09/20/18 09:23	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			09/20/18 09:23	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			09/20/18 09:23	1

Lab Sample ID: LCS 440-500301/29
Matrix: Water
Analysis Batch: 500301

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3	81.3	80.1		mg/L		99	80 - 120

Lab Sample ID: 440-220348-1 DU
Matrix: Water
Analysis Batch: 500301

Client Sample ID: MW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity as CaCO3	110		106		mg/L		0	20
Bicarbonate Alkalinity as CaCO3	110		106		mg/L		0	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20
Hydroxide Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: MB 440-502149/5
Matrix: Water
Analysis Batch: 502149

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		1.0	1.0	umhos/cm			10/02/18 09:54	1

Method: SM 2510B - Conductivity, Specific Conductance (Continued)

Lab Sample ID: LCS 440-502149/6
Matrix: Water
Analysis Batch: 502149

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Specific Conductance	953	982		umhos/cm		103	90 - 110

Lab Sample ID: 440-220348-1 DU
Matrix: Water
Analysis Batch: 502149

Client Sample ID: MW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Specific Conductance	760		768		umhos/cm		2	5

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 440-500689/1
Matrix: Water
Analysis Batch: 500689

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	5.0	mg/L			09/24/18 08:40	1

Lab Sample ID: LCS 440-500689/2
Matrix: Water
Analysis Batch: 500689

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1000	1020		mg/L		102	90 - 110

Lab Sample ID: 440-220348-1 DU
Matrix: Water
Analysis Batch: 500689

Client Sample ID: MW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	590		586		mg/L		0.2	5

Lab Sample ID: MB 440-500927/1
Matrix: Water
Analysis Batch: 500927

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	5.0	mg/L			09/25/18 08:45	1

Lab Sample ID: LCS 440-500927/2
Matrix: Water
Analysis Batch: 500927

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1000	984		mg/L		98	90 - 110

Method: SM 4500 CN E - Cyanide, Total

Lab Sample ID: MB 440-501021/1-A
Matrix: Water
Analysis Batch: 501093

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 501021

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.025	0.013	mg/L		09/25/18 13:35	09/25/18 19:06	1

Lab Sample ID: LCS 440-501021/2-A
Matrix: Water
Analysis Batch: 501093

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 501021

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.200	0.202		mg/L		101	90 - 110

Lab Sample ID: MB 440-502174/1-A
Matrix: Water
Analysis Batch: 502279

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 502174

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.025	0.013	mg/L		10/01/18 11:03	10/01/18 18:11	1

Lab Sample ID: LCS 440-502174/2-A
Matrix: Water
Analysis Batch: 502279

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 502174

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.200	0.191		mg/L		96	90 - 110

Method: SM 4500 H+ B - pH

Lab Sample ID: 440-220348-4 DU
Matrix: Water
Analysis Batch: 499933

Client Sample ID: EQUIPMENT BLANK
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH adj. to 25 deg C	5.5	HF	5.5		SU		0.9	2

HPLC/IC

Analysis Batch: 499598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-220348-1	MW-5	Total/NA	Water	300.0	
440-220348-2	MW-6	Total/NA	Water	300.0	
440-220348-3	MW-3	Total/NA	Water	300.0	
440-220348-4	EQUIPMENT BLANK	Total/NA	Water	300.0	
440-220348-5	MW-1	Total/NA	Water	300.0	
440-220348-6	MW-2	Total/NA	Water	300.0	
440-220348-7	MW-4	Total/NA	Water	300.0	
MB 440-499598/6	Method Blank	Total/NA	Water	300.0	
LCS 440-499598/5	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 499599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-220348-1	MW-5	Total/NA	Water	300.0	
440-220348-1	MW-5	Total/NA	Water	300.0	
440-220348-2	MW-6	Total/NA	Water	300.0	
440-220348-3	MW-3	Total/NA	Water	300.0	
440-220348-3	MW-3	Total/NA	Water	300.0	
440-220348-4	EQUIPMENT BLANK	Total/NA	Water	300.0	
440-220348-5	MW-1	Total/NA	Water	300.0	
440-220348-5	MW-1	Total/NA	Water	300.0	
440-220348-6	MW-2	Total/NA	Water	300.0	
440-220348-6	MW-2	Total/NA	Water	300.0	
440-220348-7	MW-4	Total/NA	Water	300.0	
440-220348-7	MW-4	Total/NA	Water	300.0	
MB 440-499599/6	Method Blank	Total/NA	Water	300.0	
LCS 440-499599/5	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 501234

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-220348-1	MW-5	Total/NA	Water	314.0 LL	
440-220348-2	MW-6	Total/NA	Water	314.0 LL	
440-220348-3	MW-3	Total/NA	Water	314.0 LL	
440-220348-4	EQUIPMENT BLANK	Total/NA	Water	314.0 LL	
440-220348-5	MW-1	Total/NA	Water	314.0 LL	
440-220348-6	MW-2	Total/NA	Water	314.0 LL	
MB 440-501234/6	Method Blank	Total/NA	Water	314.0 LL	
LCS 440-501234/5	Lab Control Sample	Total/NA	Water	314.0 LL	
MRL 440-501234/4	Lab Control Sample	Total/NA	Water	314.0 LL	
440-220348-1 MS	MW-5	Total/NA	Water	314.0 LL	
440-220348-1 MSD	MW-5	Total/NA	Water	314.0 LL	

Analysis Batch: 501429

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-220348-7	MW-4	Total/NA	Water	314.0 LL	
MB 440-501429/13	Method Blank	Total/NA	Water	314.0 LL	
LCS 440-501429/14	Lab Control Sample	Total/NA	Water	314.0 LL	
MRL 440-501429/4	Lab Control Sample	Total/NA	Water	314.0 LL	
440-220348-7 MS	MW-4	Total/NA	Water	314.0 LL	
440-220348-7 MSD	MW-4	Total/NA	Water	314.0 LL	

Metals

Filtration Batch: 247044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-220348-1	MW-5	Dissolved	Water	Filtration	
440-220348-2	MW-6	Dissolved	Water	Filtration	
440-220348-3	MW-3	Dissolved	Water	Filtration	
440-220348-4	EQUIPMENT BLANK	Dissolved	Water	Filtration	
440-220348-5	MW-1	Dissolved	Water	Filtration	
440-220348-6	MW-2	Dissolved	Water	Filtration	
440-220348-7	MW-4	Dissolved	Water	Filtration	
MB 320-247044/1-B	Method Blank	Dissolved	Water	Filtration	
MB 320-247044/1-C	Method Blank	Dissolved	Water	Filtration	
440-220348-1 MS	MW-5	Dissolved	Water	Filtration	
440-220348-1 MSD	MW-5	Dissolved	Water	Filtration	

Prep Batch: 247845

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-220348-1	MW-5	Dissolved	Water	3005A	247044
440-220348-2	MW-6	Dissolved	Water	3005A	247044
440-220348-3	MW-3	Dissolved	Water	3005A	247044
440-220348-4	EQUIPMENT BLANK	Dissolved	Water	3005A	247044
440-220348-5	MW-1	Dissolved	Water	3005A	247044
440-220348-6	MW-2	Dissolved	Water	3005A	247044
440-220348-7	MW-4	Dissolved	Water	3005A	247044
MB 320-247044/1-B	Method Blank	Dissolved	Water	3005A	247044
LCS 320-247845/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
440-220348-1 MS	MW-5	Dissolved	Water	3005A	247044
440-220348-1 MSD	MW-5	Dissolved	Water	3005A	247044

Prep Batch: 247846

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-220348-1	MW-5	Dissolved	Water	3010A	247044
440-220348-2	MW-6	Dissolved	Water	3010A	247044
440-220348-3	MW-3	Dissolved	Water	3010A	247044
440-220348-4	EQUIPMENT BLANK	Dissolved	Water	3010A	247044
440-220348-5	MW-1	Dissolved	Water	3010A	247044
440-220348-6	MW-2	Dissolved	Water	3010A	247044
440-220348-7	MW-4	Dissolved	Water	3010A	247044
MB 320-247846/1-A	Method Blank	Total/NA	Water	3010A	
LCS 320-247846/2-A	Lab Control Sample	Total/NA	Water	3010A	
440-220348-1 MS	MW-5	Dissolved	Water	3010A	247044
440-220348-1 MSD	MW-5	Dissolved	Water	3010A	247044

Prep Batch: 247933

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-220348-1	MW-5	Dissolved	Water	7470A	247044
440-220348-2	MW-6	Dissolved	Water	7470A	247044
440-220348-3	MW-3	Dissolved	Water	7470A	247044
440-220348-4	EQUIPMENT BLANK	Dissolved	Water	7470A	247044
440-220348-5	MW-1	Dissolved	Water	7470A	247044
440-220348-6	MW-2	Dissolved	Water	7470A	247044
440-220348-7	MW-4	Dissolved	Water	7470A	247044
MB 320-247044/1-C	Method Blank	Dissolved	Water	7470A	247044
LCS 320-247933/12-A	Lab Control Sample	Total/NA	Water	7470A	

Metals (Continued)

Prep Batch: 247933 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-220348-1 MS	MW-5	Dissolved	Water	7470A	247044
440-220348-1 MSD	MW-5	Dissolved	Water	7470A	247044

Analysis Batch: 248059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-220348-1	MW-5	Dissolved	Water	6010B	247846
440-220348-4	EQUIPMENT BLANK	Dissolved	Water	6010B	247846
MB 320-247846/1-A	Method Blank	Total/NA	Water	6010B	247846
LCS 320-247846/2-A	Lab Control Sample	Total/NA	Water	6010B	247846

Analysis Batch: 248081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-220348-1	MW-5	Dissolved	Water	7470A	247933
440-220348-2	MW-6	Dissolved	Water	7470A	247933
440-220348-3	MW-3	Dissolved	Water	7470A	247933
440-220348-4	EQUIPMENT BLANK	Dissolved	Water	7470A	247933
440-220348-5	MW-1	Dissolved	Water	7470A	247933
440-220348-6	MW-2	Dissolved	Water	7470A	247933
440-220348-7	MW-4	Dissolved	Water	7470A	247933
MB 320-247044/1-C	Method Blank	Dissolved	Water	7470A	247933
LCS 320-247933/12-A	Lab Control Sample	Total/NA	Water	7470A	247933
440-220348-1 MS	MW-5	Dissolved	Water	7470A	247933
440-220348-1 MSD	MW-5	Dissolved	Water	7470A	247933

Analysis Batch: 248363

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-220348-2	MW-6	Dissolved	Water	6010B	247846
440-220348-3	MW-3	Dissolved	Water	6010B	247846
440-220348-5	MW-1	Dissolved	Water	6010B	247846
440-220348-6	MW-2	Dissolved	Water	6010B	247846
440-220348-7	MW-4	Dissolved	Water	6010B	247846
440-220348-1 MS	MW-5	Dissolved	Water	6010B	247846
440-220348-1 MSD	MW-5	Dissolved	Water	6010B	247846

Analysis Batch: 249007

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-220348-1	MW-5	Dissolved	Water	6020	247845
440-220348-2	MW-6	Dissolved	Water	6020	247845
440-220348-3	MW-3	Dissolved	Water	6020	247845
440-220348-4	EQUIPMENT BLANK	Dissolved	Water	6020	247845
440-220348-5	MW-1	Dissolved	Water	6020	247845
440-220348-6	MW-2	Dissolved	Water	6020	247845
440-220348-7	MW-4	Dissolved	Water	6020	247845
440-220348-7	MW-4	Dissolved	Water	6020	247845
MB 320-247044/1-B	Method Blank	Dissolved	Water	6020	247845
LCS 320-247845/2-A	Lab Control Sample	Total Recoverable	Water	6020	247845
440-220348-1 MS	MW-5	Dissolved	Water	6020	247845
440-220348-1 MSD	MW-5	Dissolved	Water	6020	247845

General Chemistry

Analysis Batch: 499933

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-220348-1	MW-5	Total/NA	Water	SM 4500 H+ B	
440-220348-2	MW-6	Total/NA	Water	SM 4500 H+ B	
440-220348-3	MW-3	Total/NA	Water	SM 4500 H+ B	
440-220348-4	EQUIPMENT BLANK	Total/NA	Water	SM 4500 H+ B	
440-220348-5	MW-1	Total/NA	Water	SM 4500 H+ B	
440-220348-6	MW-2	Total/NA	Water	SM 4500 H+ B	
440-220348-7	MW-4	Total/NA	Water	SM 4500 H+ B	
440-220348-4 DU	EQUIPMENT BLANK	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 500301

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-220348-1	MW-5	Total/NA	Water	SM 2320B	
440-220348-2	MW-6	Total/NA	Water	SM 2320B	
440-220348-3	MW-3	Total/NA	Water	SM 2320B	
440-220348-4	EQUIPMENT BLANK	Total/NA	Water	SM 2320B	
440-220348-5	MW-1	Total/NA	Water	SM 2320B	
440-220348-6	MW-2	Total/NA	Water	SM 2320B	
440-220348-7	MW-4	Total/NA	Water	SM 2320B	
MB 440-500301/30	Method Blank	Total/NA	Water	SM 2320B	
LCS 440-500301/29	Lab Control Sample	Total/NA	Water	SM 2320B	
440-220348-1 DU	MW-5	Total/NA	Water	SM 2320B	

Analysis Batch: 500689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-220348-1	MW-5	Total/NA	Water	SM 2540C	
440-220348-2	MW-6	Total/NA	Water	SM 2540C	
440-220348-3	MW-3	Total/NA	Water	SM 2540C	
440-220348-4	EQUIPMENT BLANK	Total/NA	Water	SM 2540C	
440-220348-5	MW-1	Total/NA	Water	SM 2540C	
440-220348-6	MW-2	Total/NA	Water	SM 2540C	
MB 440-500689/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 440-500689/2	Lab Control Sample	Total/NA	Water	SM 2540C	
440-220348-1 DU	MW-5	Total/NA	Water	SM 2540C	

Analysis Batch: 500927

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-220348-7	MW-4	Total/NA	Water	SM 2540C	
MB 440-500927/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 440-500927/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Prep Batch: 501021

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-220348-1	MW-5	Total/NA	Water	Distill/CN	
440-220348-2	MW-6	Total/NA	Water	Distill/CN	
440-220348-3	MW-3	Total/NA	Water	Distill/CN	
440-220348-4	EQUIPMENT BLANK	Total/NA	Water	Distill/CN	
440-220348-5	MW-1	Total/NA	Water	Distill/CN	
MB 440-501021/1-A	Method Blank	Total/NA	Water	Distill/CN	
LCS 440-501021/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	

General Chemistry (Continued)

Analysis Batch: 501093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-220348-1	MW-5	Total/NA	Water	SM 4500 CN E	501021
440-220348-2	MW-6	Total/NA	Water	SM 4500 CN E	501021
440-220348-3	MW-3	Total/NA	Water	SM 4500 CN E	501021
440-220348-4	EQUIPMENT BLANK	Total/NA	Water	SM 4500 CN E	501021
440-220348-5	MW-1	Total/NA	Water	SM 4500 CN E	501021
MB 440-501021/1-A	Method Blank	Total/NA	Water	SM 4500 CN E	501021
LCS 440-501021/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN E	501021

Analysis Batch: 501393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-220348-1	MW-5	Total/NA	Water	350.1	
440-220348-2	MW-6	Total/NA	Water	350.1	
440-220348-3	MW-3	Total/NA	Water	350.1	
440-220348-4	EQUIPMENT BLANK	Total/NA	Water	350.1	
440-220348-5	MW-1	Total/NA	Water	350.1	
440-220348-6	MW-2	Total/NA	Water	350.1	
440-220348-7	MW-4	Total/NA	Water	350.1	
MB 440-501393/10	Method Blank	Total/NA	Water	350.1	
MB 440-501393/34	Method Blank	Total/NA	Water	350.1	
LCS 440-501393/11	Lab Control Sample	Total/NA	Water	350.1	
LCS 440-501393/35	Lab Control Sample	Total/NA	Water	350.1	
MRL 440-501393/9	Lab Control Sample	Total/NA	Water	350.1	

Analysis Batch: 502149

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-220348-1	MW-5	Total/NA	Water	SM 2510B	
440-220348-2	MW-6	Total/NA	Water	SM 2510B	
440-220348-3	MW-3	Total/NA	Water	SM 2510B	
440-220348-4	EQUIPMENT BLANK	Total/NA	Water	SM 2510B	
440-220348-5	MW-1	Total/NA	Water	SM 2510B	
440-220348-6	MW-2	Total/NA	Water	SM 2510B	
440-220348-7	MW-4	Total/NA	Water	SM 2510B	
MB 440-502149/5	Method Blank	Total/NA	Water	SM 2510B	
LCS 440-502149/6	Lab Control Sample	Total/NA	Water	SM 2510B	
440-220348-1 DU	MW-5	Total/NA	Water	SM 2510B	

Prep Batch: 502174

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-220348-6	MW-2	Total/NA	Water	Distill/CN	
440-220348-7	MW-4	Total/NA	Water	Distill/CN	
MB 440-502174/1-A	Method Blank	Total/NA	Water	Distill/CN	
LCS 440-502174/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	

Analysis Batch: 502279

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-220348-6	MW-2	Total/NA	Water	SM 4500 CN E	502174
440-220348-7	MW-4	Total/NA	Water	SM 4500 CN E	502174
MB 440-502174/1-A	Method Blank	Total/NA	Water	SM 4500 CN E	502174
LCS 440-502174/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN E	502174

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-220348-1
SDG: September 2018

Laboratory: TestAmerica Irvine

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	CA ELAP 2706	06-30-19

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
SM 2320B		Water	Bicarbonate Alkalinity as CaCO3
SM 2320B		Water	Carbonate Alkalinity as CaCO3
SM 2320B		Water	Hydroxide Alkalinity as CaCO3

Laboratory: TestAmerica Sacramento

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2897	01-31-19

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6010B	3010A	Water	Sulfur
6020	3005A	Water	Aluminum
6020	3005A	Water	Calcium
6020	3005A	Water	Iron
6020	3005A	Water	Magnesium
6020	3005A	Water	Manganese
6020	3005A	Water	Potassium
6020	3005A	Water	Sodium

Chain of Custody Record 210844

TestAmerica
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TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☒ Other

Client Contact	Project Manager: Eric Fordham	Site Contact:	Date:	COC No. 210844
Company Name: GeoPentech	Tel/Fax: 714-796-9100	Lab Contact:	Carrier:	____ of ____ COCs
Address: 101 Academy Drive	Analysis Turnaround Time			Sampler:
City/State/Zip: Irvine, CA	☐ CALENDAR DAYS ☒ WORKING DAYS			For Lab Use Only:
Phone: 714-796-9100	TAT if different from Below Standard			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling
Project Name: Blue Eagle Mine	☐ 1 week			
Site: Rosamond, CA	☐ 2 days			Job / SDG No
PO #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	300, Eg pH, TDS	perchlorate	cyanide	alkalinity	dissolved metals	ammonia	Sample Specific Notes:
MW-5	9/17/18	9:44	G	W	6			✓	✓	✓	✓	✓	✓	
MW-6	9/17/18	10:44	G	W	6			✓	✓	✓	✓	✓	✓	
MW-3	9/17/18	12:13	G	W	6			✓	✓	✓	✓	✓	✓	
Equip. Blank	9/17/18	12:55	G	W	6			✓	✓	✓	✓	✓	✓	
MW-1	9/17/18	1:31	G	W	6			✓	✓	✓	✓	✓	✓	
MW-2	9/18/18	9:06	G	W	6			✓	✓	✓	✓	✓	✓	
MW-4	9/18/18	9:49	G	W	6			✓	✓	✓	✓	✓	✓	

TestAmerica Irvine
~~17461 Derian Ave~~
~~Suite 100~~
Irvine, CA 92614
~~Phone: 949 261 1022 Fax:~~

440-220348 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample

☐ Non-Hazard ☐ Flammable ☒ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

All samples put on ice after collection 0.9/06 0.5/02 IR-JCG Quotation #: 32011123

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd _____ Corr'd _____ Therm ID No.: _____

Relinquished by	Company	Date/Time	Received by	Company	Date/Time
William Erickson	GeoPentech	9/18 1:14			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time	Received in Laboratory by:	Company: TA-IRV	Date/Time: 9/18/18 13.14

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10/8/2018

CL26

TestAmerica Irvine
17461 Derian Ave Suite 100
Irvine, CA 92614-5817
Phone (949) 261-1022 Fax (949) 260-3297

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Laver, Linda C.	Carrier Tracking No(s):	COC No: 440-126656.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: linda.laver@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 440-220348-1
Address: 880 Riverside Parkway, ,	Due Date Requested: 10/4/2018			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: Blue Eagle Lode Mine	Project #: 32011165			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020/Filtration_ME Dissolved Metals Including Ca & Mg	6010B/Filtration_ME (MOD) Pick Your Analytes	7470A/Filtration_ME Dissolved Mercury	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
MW-5 (440-220348-1)	9/17/18	09:44 Pacific		Water			X	X	X	1	Sulfur may be high, may want to see 6010 data, Sulfur may be high, may want to see
MW-6 (440-220348-2)	9/17/18	10:44 Pacific		Water			X	X	X	1	Sulfur may be high, may want to see 6010 data, Sulfur may be high, may want to see
MW-3 (440-220348-3)	9/17/18	12:13 Pacific		Water			X	X	X	1	Sulfur may be high, may want to see 6010 data, Sulfur may be high, may want to see
EQUIPMENT BLANK (440-220348-4)	9/17/18	12:55 Pacific		Water			X	X	X	1	Sulfur may be high, may want to see 6010 data, Sulfur may be high, may want to see
MW-1 (440-220348-5)	9/17/18	13:31 Pacific		Water			X	X	X	1	Sulfur may be high, may want to see 6010 data, Sulfur may be high, may want to see
MW-2 (440-220348-6)	9/18/18	09:06 Pacific		Water			X	X	X	1	Sulfur may be high, may want to see 6010 data, Sulfur may be high, may want to see
MW-4 (440-220348-7)	9/18/18	09:49 Pacific		Water			X	X	X	1	Sulfur may be high, may want to see 6010 data, Sulfur may be high, may want to see

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time:	Company	Received by	Date/Time:	Company
[illegible]	9/19/18 (1700)	TAIRV	[illegible]	9/21/18 930	TAIRVSTE
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
	Seal	0.6°C

Ver: 09/20/2016

Login Sample Receipt Checklist

Client: GeoPentech, Inc

Job Number: 440-220348-1
SDG Number: September 2018

Login Number: 220348
List Number: 1
Creator: Escalante, Maria I

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	Not present
Sample custody seals, if present, are intact.	N/A	Not Present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: GeoPentech, Inc

Job Number: 440-220348-1
SDG Number: September 2018

Login Number: 220348
List Number: 2
Creator: Nelson, Kym D

List Source: TestAmerica Sacramento
List Creation: 09/21/18 11:53 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	Seal
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.6C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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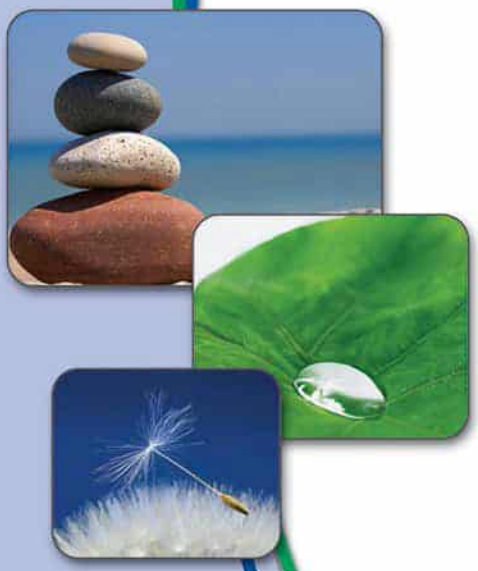

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-223416-1
TestAmerica Sample Delivery Group: October 2018
Client Project/Site: Blue Eagle Lode Mine

For:
GeoPentech, Inc
101 Academy Dr
Suite 100
Irvine, California 92617

Attn: Eric Fordham

Authorized for release by:
12/6/2018 12:56:02 PM
Laura Turpen, Project Manager I
(916)374-4414
laura.turpen@testamericainc.com

Designee for

Linda C. Laver, Project Manager II
(916)374-4362
linda.laver@testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-223416-1
SDG: October 2018

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-223416-1	MW-5	Water	10/30/18 09:28	10/31/18 16:05
440-223416-2	MW-6	Water	10/30/18 12:01	10/31/18 15:40
440-223416-3	MW-3	Water	10/30/18 14:06	10/31/18 15:40
440-223416-4	MW-1	Water	10/31/18 08:05	10/31/18 15:40
440-223416-5	MW-2	Water	10/31/18 09:17	10/31/18 15:40
440-223416-6	MW-4	Water	10/31/18 10:34	10/31/18 15:40

Job ID: 440-223416-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-223416-1

Comments
No additional comments.

Receipt
The samples were received on 10/31/2018 3:40 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 5 coolers at receipt time were 0.8º C, 1.2º C, 2.6º C, 3.8º C and 4.1º C.

Method 8330 was canceled due to delays by the laboratory.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

HPLC/IC
Method(s) 300.0: The following sample was diluted for Nitrate as N and Nitrite as N due to the nature of the sample matrix: MW-4 (440-223416-6). Elevated reporting limits (RLs) are provided.

Method(s) 314.0 LL: The following samples were pretreated: MW-1 (440-223416-4), MW-4 (440-223416-6), (LCS 440-508900/9), (MB 440-508900/8), (440-223416-Q-4 MS) and (440-223416-Q-4 MSD)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
Method(s) 8015B: Surrogate recovery for the following sample was outside control limits: MW-6 (440-223416-2). Evidence of matrix interference is present; therefore, re-extraction and re-analysis was not performed.

Method(s) 8015B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 490-556157.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method(s) 3005A: All samples requested dissolved metals and were not filtered in the field: The samples were filtered and preserved upon receipt to the laboratory.

Method(s) 3010A: All samples requested dissolved metals and were not filtered in the field. The samples were filtered and preserved upon receipt to the laboratory.

Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 320-257361 and 320-257811 and analytical batch 320-258516 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 6010B: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-5 (440-223416-1), MW-3 (440-223416-3), MW-1 (440-223416-4), MW-2 (440-223416-5) and MW-4 (440-223416-6). Elevated reporting limits (RLs) are provided.

Method(s) 6020: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-3 (440-223416-3), MW-1 (440-223416-4), MW-2 (440-223416-5) and MW-4 (440-223416-6). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Job ID: 440-223416-1 (Continued)

Laboratory: TestAmerica Irvine (Continued)

Organic Prep
Method(s) 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with method 8015B_DRO and 8015B_DRO_DOD5 aqueous in preparation batch 320-257214.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Client Sample ID: MW-5

Date Collected: 10/30/18 09:28
Date Received: 10/31/18 16:05

Lab Sample ID: 440-223416-1

Matrix: Water

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50	35	ug/L			11/08/18 22:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*116*		*76 - 132*		*11/08/18 22:30*	*1*
4-Bromofluorobenzene (Surr)	*109*		*80 - 120*		*11/08/18 22:30*	*1*
Toluene-d8 (Surr)	*111*		*80 - 128*		*11/08/18 22:30*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.25	ug/L			11/08/18 22:30	1
Ethylbenzene	ND		0.50	0.25	ug/L			11/08/18 22:30	1
m,p-Xylene	ND		1.0	0.50	ug/L			11/08/18 22:30	1
o-Xylene	ND		0.50	0.25	ug/L			11/08/18 22:30	1
Toluene	ND		0.50	0.25	ug/L			11/08/18 22:30	1
Xylenes, Total	ND		1.0	0.50	ug/L			11/08/18 22:30	1
Naphthalene	**1.2**		1.0	0.40	ug/L			11/08/18 22:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*80 - 120*		*11/08/18 22:30*	*1*
Dibromofluoromethane (Surr)	*116*		*76 - 132*		*11/08/18 22:30*	*1*
Toluene-d8 (Surr)	*111*		*80 - 128*		*11/08/18 22:30*	*1*

Method: 8015B - Glycols -Direct Injection (GC/FID)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene glycol	ND		10	1.0	mg/L			11/09/18 13:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-butyl alcohol (Surr)	*113*		*70 - 130*		*11/09/18 13:08*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	**20**	**J**	47	15	ug/L		11/06/18 09:00	11/09/18 04:31	1
Motor Oil Range Organics (C25-C36)	**170**	**J**	470	160	ug/L		11/06/18 09:00	11/09/18 04:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*76*		*56 - 145*	*11/06/18 09:00*	*11/09/18 04:31*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**16**		2.5	1.3	mg/L			10/31/18 23:59	5
Nitrate as N	**0.16**		0.11	0.055	mg/L			10/31/18 18:40	1
Fluoride	**0.26**	**J**	0.50	0.25	mg/L			10/31/18 18:40	1
Nitrite as N	ND		0.15	0.025	mg/L			10/31/18 18:40	1
Sulfate	**240**		10	5.0	mg/L			10/31/18 21:23	20

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			11/01/18 11:31	1

Client Sample ID: MW-5

Date Collected: 10/30/18 09:28
Date Received: 10/31/18 16:05

Lab Sample ID: 440-223416-1

Matrix: Water

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	**79**		5.0	3.0	mg/L		11/08/18 07:45	11/09/18 21:58	10

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		11/08/18 07:45	11/12/18 16:00	1
Aluminum	**0.035**	**J**	0.050	0.025	mg/L		11/08/18 07:45	11/12/18 16:00	1
Antimony	ND		0.0020	0.00020	mg/L		11/08/18 07:45	11/12/18 16:00	1
Arsenic	**0.88**		0.0020	0.0010	mg/L		11/08/18 07:45	11/12/18 16:00	1
Barium	**0.016**		0.0010	0.00050	mg/L		11/08/18 07:45	11/12/18 16:00	1
Beryllium	**0.00011**	**J**	0.0010	0.00010	mg/L		11/08/18 07:45	11/12/18 16:00	1
Cadmium	ND		0.0010	0.00050	mg/L		11/08/18 07:45	11/12/18 16:00	1
Calcium	**66**		0.30	0.17	mg/L		11/08/18 07:45	11/12/18 16:00	1
Chromium	ND		0.0020	0.0010	mg/L		11/08/18 07:45	11/12/18 16:00	1
Cobalt	ND		0.0010	0.00060	mg/L		11/08/18 07:45	11/12/18 16:00	1
Copper	**0.0050**		0.0020	0.0010	mg/L		11/08/18 07:45	11/12/18 16:00	1
Iron	ND		0.050	0.025	mg/L		11/08/18 07:45	11/12/18 16:00	1
Lead	ND		0.0010	0.00060	mg/L		11/08/18 07:45	11/12/18 16:00	1
Magnesium	**21**		0.050	0.025	mg/L		11/08/18 07:45	11/12/18 16:00	1
Manganese	**0.070**		0.0025	0.0014	mg/L		11/08/18 07:45	11/12/18 16:00	1
Molybdenum	**0.0026**		0.0020	0.00060	mg/L		11/08/18 07:45	11/12/18 16:00	1
Nickel	**0.0042**		0.0020	0.0010	mg/L		11/08/18 07:45	11/12/18 16:00	1
Potassium	**25**		0.050	0.025	mg/L		11/08/18 07:45	11/12/18 16:00	1
Selenium	**0.0065**		0.0020	0.0010	mg/L		11/08/18 07:45	11/12/18 16:00	1
Sodium	**53**		0.10	0.080	mg/L		11/08/18 07:45	11/12/18 16:00	1
Thallium	ND		0.0010	0.00050	mg/L		11/08/18 07:45	11/12/18 16:00	1
Vanadium	ND		0.010	0.0030	mg/L		11/08/18 07:45	11/12/18 16:00	1
Zinc	**0.055**		0.0050	0.0040	mg/L		11/08/18 07:45	11/12/18 16:00	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		11/09/18 13:35	11/09/18 20:16	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**250**		2.5	2.5	mg/L			11/21/18 15:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	**0.16**	**J**	0.20	0.10	mg/L			11/08/18 21:10	1
Total Dissolved Solids	**570**		10	5.0	mg/L			11/02/18 08:45	1
Cyanide, Total	ND		0.025	0.013	mg/L		11/06/18 15:17	11/07/18 12:26	1
Nitrocellulose	ND		2.0	0.48	mg/L		11/13/18 09:00	11/13/18 12:27	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	**97**		4.0	4.0	mg/L			11/01/18 09:28	1
Bicarbonate Alkalinity as CaCO3	**97**		4.0	4.0	mg/L			11/01/18 09:28	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			11/01/18 09:28	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			11/01/18 09:28	1
Specific Conductance	**720**		1.0	1.0	umhos/cm			11/08/18 14:31	1
pH adj. to 25 deg C	**7.2**	**HF**	0.1	0.1	SU			11/01/18 15:34	1

Client Sample ID: MW-6

Date Collected: 10/30/18 12:01
Date Received: 10/31/18 15:40

Lab Sample ID: 440-223416-2

Matrix: Water

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	**60**		50	35	ug/L			11/08/18 21:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*109*		*76 - 132*		*11/08/18 21:06*	*1*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*		*11/08/18 21:06*	*1*
Toluene-d8 (Surr)	*112*		*80 - 128*		*11/08/18 21:06*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.25	ug/L			11/08/18 21:06	1
Ethylbenzene	ND		0.50	0.25	ug/L			11/08/18 21:06	1
m,p-Xylene	ND		1.0	0.50	ug/L			11/08/18 21:06	1
o-Xylene	ND		0.50	0.25	ug/L			11/08/18 21:06	1
Toluene	ND		0.50	0.25	ug/L			11/08/18 21:06	1
Xylenes, Total	ND		1.0	0.50	ug/L			11/08/18 21:06	1
Naphthalene	**2.7**		1.0	0.40	ug/L			11/08/18 21:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*		*11/08/18 21:06*	*1*
Dibromofluoromethane (Surr)	*109*		*76 - 132*		*11/08/18 21:06*	*1*
Toluene-d8 (Surr)	*112*		*80 - 128*		*11/08/18 21:06*	*1*

Method: 8015B - Glycols -Direct Injection (GC/FID)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene glycol	ND		10	1.0	mg/L			11/09/18 13:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-butyl alcohol (Surr)	*119*		*70 - 130*		*11/09/18 13:24*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	**3800**		47	15	ug/L		11/06/18 09:00	11/09/18 04:54	1
Motor Oil Range Organics (C25-C36)	**500**		470	160	ug/L		11/06/18 09:00	11/09/18 04:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*779*	*X*	*56 - 145*	*11/06/18 09:00*	*11/09/18 04:54*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**24**		2.5	1.3	mg/L			11/01/18 00:54	5
Nitrate as N	**0.079**	**J**	0.11	0.055	mg/L			10/31/18 18:58	1
Fluoride	**0.77**		0.50	0.25	mg/L			10/31/18 18:58	1
Nitrite as N	**0.032**	**J**	0.15	0.025	mg/L			10/31/18 18:58	1
Sulfate	**1.1**		0.50	0.25	mg/L			10/31/18 18:58	1

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			11/01/18 13:10	1

Client Sample ID: MW-6

Date Collected: 10/30/18 12:01
Date Received: 10/31/18 15:40

Lab Sample ID: 440-223416-2

Matrix: Water

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	ND		0.50	0.30	mg/L		11/08/18 07:45	11/13/18 12:38	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		11/08/18 07:45	11/12/18 16:03	1
Aluminum	ND		0.050	0.025	mg/L		11/08/18 07:45	11/12/18 16:03	1
Antimony	ND		0.0020	0.00020	mg/L		11/08/18 07:45	11/12/18 16:03	1
Arsenic	**1.4**		0.0020	0.0010	mg/L		11/08/18 07:45	11/12/18 16:03	1
Barium	**0.015**		0.0010	0.00050	mg/L		11/08/18 07:45	11/12/18 16:03	1
Beryllium	ND		0.0010	0.00010	mg/L		11/08/18 07:45	11/12/18 16:03	1
Cadmium	ND		0.0010	0.00050	mg/L		11/08/18 07:45	11/12/18 16:03	1
Calcium	**100**		0.30	0.17	mg/L		11/08/18 07:45	11/12/18 16:03	1
Chromium	ND		0.0020	0.0010	mg/L		11/08/18 07:45	11/12/18 16:03	1
Cobalt	ND		0.0010	0.00060	mg/L		11/08/18 07:45	11/12/18 16:03	1
Copper	ND		0.0020	0.0010	mg/L		11/08/18 07:45	11/12/18 16:03	1
Iron	**0.72**		0.050	0.025	mg/L		11/08/18 07:45	11/12/18 16:03	1
Lead	ND		0.0010	0.00060	mg/L		11/08/18 07:45	11/12/18 16:03	1
Magnesium	**39**		0.050	0.025	mg/L		11/08/18 07:45	11/12/18 16:03	1
Manganese	**4.1**		0.0025	0.0014	mg/L		11/08/18 07:45	11/12/18 16:03	1
Molybdenum	**0.0012**	**J**	0.0020	0.00060	mg/L		11/08/18 07:45	11/12/18 16:03	1
Nickel	ND		0.0020	0.0010	mg/L		11/08/18 07:45	11/12/18 16:03	1
Potassium	**17**		0.050	0.025	mg/L		11/08/18 07:45	11/12/18 16:03	1
Selenium	ND		0.0020	0.0010	mg/L		11/08/18 07:45	11/12/18 16:03	1
Sodium	**120**		0.10	0.080	mg/L		11/08/18 07:45	11/12/18 16:03	1
Thallium	ND		0.0010	0.00050	mg/L		11/08/18 07:45	11/12/18 16:03	1
Vanadium	ND		0.010	0.0030	mg/L		11/08/18 07:45	11/12/18 16:03	1
Zinc	ND		0.0050	0.0040	mg/L		11/08/18 07:45	11/12/18 16:03	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00023**		0.00020	0.00010	mg/L		11/15/18 12:07	11/16/18 10:43	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**420**		2.5	2.5	mg/L			11/21/18 15:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	**0.21**		0.20	0.10	mg/L			11/08/18 21:10	1
Total Dissolved Solids	**900**		10	5.0	mg/L			11/02/18 08:45	1
Cyanide, Total	ND		0.025	0.013	mg/L		11/06/18 15:17	11/07/18 12:26	1
Nitrocellulose	ND		2.0	0.48	mg/L		11/13/18 09:00	11/13/18 12:33	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	**720**		4.0	4.0	mg/L			11/01/18 09:42	1
Bicarbonate Alkalinity as CaCO3	**720**		4.0	4.0	mg/L			11/01/18 09:42	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			11/01/18 09:42	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			11/01/18 09:42	1
Specific Conductance	**1200**		1.0	1.0	umhos/cm			11/08/18 14:31	1
pH adj. to 25 deg C	**7.3**	**HF**	0.1	0.1	SU			11/01/18 15:34	1

Client Sample ID: MW-3

Date Collected: 10/30/18 14:06
Date Received: 10/31/18 15:40

Lab Sample ID: 440-223416-3

Matrix: Water

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50	35	ug/L			11/08/18 22:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*116*		*76 - 132*		*11/08/18 22:58*	*1*
4-Bromofluorobenzene (Surr)	*109*		*80 - 120*		*11/08/18 22:58*	*1*
Toluene-d8 (Surr)	*110*		*80 - 128*		*11/08/18 22:58*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.25	ug/L			11/08/18 22:58	1
Ethylbenzene	ND		0.50	0.25	ug/L			11/08/18 22:58	1
m,p-Xylene	ND		1.0	0.50	ug/L			11/08/18 22:58	1
o-Xylene	ND		0.50	0.25	ug/L			11/08/18 22:58	1
Toluene	ND		0.50	0.25	ug/L			11/08/18 22:58	1
Xylenes, Total	ND		1.0	0.50	ug/L			11/08/18 22:58	1
Naphthalene	ND		1.0	0.40	ug/L			11/08/18 22:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*80 - 120*		*11/08/18 22:58*	*1*
Dibromofluoromethane (Surr)	*116*		*76 - 132*		*11/08/18 22:58*	*1*
Toluene-d8 (Surr)	*110*		*80 - 128*		*11/08/18 22:58*	*1*

Method: 8015B - Glycols -Direct Injection (GC/FID)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene glycol	ND		10	1.0	mg/L			11/09/18 13:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-butyl alcohol (Surr)	*117*		*70 - 130*		*11/09/18 13:41*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	**67**		47	15	ug/L		11/06/18 09:00	11/09/18 05:18	1
Motor Oil Range Organics (C25-C36)	ND		470	160	ug/L		11/06/18 09:00	11/09/18 05:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*80*		*56 - 145*	*11/06/18 09:00*	*11/09/18 05:18*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**15**		5.0	2.5	mg/L			10/31/18 23:05	10
Nitrate as N	ND		0.11	0.055	mg/L			10/31/18 19:16	1
Fluoride	**0.88**		0.50	0.25	mg/L			10/31/18 19:16	1
Nitrite as N	ND		0.15	0.025	mg/L			10/31/18 19:16	1
Sulfate	**170**		5.0	2.5	mg/L			10/31/18 23:05	10

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			11/01/18 13:29	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	**54**		5.0	3.0	mg/L		11/08/18 07:45	11/09/18 22:28	10

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		11/08/18 07:45	11/12/18 16:30	1
Aluminum	ND		0.050	0.025	mg/L		11/08/18 07:45	11/12/18 16:30	1
Antimony	ND		0.0020	0.00020	mg/L		11/08/18 07:45	11/12/18 16:30	1
Arsenic	**0.32**		0.010	0.0050	mg/L		11/08/18 07:45	11/14/18 18:01	5
Barium	**0.0063**		0.0010	0.00050	mg/L		11/08/18 07:45	11/12/18 16:30	1
Beryllium	ND		0.0010	0.00010	mg/L		11/08/18 07:45	11/12/18 16:30	1
Cadmium	**0.00054**	**J**	0.0010	0.00050	mg/L		11/08/18 07:45	11/12/18 16:30	1
Calcium	**24**		0.30	0.17	mg/L		11/08/18 07:45	11/12/18 16:30	1
Chromium	ND		0.0020	0.0010	mg/L		11/08/18 07:45	11/12/18 16:30	1
Cobalt	**0.0015**		0.0010	0.00060	mg/L		11/08/18 07:45	11/12/18 16:30	1
Copper	**0.0011**	**J**	0.0020	0.0010	mg/L		11/08/18 07:45	11/12/18 16:30	1
Iron	ND		0.050	0.025	mg/L		11/08/18 07:45	11/12/18 16:30	1
Lead	ND		0.0010	0.00060	mg/L		11/08/18 07:45	11/12/18 16:30	1
Magnesium	**15**		0.050	0.025	mg/L		11/08/18 07:45	11/12/18 16:30	1
Manganese	**5.9**		0.0025	0.0014	mg/L		11/08/18 07:45	11/12/18 16:30	1
Molybdenum	**0.0053**		0.0020	0.00060	mg/L		11/08/18 07:45	11/12/18 16:30	1
Nickel	**0.0054**		0.0020	0.0010	mg/L		11/08/18 07:45	11/12/18 16:30	1
Potassium	**19**		0.050	0.025	mg/L		11/08/18 07:45	11/12/18 16:30	1
Selenium	ND		0.0020	0.0010	mg/L		11/08/18 07:45	11/12/18 16:30	1
Sodium	**40**		0.10	0.080	mg/L		11/08/18 07:45	11/12/18 16:30	1
Thallium	ND		0.0010	0.00050	mg/L		11/08/18 07:45	11/12/18 16:30	1
Vanadium	ND		0.010	0.0030	mg/L		11/08/18 07:45	11/12/18 16:30	1
Zinc	**2.4**		0.0050	0.0040	mg/L		11/08/18 07:45	11/12/18 16:30	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		11/15/18 12:07	11/16/18 10:46	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**120**		2.5	2.5	mg/L			11/21/18 15:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	**0.29**		0.20	0.10	mg/L			11/08/18 21:10	1
Total Dissolved Solids	**440**		10	5.0	mg/L			11/02/18 08:45	1
Cyanide, Total	ND		0.025	0.013	mg/L		11/09/18 14:01	11/09/18 15:13	1
Nitrocellulose	ND		2.0	0.48	mg/L		11/13/18 09:00	11/13/18 12:35	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	**68**		4.0	4.0	mg/L			11/01/18 09:49	1
Bicarbonate Alkalinity as CaCO3	**68**		4.0	4.0	mg/L			11/01/18 09:49	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			11/01/18 09:49	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			11/01/18 09:49	1
Specific Conductance	**560**		1.0	1.0	umhos/cm			11/08/18 14:31	1
pH adj. to 25 deg C	**6.9**	**HF**	0.1	0.1	SU			11/01/18 15:34	1

Client Sample ID: MW-1

Date Collected: 10/31/18 08:05
Date Received: 10/31/18 15:40

Lab Sample ID: 440-223416-4

Matrix: Water

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50	35	ug/L			11/08/18 23:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*117*		*76 - 132*		*11/08/18 23:26*	*1*
4-Bromofluorobenzene (Surr)	*111*		*80 - 120*		*11/08/18 23:26*	*1*
Toluene-d8 (Surr)	*110*		*80 - 128*		*11/08/18 23:26*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.25	ug/L			11/08/18 23:26	1
Ethylbenzene	ND		0.50	0.25	ug/L			11/08/18 23:26	1
m,p-Xylene	ND		1.0	0.50	ug/L			11/08/18 23:26	1
o-Xylene	ND		0.50	0.25	ug/L			11/08/18 23:26	1
Toluene	ND		0.50	0.25	ug/L			11/08/18 23:26	1
Xylenes, Total	ND		1.0	0.50	ug/L			11/08/18 23:26	1
Naphthalene	ND		1.0	0.40	ug/L			11/08/18 23:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*80 - 120*		*11/08/18 23:26*	*1*
Dibromofluoromethane (Surr)	*117*		*76 - 132*		*11/08/18 23:26*	*1*
Toluene-d8 (Surr)	*110*		*80 - 128*		*11/08/18 23:26*	*1*

Method: 8015B - Glycols -Direct Injection (GC/FID)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene glycol	ND		10	1.0	mg/L			11/09/18 13:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-butyl alcohol (Surr)	*121*		*70 - 130*		*11/09/18 13:57*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	**37**	**J**	47	15	ug/L		11/06/18 09:00	11/09/18 05:41	1
Motor Oil Range Organics (C25-C36)	ND		470	160	ug/L		11/06/18 09:00	11/09/18 05:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*69*		*56 - 145*	*11/06/18 09:00*	*11/09/18 05:41*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**11**		0.50	0.25	mg/L			10/31/18 19:34	1
Nitrate as N	ND		0.11	0.055	mg/L			10/31/18 19:34	1
Fluoride	**0.80**		0.50	0.25	mg/L			10/31/18 19:34	1
Nitrite as N	ND		0.15	0.025	mg/L			10/31/18 19:34	1
Sulfate	**680**		25	13	mg/L			10/31/18 23:23	50

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			11/02/18 10:12	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	**210**		5.0	3.0	mg/L		11/08/18 07:45	11/09/18 22:32	10

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		11/08/18 07:45	11/12/18 16:33	1
Aluminum	**48**		0.050	0.025	mg/L		11/08/18 07:45	11/12/18 16:33	1
Antimony	**0.0061**		0.0020	0.00020	mg/L		11/08/18 07:45	11/12/18 16:33	1
Arsenic	**3.9**		0.010	0.0050	mg/L		11/08/18 07:45	11/14/18 18:04	5
Barium	**0.0099**		0.0010	0.00050	mg/L		11/08/18 07:45	11/12/18 16:33	1
Beryllium	**0.0095**		0.0010	0.00010	mg/L		11/08/18 07:45	11/12/18 16:33	1
Cadmium	**0.10**		0.0010	0.00050	mg/L		11/08/18 07:45	11/12/18 16:33	1
Calcium	**63**		0.30	0.17	mg/L		11/08/18 07:45	11/12/18 16:33	1
Chromium	**0.0017**	**J**	0.0020	0.0010	mg/L		11/08/18 07:45	11/12/18 16:33	1
Cobalt	**0.25**		0.0010	0.00060	mg/L		11/08/18 07:45	11/12/18 16:33	1
Copper	**0.0032**		0.0020	0.0010	mg/L		11/08/18 07:45	11/12/18 16:33	1
Iron	**34**		0.050	0.025	mg/L		11/08/18 07:45	11/12/18 16:33	1
Lead	**0.0039**		0.0010	0.00060	mg/L		11/08/18 07:45	11/12/18 16:33	1
Magnesium	**19**		0.050	0.025	mg/L		11/08/18 07:45	11/12/18 16:33	1
Manganese	**1.8**		0.0025	0.0014	mg/L		11/08/18 07:45	11/12/18 16:33	1
Molybdenum	ND		0.0020	0.00060	mg/L		11/08/18 07:45	11/12/18 16:33	1
Nickel	**0.097**		0.0020	0.0010	mg/L		11/08/18 07:45	11/12/18 16:33	1
Potassium	**52**		0.050	0.025	mg/L		11/08/18 07:45	11/12/18 16:33	1
Selenium	**0.0043**		0.0020	0.0010	mg/L		11/08/18 07:45	11/12/18 16:33	1
Sodium	**37**		0.10	0.080	mg/L		11/08/18 07:45	11/12/18 16:33	1
Thallium	**0.013**		0.0010	0.00050	mg/L		11/08/18 07:45	11/12/18 16:33	1
Vanadium	**0.054**		0.010	0.0030	mg/L		11/08/18 07:45	11/12/18 16:33	1
Zinc	**1.6**		0.0050	0.0040	mg/L		11/08/18 07:45	11/12/18 16:33	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00033**		0.00020	0.00010	mg/L		11/15/18 12:07	11/16/18 10:48	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**240**		2.5	2.5	mg/L			11/21/18 15:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	**1.3**		0.20	0.10	mg/L			11/08/18 21:10	1
Total Dissolved Solids	**1200**		10	5.0	mg/L			11/02/18 08:45	1
Cyanide, Total	ND		0.025	0.013	mg/L		11/09/18 14:01	11/09/18 15:13	1
Nitrocellulose	ND		2.0	0.48	mg/L		11/13/18 09:00	11/13/18 12:37	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	ND		4.0	4.0	mg/L			11/01/18 09:57	1
Bicarbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			11/01/18 09:57	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			11/01/18 09:57	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			11/01/18 09:57	1
Specific Conductance	**1300**		1.0	1.0	umhos/cm			11/08/18 14:31	1
pH adj. to 25 deg C	**3.3**	**HF**	0.1	0.1	SU			11/01/18 16:11	1

Client Sample ID: MW-2

Date Collected: 10/31/18 09:17
Date Received: 10/31/18 15:40

Lab Sample ID: 440-223416-5

Matrix: Water

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50	35	ug/L			11/08/18 23:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*117*		*76 - 132*		*11/08/18 23:54*	*1*
4-Bromofluorobenzene (Surr)	*110*		*80 - 120*		*11/08/18 23:54*	*1*
Toluene-d8 (Surr)	*109*		*80 - 128*		*11/08/18 23:54*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.25	ug/L			11/08/18 23:54	1
Ethylbenzene	ND		0.50	0.25	ug/L			11/08/18 23:54	1
m,p-Xylene	ND		1.0	0.50	ug/L			11/08/18 23:54	1
o-Xylene	ND		0.50	0.25	ug/L			11/08/18 23:54	1
Toluene	ND		0.50	0.25	ug/L			11/08/18 23:54	1
Xylenes, Total	ND		1.0	0.50	ug/L			11/08/18 23:54	1
Naphthalene	ND		1.0	0.40	ug/L			11/08/18 23:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*80 - 120*		*11/08/18 23:54*	*1*
Dibromofluoromethane (Surr)	*117*		*76 - 132*		*11/08/18 23:54*	*1*
Toluene-d8 (Surr)	*109*		*80 - 128*		*11/08/18 23:54*	*1*

Method: 8015B - Glycols -Direct Injection (GC/FID)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene glycol	ND		10	1.0	mg/L			11/09/18 14:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-butyl alcohol (Surr)	*127*		*70 - 130*		*11/09/18 14:14*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	**24**	**J**	47	15	ug/L		11/06/18 09:00	11/09/18 06:05	1
Motor Oil Range Organics (C25-C36)	ND		470	160	ug/L		11/06/18 09:00	11/09/18 06:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*77*		*56 - 145*	*11/06/18 09:00*	*11/09/18 06:05*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.11	0.055	mg/L			10/31/18 20:10	1
Nitrite as N	ND		0.15	0.025	mg/L			10/31/18 20:10	1
Sulfate	**550**		25	13	mg/L			10/31/18 21:04	50

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**14**		0.50	0.25	mg/L			10/31/18 20:10	1
Fluoride	**0.49**	**J F1**	0.50	0.25	mg/L			10/31/18 20:10	1

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			11/01/18 14:05	1

Client Sample ID: MW-2

Date Collected: 10/31/18 09:17
Date Received: 10/31/18 15:40

Lab Sample ID: 440-223416-5

Matrix: Water

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	170		5.0	3.0	mg/L		11/08/18 07:45	11/09/18 22:36	10

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		11/08/18 07:45	11/12/18 16:36	1
Aluminum	31		0.050	0.025	mg/L		11/08/18 07:45	11/12/18 16:36	1
Antimony	0.0021		0.0020	0.00020	mg/L		11/08/18 07:45	11/12/18 16:36	1
Arsenic	0.11		0.010	0.0050	mg/L		11/08/18 07:45	11/14/18 18:07	5
Barium	0.0070		0.0010	0.00050	mg/L		11/08/18 07:45	11/12/18 16:36	1
Beryllium	0.0061		0.0010	0.00010	mg/L		11/08/18 07:45	11/12/18 16:36	1
Cadmium	0.0023		0.0010	0.00050	mg/L		11/08/18 07:45	11/12/18 16:36	1
Calcium	52		0.30	0.17	mg/L		11/08/18 07:45	11/12/18 16:36	1
Chromium	ND		0.0020	0.0010	mg/L		11/08/18 07:45	11/12/18 16:36	1
Cobalt	0.15		0.0010	0.00060	mg/L		11/08/18 07:45	11/12/18 16:36	1
Copper	0.11		0.0020	0.0010	mg/L		11/08/18 07:45	11/12/18 16:36	1
Iron	2.6		0.050	0.025	mg/L		11/08/18 07:45	11/12/18 16:36	1
Lead	ND		0.0010	0.00060	mg/L		11/08/18 07:45	11/12/18 16:36	1
Magnesium	15		0.050	0.025	mg/L		11/08/18 07:45	11/12/18 16:36	1
Manganese	1.6		0.0025	0.0014	mg/L		11/08/18 07:45	11/12/18 16:36	1
Molybdenum	ND		0.0020	0.00060	mg/L		11/08/18 07:45	11/12/18 16:36	1
Nickel	0.054		0.0020	0.0010	mg/L		11/08/18 07:45	11/12/18 16:36	1
Potassium	45		0.050	0.025	mg/L		11/08/18 07:45	11/12/18 16:36	1
Selenium	0.0011	J	0.0020	0.0010	mg/L		11/08/18 07:45	11/12/18 16:36	1
Sodium	50		0.10	0.080	mg/L		11/08/18 07:45	11/12/18 16:36	1
Thallium	0.0014		0.0010	0.00050	mg/L		11/08/18 07:45	11/12/18 16:36	1
Vanadium	ND		0.010	0.0030	mg/L		11/08/18 07:45	11/12/18 16:36	1
Zinc	1.3		0.0050	0.0040	mg/L		11/08/18 07:45	11/12/18 16:36	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00014	J	0.00020	0.00010	mg/L		11/15/18 12:07	11/16/18 10:51	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	190		2.5	2.5	mg/L			11/21/18 15:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	0.24		0.20	0.10	mg/L			11/08/18 21:10	1
Total Dissolved Solids	890		10	5.0	mg/L			11/02/18 08:45	1
Cyanide, Total	ND		0.025	0.013	mg/L		11/02/18 14:38	11/02/18 19:10	1
Nitrocellulose	ND		2.0	0.48	mg/L		11/13/18 09:00	11/13/18 12:45	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	ND		4.0	4.0	mg/L			11/01/18 10:05	1
Bicarbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			11/01/18 10:05	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			11/01/18 10:05	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			11/01/18 10:05	1
Specific Conductance	1100		1.0	1.0	umhos/cm			11/08/18 14:31	1
pH adj. to 25 deg C	3.4	HF	0.1	0.1	SU			11/01/18 16:11	1

Client Sample ID: MW-4

Date Collected: 10/31/18 10:34
Date Received: 10/31/18 15:40

Lab Sample ID: 440-223416-6

Matrix: Water

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50	35	ug/L			11/09/18 00:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*118*		*76 - 132*		*11/09/18 00:23*	*1*
4-Bromofluorobenzene (Surr)	*109*		*80 - 120*		*11/09/18 00:23*	*1*
Toluene-d8 (Surr)	*110*		*80 - 128*		*11/09/18 00:23*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.75**		0.50	0.25	ug/L			11/09/18 00:23	1
Ethylbenzene	ND		0.50	0.25	ug/L			11/09/18 00:23	1
m,p-Xylene	ND		1.0	0.50	ug/L			11/09/18 00:23	1
o-Xylene	ND		0.50	0.25	ug/L			11/09/18 00:23	1
Toluene	ND		0.50	0.25	ug/L			11/09/18 00:23	1
Xylenes, Total	ND		1.0	0.50	ug/L			11/09/18 00:23	1
Naphthalene	**0.83**	**J**	1.0	0.40	ug/L			11/09/18 00:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*80 - 120*		*11/09/18 00:23*	*1*
Dibromofluoromethane (Surr)	*118*		*76 - 132*		*11/09/18 00:23*	*1*
Toluene-d8 (Surr)	*110*		*80 - 128*		*11/09/18 00:23*	*1*

Method: 8015B - Glycols -Direct Injection (GC/FID)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene glycol	ND		10	1.0	mg/L			11/09/18 14:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-butyl alcohol (Surr)	*111*		*70 - 130*		*11/09/18 14:31*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	**54**		47	15	ug/L		11/06/18 09:00	11/09/18 06:28	1
Motor Oil Range Organics (C25-C36)	ND		470	160	ug/L		11/06/18 09:00	11/09/18 06:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*73*		*56 - 145*	*11/06/18 09:00*	*11/09/18 06:28*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**19**		1.0	0.50	mg/L			10/31/18 19:52	2
Nitrate as N	ND		0.22	0.11	mg/L			10/31/18 19:52	2
Fluoride	**1.3**		1.0	0.50	mg/L			10/31/18 19:52	2
Nitrite as N	ND		0.30	0.050	mg/L			10/31/18 19:52	2
Sulfate	**1900**		50	25	mg/L			10/31/18 23:41	100

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			11/02/18 10:32	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	**580**		5.0	3.0	mg/L		11/08/18 07:45	11/09/18 22:40	10

Client Sample Results

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-223416-1
SDG: October 2018

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		11/08/18 07:45	11/12/18 16:39	1
Aluminum	**120**		0.050	0.025	mg/L		11/08/18 07:45	11/12/18 16:39	1
Antimony	**0.0039**		0.0020	0.00020	mg/L		11/08/18 07:45	11/12/18 16:39	1
Arsenic	**110**		0.050	0.025	mg/L		11/08/18 07:45	11/14/18 18:10	25
Barium	**0.021**		0.0010	0.00050	mg/L		11/08/18 07:45	11/12/18 16:39	1
Beryllium	**0.018**		0.0010	0.00010	mg/L		11/08/18 07:45	11/12/18 16:39	1
Cadmium	**0.093**		0.0010	0.00050	mg/L		11/08/18 07:45	11/12/18 16:39	1
Calcium	**170**		0.30	0.17	mg/L		11/08/18 07:45	11/12/18 16:39	1
Chromium	**0.0014**	**J**	0.0020	0.0010	mg/L		11/08/18 07:45	11/12/18 16:39	1
Cobalt	**1.2**		0.0010	0.00060	mg/L		11/08/18 07:45	11/12/18 16:39	1
Copper	**0.60**		0.0020	0.0010	mg/L		11/08/18 07:45	11/12/18 16:39	1
Iron	**250**		1.3	0.63	mg/L		11/08/18 07:45	11/14/18 18:10	25
Lead	ND		0.0010	0.00060	mg/L		11/08/18 07:45	11/12/18 16:39	1
Magnesium	**43**		0.050	0.025	mg/L		11/08/18 07:45	11/12/18 16:39	1
Manganese	**4.7**		0.0025	0.0014	mg/L		11/08/18 07:45	11/12/18 16:39	1
Molybdenum	**0.0040**		0.0020	0.00060	mg/L		11/08/18 07:45	11/12/18 16:39	1
Nickel	**0.30**		0.0020	0.0010	mg/L		11/08/18 07:45	11/12/18 16:39	1
Potassium	**61**		0.050	0.025	mg/L		11/08/18 07:45	11/12/18 16:39	1
Selenium	**0.0040**		0.0020	0.0010	mg/L		11/08/18 07:45	11/12/18 16:39	1
Sodium	**95**		0.10	0.080	mg/L		11/08/18 07:45	11/12/18 16:39	1
Thallium	**0.0088**		0.0010	0.00050	mg/L		11/08/18 07:45	11/12/18 16:39	1
Vanadium	**0.044**		0.010	0.0030	mg/L		11/08/18 07:45	11/12/18 16:39	1
Zinc	**9.3**		0.0050	0.0040	mg/L		11/08/18 07:45	11/12/18 16:39	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00037**		0.00020	0.00010	mg/L		11/15/18 12:07	11/16/18 11:00	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**610**		2.5	2.5	mg/L			11/21/18 15:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	**1.5**		0.20	0.10	mg/L			11/08/18 21:10	1
Total Dissolved Solids	**3100**		20	10	mg/L			11/02/18 08:45	1
Cyanide, Total	ND		0.025	0.013	mg/L		11/09/18 14:01	11/09/18 15:13	1
Nitrocellulose	ND		2.0	0.48	mg/L		11/13/18 09:00	11/13/18 12:47	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	ND		4.0	4.0	mg/L			11/01/18 10:08	1
Bicarbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			11/01/18 10:08	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			11/01/18 10:08	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			11/01/18 10:08	1
Specific Conductance	**2700**		1.0	1.0	umhos/cm			11/08/18 14:31	1
pH adj. to 25 deg C	**3.9**	**HF**	0.1	0.1	SU			11/01/18 16:33	1

Method Summary

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-223416-1
SDG: October 2018

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL IRV
8260B/CA_LUFTMS	Volatile Organic Compounds by GC/MS	SW846	TAL IRV
8015B	Glycols -Direct Injection (GC/FID)	SW846	TAL NSH
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL SAC
300.0	Anions, Ion Chromatography	MCAWW	TAL IRV
314.0 LL	Perchlorate (IC)	EPA	TAL IRV
6010B	Metals (ICP)	SW846	TAL SAC
6020	Metals (ICP/MS)	SW846	TAL SAC
7470A	Mercury (CVAA)	SW846	TAL SAC
SM 2340B	Total Hardness (as CaCO3) by calculation	SM	TAL SAC
350.1	Nitrogen, Ammonia	MCAWW	TAL IRV
SM 2320B	Alkalinity	SM	TAL IRV
SM 2510B	Conductivity, Specific Conductance	SM	TAL IRV
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL IRV
SM 4500 CN E	Cyanide, Total	SM	TAL IRV
SM 4500 H+ B	pH	SM	TAL IRV
WS-WC-0050	Nitrocellulose	TAL-SAC	TAL SAC
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL SAC
3010A	Preparation, Total Metals	SW846	TAL SAC
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL SAC
353 (NCell-Hyd)	Nitrocellulose Sample Preparation (Hydrolysis)	MCAWW	TAL SAC
353.2 (NCell)	Nitrocellulose Sample Preparation	MCAWW	TAL SAC
5030B	Purge and Trap	SW846	TAL IRV
7470A	Preparation, Mercury	SW846	TAL SAC
Distill/CN	Distillation, Cyanide	None	TAL IRV
Filtration	Sample Filtration	None	TAL SAC

Protocol References:

EPA = US Environmental Protection Agency
MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
TAL-SAC = TestAmerica Laboratories, West Sacramento, Facility Standard Operating Procedure.

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022
TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177
TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Lab Chronicle

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-223416-1
SDG: October 2018

Client Sample ID: MW-5

Date Collected: 10/30/18 09:28
Date Received: 10/31/18 16:05

Lab Sample ID: 440-223416-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	510107	11/08/18 22:30	P1P	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	510108	11/08/18 22:30	WK	TAL IRV
Total/NA	Analysis	8015B		1			556157	11/09/18 13:08	AAB	TAL NSH
Total/NA	Prep	3510C			1055.5 mL	3.0 mL	257214	11/06/18 09:00	NGK	TAL SAC
Total/NA	Analysis	8015B		1			258034	11/09/18 04:31	RS1	TAL SAC
Total/NA	Analysis	300.0		1			508482	10/31/18 18:40	NN	TAL IRV
Total/NA	Analysis	300.0		1			508483	10/31/18 18:40	NN	TAL IRV
Total/NA	Analysis	300.0		20	5 mL	1.0 mL	508482	10/31/18 21:23	NN	TAL IRV
Total/NA	Analysis	300.0		5	5 mL	1.0 mL	508482	10/31/18 23:59	NN	TAL IRV
Total/NA	Analysis	314.0 LL		1			508689	11/01/18 11:31	CTH	TAL IRV
Dissolved	Filtration	Filtration			250 mL	250 mL	257361	11/06/18 14:00	NIM	TAL SAC
Dissolved	Prep	3010A			50 mL	50 mL	257811	11/08/18 07:45	NIM	TAL SAC
Dissolved	Analysis	6010B		10			258516	11/09/18 21:58	LW1	TAL SAC
Dissolved	Filtration	Filtration			250 mL	250 mL	257361	11/06/18 14:00	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	257796	11/08/18 07:45	NIM	TAL SAC
Dissolved	Analysis	6020		1			258782	11/12/18 16:00	LW1	TAL SAC
Dissolved	Filtration	Filtration			250 mL	250 mL	257361	11/06/18 14:00	NIM	TAL SAC
Dissolved	Prep	7470A			30 mL	30 mL	258240	11/09/18 13:35	DPM	TAL SAC
Dissolved	Analysis	7470A		1			258490	11/09/18 20:16	GSH	TAL SAC
Dissolved	Analysis	SM 2340B		1			260722	11/21/18 15:49	LW1	TAL SAC
Total/NA	Analysis	350.1		1	0.8 mL	8 mL	510602	11/08/18 21:10	KMY	TAL IRV
Total/NA	Analysis	SM 2320B		1			508755	11/01/18 09:28	YZ	TAL IRV
Total/NA	Analysis	SM 2510B		1			510082	11/08/18 14:31	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	508698	11/02/18 08:45	XL	TAL IRV
Total/NA	Prep	Distill/CN			50 mL	50 mL	509595	11/06/18 15:17	QTN	TAL IRV
Total/NA	Analysis	SM 4500 CN E		1			509863	11/07/18 12:26	QTN	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			508778	11/01/18 15:34	CMM	TAL IRV
Total/NA	Pre Prep	353.2 (NCell)			100 mL	50 mL	260951	11/09/18 09:00	TCS	TAL SAC
Total/NA	Prep	353 (NCell-Hyd)			50 mL	40 mL	260953	11/13/18 09:00	TCS	TAL SAC
Total/NA	Analysis	WS-WC-0050		1			258951	11/13/18 12:27	TCS	TAL SAC

Client Sample ID: MW-6

Date Collected: 10/30/18 12:01
Date Received: 10/31/18 15:40

Lab Sample ID: 440-223416-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	510107	11/08/18 21:06	P1P	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	510108	11/08/18 21:06	WK	TAL IRV
Total/NA	Analysis	8015B		1			556157	11/09/18 13:24	AAB	TAL NSH
Total/NA	Prep	3510C			1056 mL	3.0 mL	257214	11/06/18 09:00	NGK	TAL SAC
Total/NA	Analysis	8015B		1			258034	11/09/18 04:54	RS1	TAL SAC

Lab Chronicle

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-223416-1
SDG: October 2018

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	508482	10/31/18 18:58	NN	TAL IRV
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	508483	10/31/18 18:58	NN	TAL IRV
Total/NA	Analysis	300.0		5			508482	11/01/18 00:54	NN	TAL IRV
Total/NA	Analysis	314.0 LL		1			508689	11/01/18 13:10	CTH	TAL IRV
Dissolved	Filtration	Filtration			250 mL	250 mL	257361	11/06/18 14:00	NIM	TAL SAC
Dissolved	Prep	3010A			50 mL	50 mL	257811	11/08/18 07:45	NIM	TAL SAC
Dissolved	Analysis	6010B		1			259058	11/13/18 12:38	JMD	TAL SAC
Dissolved	Filtration	Filtration			250 mL	250 mL	257361	11/06/18 14:00	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	257796	11/08/18 07:45	NIM	TAL SAC
Dissolved	Analysis	6020		1			258782	11/12/18 16:03	LW1	TAL SAC
Dissolved	Filtration	Filtration			250 mL	250 mL	257361	11/06/18 14:00	NIM	TAL SAC
Dissolved	Prep	7470A			30 mL	30 mL	259403	11/15/18 12:07	DPM	TAL SAC
Dissolved	Analysis	7470A		1			259711	11/16/18 10:43	GSH	TAL SAC
Dissolved	Analysis	SM 2340B		1			260722	11/21/18 15:49	LW1	TAL SAC
Total/NA	Analysis	350.1		1	0.8 mL	8 mL	510602	11/08/18 21:10	KMY	TAL IRV
Total/NA	Analysis	SM 2320B		1			508755	11/01/18 09:42	YZ	TAL IRV
Total/NA	Analysis	SM 2510B		1			510082	11/08/18 14:31	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	508698	11/02/18 08:45	XL	TAL IRV
Total/NA	Prep	Distill/CN			50 mL	50 mL	509595	11/06/18 15:17	QTN	TAL IRV
Total/NA	Analysis	SM 4500 CN E		1			509863	11/07/18 12:26	QTN	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			508778	11/01/18 15:34	CMM	TAL IRV
Total/NA	Pre Prep	353.2 (NCell)			100 mL	50 mL	260951	11/09/18 09:00	TCS	TAL SAC
Total/NA	Prep	353 (NCell-Hyd)			50 mL	40 mL	260953	11/13/18 09:00	TCS	TAL SAC
Total/NA	Analysis	WS-WC-0050		1			258951	11/13/18 12:33	TCS	TAL SAC

Client Sample ID: MW-3

Date Collected: 10/30/18 14:06
Date Received: 10/31/18 15:40

Lab Sample ID: 440-223416-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	510107	11/08/18 22:58	P1P	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	510108	11/08/18 22:58	WK	TAL IRV
Total/NA	Analysis	8015B		1			556157	11/09/18 13:41	AAB	TAL NSH
Total/NA	Prep	3510C			1055 mL	3.0 mL	257214	11/06/18 09:00	NGK	TAL SAC
Total/NA	Analysis	8015B		1			258034	11/09/18 05:18	RS1	TAL SAC
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	508482	10/31/18 19:16	NN	TAL IRV
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	508483	10/31/18 19:16	NN	TAL IRV
Total/NA	Analysis	300.0		10	5 mL	1.0 mL	508482	10/31/18 23:05	NN	TAL IRV
Total/NA	Analysis	314.0 LL		1			508689	11/01/18 13:29	CTH	TAL IRV
Dissolved	Filtration	Filtration			250 mL	250 mL	257361	11/06/18 14:00	NIM	TAL SAC
Dissolved	Prep	3010A			50 mL	50 mL	257811	11/08/18 07:45	NIM	TAL SAC
Dissolved	Analysis	6010B		10			258516	11/09/18 22:28	LW1	TAL SAC
Dissolved	Filtration	Filtration			250 mL	250 mL	257361	11/06/18 14:00	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	257796	11/08/18 07:45	NIM	TAL SAC
Dissolved	Analysis	6020		1			258782	11/12/18 16:30	LW1	TAL SAC
Dissolved	Filtration	Filtration			250 mL	250 mL	257361	11/06/18 14:00	NIM	TAL SAC

Client Sample ID: MW-3

Date Collected: 10/30/18 14:06
Date Received: 10/31/18 15:40

Lab Sample ID: 440-223416-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			50 mL	50 mL	257796	11/08/18 07:45	NIM	TAL SAC
Dissolved	Analysis	6020		5			259338	11/14/18 18:01	LW1	TAL SAC
Dissolved	Filtration	Filtration			250 mL	250 mL	257361	11/06/18 14:00	NIM	TAL SAC
Dissolved	Prep	7470A			30 mL	30 mL	259403	11/15/18 12:07	DPM	TAL SAC
Dissolved	Analysis	7470A		1			259711	11/16/18 10:46	GSH	TAL SAC
Dissolved	Analysis	SM 2340B		1			260722	11/21/18 15:49	LW1	TAL SAC
Total/NA	Analysis	350.1		1	0.8 mL	8 mL	510602	11/08/18 21:10	KMY	TAL IRV
Total/NA	Analysis	SM 2320B		1			508755	11/01/18 09:49	YZ	TAL IRV
Total/NA	Analysis	SM 2510B		1			510082	11/08/18 14:31	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	508698	11/02/18 08:45	XL	TAL IRV
Total/NA	Prep	Distill/CN			50 mL	50 mL	510315	11/09/18 14:01	KMY	TAL IRV
Total/NA	Analysis	SM 4500 CN E		1			510402	11/09/18 15:13	QTN	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			508778	11/01/18 15:34	CMM	TAL IRV
Total/NA	Pre Prep	353.2 (NCell)			100 mL	50 mL	260951	11/09/18 09:00	TCS	TAL SAC
Total/NA	Prep	353 (NCell-Hyd)			50 mL	40 mL	260953	11/13/18 09:00	TCS	TAL SAC
Total/NA	Analysis	WS-WC-0050		1			258951	11/13/18 12:35	TCS	TAL SAC

Client Sample ID: MW-1

Date Collected: 10/31/18 08:05
Date Received: 10/31/18 15:40

Lab Sample ID: 440-223416-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	510107	11/08/18 23:26	P1P	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	510108	11/08/18 23:26	WK	TAL IRV
Total/NA	Analysis	8015B		1			556157	11/09/18 13:57	AAB	TAL NSH
Total/NA	Prep	3510C			1055.5 mL	3.0 mL	257214	11/06/18 09:00	NGK	TAL SAC
Total/NA	Analysis	8015B		1			258034	11/09/18 05:41	RS1	TAL SAC
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	508482	10/31/18 19:34	NN	TAL IRV
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	508483	10/31/18 19:34	NN	TAL IRV
Total/NA	Analysis	300.0		50	5 mL	1.0 mL	508482	10/31/18 23:23	NN	TAL IRV
Total/NA	Analysis	314.0 LL		1			508900	11/02/18 10:12	CTH	TAL IRV
Dissolved	Filtration	Filtration			250 mL	250 mL	257361	11/06/18 14:00	NIM	TAL SAC
Dissolved	Prep	3010A			50 mL	50 mL	257811	11/08/18 07:45	NIM	TAL SAC
Dissolved	Analysis	6010B		10			258516	11/09/18 22:32	LW1	TAL SAC
Dissolved	Filtration	Filtration			250 mL	250 mL	257361	11/06/18 14:00	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	257796	11/08/18 07:45	NIM	TAL SAC
Dissolved	Analysis	6020		1			258782	11/12/18 16:33	LW1	TAL SAC
Dissolved	Filtration	Filtration			250 mL	250 mL	257361	11/06/18 14:00	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	257796	11/08/18 07:45	NIM	TAL SAC
Dissolved	Analysis	6020		5			259338	11/14/18 18:04	LW1	TAL SAC
Dissolved	Filtration	Filtration			250 mL	250 mL	257361	11/06/18 14:00	NIM	TAL SAC
Dissolved	Prep	7470A			30 mL	30 mL	259403	11/15/18 12:07	DPM	TAL SAC

Lab Chronicle

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-223416-1
SDG: October 2018

Client Sample ID: MW-1

Date Collected: 10/31/18 08:05
Date Received: 10/31/18 15:40

Lab Sample ID: 440-223416-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	7470A		1			259711	11/16/18 10:48	GSH	TAL SAC
Dissolved	Analysis	SM 2340B		1			260722	11/21/18 15:49	LW1	TAL SAC
Total/NA	Analysis	350.1		1	0.8 mL	8 mL	510602	11/08/18 21:10	KMY	TAL IRV
Total/NA	Analysis	SM 2320B		1			508755	11/01/18 09:57	YZ	TAL IRV
Total/NA	Analysis	SM 2510B		1			510082	11/08/18 14:31	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	508698	11/02/18 08:45	XL	TAL IRV
Total/NA	Prep	Distill/CN			50 mL	50 mL	510315	11/09/18 14:01	KMY	TAL IRV
Total/NA	Analysis	SM 4500 CN E		1			510402	11/09/18 15:13	QTN	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			508778	11/01/18 16:11	CMM	TAL IRV
Total/NA	Pre Prep	353.2 (NCell)			100 mL	50 mL	260951	11/09/18 09:00	TCS	TAL SAC
Total/NA	Prep	353 (NCell-Hyd)			50 mL	40 mL	260953	11/13/18 09:00	TCS	TAL SAC
Total/NA	Analysis	WS-WC-0050		1			258951	11/13/18 12:37	TCS	TAL SAC

Client Sample ID: MW-2

Date Collected: 10/31/18 09:17
Date Received: 10/31/18 15:40

Lab Sample ID: 440-223416-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	510107	11/08/18 23:54	P1P	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	510108	11/08/18 23:54	WK	TAL IRV
Total/NA	Analysis	8015B		1			556157	11/09/18 14:14	AAB	TAL NSH
Total/NA	Prep	3510C			1055.8 mL	3.0 mL	257214	11/06/18 09:00	NGK	TAL SAC
Total/NA	Analysis	8015B		1			258034	11/09/18 06:05	RS1	TAL SAC
Total/NA	Analysis	300.0	DL	1	5 mL	1.0 mL	508482	10/31/18 20:10	NN	TAL IRV
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	508483	10/31/18 20:10	NN	TAL IRV
Total/NA	Analysis	300.0		50	5 mL	1.0 mL	508482	10/31/18 21:04	NN	TAL IRV
Total/NA	Analysis	314.0 LL		1			508689	11/01/18 14:05	CTH	TAL IRV
Dissolved	Filtration	Filtration			250 mL	250 mL	257361	11/06/18 14:00	NIM	TAL SAC
Dissolved	Prep	3010A			50 mL	50 mL	257811	11/08/18 07:45	NIM	TAL SAC
Dissolved	Analysis	6010B		10			258516	11/09/18 22:36	LW1	TAL SAC
Dissolved	Filtration	Filtration			250 mL	250 mL	257361	11/06/18 14:00	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	257796	11/08/18 07:45	NIM	TAL SAC
Dissolved	Analysis	6020		1			258782	11/12/18 16:36	LW1	TAL SAC
Dissolved	Filtration	Filtration			250 mL	250 mL	257361	11/06/18 14:00	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	257796	11/08/18 07:45	NIM	TAL SAC
Dissolved	Analysis	6020		5			259338	11/14/18 18:07	LW1	TAL SAC
Dissolved	Filtration	Filtration			250 mL	250 mL	257361	11/06/18 14:00	NIM	TAL SAC
Dissolved	Prep	7470A			30 mL	30 mL	259403	11/15/18 12:07	DPM	TAL SAC
Dissolved	Analysis	7470A		1			259711	11/16/18 10:51	GSH	TAL SAC
Dissolved	Analysis	SM 2340B		1			260722	11/21/18 15:49	LW1	TAL SAC
Total/NA	Analysis	350.1		1	0.8 mL	8 mL	510602	11/08/18 21:10	KMY	TAL IRV
Total/NA	Analysis	SM 2320B		1			508755	11/01/18 10:05	YZ	TAL IRV

Lab Chronicle

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-223416-1
SDG: October 2018

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2510B		1			510082	11/08/18 14:31	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	508698	11/02/18 08:45	XL	TAL IRV
Total/NA	Prep	Distill/CN			50 mL	50 mL	509011	11/02/18 14:38	KMY	TAL IRV
Total/NA	Analysis	SM 4500 CN E		1			509059	11/02/18 19:10	KMY	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			508778	11/01/18 16:11	CMM	TAL IRV
Total/NA	Pre Prep	353.2 (NCell)			100 mL	50 mL	260951	11/09/18 09:00	TCS	TAL SAC
Total/NA	Prep	353 (NCell-Hyd)			50 mL	40 mL	260953	11/13/18 09:00	TCS	TAL SAC
Total/NA	Analysis	WS-WC-0050		1			258951	11/13/18 12:45	TCS	TAL SAC

Client Sample ID: MW-4

Date Collected: 10/31/18 10:34
Date Received: 10/31/18 15:40

Lab Sample ID: 440-223416-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	510107	11/09/18 00:23	P1P	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	510108	11/09/18 00:23	WK	TAL IRV
Total/NA	Analysis	8015B		1			556157	11/09/18 14:31	AAB	TAL NSH
Total/NA	Prep	3510C			1057.8 mL	3.0 mL	257214	11/06/18 09:00	NGK	TAL SAC
Total/NA	Analysis	8015B		1			258034	11/09/18 06:28	RS1	TAL SAC
Total/NA	Analysis	300.0		2	5 mL	1.0 mL	508482	10/31/18 19:52	NN	TAL IRV
Total/NA	Analysis	300.0		2	5 mL	1.0 mL	508483	10/31/18 19:52	NN	TAL IRV
Total/NA	Analysis	300.0		100	5 mL	1.0 mL	508482	10/31/18 23:41	NN	TAL IRV
Total/NA	Analysis	314.0 LL		1			508900	11/02/18 10:32	CTH	TAL IRV
Dissolved	Filtration	Filtration			250 mL	250 mL	257361	11/06/18 14:00	NIM	TAL SAC
Dissolved	Prep	3010A			50 mL	50 mL	257811	11/08/18 07:45	NIM	TAL SAC
Dissolved	Analysis	6010B		10			258516	11/09/18 22:40	LW1	TAL SAC
Dissolved	Filtration	Filtration			250 mL	250 mL	257361	11/06/18 14:00	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	257796	11/08/18 07:45	NIM	TAL SAC
Dissolved	Analysis	6020		1			258782	11/12/18 16:39	LW1	TAL SAC
Dissolved	Filtration	Filtration			250 mL	250 mL	257361	11/06/18 14:00	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	257796	11/08/18 07:45	NIM	TAL SAC
Dissolved	Analysis	6020		25			259338	11/14/18 18:10	LW1	TAL SAC
Dissolved	Filtration	Filtration			250 mL	250 mL	257361	11/06/18 14:00	NIM	TAL SAC
Dissolved	Prep	7470A			30 mL	30 mL	259403	11/15/18 12:07	DPM	TAL SAC
Dissolved	Analysis	7470A		1			259711	11/16/18 11:00	GSH	TAL SAC
Dissolved	Analysis	SM 2340B		1			260722	11/21/18 15:49	LW1	TAL SAC
Total/NA	Analysis	350.1		1	0.8 mL	8 mL	510602	11/08/18 21:10	KMY	TAL IRV
Total/NA	Analysis	SM 2320B		1			508755	11/01/18 10:08	YZ	TAL IRV
Total/NA	Analysis	SM 2510B		1			510082	11/08/18 14:31	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	508698	11/02/18 08:45	XL	TAL IRV
Total/NA	Prep	Distill/CN			50 mL	50 mL	510315	11/09/18 14:01	KMY	TAL IRV
Total/NA	Analysis	SM 4500 CN E		1			510402	11/09/18 15:13	QTN	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			508778	11/01/18 16:33	CMM	TAL IRV
Total/NA	Pre Prep	353.2 (NCell)			100 mL	50 mL	260951	11/09/18 09:00	TCS	TAL SAC
Total/NA	Prep	353 (NCell-Hyd)			50 mL	40 mL	260953	11/13/18 09:00	TCS	TAL SAC
Total/NA	Analysis	WS-WC-0050		1			258951	11/13/18 12:47	TCS	TAL SAC

Lab Chronicle

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-223416-1
SDG: October 2018

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-510107/4
Matrix: Water
Analysis Batch: 510107

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.25	ug/L			11/08/18 19:42	1
Ethylbenzene	ND		0.50	0.25	ug/L			11/08/18 19:42	1
m,p-Xylene	ND		1.0	0.50	ug/L			11/08/18 19:42	1
o-Xylene	ND		0.50	0.25	ug/L			11/08/18 19:42	1
Toluene	ND		0.50	0.25	ug/L			11/08/18 19:42	1
Xylenes, Total	ND		1.0	0.50	ug/L			11/08/18 19:42	1
Naphthalene	ND		1.0	0.40	ug/L			11/08/18 19:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*80 - 120*		*11/08/18 19:42*	*1*
Dibromofluoromethane (Surr)	*111*		*76 - 132*		*11/08/18 19:42*	*1*
Toluene-d8 (Surr)	*111*		*80 - 128*		*11/08/18 19:42*	*1*

Lab Sample ID: LCS 440-510107/5
Matrix: Water
Analysis Batch: 510107

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	25.0	25.0		ug/L		100	68 - 130
Ethylbenzene	25.0	24.5		ug/L		98	70 - 130
m,p-Xylene	25.0	24.7		ug/L		99	70 - 130
o-Xylene	25.0	24.7		ug/L		99	70 - 130
Toluene	25.0	24.6		ug/L		98	70 - 130
Naphthalene	25.0	24.1		ug/L		97	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*
Dibromofluoromethane (Surr)	*111*		*76 - 132*
Toluene-d8 (Surr)	*100*		*80 - 128*

Lab Sample ID: 440-223416-2 MS
Matrix: Water
Analysis Batch: 510107

Client Sample ID: MW-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND		25.0	25.3		ug/L		101	66 - 130
Ethylbenzene	ND		25.0	25.4		ug/L		102	70 - 130
m,p-Xylene	ND		25.0	25.4		ug/L		102	70 - 133
o-Xylene	ND		25.0	25.3		ug/L		101	70 - 133
Toluene	ND		25.0	25.0		ug/L		100	70 - 130
Naphthalene	2.7		25.0	29.1		ug/L		105	60 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*
Dibromofluoromethane (Surr)	*109*		*76 - 132*
Toluene-d8 (Surr)	*100*		*80 - 128*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-223416-2 MSD
Matrix: Water
Analysis Batch: 510107

Client Sample ID: MW-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	ND		25.0	25.1		ug/L		100	66 - 130	1	20
Ethylbenzene	ND		25.0	25.2		ug/L		101	70 - 130	1	20
m,p-Xylene	ND		25.0	25.5		ug/L		102	70 - 133	0	25
o-Xylene	ND		25.0	25.1		ug/L		100	70 - 133	1	20
Toluene	ND		25.0	25.5		ug/L		102	70 - 130	2	20
Naphthalene	2.7		25.0	30.1		ug/L		110	60 - 140	4	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*
Dibromofluoromethane (Surr)	*110*		*76 - 132*
Toluene-d8 (Surr)	*101*		*80 - 128*

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 440-510108/4
Matrix: Water
Analysis Batch: 510108

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50	35	ug/L			11/08/18 19:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*111*		*76 - 132*		*11/08/18 19:42*	*1*
4-Bromofluorobenzene (Surr)	*108*		*80 - 120*		*11/08/18 19:42*	*1*
Toluene-d8 (Surr)	*111*		*80 - 128*		*11/08/18 19:42*	*1*

Lab Sample ID: LCS 440-510108/6
Matrix: Water
Analysis Batch: 510108

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Volatile Fuel Hydrocarbons (C4-C12)	500	370		ug/L		74	55 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*112*		*76 - 132*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*
Toluene-d8 (Surr)	*106*		*80 - 128*

Lab Sample ID: 440-223416-2 MS
Matrix: Water
Analysis Batch: 510108

Client Sample ID: MW-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Volatile Fuel Hydrocarbons (C4-C12)	60		1730	1460		ug/L		81	50 - 145

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 440-223416-2 MS
Matrix: Water
Analysis Batch: 510108

Client Sample ID: MW-6
Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	*109*		*76 - 132*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*
Toluene-d8 (Surr)	*100*		*80 - 128*

Lab Sample ID: 440-223416-2 MSD
Matrix: Water
Analysis Batch: 510108

Client Sample ID: MW-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Volatile Fuel Hydrocarbons (C4-C12)	60		1730	1460		ug/L		81	50 - 145	0	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Dibromofluoromethane (Surr)	*110*		*76 - 132*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*
Toluene-d8 (Surr)	*101*		*80 - 128*

Method: 8015B - Glycols -Direct Injection (GC/FID)

Lab Sample ID: MB 490-556157/4
Matrix: Water
Analysis Batch: 556157

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene glycol	ND		10	1.0	mg/L			11/09/18 10:55	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-butyl alcohol (Surr)	*109*		*70 - 130*		*11/09/18 10:55*	*1*

Lab Sample ID: LCS 490-556157/5
Matrix: Water
Analysis Batch: 556157

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ethylene glycol			50.0	45.6		mg/L		91	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
n-butyl alcohol (Surr)	*106*		*70 - 130*

Lab Sample ID: LCSD 490-556157/6
Matrix: Water
Analysis Batch: 556157

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylene glycol			50.0	61.6		mg/L		123	70 - 130	30	36

Method: 8015B - Glycols -Direct Injection (GC/FID) (Continued)

Lab Sample ID: LCSD 490-556157/6
Matrix: Water
Analysis Batch: 556157

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
n-butyl alcohol (Surr)	*120*		*70 - 130*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 320-257214/1-A
Matrix: Water
Analysis Batch: 258034

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 257214

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	ND		50	16	ug/L		11/06/18 09:00	11/09/18 02:33	1
Motor Oil Range Organics (C25-C36)	ND		500	170	ug/L		11/06/18 09:00	11/09/18 02:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*74*		*56 - 145*	*11/06/18 09:00*	*11/09/18 02:33*	*1*

Lab Sample ID: LCS 320-257214/2-A
Matrix: Water
Analysis Batch: 258034

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 257214

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics (C10-C24)	300	216		ug/L		72	53 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl (Surr)	*77*		*56 - 145*

Lab Sample ID: LCS 320-257214/4-A
Matrix: Water
Analysis Batch: 258034

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 257214

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Motor Oil Range Organics (C25-C36)	900	538		ug/L		60	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl (Surr)	*75*		*56 - 145*

Lab Sample ID: LCSD 320-257214/3-A
Matrix: Water
Analysis Batch: 258034

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 257214

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (C10-C24)	300	238		ug/L		79	53 - 123	10	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
o-Terphenyl (Surr)	*79*		*56 - 145*

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCSD 320-257214/5-A
Matrix: Water
Analysis Batch: 258034

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 257214

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Motor Oil Range Organics (C25-C36)			900	511		ug/L		57	50 - 150	5	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
o-Terphenyl (Surr)	*70*		*56 - 145*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 440-508482/15
Matrix: Water
Analysis Batch: 508482

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50	0.25	mg/L			10/31/18 16:57	1
Fluoride	ND		0.50	0.25	mg/L			10/31/18 16:57	1
Sulfate	ND		0.50	0.25	mg/L			10/31/18 16:57	1

Lab Sample ID: LCS 440-508482/14
Matrix: Water
Analysis Batch: 508482

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			5.00	4.69		mg/L		94	90 - 110		
Fluoride			5.00	4.69		mg/L		94	90 - 110		
Sulfate			5.00	4.72		mg/L		94	90 - 110		

Lab Sample ID: MB 440-508483/15
Matrix: Water
Analysis Batch: 508483

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.11	0.055	mg/L			10/31/18 16:57	1
Nitrite as N	ND		0.15	0.025	mg/L			10/31/18 16:57	1

Lab Sample ID: LCS 440-508483/14
Matrix: Water
Analysis Batch: 508483

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate as N			1.13	1.05		mg/L		93	90 - 110		
Nitrite as N			1.52	1.42		mg/L		93	90 - 110		

Lab Sample ID: 440-223416-5 MS
Matrix: Water
Analysis Batch: 508483

Client Sample ID: MW-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate as N	ND		1.13	1.05		mg/L		93	80 - 120		
Nitrite as N	ND		1.52	1.45		mg/L		95	80 - 120		

Lab Sample ID: 440-223416-5 MSD
Matrix: Water
Analysis Batch: 508483

Client Sample ID: MW-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	ND		1.13	1.05		mg/L		93	80 - 120	0	20
Nitrite as N	ND		1.52	1.44		mg/L		95	80 - 120	1	20

Method: 300.0 - Anions, Ion Chromatography - DL

Lab Sample ID: 440-223416-5 MS
Matrix: Water
Analysis Batch: 508482

Client Sample ID: MW-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride - DL	14		5.00	20.1	E	mg/L		113	80 - 120
Fluoride - DL	0.49	J F1	5.00	2.97	F1	mg/L		50	80 - 120
Sulfate - DL	760	E	5.00	760	E 4	mg/L		-6	80 - 120

Lab Sample ID: 440-223416-5 MSD
Matrix: Water
Analysis Batch: 508482

Client Sample ID: MW-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride - DL	14		5.00	20.1	E	mg/L		113	80 - 120	0	20
Fluoride - DL	0.49	J F1	5.00	3.00	F1	mg/L		50	80 - 120	1	20
Sulfate - DL	760	E	5.00	761	E 4	mg/L		7	80 - 120	0	20

Method: 314.0 LL - Perchlorate (IC)

Lab Sample ID: MB 440-508689/6
Matrix: Water
Analysis Batch: 508689

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			11/01/18 09:35	1

Lab Sample ID: LCS 440-508689/5
Matrix: Water
Analysis Batch: 508689

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	25.0	25.1		ug/L		101	85 - 115

Lab Sample ID: MRL 440-508689/4
Matrix: Water
Analysis Batch: 508689

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	1.00	0.836	J	ug/L		84	75 - 125

Method: 314.0 LL - Perchlorate (IC) (Continued)

Lab Sample ID: 440-223416-1 MS
Matrix: Water
Analysis Batch: 508689

Client Sample ID: MW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	ND		25.0	27.0		ug/L		108	80 - 120

Lab Sample ID: 440-223416-1 MSD
Matrix: Water
Analysis Batch: 508689

Client Sample ID: MW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perchlorate	ND		25.0	27.4		ug/L		110	80 - 120	1	20

Lab Sample ID: MB 440-508900/8
Matrix: Water
Analysis Batch: 508900

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			11/02/18 09:29	1

Lab Sample ID: LCS 440-508900/9
Matrix: Water
Analysis Batch: 508900

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	25.0	27.2		ug/L		109	85 - 115

Lab Sample ID: MRL 440-508900/4
Matrix: Water
Analysis Batch: 508900

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	1.00	1.12		ug/L		112	75 - 125

Lab Sample ID: 440-223416-4 MS
Matrix: Water
Analysis Batch: 508900

Client Sample ID: MW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	ND		25.0	28.8		ug/L		115	80 - 120

Lab Sample ID: 440-223416-4 MSD
Matrix: Water
Analysis Batch: 508900

Client Sample ID: MW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perchlorate	ND		25.0	29.8		ug/L		119	80 - 120	3	20

Method: 6010B - Metals (ICP)

Lab Sample ID: LCS 320-257811/2-A
Matrix: Water
Analysis Batch: 258516

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 257811

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfur			10.0	9.47		mg/L		95	80 - 120		

Lab Sample ID: MB 320-257361/1-C
Matrix: Water
Analysis Batch: 258516

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 257811

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	ND		0.50	0.30	mg/L		11/08/18 07:45	11/09/18 20:54	1

Lab Sample ID: 440-223416-1 MS
Matrix: Water
Analysis Batch: 258516

Client Sample ID: MW-5
Prep Type: Dissolved
Prep Batch: 257811

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfur	79		10.0	93.9	4	mg/L		146	80 - 120		

Lab Sample ID: 440-223416-1 MSD
Matrix: Water
Analysis Batch: 258516

Client Sample ID: MW-5
Prep Type: Dissolved
Prep Batch: 257811

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfur	79		10.0	86.8	4	mg/L		74	80 - 120	8	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: LCS 320-257796/2-A
Matrix: Water
Analysis Batch: 258782

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 257796

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Silver			0.0500	0.0494		mg/L		99	80 - 120		
Aluminum			1.00	0.964		mg/L		96	80 - 120		
Antimony			0.200	0.214		mg/L		107	80 - 120		
Arsenic			0.200	0.212		mg/L		106	80 - 120		
Barium			0.200	0.200		mg/L		100	80 - 120		
Beryllium			0.200	0.201		mg/L		101	80 - 120		
Cadmium			0.200	0.197		mg/L		99	80 - 120		
Calcium			1.00	1.06		mg/L		106	80 - 120		
Chromium			0.200	0.196		mg/L		98	80 - 120		
Cobalt			0.200	0.203		mg/L		101	80 - 120		
Copper			0.200	0.193		mg/L		96	80 - 120		
Iron			1.00	0.997		mg/L		100	80 - 120		
Lead			0.200	0.187		mg/L		94	80 - 120		
Magnesium			1.00	0.965		mg/L		96	80 - 120		
Manganese			0.200	0.191		mg/L		95	80 - 120		
Molybdenum			0.200	0.220		mg/L		110	80 - 120		
Nickel			0.200	0.193		mg/L		96	80 - 120		
Potassium			1.00	0.947		mg/L		95	80 - 120		
Selenium			0.200	0.214		mg/L		107	80 - 120		

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 320-257796/2-A
Matrix: Water
Analysis Batch: 258782

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 257796

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium	1.00	0.956		mg/L		96	80 - 120
Thallium	0.0500	0.0487		mg/L		97	80 - 120
Vanadium	0.200	0.194		mg/L		97	80 - 120
Zinc	0.200	0.215		mg/L		107	80 - 120

Lab Sample ID: MB 320-257361/1-B
Matrix: Water
Analysis Batch: 258782

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 257796

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		11/08/18 07:45	11/12/18 14:45	1
Aluminum	ND		0.050	0.025	mg/L		11/08/18 07:45	11/12/18 14:45	1
Antimony	ND		0.0020	0.00020	mg/L		11/08/18 07:45	11/12/18 14:45	1
Arsenic	ND		0.0020	0.0010	mg/L		11/08/18 07:45	11/12/18 14:45	1
Barium	ND		0.0010	0.00050	mg/L		11/08/18 07:45	11/12/18 14:45	1
Beryllium	ND		0.0010	0.00010	mg/L		11/08/18 07:45	11/12/18 14:45	1
Cadmium	ND		0.0010	0.00050	mg/L		11/08/18 07:45	11/12/18 14:45	1
Calcium	ND		0.30	0.17	mg/L		11/08/18 07:45	11/12/18 14:45	1
Chromium	ND		0.0020	0.0010	mg/L		11/08/18 07:45	11/12/18 14:45	1
Cobalt	ND		0.0010	0.00060	mg/L		11/08/18 07:45	11/12/18 14:45	1
Copper	ND		0.0020	0.0010	mg/L		11/08/18 07:45	11/12/18 14:45	1
Iron	ND		0.050	0.025	mg/L		11/08/18 07:45	11/12/18 14:45	1
Lead	ND		0.0010	0.00060	mg/L		11/08/18 07:45	11/12/18 14:45	1
Magnesium	ND		0.050	0.025	mg/L		11/08/18 07:45	11/12/18 14:45	1
Manganese	ND		0.0025	0.0014	mg/L		11/08/18 07:45	11/12/18 14:45	1
Molybdenum	ND		0.0020	0.00060	mg/L		11/08/18 07:45	11/12/18 14:45	1
Nickel	ND		0.0020	0.0010	mg/L		11/08/18 07:45	11/12/18 14:45	1
Potassium	ND		0.050	0.025	mg/L		11/08/18 07:45	11/12/18 14:45	1
Selenium	ND		0.0020	0.0010	mg/L		11/08/18 07:45	11/12/18 14:45	1
Sodium	ND		0.10	0.080	mg/L		11/08/18 07:45	11/12/18 14:45	1
Thallium	ND		0.0010	0.00050	mg/L		11/08/18 07:45	11/12/18 14:45	1
Vanadium	ND		0.010	0.0030	mg/L		11/08/18 07:45	11/12/18 14:45	1
Zinc	ND		0.0050	0.0040	mg/L		11/08/18 07:45	11/12/18 14:45	1

Lab Sample ID: 440-223416-2 MS
Matrix: Water
Analysis Batch: 258782

Client Sample ID: MW-6
Prep Type: Dissolved
Prep Batch: 257796

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	ND		0.0500	0.0458		mg/L		92	80 - 120
Aluminum	ND		1.00	0.971		mg/L		97	80 - 120
Antimony	ND		0.200	0.202		mg/L		101	80 - 120
Arsenic	1.4		0.200	1.66	4 ^	mg/L		140	80 - 120
Barium	0.015		0.200	0.208		mg/L		96	80 - 120
Beryllium	ND		0.200	0.195		mg/L		97	80 - 120
Cadmium	ND		0.200	0.183		mg/L		91	80 - 120
Calcium	100		1.00	107	4	mg/L		579	80 - 120
Chromium	ND		0.200	0.196		mg/L		98	80 - 120
Cobalt	ND		0.200	0.195		mg/L		97	80 - 120

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 440-223416-2 MS
Matrix: Water
Analysis Batch: 258782

Client Sample ID: MW-6
Prep Type: Dissolved
Prep Batch: 257796

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	ND		0.200	0.190		mg/L		95	80 - 120
Iron	0.72		1.00	1.76		mg/L		104	80 - 120
Lead	ND		0.200	0.192		mg/L		96	80 - 120
Magnesium	39		1.00	41.9	4	mg/L		240	80 - 120
Manganese	4.1		0.200	4.53	4	mg/L		201	80 - 120
Molybdenum	0.0012	J	0.200	0.230		mg/L		115	80 - 120
Nickel	ND		0.200	0.189		mg/L		94	80 - 120
Potassium	17		1.00	19.4	4	mg/L		251	80 - 120
Selenium	ND		0.200	0.204		mg/L		102	80 - 120
Sodium	120		1.00	131	4	mg/L		620	80 - 120
Thallium	ND		0.0500	0.0458		mg/L		92	80 - 120
Vanadium	ND		0.200	0.201		mg/L		100	80 - 120
Zinc	ND		0.200	0.209		mg/L		104	80 - 120

Lab Sample ID: 440-223416-2 MSD
Matrix: Water
Analysis Batch: 258782

Client Sample ID: MW-6
Prep Type: Dissolved
Prep Batch: 257796

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	ND		0.0500	0.0468		mg/L		94	80 - 120	2	15
Aluminum	ND		1.00	0.988		mg/L		99	80 - 120	2	15
Antimony	ND		0.200	0.206		mg/L		103	80 - 120	2	15
Arsenic	1.4		0.200	1.61	4 ^	mg/L		115	80 - 120	3	15
Barium	0.015		0.200	0.212		mg/L		99	80 - 120	2	15
Beryllium	ND		0.200	0.199		mg/L		100	80 - 120	2	15
Cadmium	ND		0.200	0.187		mg/L		94	80 - 120	2	15
Calcium	100		1.00	107	4	mg/L		558	80 - 120	0	15
Chromium	ND		0.200	0.198		mg/L		99	80 - 120	1	15
Cobalt	ND		0.200	0.196		mg/L		98	80 - 120	1	15
Copper	ND		0.200	0.191		mg/L		95	80 - 120	1	15
Iron	0.72		1.00	1.77		mg/L		105	80 - 120	0	15
Lead	ND		0.200	0.194		mg/L		97	80 - 120	1	15
Magnesium	39		1.00	41.8	4	mg/L		235	80 - 120	0	15
Manganese	4.1		0.200	4.51	4	mg/L		195	80 - 120	0	15
Molybdenum	0.0012	J	0.200	0.229		mg/L		114	80 - 120	0	15
Nickel	ND		0.200	0.191		mg/L		95	80 - 120	1	15
Potassium	17		1.00	19.4	4	mg/L		253	80 - 120	0	17
Selenium	ND		0.200	0.207		mg/L		104	80 - 120	1	15
Sodium	120		1.00	130	4	mg/L		512	80 - 120	1	15
Thallium	ND		0.0500	0.0480		mg/L		96	80 - 120	5	15
Vanadium	ND		0.200	0.204		mg/L		102	80 - 120	2	15
Zinc	ND		0.200	0.206		mg/L		103	80 - 120	1	15

Method: 7470A - Mercury (CVAA)

Lab Sample ID: LCS 320-259403/12-A
Matrix: Water
Analysis Batch: 259711

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 259403

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00100	0.00103		mg/L		103	82 - 113

Lab Sample ID: MB 320-257361/1-F
Matrix: Water
Analysis Batch: 259711

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 259403

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		11/15/18 12:07	11/16/18 09:38	1

Lab Sample ID: MB 320-257593/1-F
Matrix: Water
Analysis Batch: 259711

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 259403

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		11/15/18 12:07	11/16/18 09:41	1

Lab Sample ID: 440-223416-5 MS
Matrix: Water
Analysis Batch: 259711

Client Sample ID: MW-2
Prep Type: Dissolved
Prep Batch: 259403

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00014	J	0.00100	0.00119		mg/L		105	82 - 113

Lab Sample ID: 440-223416-5 MSD
Matrix: Water
Analysis Batch: 259711

Client Sample ID: MW-2
Prep Type: Dissolved
Prep Batch: 259403

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00014	J	0.00100	0.00122		mg/L		108	82 - 113	2	17

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 440-510602/10
Matrix: Water
Analysis Batch: 510602

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.20	0.10	mg/L			11/08/18 21:10	1

Lab Sample ID: LCS 440-510602/11
Matrix: Water
Analysis Batch: 510602

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	5.00	4.84		mg/L		97	90 - 110

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: MRL 440-510602/9
Matrix: Water
Analysis Batch: 510602

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	0.200	0.220		mg/L		110	50 - 150

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 440-508755/30
Matrix: Water
Analysis Batch: 508755

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	ND		4.0	4.0	mg/L			11/01/18 08:34	1
Bicarbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			11/01/18 08:34	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			11/01/18 08:34	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			11/01/18 08:34	1

Lab Sample ID: LCS 440-508755/29
Matrix: Water
Analysis Batch: 508755

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3	80.7	83.2		mg/L		103	80 - 120

Lab Sample ID: 440-223416-4 DU
Matrix: Water
Analysis Batch: 508755

Client Sample ID: MW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity as CaCO3	ND		ND		mg/L		NC	20
Bicarbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20
Hydroxide Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: MB 440-510082/3
Matrix: Water
Analysis Batch: 510082

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		1.0	1.0	umhos/cm			11/08/18 14:15	1

Lab Sample ID: LCS 440-510082/4
Matrix: Water
Analysis Batch: 510082

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Specific Conductance	953	962		umhos/cm		101	90 - 110

Method: SM 2510B - Conductivity, Specific Conductance (Continued)

Lab Sample ID: 440-223416-6 DU
Matrix: Water
Analysis Batch: 510082

Client Sample ID: MW-4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Specific Conductance	2700		2710		umhos/cm		0.7	5

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 440-508698/1
Matrix: Water
Analysis Batch: 508698

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	5.0	mg/L			11/02/18 08:45	1

Lab Sample ID: LCS 440-508698/2
Matrix: Water
Analysis Batch: 508698

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1000	1010		mg/L		101	90 - 110

Method: SM 4500 CN E - Cyanide, Total

Lab Sample ID: MB 440-509011/1-A
Matrix: Water
Analysis Batch: 509059

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 509011

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.025	0.013	mg/L		11/02/18 14:38	11/02/18 19:09	1

Lab Sample ID: LCS 440-509011/2-A
Matrix: Water
Analysis Batch: 509059

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 509011

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.200	0.194		mg/L		97	90 - 110

Lab Sample ID: 440-223416-5 MS
Matrix: Water
Analysis Batch: 509059

Client Sample ID: MW-2
Prep Type: Total/NA
Prep Batch: 509011

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	ND		0.200	0.189		mg/L		95	70 - 115

Lab Sample ID: 440-223416-5 MSD
Matrix: Water
Analysis Batch: 509059

Client Sample ID: MW-2
Prep Type: Total/NA
Prep Batch: 509011

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	ND		0.200	0.194		mg/L		97	70 - 115	2	15

Method: SM 4500 CN E - Cyanide, Total (Continued)

Lab Sample ID: MB 440-509595/1-A
Matrix: Water
Analysis Batch: 509863

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 509595

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.025	0.013	mg/L		11/06/18 15:17	11/07/18 12:26	1

Lab Sample ID: LCS 440-509595/2-A
Matrix: Water
Analysis Batch: 509863

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 509595

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.200	0.198		mg/L		99	90 - 110

Lab Sample ID: 440-223416-1 MS
Matrix: Water
Analysis Batch: 509863

Client Sample ID: MW-5
Prep Type: Total/NA
Prep Batch: 509595

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	ND		0.200	0.198		mg/L		99	70 - 115

Lab Sample ID: 440-223416-1 MSD
Matrix: Water
Analysis Batch: 509863

Client Sample ID: MW-5
Prep Type: Total/NA
Prep Batch: 509595

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	ND		0.200	0.200		mg/L		100	70 - 115	1	15

Lab Sample ID: MB 440-510315/1-A
Matrix: Water
Analysis Batch: 510402

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 510315

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.025	0.013	mg/L		11/09/18 14:01	11/09/18 15:12	1

Lab Sample ID: LCS 440-510315/2-A
Matrix: Water
Analysis Batch: 510402

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 510315

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.200	0.184		mg/L		92	90 - 110

Lab Sample ID: LCSD 440-510315/19-A
Matrix: Water
Analysis Batch: 510402

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 510315

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.200	0.183		mg/L		92	90 - 110	1	10

Method: WS-WC-0050 - Nitrocellulose

Lab Sample ID: MB 320-260951/1-B
Matrix: Water
Analysis Batch: 258951

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 260953

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrocellulose	ND		2.0	0.48	mg/L		11/13/18 09:00	11/13/18 12:23	1

Lab Sample ID: LCS 320-260951/2-B
Matrix: Water
Analysis Batch: 258951

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 260953

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrocellulose			5.06	3.57		mg/L		71	26 - 144		

Lab Sample ID: 440-223416-1 MS
Matrix: Water
Analysis Batch: 258951

Client Sample ID: MW-5
Prep Type: Total/NA
Prep Batch: 260953

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrocellulose	ND		5.06	4.47		mg/L		88	26 - 144		

Lab Sample ID: 440-223416-1 MSD
Matrix: Water
Analysis Batch: 258951

Client Sample ID: MW-5
Prep Type: Total/NA
Prep Batch: 260953

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrocellulose	ND		5.06	4.00		mg/L		79	26 - 144	11	45

GC/MS VOA

Analysis Batch: 510107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-223416-1	MW-5	Total/NA	Water	8260B	
440-223416-2	MW-6	Total/NA	Water	8260B	
440-223416-3	MW-3	Total/NA	Water	8260B	
440-223416-4	MW-1	Total/NA	Water	8260B	
440-223416-5	MW-2	Total/NA	Water	8260B	
440-223416-6	MW-4	Total/NA	Water	8260B	
MB 440-510107/4	Method Blank	Total/NA	Water	8260B	
LCS 440-510107/5	Lab Control Sample	Total/NA	Water	8260B	
440-223416-2 MS	MW-6	Total/NA	Water	8260B	
440-223416-2 MSD	MW-6	Total/NA	Water	8260B	

Analysis Batch: 510108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-223416-1	MW-5	Total/NA	Water	8260B/CA_LUFT MS	
440-223416-2	MW-6	Total/NA	Water	8260B/CA_LUFT MS	
440-223416-3	MW-3	Total/NA	Water	8260B/CA_LUFT MS	
440-223416-4	MW-1	Total/NA	Water	8260B/CA_LUFT MS	
440-223416-5	MW-2	Total/NA	Water	8260B/CA_LUFT MS	
440-223416-6	MW-4	Total/NA	Water	8260B/CA_LUFT MS	
MB 440-510108/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	
LCS 440-510108/6	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
440-223416-2 MS	MW-6	Total/NA	Water	8260B/CA_LUFT MS	
440-223416-2 MSD	MW-6	Total/NA	Water	8260B/CA_LUFT MS	

GC VOA

Analysis Batch: 556157

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-223416-1	MW-5	Total/NA	Water	8015B	
440-223416-2	MW-6	Total/NA	Water	8015B	
440-223416-3	MW-3	Total/NA	Water	8015B	
440-223416-4	MW-1	Total/NA	Water	8015B	
440-223416-5	MW-2	Total/NA	Water	8015B	
440-223416-6	MW-4	Total/NA	Water	8015B	
MB 490-556157/4	Method Blank	Total/NA	Water	8015B	
LCS 490-556157/5	Lab Control Sample	Total/NA	Water	8015B	
LCSD 490-556157/6	Lab Control Sample Dup	Total/NA	Water	8015B	

GC Semi VOA

Prep Batch: 257214

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-223416-1	MW-5	Total/NA	Water	3510C	

GC Semi VOA (Continued)

Prep Batch: 257214 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-223416-2	MW-6	Total/NA	Water	3510C	
440-223416-3	MW-3	Total/NA	Water	3510C	
440-223416-4	MW-1	Total/NA	Water	3510C	
440-223416-5	MW-2	Total/NA	Water	3510C	
440-223416-6	MW-4	Total/NA	Water	3510C	
MB 320-257214/1-A	Method Blank	Total/NA	Water	3510C	
LCS 320-257214/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 320-257214/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 320-257214/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 320-257214/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 258034

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-223416-1	MW-5	Total/NA	Water	8015B	257214
440-223416-2	MW-6	Total/NA	Water	8015B	257214
440-223416-3	MW-3	Total/NA	Water	8015B	257214
440-223416-4	MW-1	Total/NA	Water	8015B	257214
440-223416-5	MW-2	Total/NA	Water	8015B	257214
440-223416-6	MW-4	Total/NA	Water	8015B	257214
MB 320-257214/1-A	Method Blank	Total/NA	Water	8015B	257214
LCS 320-257214/2-A	Lab Control Sample	Total/NA	Water	8015B	257214
LCS 320-257214/4-A	Lab Control Sample	Total/NA	Water	8015B	257214
LCSD 320-257214/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	257214
LCSD 320-257214/5-A	Lab Control Sample Dup	Total/NA	Water	8015B	257214

HPLC/IC

Analysis Batch: 508482

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-223416-1	MW-5	Total/NA	Water	300.0	
440-223416-1	MW-5	Total/NA	Water	300.0	
440-223416-1	MW-5	Total/NA	Water	300.0	
440-223416-2	MW-6	Total/NA	Water	300.0	
440-223416-2	MW-6	Total/NA	Water	300.0	
440-223416-3	MW-3	Total/NA	Water	300.0	
440-223416-3	MW-3	Total/NA	Water	300.0	
440-223416-4	MW-1	Total/NA	Water	300.0	
440-223416-4	MW-1	Total/NA	Water	300.0	
440-223416-5 - DL	MW-2	Total/NA	Water	300.0	
440-223416-5	MW-2	Total/NA	Water	300.0	
440-223416-6	MW-4	Total/NA	Water	300.0	
440-223416-6	MW-4	Total/NA	Water	300.0	
MB 440-508482/15	Method Blank	Total/NA	Water	300.0	
LCS 440-508482/14	Lab Control Sample	Total/NA	Water	300.0	
440-223416-5 MS - DL	MW-2	Total/NA	Water	300.0	
440-223416-5 MSD - DL	MW-2	Total/NA	Water	300.0	

Analysis Batch: 508483

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-223416-1	MW-5	Total/NA	Water	300.0	

HPLC/IC (Continued)

Analysis Batch: 508483 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-223416-2	MW-6	Total/NA	Water	300.0	
440-223416-3	MW-3	Total/NA	Water	300.0	
440-223416-4	MW-1	Total/NA	Water	300.0	
440-223416-5	MW-2	Total/NA	Water	300.0	
440-223416-6	MW-4	Total/NA	Water	300.0	
MB 440-508483/15	Method Blank	Total/NA	Water	300.0	
LCS 440-508483/14	Lab Control Sample	Total/NA	Water	300.0	
440-223416-5 MS	MW-2	Total/NA	Water	300.0	
440-223416-5 MSD	MW-2	Total/NA	Water	300.0	

Analysis Batch: 508689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-223416-1	MW-5	Total/NA	Water	314.0 LL	
440-223416-2	MW-6	Total/NA	Water	314.0 LL	
440-223416-3	MW-3	Total/NA	Water	314.0 LL	
440-223416-5	MW-2	Total/NA	Water	314.0 LL	
MB 440-508689/6	Method Blank	Total/NA	Water	314.0 LL	
LCS 440-508689/5	Lab Control Sample	Total/NA	Water	314.0 LL	
MRL 440-508689/4	Lab Control Sample	Total/NA	Water	314.0 LL	
440-223416-1 MS	MW-5	Total/NA	Water	314.0 LL	
440-223416-1 MSD	MW-5	Total/NA	Water	314.0 LL	

Analysis Batch: 508900

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-223416-4	MW-1	Total/NA	Water	314.0 LL	
440-223416-6	MW-4	Total/NA	Water	314.0 LL	
MB 440-508900/8	Method Blank	Total/NA	Water	314.0 LL	
LCS 440-508900/9	Lab Control Sample	Total/NA	Water	314.0 LL	
MRL 440-508900/4	Lab Control Sample	Total/NA	Water	314.0 LL	
440-223416-4 MS	MW-1	Total/NA	Water	314.0 LL	
440-223416-4 MSD	MW-1	Total/NA	Water	314.0 LL	

Metals

Filtration Batch: 257361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-223416-1	MW-5	Dissolved	Water	Filtration	
440-223416-2	MW-6	Dissolved	Water	Filtration	
440-223416-3	MW-3	Dissolved	Water	Filtration	
440-223416-4	MW-1	Dissolved	Water	Filtration	
440-223416-5	MW-2	Dissolved	Water	Filtration	
440-223416-6	MW-4	Dissolved	Water	Filtration	
MB 320-257361/1-B	Method Blank	Dissolved	Water	Filtration	
MB 320-257361/1-C	Method Blank	Dissolved	Water	Filtration	
MB 320-257361/1-F	Method Blank	Dissolved	Water	Filtration	
440-223416-1 MS	MW-5	Dissolved	Water	Filtration	
440-223416-1 MSD	MW-5	Dissolved	Water	Filtration	
440-223416-2 MS	MW-6	Dissolved	Water	Filtration	
440-223416-2 MSD	MW-6	Dissolved	Water	Filtration	
440-223416-5 MS	MW-2	Dissolved	Water	Filtration	

Metals (Continued)

Filtration Batch: 257361 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-223416-5 MSD	MW-2	Dissolved	Water	Filtration	

Filtration Batch: 257593

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 320-257593/1-F	Method Blank	Dissolved	Water	Filtration	

Prep Batch: 257796

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-223416-1	MW-5	Dissolved	Water	3005A	257361
440-223416-2	MW-6	Dissolved	Water	3005A	257361
440-223416-3	MW-3	Dissolved	Water	3005A	257361
440-223416-4	MW-1	Dissolved	Water	3005A	257361
440-223416-5	MW-2	Dissolved	Water	3005A	257361
440-223416-6	MW-4	Dissolved	Water	3005A	257361
MB 320-257361/1-B	Method Blank	Dissolved	Water	3005A	257361
LCS 320-257796/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
440-223416-2 MS	MW-6	Dissolved	Water	3005A	257361
440-223416-2 MSD	MW-6	Dissolved	Water	3005A	257361

Prep Batch: 257811

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-223416-1	MW-5	Dissolved	Water	3010A	257361
440-223416-2	MW-6	Dissolved	Water	3010A	257361
440-223416-3	MW-3	Dissolved	Water	3010A	257361
440-223416-4	MW-1	Dissolved	Water	3010A	257361
440-223416-5	MW-2	Dissolved	Water	3010A	257361
440-223416-6	MW-4	Dissolved	Water	3010A	257361
MB 320-257361/1-C	Method Blank	Dissolved	Water	3010A	257361
LCS 320-257811/2-A	Lab Control Sample	Total/NA	Water	3010A	
440-223416-1 MS	MW-5	Dissolved	Water	3010A	257361
440-223416-1 MSD	MW-5	Dissolved	Water	3010A	257361

Prep Batch: 258240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-223416-1	MW-5	Dissolved	Water	7470A	257361

Analysis Batch: 258490

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-223416-1	MW-5	Dissolved	Water	7470A	258240

Analysis Batch: 258516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-223416-1	MW-5	Dissolved	Water	6010B	257811
440-223416-3	MW-3	Dissolved	Water	6010B	257811
440-223416-4	MW-1	Dissolved	Water	6010B	257811
440-223416-5	MW-2	Dissolved	Water	6010B	257811
440-223416-6	MW-4	Dissolved	Water	6010B	257811
MB 320-257361/1-C	Method Blank	Dissolved	Water	6010B	257811
LCS 320-257811/2-A	Lab Control Sample	Total/NA	Water	6010B	257811
440-223416-1 MS	MW-5	Dissolved	Water	6010B	257811
440-223416-1 MSD	MW-5	Dissolved	Water	6010B	257811

QC Association Summary

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-223416-1
SDG: October 2018

Analysis Batch: 258782

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-223416-1	MW-5	Dissolved	Water	6020	257796
440-223416-2	MW-6	Dissolved	Water	6020	257796
440-223416-3	MW-3	Dissolved	Water	6020	257796
440-223416-4	MW-1	Dissolved	Water	6020	257796
440-223416-5	MW-2	Dissolved	Water	6020	257796
440-223416-6	MW-4	Dissolved	Water	6020	257796
MB 320-257361/1-B	Method Blank	Dissolved	Water	6020	257796
LCS 320-257796/2-A	Lab Control Sample	Total Recoverable	Water	6020	257796
440-223416-2 MS	MW-6	Dissolved	Water	6020	257796
440-223416-2 MSD	MW-6	Dissolved	Water	6020	257796

Analysis Batch: 259058

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-223416-2	MW-6	Dissolved	Water	6010B	257811

Analysis Batch: 259338

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-223416-3	MW-3	Dissolved	Water	6020	257796
440-223416-4	MW-1	Dissolved	Water	6020	257796
440-223416-5	MW-2	Dissolved	Water	6020	257796
440-223416-6	MW-4	Dissolved	Water	6020	257796

Prep Batch: 259403

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-223416-2	MW-6	Dissolved	Water	7470A	257361
440-223416-3	MW-3	Dissolved	Water	7470A	257361
440-223416-4	MW-1	Dissolved	Water	7470A	257361
440-223416-5	MW-2	Dissolved	Water	7470A	257361
440-223416-6	MW-4	Dissolved	Water	7470A	257361
MB 320-257361/1-F	Method Blank	Dissolved	Water	7470A	257361
MB 320-257593/1-F	Method Blank	Dissolved	Water	7470A	257593
LCS 320-259403/12-A	Lab Control Sample	Total/NA	Water	7470A	
440-223416-5 MS	MW-2	Dissolved	Water	7470A	257361
440-223416-5 MSD	MW-2	Dissolved	Water	7470A	257361

Analysis Batch: 259711

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-223416-2	MW-6	Dissolved	Water	7470A	259403
440-223416-3	MW-3	Dissolved	Water	7470A	259403
440-223416-4	MW-1	Dissolved	Water	7470A	259403
440-223416-5	MW-2	Dissolved	Water	7470A	259403
440-223416-6	MW-4	Dissolved	Water	7470A	259403
MB 320-257361/1-F	Method Blank	Dissolved	Water	7470A	259403
MB 320-257593/1-F	Method Blank	Dissolved	Water	7470A	259403
LCS 320-259403/12-A	Lab Control Sample	Total/NA	Water	7470A	259403
440-223416-5 MS	MW-2	Dissolved	Water	7470A	259403
440-223416-5 MSD	MW-2	Dissolved	Water	7470A	259403

Analysis Batch: 260722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-223416-1	MW-5	Dissolved	Water	SM 2340B	
440-223416-2	MW-6	Dissolved	Water	SM 2340B	
440-223416-3	MW-3	Dissolved	Water	SM 2340B	

Metals (Continued)

Analysis Batch: 260722 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-223416-4	MW-1	Dissolved	Water	SM 2340B	
440-223416-5	MW-2	Dissolved	Water	SM 2340B	
440-223416-6	MW-4	Dissolved	Water	SM 2340B	

General Chemistry

Analysis Batch: 258951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-223416-1	MW-5	Total/NA	Water	WS-WC-0050	260953
440-223416-2	MW-6	Total/NA	Water	WS-WC-0050	260953
440-223416-3	MW-3	Total/NA	Water	WS-WC-0050	260953
440-223416-4	MW-1	Total/NA	Water	WS-WC-0050	260953
440-223416-5	MW-2	Total/NA	Water	WS-WC-0050	260953
440-223416-6	MW-4	Total/NA	Water	WS-WC-0050	260953
MB 320-260951/1-B	Method Blank	Total/NA	Water	WS-WC-0050	260953
LCS 320-260951/2-B	Lab Control Sample	Total/NA	Water	WS-WC-0050	260953
440-223416-1 MS	MW-5	Total/NA	Water	WS-WC-0050	260953
440-223416-1 MSD	MW-5	Total/NA	Water	WS-WC-0050	260953

Pre Prep Batch: 260951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-223416-1	MW-5	Total/NA	Water	353.2 (NCell)	
440-223416-2	MW-6	Total/NA	Water	353.2 (NCell)	
440-223416-3	MW-3	Total/NA	Water	353.2 (NCell)	
440-223416-4	MW-1	Total/NA	Water	353.2 (NCell)	
440-223416-5	MW-2	Total/NA	Water	353.2 (NCell)	
440-223416-6	MW-4	Total/NA	Water	353.2 (NCell)	
MB 320-260951/1-B	Method Blank	Total/NA	Water	353.2 (NCell)	
LCS 320-260951/2-B	Lab Control Sample	Total/NA	Water	353.2 (NCell)	
440-223416-1 MS	MW-5	Total/NA	Water	353.2 (NCell)	
440-223416-1 MSD	MW-5	Total/NA	Water	353.2 (NCell)	

Prep Batch: 260953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-223416-1	MW-5	Total/NA	Water	353 (NCell-Hyd)	260951
440-223416-2	MW-6	Total/NA	Water	353 (NCell-Hyd)	260951
440-223416-3	MW-3	Total/NA	Water	353 (NCell-Hyd)	260951
440-223416-4	MW-1	Total/NA	Water	353 (NCell-Hyd)	260951
440-223416-5	MW-2	Total/NA	Water	353 (NCell-Hyd)	260951
440-223416-6	MW-4	Total/NA	Water	353 (NCell-Hyd)	260951
MB 320-260951/1-B	Method Blank	Total/NA	Water	353 (NCell-Hyd)	260951
LCS 320-260951/2-B	Lab Control Sample	Total/NA	Water	353 (NCell-Hyd)	260951
440-223416-1 MS	MW-5	Total/NA	Water	353 (NCell-Hyd)	260951
440-223416-1 MSD	MW-5	Total/NA	Water	353 (NCell-Hyd)	260951

Analysis Batch: 508698

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-223416-1	MW-5	Total/NA	Water	SM 2540C	
440-223416-2	MW-6	Total/NA	Water	SM 2540C	
440-223416-3	MW-3	Total/NA	Water	SM 2540C	

General Chemistry (Continued)

Analysis Batch: 508698 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-223416-4	MW-1	Total/NA	Water	SM 2540C	
440-223416-5	MW-2	Total/NA	Water	SM 2540C	
440-223416-6	MW-4	Total/NA	Water	SM 2540C	
MB 440-508698/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 440-508698/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 508755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-223416-1	MW-5	Total/NA	Water	SM 2320B	
440-223416-2	MW-6	Total/NA	Water	SM 2320B	
440-223416-3	MW-3	Total/NA	Water	SM 2320B	
440-223416-4	MW-1	Total/NA	Water	SM 2320B	
440-223416-5	MW-2	Total/NA	Water	SM 2320B	
440-223416-6	MW-4	Total/NA	Water	SM 2320B	
MB 440-508755/30	Method Blank	Total/NA	Water	SM 2320B	
LCS 440-508755/29	Lab Control Sample	Total/NA	Water	SM 2320B	
440-223416-4 DU	MW-1	Total/NA	Water	SM 2320B	

Analysis Batch: 508778

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-223416-1	MW-5	Total/NA	Water	SM 4500 H+ B	
440-223416-2	MW-6	Total/NA	Water	SM 4500 H+ B	
440-223416-3	MW-3	Total/NA	Water	SM 4500 H+ B	
440-223416-4	MW-1	Total/NA	Water	SM 4500 H+ B	
440-223416-5	MW-2	Total/NA	Water	SM 4500 H+ B	
440-223416-6	MW-4	Total/NA	Water	SM 4500 H+ B	

Prep Batch: 509011

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-223416-5	MW-2	Total/NA	Water	Distill/CN	
MB 440-509011/1-A	Method Blank	Total/NA	Water	Distill/CN	
LCS 440-509011/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	
440-223416-5 MS	MW-2	Total/NA	Water	Distill/CN	
440-223416-5 MSD	MW-2	Total/NA	Water	Distill/CN	

Analysis Batch: 509059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-223416-5	MW-2	Total/NA	Water	SM 4500 CN E	509011
MB 440-509011/1-A	Method Blank	Total/NA	Water	SM 4500 CN E	509011
LCS 440-509011/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN E	509011
440-223416-5 MS	MW-2	Total/NA	Water	SM 4500 CN E	509011
440-223416-5 MSD	MW-2	Total/NA	Water	SM 4500 CN E	509011

Prep Batch: 509595

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-223416-1	MW-5	Total/NA	Water	Distill/CN	
440-223416-2	MW-6	Total/NA	Water	Distill/CN	
MB 440-509595/1-A	Method Blank	Total/NA	Water	Distill/CN	
LCS 440-509595/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	
440-223416-1 MS	MW-5	Total/NA	Water	Distill/CN	
440-223416-1 MSD	MW-5	Total/NA	Water	Distill/CN	

QC Association Summary

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-223416-1
SDG: October 2018

Analysis Batch: 509863

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-223416-1	MW-5	Total/NA	Water	SM 4500 CN E	509595
440-223416-2	MW-6	Total/NA	Water	SM 4500 CN E	509595
MB 440-509595/1-A	Method Blank	Total/NA	Water	SM 4500 CN E	509595
LCS 440-509595/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN E	509595
440-223416-1 MS	MW-5	Total/NA	Water	SM 4500 CN E	509595
440-223416-1 MSD	MW-5	Total/NA	Water	SM 4500 CN E	509595

Analysis Batch: 510082

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-223416-1	MW-5	Total/NA	Water	SM 2510B	
440-223416-2	MW-6	Total/NA	Water	SM 2510B	
440-223416-3	MW-3	Total/NA	Water	SM 2510B	
440-223416-4	MW-1	Total/NA	Water	SM 2510B	
440-223416-5	MW-2	Total/NA	Water	SM 2510B	
440-223416-6	MW-4	Total/NA	Water	SM 2510B	
MB 440-510082/3	Method Blank	Total/NA	Water	SM 2510B	
LCS 440-510082/4	Lab Control Sample	Total/NA	Water	SM 2510B	
440-223416-6 DU	MW-4	Total/NA	Water	SM 2510B	

Prep Batch: 510315

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-223416-3	MW-3	Total/NA	Water	Distill/CN	
440-223416-4	MW-1	Total/NA	Water	Distill/CN	
440-223416-6	MW-4	Total/NA	Water	Distill/CN	
MB 440-510315/1-A	Method Blank	Total/NA	Water	Distill/CN	
LCS 440-510315/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	
LCSD 440-510315/19-A	Lab Control Sample Dup	Total/NA	Water	Distill/CN	

Analysis Batch: 510402

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-223416-3	MW-3	Total/NA	Water	SM 4500 CN E	510315
440-223416-4	MW-1	Total/NA	Water	SM 4500 CN E	510315
440-223416-6	MW-4	Total/NA	Water	SM 4500 CN E	510315
MB 440-510315/1-A	Method Blank	Total/NA	Water	SM 4500 CN E	510315
LCS 440-510315/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN E	510315
LCSD 440-510315/19-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN E	510315

Analysis Batch: 510602

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-223416-1	MW-5	Total/NA	Water	350.1	
440-223416-2	MW-6	Total/NA	Water	350.1	
440-223416-3	MW-3	Total/NA	Water	350.1	
440-223416-4	MW-1	Total/NA	Water	350.1	
440-223416-5	MW-2	Total/NA	Water	350.1	
440-223416-6	MW-4	Total/NA	Water	350.1	
MB 440-510602/10	Method Blank	Total/NA	Water	350.1	
LCS 440-510602/11	Lab Control Sample	Total/NA	Water	350.1	
MRL 440-510602/9	Lab Control Sample	Total/NA	Water	350.1	

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
E	Result exceeded calibration range.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-223416-1
SDG: October 2018

Laboratory: TestAmerica Irvine

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	CA ELAP 2706	06-30-19

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260B		Water	m,p-Xylene
8260B		Water	Xylenes, Total
SM 2320B		Water	Bicarbonate Alkalinity as CaCO3
SM 2320B		Water	Carbonate Alkalinity as CaCO3
SM 2320B		Water	Hydroxide Alkalinity as CaCO3

Laboratory: TestAmerica Nashville

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2938	10-31-18 *

Laboratory: TestAmerica Sacramento

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2897	01-31-19

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6010B	3010A	Water	Sulfur
6020	3005A	Water	Aluminum
6020	3005A	Water	Calcium
6020	3005A	Water	Iron
6020	3005A	Water	Magnesium
6020	3005A	Water	Manganese
6020	3005A	Water	Potassium
6020	3005A	Water	Sodium
8015B	3510C	Water	Motor Oil Range Organics (C25-C36)
WS-WC-0050	353 (NCell-Hyd)	Water	Nitrocellulose

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614
Phone: 949.261.1022 Fax:

Chain of Custody Record 207245

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☒ Other:

Client Contact	Project Manager: Eric Fordham	Site Contact:	Date:	COC No 207245
Company Name GeoPentech	Tel/Fax: 714-796-9100	Lab Contact: Linda Laver	Carrier:	1 of 1 COCs
Address: 101 Academy Drive	Analysis Turnaround Time			Sampler:
City/State/Zip: Irvine, CA 92617	☐ CALENDAR DAYS ☒ WORKING DAYS			For Lab Use Only:
Phone 714-796-9100	TAT if different from Below Standard			Walk-in Client:
Fax 714-796-9191	☐ 2 weeks			Lab Sampling
Project Name: Blue Eagle Mine	☐ 1 week			Job / SDG No.:
Site Rosamond, CA	☐ 2 days			
PO #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	DRO/MRO	Energetics	Nitrate/Nitrite	Dissolved Metals +S	Dissolved Hardness	Ethylene Glycol	Alkalinity	300, EC, pH, TDS	Ammonia	Cyanide	VOC + GRO	Perchlorate	Sample Specific Notes.
MW-5	10-30-18	9:28	G	H_2O	18			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
MW-6	10-30-18	12:01	G	H_2O	18			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
MW-3	10-30-18	14:06	G	H_2O	18			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
MW-1	10-31-18	8:05	G	H_2O	18			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
MW-2	10-31-18	9:17	G	H_2O	18			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
MW-4	10-31-18	10:34	G	H_2O	18			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

00/00 10/31/18

440-223416 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other 2, 3, 1, 5

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☒ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:
All samples were put on ice after collection and kept on ice until delivery. Quotation: 3201123

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp (°C): Obs'd:_____ Corr'd._____ Therm ID No._____

Relinquished by:	Company	Date/Time	Received by.	Company	Date/Time.
Ryan Wakefield	GeoPentech	10-31-18 15:40			
Relinquished by.	Company	Date/Time	Received by.	Company	Date/Time:
Relinquished by:	Company:	Date/Time.	Received in Laboratory by	Company.	Date/Time
				TA-IRV	10/31/18 15:40

2.4/2.6 3.6/3.8 1.0/1.2 3.9/4.1 0.6/0.8

TestAmerica Irvine
17461 Derian Ave Suite 100
Irvine, CA 92614-5817
Phone (949) 261-1022 Fax (949) 260-3297

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Laver, Linda C.	Carrier Tracking No(s):	COC No: 440-128719.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: linda.laver@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 440-223416-1
Address: 880 Riverside Parkway, ,	Due Date Requested: 11/16/2018			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: Blue Eagle Lode Mine	Project #: 32011165			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015B_DRO/3510C_IVWT (MOD) CALUFT DRO/MRO	8330A/8330_SPE_P_IVWT (MOD) Standard List	353.2_Nitrocell/NCEL_Prep_A (MOD) Local Method	6010B/Filtration_ME (MOD) Pick Your Analytes	7470A/Filtration_ME Dissolved Mercury	SM2340B/Filtration_AC (MOD) All Hardness Forms	6020/Filtration_ME Dissolved Metals including Ca & Mg	Total Number of containers	Special Instructions/Note:
			Preservation Code:												
MW-5 (440-223416-1)	10/30/18	09:28 Pacific		Water			X	X	X	X	X	X	X	7	Project was quoted as DRO (C10-C24) and MRO (C25-C36)., Sulfur may be high, may
MW-6 (440-223416-2)	10/30/18	12:01 Pacific		Water			X	X	X	X	X	X	X	7	Project was quoted as DRO (C10-C24) and MRO (C25-C36)., Sulfur may be high, may
MW-3 (440-223416-3)	10/30/18	14:06 Pacific		Water			X	X	X	X	X	X	X	7	Project was quoted as DRO (C10-C24) and MRO (C25-C36)., Sulfur may be high, may
MW-1 (440-223416-4)	10/31/18	08:05 Pacific		Water			X	X	X	X	X	X	X	7	Project was quoted as DRO (C10-C24) and MRO (C25-C36)., Sulfur may be high, may
MW-2 (440-223416-5)	10/31/18	09:17 Pacific		Water			X	X	X	X	X	X	X	7	Project was quoted as DRO (C10-C24) and MRO (C25-C36)., Sulfur may be high, may
MW-4 (440-223416-6)	10/31/18	10:34 Pacific		Water			X	X	X	X	X	X	X	7	Project was quoted as DRO (C10-C24) and MRO (C25-C36)., Sulfur may be high, may

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	11/1/18 1630	TA Irv		11-2-18 920	TA Sac
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ✓ Yes Δ No	Custody Seal No.: Seal	Cooler Temperature(s) °C and Other Remarks:

Ver: 09/20/2016

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

440-223416 Chain of Custody

Cooler Received/Opened On 11/2/2018 @ 09:55

Time Samples Removed From Cooler 17:27 Time Samples Placed In Storage 17:43 (2 Hour Window)

1. Tracking # 4535 3127 5155 (last 4 digits, FedEx) Courier: Fedex

IR Gun ID 31470366 pH Strip Lot_____ Chlorine Strip Lot_____

2. Temperature of rep. sample or temp blank when opened: 2.2 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where:_____

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) _____

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

● ⬅ Larger than this.

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) 2.2

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) 2.2

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) 2.2

I certify that I attached a label with the unique LIMS number to each container (intial) 2.2

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment

TestAmerica Irvine
17461 Derian Ave Suite 100
Irvine, CA 92614-5817
Phone (949) 261-1022 Fax (949) 260-3297

Chain of Custody Record

440-223416

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Laver, Linda C.	COC No: 440-128713.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: linda.laver@testamericainc.com	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): State Program - California	Job #: 440-223416-1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 11/16/2018		
City: Nashville	TAT Requested (days):		
State, Zip: TN, 37204			
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:		
Email:	WO #:		
Project Name: Blue Eagle Lode Mine	Project #: 32011165		
Site:	SSOW#:		

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015B_DAI_GLY/(MOD) Custom Glycols List	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-5 (440-223416-1)	10/30/18	09:28 Pacific		Water			X	3	
MW-6 (440-223416-2)	10/30/18	12:01 Pacific		Water			X	3	
MW-3 (440-223416-3)	10/30/18	14:06 Pacific		Water			X	3	
MW-1 (440-223416-4)	10/31/18	08:05 Pacific		Water			X	3	
MW-2 (440-223416-5)	10/31/18	09:17 Pacific		Water			X	3	
MW-4 (440-223416-6)	10/31/18	10:34 Pacific		Water			X	3	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:
Empty Kit Relinquished by:	Date: Time: Method of Shipment:

	Date/Time	Company	Received by	Date/Time	Company
Relinquished by:	11/1/18 1700	TAL-IRV			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
			Received by:	11/02/18 09:55	TA-IRV

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks:	2.2

Ver: 09/20/2016

Login Sample Receipt Checklist

Client: GeoPentech, Inc

Job Number: 440-223416-1
SDG Number: October 2018

Login Number: 223416
List Number: 1
Creator: Escalante, Maria I

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	Not present
Sample custody seals, if present, are intact.	N/A	Not Present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: GeoPentech, Inc

Job Number: 440-223416-1
SDG Number: October 2018

Login Number: 223416
List Number: 3
Creator: Gooch, Mayce

List Source: TestAmerica Sacramento
List Creation: 11/05/18 11:03 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.3c
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-225292-2
TestAmerica Sample Delivery Group: November 2018
Client Project/Site: Blue Eagle Lode Mine

For:
GeoPentech, Inc
101 Academy Dr
Suite 100
Irvine, California 92617

Attn: Eric Fordham

Linda C. Laver

Authorized for release by:
1/31/2019 3:02:02 PM

Linda C. Laver, Project Manager II
(916)374-4362
linda.laver@testamericainc.com

LINKS
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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-225292-2
SDG: November 2018

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-225292-1	MW-5	Water	11/27/18 09:00	11/28/18 12:35
440-225292-2	MW-6	Water	11/27/18 10:26	11/28/18 12:35
440-225292-3	Duplicate (MW-6)	Water	11/27/18 11:05	11/28/18 12:35
440-225292-4	MW-3	Water	11/27/18 12:38	11/28/18 12:35
440-225292-5	MW-1	Water	11/27/18 13:34	11/28/18 12:35
440-225292-6	MW-2	Water	11/28/18 08:07	11/28/18 12:35
440-225292-7	MW-4	Water	11/28/18 09:02	11/28/18 12:35

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-225292-2
SDG: November 2018

Job ID: 440-225292-2

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-225292-2

Comments
This report includes 8330A data only. All other data was included in the report for Job 440-225292-1.

Receipt
The samples were received on 11/28/2018 12:35 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 5.0º C, 5.7º C, 5.9º C and 6.0º C.

Receipt Exceptions
The collection time listed on the container label for the following sample did not match the information listed on the Chain-of-Custody (COC): MW-1 (440-225292-5). The container label listed 11/27/18, while the COC lists 11/28/17. The client label looks like it was originally 11/28/18, like listed on the COC; however, 11/28/19 was crossed out and 11/27/18 was scratched in. The sample was logged in based on the COC as 11/28/19.

HPLC
Method(s) 8330-Prep: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with method 8330A in preparation batch 320-262572.

Method(s) 8330-Prep: The following samples were filtered due to high turbidity. Preparation batch 320-262572: MW-6 (440-225292-2), Duplicate (MW-6) (440-225292-3) and MW-1 (440-225292-5)

Method(s) 8330-Prep: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with method 8330A in preparation batch 320-262895.

Method(s) 8330A: The 3,4-Dinitrotoluene surrogate recovery for the following CCV in analytical batch 320-268367 was outside acceptance limits and was biased high: (CCV 320-268367/20). The surrogate recovery was within limits in the associated samples.

Method(s) 8330A: The 3,4-Dinitrotoluene surrogate recovery for the following samples was outside acceptance limits and was biased low on the primary column. The recovery was within acceptance limits on the alternate wavelength (358nm), indicating that the extraction process was in control. There was visible chromatographic interference that suggests matrix could be adversely affecting the surrogate recovery on the primary wavelength (250nm). Samples: MW-5 (440-225292-1), MW-6 (440-225292-2), Duplicate (MW-6) (440-225292-3), MW-3 (440-225292-4), MW-1 (440-225292-5) and (PB 320-262572/14-A).

Method(s) 8330A: The %RPD between the primary and confirmation column exceeded 40% for the below listed analytes for the following samples.. The primary column results have been reported and qualified in accordance with the laboratory's SOP.
440-225292-2 for 1,3,5-Trinitrobenzene, 2,4,6-Trinitrotoluene and 2-Nitrotoluene
440-225292-3 for 1,3,5-Trinitrobenzene, HMX, 2-Nitrotoluene and 4-Nitrotoluene

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-225292-2
SDG: November 2018

Client Sample ID: MW-5
Date Collected: 11/27/18 09:00
Date Received: 11/28/18 12:35

Lab Sample ID: 440-225292-1
Matrix: Water

Method: 8330A - Nitroaromatics and Nitramines

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dinitrobenzene	ND		0.10	0.050	ug/L		12/03/18 08:24	01/01/19 00:46	1
2,4-Dinitrotoluene	ND		0.10	0.050	ug/L		12/03/18 08:24	01/01/19 00:46	1
2,6-Dinitrotoluene	ND		0.10	0.050	ug/L		12/03/18 08:24	01/01/19 00:46	1
HMX	ND		0.10	0.036	ug/L		12/03/18 08:24	01/01/19 00:46	1
Nitrobenzene	ND		0.10	0.050	ug/L		12/03/18 08:24	01/01/19 00:46	1
Nitroglycerin	ND		0.65	0.33	ug/L		12/03/18 08:24	01/01/19 00:46	1
2-Nitrotoluene	ND		0.50	0.088	ug/L		12/03/18 08:24	01/01/19 00:46	1
3-Nitrotoluene	ND		0.50	0.057	ug/L		12/03/18 08:24	01/01/19 00:46	1
4-Nitrotoluene	ND		0.50	0.088	ug/L		12/03/18 08:24	01/01/19 00:46	1
RDX	ND		0.10	0.036	ug/L		12/03/18 08:24	01/01/19 00:46	1
1,3,5-Trinitrobenzene	ND		0.10	0.031	ug/L		12/03/18 08:24	01/01/19 00:46	1
2,4,6-Trinitrotoluene	ND		0.10	0.050	ug/L		12/03/18 08:24	01/01/19 00:46	1
PETN	ND		0.65	0.30	ug/L		12/03/18 08:24	01/01/19 00:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*101*		*79 - 111*	*12/03/18 08:24*	*01/01/19 00:46*	*1*

Client Sample ID: MW-6

Date Collected: 11/27/18 10:26
Date Received: 11/28/18 12:35

Lab Sample ID: 440-225292-2

Matrix: Water

Method: 8330A - Nitroaromatics and Nitramines

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dinitrobenzene	ND		0.099	0.050	ug/L		12/03/18 08:24	01/01/19 01:40	1
2,4-Dinitrotoluene	**0.081**	**J**	0.099	0.050	ug/L		12/03/18 08:24	01/01/19 01:40	1
2,6-Dinitrotoluene	**0.091**	**J**	0.099	0.050	ug/L		12/03/18 08:24	01/01/19 01:40	1
HMX	ND		0.099	0.036	ug/L		12/03/18 08:24	01/01/19 01:40	1
Nitrobenzene	ND		0.099	0.050	ug/L		12/03/18 08:24	01/01/19 01:40	1
Nitroglycerin	**1.1**	**p1**	0.64	0.33	ug/L		12/03/18 08:24	01/01/19 01:40	1
2-Nitrotoluene	**0.099**	**J p**	0.50	0.087	ug/L		12/03/18 08:24	01/01/19 01:40	1
3-Nitrotoluene	ND		0.50	0.057	ug/L		12/03/18 08:24	01/01/19 01:40	1
4-Nitrotoluene	ND		0.50	0.087	ug/L		12/03/18 08:24	01/01/19 01:40	1
RDX	ND		0.099	0.036	ug/L		12/03/18 08:24	01/01/19 01:40	1
1,3,5-Trinitrobenzene	**0.16**	**p**	0.099	0.031	ug/L		12/03/18 08:24	01/01/19 01:40	1
2,4,6-Trinitrotoluene	ND	p	0.099	0.050	ug/L		12/03/18 08:24	01/01/19 01:40	1
PETN	ND		0.64	0.30	ug/L		12/03/18 08:24	01/01/19 01:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*98*		*79 - 111*	*12/03/18 08:24*	*01/01/19 01:40*	*1*

Client Sample ID: Duplicate (MW-6)

Date Collected: 11/27/18 11:05
Date Received: 11/28/18 12:35

Lab Sample ID: 440-225292-3

Matrix: Water

Method: 8330A - Nitroaromatics and Nitramines

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dinitrobenzene	ND		0.099	0.050	ug/L		12/03/18 08:24	01/01/19 02:33	1
2,4-Dinitrotoluene	ND		0.099	0.050	ug/L		12/03/18 08:24	01/01/19 02:33	1
2,6-Dinitrotoluene	ND		0.099	0.050	ug/L		12/03/18 08:24	01/01/19 02:33	1
HMX	**0.045**	**J p**	0.099	0.036	ug/L		12/03/18 08:24	01/01/19 02:33	1
Nitrobenzene	ND		0.099	0.050	ug/L		12/03/18 08:24	01/01/19 02:33	1
Nitroglycerin	ND		0.64	0.33	ug/L		12/03/18 08:24	01/01/19 02:33	1
2-Nitrotoluene	**0.15**	**J p**	0.50	0.087	ug/L		12/03/18 08:24	01/01/19 02:33	1
3-Nitrotoluene	ND		0.50	0.056	ug/L		12/03/18 08:24	01/01/19 02:33	1
4-Nitrotoluene	**0.15**	**J p**	0.50	0.087	ug/L		12/03/18 08:24	01/01/19 02:33	1
RDX	ND		0.099	0.036	ug/L		12/03/18 08:24	01/01/19 02:33	1
1,3,5-Trinitrobenzene	**0.089**	**J p**	0.099	0.031	ug/L		12/03/18 08:24	01/01/19 02:33	1
2,4,6-Trinitrotoluene	ND		0.099	0.050	ug/L		12/03/18 08:24	01/01/19 02:33	1
PETN	ND		0.64	0.30	ug/L		12/03/18 08:24	01/01/19 02:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*99*		*79 - 111*	*12/03/18 08:24*	*01/01/19 02:33*	*1*

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-225292-2
SDG: November 2018

Client Sample ID: MW-3
Date Collected: 11/27/18 12:38
Date Received: 11/28/18 12:35

Lab Sample ID: 440-225292-4
Matrix: Water

Method: 8330A - Nitroaromatics and Nitramines

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dinitrobenzene	ND		0.11	0.054	ug/L		12/03/18 08:24	01/01/19 03:27	1
2,4-Dinitrotoluene	ND		0.11	0.054	ug/L		12/03/18 08:24	01/01/19 03:27	1
2,6-Dinitrotoluene	ND		0.11	0.054	ug/L		12/03/18 08:24	01/01/19 03:27	1
HMX	ND		0.11	0.039	ug/L		12/03/18 08:24	01/01/19 03:27	1
Nitrobenzene	ND		0.11	0.054	ug/L		12/03/18 08:24	01/01/19 03:27	1
Nitroglycerin	ND		0.70	0.36	ug/L		12/03/18 08:24	01/01/19 03:27	1
2-Nitrotoluene	ND		0.54	0.095	ug/L		12/03/18 08:24	01/01/19 03:27	1
3-Nitrotoluene	ND		0.54	0.062	ug/L		12/03/18 08:24	01/01/19 03:27	1
4-Nitrotoluene	ND		0.54	0.095	ug/L		12/03/18 08:24	01/01/19 03:27	1
RDX	ND		0.11	0.039	ug/L		12/03/18 08:24	01/01/19 03:27	1
1,3,5-Trinitrobenzene	ND		0.11	0.033	ug/L		12/03/18 08:24	01/01/19 03:27	1
2,4,6-Trinitrotoluene	ND		0.11	0.054	ug/L		12/03/18 08:24	01/01/19 03:27	1
PETN	ND		0.70	0.32	ug/L		12/03/18 08:24	01/01/19 03:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*88*		*79 - 111*	*12/03/18 08:24*	*01/01/19 03:27*	*1*

Client Sample ID: MW-1
Date Collected: 11/27/18 13:34
Date Received: 11/28/18 12:35

Lab Sample ID: 440-225292-5
Matrix: Water

Method: 8330A - Nitroaromatics and Nitramines

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dinitrobenzene	ND		0.10	0.050	ug/L		12/03/18 08:24	01/01/19 06:08	1
2,4-Dinitrotoluene	ND		0.10	0.050	ug/L		12/03/18 08:24	01/01/19 06:08	1
2,6-Dinitrotoluene	ND		0.10	0.050	ug/L		12/03/18 08:24	01/01/19 06:08	1
HMX	ND		0.10	0.036	ug/L		12/03/18 08:24	01/01/19 06:08	1
Nitrobenzene	ND		0.10	0.050	ug/L		12/03/18 08:24	01/01/19 06:08	1
Nitroglycerin	ND		0.65	0.33	ug/L		12/03/18 08:24	01/01/19 06:08	1
2-Nitrotoluene	ND		0.50	0.088	ug/L		12/03/18 08:24	01/01/19 06:08	1
3-Nitrotoluene	ND		0.50	0.057	ug/L		12/03/18 08:24	01/01/19 06:08	1
4-Nitrotoluene	ND		0.50	0.088	ug/L		12/03/18 08:24	01/01/19 06:08	1
RDX	ND		0.10	0.036	ug/L		12/03/18 08:24	01/01/19 06:08	1
1,3,5-Trinitrobenzene	ND		0.10	0.031	ug/L		12/03/18 08:24	01/01/19 06:08	1
2,4,6-Trinitrotoluene	ND		0.10	0.050	ug/L		12/03/18 08:24	01/01/19 06:08	1
PETN	ND		0.65	0.30	ug/L		12/03/18 08:24	01/01/19 06:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*89*		*79 - 111*	*12/03/18 08:24*	*01/01/19 06:08*	*1*

Client Sample ID: MW-2

Date Collected: 11/28/18 08:07
Date Received: 11/28/18 12:35

Lab Sample ID: 440-225292-6

Matrix: Water

Method: 8330A - Nitroaromatics and Nitramines

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dinitrobenzene	ND		0.10	0.050	ug/L		12/04/18 06:06	12/14/18 18:38	1
2,4-Dinitrotoluene	ND		0.10	0.050	ug/L		12/04/18 06:06	12/14/18 18:38	1
2,6-Dinitrotoluene	ND		0.10	0.050	ug/L		12/04/18 06:06	12/14/18 18:38	1
HMX	ND		0.10	0.036	ug/L		12/04/18 06:06	12/14/18 18:38	1
Nitrobenzene	ND		0.10	0.050	ug/L		12/04/18 06:06	12/14/18 18:38	1
Nitroglycerin	ND		0.66	0.33	ug/L		12/04/18 06:06	12/14/18 18:38	1
2-Nitrotoluene	ND		0.50	0.089	ug/L		12/04/18 06:06	12/14/18 18:38	1
3-Nitrotoluene	ND		0.50	0.057	ug/L		12/04/18 06:06	12/14/18 18:38	1
4-Nitrotoluene	ND		0.50	0.089	ug/L		12/04/18 06:06	12/14/18 18:38	1
RDX	ND		0.10	0.036	ug/L		12/04/18 06:06	12/14/18 18:38	1
1,3,5-Trinitrobenzene	ND		0.10	0.031	ug/L		12/04/18 06:06	12/14/18 18:38	1
2,4,6-Trinitrotoluene	ND		0.10	0.050	ug/L		12/04/18 06:06	12/14/18 18:38	1
PETN	ND		0.66	0.30	ug/L		12/04/18 06:06	12/14/18 18:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*99*		*79 - 111*	*12/04/18 06:06*	*12/14/18 18:38*	*1*

Client Sample ID: MW-4

Date Collected: 11/28/18 09:02
Date Received: 11/28/18 12:35

Lab Sample ID: 440-225292-7

Matrix: Water

Method: 8330A - Nitroaromatics and Nitramines

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dinitrobenzene	ND		0.10	0.050	ug/L		12/04/18 06:06	12/14/18 17:53	1
2,4-Dinitrotoluene	ND		0.10	0.050	ug/L		12/04/18 06:06	12/14/18 17:53	1
2,6-Dinitrotoluene	ND		0.10	0.050	ug/L		12/04/18 06:06	12/14/18 17:53	1
HMX	ND		0.10	0.036	ug/L		12/04/18 06:06	12/14/18 17:53	1
Nitrobenzene	ND		0.10	0.050	ug/L		12/04/18 06:06	12/14/18 17:53	1
Nitroglycerin	ND		0.66	0.33	ug/L		12/04/18 06:06	12/14/18 17:53	1
2-Nitrotoluene	ND		0.50	0.089	ug/L		12/04/18 06:06	12/14/18 17:53	1
3-Nitrotoluene	ND		0.50	0.057	ug/L		12/04/18 06:06	12/14/18 17:53	1
4-Nitrotoluene	ND		0.50	0.089	ug/L		12/04/18 06:06	12/14/18 17:53	1
RDX	ND		0.10	0.036	ug/L		12/04/18 06:06	12/14/18 17:53	1
1,3,5-Trinitrobenzene	ND		0.10	0.031	ug/L		12/04/18 06:06	12/14/18 17:53	1
2,4,6-Trinitrotoluene	ND		0.10	0.050	ug/L		12/04/18 06:06	12/14/18 17:53	1
PETN	ND		0.66	0.30	ug/L		12/04/18 06:06	12/14/18 17:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*96*		*79 - 111*	*12/04/18 06:06*	*12/14/18 17:53*	*1*

Surrogate Summary

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-225292-2
SDG: November 2018

Method: 8330A - Nitroaromatics and Nitramines

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	DNT2 (79-111)
440-225292-1	MW-5	101
440-225292-2	MW-6	98
440-225292-3	Duplicate (MW-6)	99
440-225292-4	MW-3	88
440-225292-5	MW-1	89
LCS 320-262572/2-A	Lab Control Sample	111
LCSD 320-262572/3-A	Lab Control Sample Dup	99
MB 320-262572/1-A	Method Blank	87
PB 320-262572/14-A	Method Blank	91

Surrogate Legend

DNT = 3,4-Dinitrotoluene

Method: 8330A - Nitroaromatics and Nitramines

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	DNT1 (79-111)
440-225292-2	MW-6	92
440-225292-3	Duplicate (MW-6)	107
440-225292-5	MW-1	96
440-225292-6	MW-2	99
440-225292-6	MW-2	117 X
440-225292-7	MW-4	96
440-225292-7	MW-4	103
LCS 320-262572/2-A	Lab Control Sample	93
LCS 320-262895/2-A	Lab Control Sample	101
LCSD 320-262572/3-A	Lab Control Sample Dup	92
LCSD 320-262895/3-A	Lab Control Sample Dup	104
MB 320-262572/1-A	Method Blank	92
MB 320-262895/1-A	Method Blank	97
PB 320-262572/14-A	Method Blank	97

Surrogate Legend

DNT = 3,4-Dinitrotoluene

Method Summary

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-225292-2
SDG: November 2018

Method	Method Description	Protocol	Laboratory
8330A	Nitroaromatics and Nitramines	SW846	TAL SAC
8330-Prep	Solid-Phase Extraction (Explosives)	SW846	TAL SAC

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Lab Chronicle

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-225292-2
SDG: November 2018

Client Sample ID: MW-5
Date Collected: 11/27/18 09:00
Date Received: 11/28/18 12:35

Lab Sample ID: 440-225292-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8330-Prep			1000.1 mL	20 mL	262572	12/03/18 08:24	TJA	TAL SAC
Total/NA	Analysis	8330A		1			268367	01/01/19 00:46	AJC	TAL SAC

Client Sample ID: MW-6
Date Collected: 11/27/18 10:26
Date Received: 11/28/18 12:35

Lab Sample ID: 440-225292-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8330-Prep			1008.3 mL	20 mL	262572	12/03/18 08:24	TJA	TAL SAC
Total/NA	Analysis	8330A		1			268367	01/01/19 01:40	AJC	TAL SAC
Total/NA	Prep	8330-Prep			1008.3 mL	20 mL	262572	12/03/18 08:24	TJA	TAL SAC
Total/NA	Analysis	8330A		1			268387	01/02/19 08:13	D1R	TAL SAC

Client Sample ID: Duplicate (MW-6)
Date Collected: 11/27/18 11:05
Date Received: 11/28/18 12:35

Lab Sample ID: 440-225292-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8330-Prep			1009.1 mL	20 mL	262572	12/03/18 08:24	TJA	TAL SAC
Total/NA	Analysis	8330A		1			268367	01/01/19 02:33	AJC	TAL SAC
Total/NA	Prep	8330-Prep			1009.1 mL	20 mL	262572	12/03/18 08:24	TJA	TAL SAC
Total/NA	Analysis	8330A		1			268387	01/02/19 10:26	D1R	TAL SAC

Client Sample ID: MW-3
Date Collected: 11/27/18 12:38
Date Received: 11/28/18 12:35

Lab Sample ID: 440-225292-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8330-Prep			926.3 mL	20 mL	262572	12/03/18 08:24	TJA	TAL SAC
Total/NA	Analysis	8330A		1			268367	01/01/19 03:27	AJC	TAL SAC

Client Sample ID: MW-1
Date Collected: 11/27/18 13:34
Date Received: 11/28/18 12:35

Lab Sample ID: 440-225292-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8330-Prep			998.6 mL	20 mL	262572	12/03/18 08:24	TJA	TAL SAC
Total/NA	Analysis	8330A		1			268367	01/01/19 06:08	AJC	TAL SAC
Total/NA	Prep	8330-Prep			998.6 mL	20 mL	262572	12/03/18 08:24	TJA	TAL SAC
Total/NA	Analysis	8330A		1			268387	01/02/19 14:54	D1R	TAL SAC

Lab Chronicle

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-225292-2
SDG: November 2018

Client Sample ID: MW-2

Date Collected: 11/28/18 08:07
Date Received: 11/28/18 12:35

Lab Sample ID: 440-225292-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8330-Prep			991.8 mL	20 mL	262895	12/04/18 06:06	TJA	TAL SAC
Total/NA	Analysis	8330A		1	1 mL	1.0 mL	265342	12/14/18 18:38	AMAO	TAL SAC
Total/NA	Prep	8330-Prep			991.8 mL	20 mL	262895	12/04/18 06:06	TJA	TAL SAC
Total/NA	Analysis	8330A		1			272692	01/26/19 23:28	AJC	TAL SAC

Client Sample ID: MW-4

Date Collected: 11/28/18 09:02
Date Received: 11/28/18 12:35

Lab Sample ID: 440-225292-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8330-Prep			991.9 mL	20 mL	262895	12/04/18 06:06	TJA	TAL SAC
Total/NA	Analysis	8330A		1			265342	12/14/18 17:53	AMAO	TAL SAC
Total/NA	Prep	8330-Prep			991.9 mL	20 mL	262895	12/04/18 06:06	TJA	TAL SAC
Total/NA	Analysis	8330A		1			267037	12/22/18 17:18	AJC	TAL SAC

Laboratory References:

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Method: 8330A - Nitroaromatics and Nitramines

Lab Sample ID: MB 320-262572/1-A
Matrix: Water
Analysis Batch: 268367

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 262572

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dinitrobenzene	ND		0.10	0.050	ug/L		12/03/18 08:24	12/31/18 17:37	1
2,4-Dinitrotoluene	ND		0.10	0.050	ug/L		12/03/18 08:24	12/31/18 17:37	1
2,6-Dinitrotoluene	ND		0.10	0.050	ug/L		12/03/18 08:24	12/31/18 17:37	1
HMX	ND		0.10	0.036	ug/L		12/03/18 08:24	12/31/18 17:37	1
Nitrobenzene	ND		0.10	0.050	ug/L		12/03/18 08:24	12/31/18 17:37	1
Nitroglycerin	ND		0.65	0.33	ug/L		12/03/18 08:24	12/31/18 17:37	1
2-Nitrotoluene	ND		0.50	0.088	ug/L		12/03/18 08:24	12/31/18 17:37	1
3-Nitrotoluene	ND		0.50	0.057	ug/L		12/03/18 08:24	12/31/18 17:37	1
4-Nitrotoluene	ND		0.50	0.088	ug/L		12/03/18 08:24	12/31/18 17:37	1
RDX	ND		0.10	0.036	ug/L		12/03/18 08:24	12/31/18 17:37	1
1,3,5-Trinitrobenzene	ND		0.10	0.031	ug/L		12/03/18 08:24	12/31/18 17:37	1
2,4,6-Trinitrotoluene	ND		0.10	0.050	ug/L		12/03/18 08:24	12/31/18 17:37	1
PETN	ND		0.65	0.30	ug/L		12/03/18 08:24	12/31/18 17:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*87*		*79 - 111*	*12/03/18 08:24*	*12/31/18 17:37*	*1*

Lab Sample ID: PB 320-262572/14-A
Matrix: Water
Analysis Batch: 268367

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 262572

Analyte	PB Result	PB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dinitrobenzene	ND		0.10	0.050	ug/L		12/03/18 08:24	01/01/19 07:01	1
2,4-Dinitrotoluene	ND		0.10	0.050	ug/L		12/03/18 08:24	01/01/19 07:01	1
2,6-Dinitrotoluene	ND		0.10	0.050	ug/L		12/03/18 08:24	01/01/19 07:01	1
HMX	ND		0.10	0.036	ug/L		12/03/18 08:24	01/01/19 07:01	1
Nitrobenzene	ND		0.10	0.050	ug/L		12/03/18 08:24	01/01/19 07:01	1
Nitroglycerin	ND		0.65	0.33	ug/L		12/03/18 08:24	01/01/19 07:01	1
2-Nitrotoluene	ND		0.50	0.088	ug/L		12/03/18 08:24	01/01/19 07:01	1
3-Nitrotoluene	ND		0.50	0.057	ug/L		12/03/18 08:24	01/01/19 07:01	1
4-Nitrotoluene	ND		0.50	0.088	ug/L		12/03/18 08:24	01/01/19 07:01	1
RDX	ND		0.10	0.036	ug/L		12/03/18 08:24	01/01/19 07:01	1
1,3,5-Trinitrobenzene	0.0374	J	0.10	0.031	ug/L		12/03/18 08:24	01/01/19 07:01	1
2,4,6-Trinitrotoluene	ND		0.10	0.050	ug/L		12/03/18 08:24	01/01/19 07:01	1
PETN	ND		0.65	0.30	ug/L		12/03/18 08:24	01/01/19 07:01	1

Surrogate	*PB %Recovery*	*PB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*91*		*79 - 111*	*12/03/18 08:24*	*01/01/19 07:01*	*1*

Lab Sample ID: LCS 320-262572/2-A
Matrix: Water
Analysis Batch: 268367

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 262572

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dinitrobenzene	1.00	0.842		ug/L		84	72 - 123
2,4-Dinitrotoluene	1.00	0.867		ug/L		87	70 - 119
2,6-Dinitrotoluene	1.00	0.828		ug/L		83	71 - 119

Method: 8330A - Nitroaromatics and Nitramines (Continued)

Lab Sample ID: LCS 320-262572/2-A
Matrix: Water
Analysis Batch: 268367

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 262572

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HMX	1.00	0.844		ug/L		84	67 - 115
Nitrobenzene	1.00	0.923		ug/L		92	69 - 119
Nitroglycerin	5.00	4.58		ug/L		92	85 - 115
2-Nitrotoluene	1.00	0.810		ug/L		81	64 - 120
3-Nitrotoluene	1.00	0.817		ug/L		82	67 - 114
4-Nitrotoluene	1.00	0.810		ug/L		81	67 - 115
RDX	1.00	0.882		ug/L		88	68 - 122
1,3,5-Trinitrobenzene	1.00	0.848		ug/L		85	74 - 120
2,4,6-Trinitrotoluene	1.00	0.784		ug/L		78	69 - 111
PETN	5.00	4.86		ug/L		97	84 - 117

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
3,4-Dinitrotoluene	*111*		*79 - 111*

Lab Sample ID: LCSD 320-262572/3-A
Matrix: Water
Analysis Batch: 268367

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 262572

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3-Dinitrobenzene	1.00	0.866		ug/L		87	72 - 123	3	29
2,4-Dinitrotoluene	1.00	0.893		ug/L		89	70 - 119	3	30
2,6-Dinitrotoluene	1.00	0.864		ug/L		86	71 - 119	4	29
HMX	1.00	0.873		ug/L		87	67 - 115	3	32
Nitrobenzene	1.00	0.928		ug/L		93	69 - 119	1	31
Nitroglycerin	5.00	4.27		ug/L		85	85 - 115	7	15
2-Nitrotoluene	1.00	0.823		ug/L		82	64 - 120	2	36
3-Nitrotoluene	1.00	0.862		ug/L		86	67 - 114	5	31
4-Nitrotoluene	1.00	0.866		ug/L		87	67 - 115	7	32
RDX	1.00	0.911		ug/L		91	68 - 122	3	32
1,3,5-Trinitrobenzene	1.00	0.865		ug/L		87	74 - 120	2	29
2,4,6-Trinitrotoluene	1.00	0.794		ug/L		79	69 - 111	1	28
PETN	5.00	4.64		ug/L		93	84 - 117	5	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
3,4-Dinitrotoluene	*99*		*79 - 111*

Lab Sample ID: MB 320-262895/1-A
Matrix: Water
Analysis Batch: 265342

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 262895

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dinitrobenzene	ND		0.10	0.050	ug/L		12/04/18 06:05	12/14/18 15:39	1
2,4-Dinitrotoluene	ND		0.10	0.050	ug/L		12/04/18 06:05	12/14/18 15:39	1
2,6-Dinitrotoluene	ND		0.10	0.050	ug/L		12/04/18 06:05	12/14/18 15:39	1
HMX	ND		0.10	0.036	ug/L		12/04/18 06:05	12/14/18 15:39	1
Nitrobenzene	ND		0.10	0.050	ug/L		12/04/18 06:05	12/14/18 15:39	1
Nitroglycerin	ND		0.65	0.33	ug/L		12/04/18 06:05	12/14/18 15:39	1
2-Nitrotoluene	ND		0.50	0.088	ug/L		12/04/18 06:05	12/14/18 15:39	1

Method: 8330A - Nitroaromatics and Nitramines (Continued)

Lab Sample ID: MB 320-262895/1-A
Matrix: Water
Analysis Batch: 265342

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 262895

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3-Nitrotoluene	ND		0.50	0.057	ug/L		12/04/18 06:05	12/14/18 15:39	1
4-Nitrotoluene	ND		0.50	0.088	ug/L		12/04/18 06:05	12/14/18 15:39	1
RDX	ND		0.10	0.036	ug/L		12/04/18 06:05	12/14/18 15:39	1
1,3,5-Trinitrobenzene	ND		0.10	0.031	ug/L		12/04/18 06:05	12/14/18 15:39	1
2,4,6-Trinitrotoluene	ND		0.10	0.050	ug/L		12/04/18 06:05	12/14/18 15:39	1
PETN	ND		0.65	0.30	ug/L		12/04/18 06:05	12/14/18 15:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*97*		*79 - 111*	*12/04/18 06:05*	*12/14/18 15:39*	*1*

Lab Sample ID: LCS 320-262895/2-A
Matrix: Water
Analysis Batch: 265342

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 262895

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dinitrobenzene	1.00	1.02		ug/L		102	72 - 123
2,4-Dinitrotoluene	1.00	0.970		ug/L		97	70 - 119
2,6-Dinitrotoluene	1.00	0.968		ug/L		97	71 - 119
HMX	1.00	0.974		ug/L		97	67 - 115
Nitrobenzene	1.00	1.01		ug/L		101	69 - 119
Nitroglycerin	5.00	4.36		ug/L		87	85 - 115
2-Nitrotoluene	1.00	0.887		ug/L		89	64 - 120
3-Nitrotoluene	1.00	0.887		ug/L		89	67 - 114
4-Nitrotoluene	1.00	0.898		ug/L		90	67 - 115
RDX	1.00	1.04		ug/L		104	68 - 122
1,3,5-Trinitrobenzene	1.00	0.990		ug/L		99	74 - 120
2,4,6-Trinitrotoluene	1.00	0.778		ug/L		78	69 - 111
PETN	5.00	4.46		ug/L		89	84 - 117

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
3,4-Dinitrotoluene	*101*		*79 - 111*

Lab Sample ID: LCSD 320-262895/3-A
Matrix: Water
Analysis Batch: 270250

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 262895

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3-Dinitrobenzene	1.00	1.04		ug/L		104	72 - 123	2	29
2,4-Dinitrotoluene	1.00	0.997		ug/L		100	70 - 119	3	30
2,6-Dinitrotoluene	1.00	1.00		ug/L		100	71 - 119	4	29
HMX	1.00	0.998		ug/L		100	67 - 115	2	32
Nitrobenzene	1.00	1.01		ug/L		101	69 - 119	0	31
Nitroglycerin	5.00	4.23		ug/L		85	85 - 115	3	15
2-Nitrotoluene	1.00	0.948		ug/L		95	64 - 120	7	36
3-Nitrotoluene	1.00	0.987		ug/L		99	67 - 114	11	31
4-Nitrotoluene	1.00	0.935		ug/L		93	67 - 115	4	32
RDX	1.00	1.11		ug/L		111	68 - 122	7	32
1,3,5-Trinitrobenzene	1.00	1.02		ug/L		102	74 - 120	3	29

Method: 8330A - Nitroaromatics and Nitramines (Continued)

Lab Sample ID: LCSD 320-262895/3-A
Matrix: Water
Analysis Batch: 270250

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 262895

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4,6-Trinitrotoluene			1.00	0.815		ug/L		82	69 - 111	5	28
PETN			5.00	4.50		ug/L		90	84 - 117	1	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
3,4-Dinitrotoluene	*104*		*79 - 111*

HPLC/IC

Prep Batch: 262572

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-225292-1	MW-5	Total/NA	Water	8330-Prep	
440-225292-2	MW-6	Total/NA	Water	8330-Prep	
440-225292-3	Duplicate (MW-6)	Total/NA	Water	8330-Prep	
440-225292-4	MW-3	Total/NA	Water	8330-Prep	
440-225292-5	MW-1	Total/NA	Water	8330-Prep	
MB 320-262572/1-A	Method Blank	Total/NA	Water	8330-Prep	
PB 320-262572/14-A	Method Blank	Total/NA	Water	8330-Prep	
LCS 320-262572/2-A	Lab Control Sample	Total/NA	Water	8330-Prep	
LCSD 320-262572/3-A	Lab Control Sample Dup	Total/NA	Water	8330-Prep	

Prep Batch: 262895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-225292-6	MW-2	Total/NA	Water	8330-Prep	
440-225292-7	MW-4	Total/NA	Water	8330-Prep	
MB 320-262895/1-A	Method Blank	Total/NA	Water	8330-Prep	
LCS 320-262895/2-A	Lab Control Sample	Total/NA	Water	8330-Prep	
LCSD 320-262895/3-A	Lab Control Sample Dup	Total/NA	Water	8330-Prep	

Analysis Batch: 265342

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-225292-6	MW-2	Total/NA	Water	8330A	262895
440-225292-7	MW-4	Total/NA	Water	8330A	262895
MB 320-262895/1-A	Method Blank	Total/NA	Water	8330A	262895
LCS 320-262895/2-A	Lab Control Sample	Total/NA	Water	8330A	262895

Analysis Batch: 267037

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-225292-7	MW-4	Total/NA	Water	8330A	262895

Analysis Batch: 268367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-225292-1	MW-5	Total/NA	Water	8330A	262572
440-225292-2	MW-6	Total/NA	Water	8330A	262572
440-225292-3	Duplicate (MW-6)	Total/NA	Water	8330A	262572
440-225292-4	MW-3	Total/NA	Water	8330A	262572
440-225292-5	MW-1	Total/NA	Water	8330A	262572
MB 320-262572/1-A	Method Blank	Total/NA	Water	8330A	262572
PB 320-262572/14-A	Method Blank	Total/NA	Water	8330A	262572
LCS 320-262572/2-A	Lab Control Sample	Total/NA	Water	8330A	262572
LCSD 320-262572/3-A	Lab Control Sample Dup	Total/NA	Water	8330A	262572

Analysis Batch: 268387

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-225292-2	MW-6	Total/NA	Water	8330A	262572
440-225292-3	Duplicate (MW-6)	Total/NA	Water	8330A	262572
440-225292-5	MW-1	Total/NA	Water	8330A	262572
MB 320-262572/1-A	Method Blank	Total/NA	Water	8330A	262572
PB 320-262572/14-A	Method Blank	Total/NA	Water	8330A	262572
LCS 320-262572/2-A	Lab Control Sample	Total/NA	Water	8330A	262572
LCSD 320-262572/3-A	Lab Control Sample Dup	Total/NA	Water	8330A	262572

HPLC/IC (Continued)

Analysis Batch: 270250

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 320-262895/3-A	Lab Control Sample Dup	Total/NA	Water	8330A	262895

Analysis Batch: 272692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-225292-6	MW-2	Total/NA	Water	8330A	262895

Definitions/Glossary

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-225292-2
SDG: November 2018

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
p1	The %Difference between the primary and confirmation column/detector is >40%. The lower value has been reported.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine

TestAmerica Job ID: 440-225292-2
SDG: November 2018

Laboratory: TestAmerica Irvine

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	CA ELAP 2706	06-30-19

Laboratory: TestAmerica Sacramento

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2897	01-31-19 *

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8330A	8330-Prep	Water	Nitroglycerin
8330A	8330-Prep	Water	PETN

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614
Phone: 949.261.1022 Fax:

Chain of Custody Record 207935

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TestAmerica Laboratories, Inc.

TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☒ Other:

Client Contact	Project Manager: Eric Fordham	Site Contact:	Date:	COC No: 207935
Company Name: GeoPentech	Tel/Fax: 714-796-9100	Lab Contact:	Carrier:	1 of 1 COCs
Address 101 Academy Drive	Analysis Turnaround Time			Sampler.
City/State/Zip: Irvine, CA 92617	☐ CALENDAR DAYS ☒ WORKING DAYS			For Lab Use Only:
Phone 714-796-9100	TAT if different from Below Standard			Walk-in Client:
Fax: 714-796-9191	☐ 2 weeks			Lab Sampling:
Project Name. Blue Eagle Mine	☐ 1 week			Job / SDG No.:
Site: Rosamond, CA	☐ 2 days			
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	DRO/MRO	Energy25	Nitrate/Nitrite	Dissolved Metals +5	Dissolved Hardness	Ethylene Glycol	Alkalinity	300.0 Cl, SO4, TDS	Ammonia	Cyanide	VOC + GRO	Perchlorate	Sample Specific Notes
MW-5	11-27-18	09:00	G	H_2O	18			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
MW-6	11-27-18	10:26	G	H_2O	18			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Duplicate (MW-6)	11-27-18	11:05	G	H_2O	18			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
MW-3	11-27-18	12:38	G	H_2O	18			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
MW-1	11-27-18	13:34	G	H_2O	18			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
MW-2	11-28-18	08:07	G	H_2O	18			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
MW-4	11-28-18	09:02	G	H_2O	18			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

440-225292 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other 1, 2, 3, 5

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☒ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:
All samples placed on ice after collection and kept on ice until delivery. Quotation: 3201123

5.8/5.8 6.0/6.0
5.1/5.1 5.0/5.0

Custody Seals Intact ☐ Yes ☐ No | Custody Seal No | Cooler Temp. (°C). Obs'd: _____ Corr'd: _____ | Therm ID No _____

Relinquished by	Company	Date/Time	Received by	Company	Date/Time
Ryan Wakefield	GeoPentech	11-28-18 1235			
Relinquished by	Company	Date/Time:	Received by:	Company:	Date/Time
Relinquished by:	Company:	Date/Time	Received in Laboratory by:	Company: IA IRV	Date/Time: 11/28/18 1235

11/28/11 RA

1/31/2019

TestAmerica Irvine
17461 Derian Ave Suite 100
Irvine, CA 92614-5817
Phone (949) 261-1022 Fax (949) 260-3297

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Laver, Linda C.	Carrier Tracking No(s):	COC No: 440-130027.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: linda.laver@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 440-225292-1
Address: 880 Riverside Parkway, ,	Due Date Requested: 12/14/2018			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: Blue Eagle Lode Mine	Project #: 32011165			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015B_DRO/3510C_IVWT (MOD) CALUFT DRO/MRO	8330A/8330_SPE_P_IVWT (MOD) Standard List	353.2_Nitrocell/NCEL_Prep_A (MOD) Local Method	6010B/Filtration_ME (MOD) Pick Your Analytes	7470A/Filtration_ME Dissolved Mercury	SM2340B/Filtration_AC (MOD) All Hardness Forms	6020/Filtration_ME Dissolved Metals Including Ca & Mg	Total Number of containers	Special Instructions/Note:
			Preservation Code:												
MW-5 (440-225292-1)	11/27/18	09:00 Pacific		Water			X	X	X	X	X	X	X	7	Project was quoted as DRO (C10-C24) and MRO (C25-C36)., Sulfur may be high, may
MW-6 (440-225292-2)	11/27/18	10:26 Pacific		Water			X	X	X	X	X	X	X	7	Project was quoted as DRO (C10-C24) and MRO (C25-C36)., Sulfur may be high, may
Duplicate (MW-6) (440-225292-3)	11/27/18	11:05 Pacific		Water			X	X	X	X	X	X	X	7	Project was quoted as DRO (C10-C24) and MRO (C25-C36)., Sulfur may be high, may
MW-3 (440-225292-4)	11/27/18	12:38 Pacific		Water			X	X	X	X	X	X	X	7	Project was quoted as DRO (C10-C24) and MRO (C25-C36)., Sulfur may be high, may
MW-1 (440-225292-5)	11/28/18	13:34 Pacific		Water			X	X	X	X	X	X	X	7	Project was quoted as DRO (C10-C24) and MRO (C25-C36)., Sulfur may be high, may
MW-2 (440-225292-6)	11/28/18	08:07 Pacific		Water			X	X	X	X	X	X	X	7	Project was quoted as DRO (C10-C24) and MRO (C25-C36)., Sulfur may be high, may
MW-4 (440-225292-7)	11/28/18	09:02 Pacific		Water			X	X	X	X	X	X	X	7	Project was quoted as DRO (C10-C24) and MRO (C25-C36)., Sulfur may be high, may

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	11-29-18 1700	FTA	Jaime Rosas	11-30-18 1030	TA-SAC
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☑ Yes ☐ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.0 2.4 1.9 2.0 AK-5

Ver: 09/20/2016

Login Sample Receipt Checklist

Client: GeoPentech, Inc

Job Number: 440-225292-2
SDG Number: November 2018

Login Number: 225292
List Number: 1
Creator: Escalante, Maria I

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	Not present
Sample custody seals, if present, are intact.	N/A	Not Present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: GeoPentech, Inc

Job Number: 440-225292-2
SDG Number: November 2018

Login Number: 225292
List Number: 3
Creator: Her, David A

List Source: TestAmerica Sacramento
List Creation: 11/30/18 06:10 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.0c 2.4c 1.9c 2.0c
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
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Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-229045-1
Client Project/Site: Blue Eagle Lode Mine_January 2019

For:
GeoPentech, Inc
101 Academy Dr
Suite 100
Irvine, California 92617

Attn: Eric Fordham

Linda C. Laver

Authorized for release by:
1/29/2019 2:05:50 PM

Linda C. Laver, Project Manager II
(916)374-4362
linda.laver@testamericainc.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine_January 2019

TestAmerica Job ID: 440-229045-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-229045-1	MW-5	Water	01/02/19 08:57	01/03/19 13:00
440-229045-2	MW-6	Water	01/02/19 10:29	01/03/19 13:00
440-229045-3	MW-3	Water	01/02/19 11:58	01/03/19 13:00
440-229045-4	MW-1	Water	01/02/19 13:11	01/03/19 13:00
440-229045-5	MW-2	Water	01/03/19 07:53	01/03/19 13:00
440-229045-6	MW-4	Water	01/03/19 08:53	01/03/19 13:00
440-229045-7	Equipment Blank	Water	01/03/19 09:30	01/03/19 13:00

Job ID: 440-229045-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-229045-1

Receipt
The samples were received on 1/3/2019 1:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 5 coolers at receipt time were 1.0º C, 1.0º C, 1.4º C, 1.5º C and 1.9º C.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

HPLC/IC
Method(s) 300.0: The following sample was diluted for Nitrate as N and Nitrite as N due to the nature of the sample matrix: MW-4 (440-229045-6). Elevated reporting limits (RLs) are provided.

Method(s) 300.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 440-520531 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 314.0 LL: The following samples and associated QC were pretreated before analysis: MW-6 (440-229045-2), MW-4 (440-229045-6, -6MS, -6MSD), (LCS 440-524619/46) and (MB 440-524619/45). Pretreatment was required due to high level of sulfate present in the sample matrix.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
Method(s) 8015B: The n-butyl alcohol (Surr) in the CCV for analytical batch 490-568233 exceeded the %D, but was within % recovery range. (CCVIS 490-568233/2).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
The requested analyses include dissolved metals and hardness but samples were not filtered in the field. The samples were filtered and preserved by the laboratory.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

LCMS
Method(s) 8330A: Surrogate recovery for 1,2-Dinitrobenzene in the following samples was outside control limits: MW-6 (440-229045-2) and MW-4 (440-229045-6). The surrogate failed high on the primary column, but was in control on the confirmation column. Chromatogram shows matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8330A: The %RPD between the primary and confirmation column exceeded 40% for HMX, RDX and Nitrobenzene in the following samples: MW-6 (440-229045-2) and MW-4 (440-229045-6). The lower value has been reported and qualified in accordance with the laboratory's SOP.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
Method(s) 3535: TestAmerica Denver's SOP is established for a 500ml volume of sample, where TestAmerica Sacramento's is 1000ml. Because of capacity issues in Sacramento at the time of this event, the samples were forwarded to the Denver lab for 8330A analysis. Thus, a portion of the following samples was used for each extraction and the containers did not undergo the solvent rinse step: MW-5 (440-229045-1), MW-6 (440-229045-2), MW-3 (440-229045-3), MW-1 (440-229045-4), MW-2 (440-229045-5), MW-4 (440-229045-6) and

Job ID: 440-229045-1 (Continued)

Laboratory: TestAmerica Irvine (Continued)

Equipment Blank (440-229045-7). Preparation batch 280-443392 for 8330A.

Method(s) 3535: The following samples required filtration to reduce matrix interferences: MW-5 (440-229045-1), MW-6 (440-229045-2), MW-1 (440-229045-4) and MW-4 (440-229045-6). Preparation batch 280-443392 for 8330A.

Method(s) 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 280-443392 for 8330A.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Client Sample ID: MW-5

Date Collected: 01/02/19 08:57
Date Received: 01/03/19 13:00

Lab Sample ID: 440-229045-1

Matrix: Water

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50	35	ug/L			01/04/19 15:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*109*		*76 - 132*		*01/04/19 15:58*	*1*
4-Bromofluorobenzene (Surr)	*110*		*80 - 120*		*01/04/19 15:58*	*1*
Toluene-d8 (Surr)	*103*		*80 - 128*		*01/04/19 15:58*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.25	ug/L			01/04/19 15:58	1
Ethylbenzene	ND		0.50	0.25	ug/L			01/04/19 15:58	1
m,p-Xylene	ND		1.0	0.50	ug/L			01/04/19 15:58	1
o-Xylene	ND		0.50	0.25	ug/L			01/04/19 15:58	1
Toluene	ND		0.50	0.25	ug/L			01/04/19 15:58	1
Xylenes, Total	ND		1.0	0.50	ug/L			01/04/19 15:58	1
Naphthalene	ND		1.0	0.40	ug/L			01/04/19 15:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*80 - 120*		*01/04/19 15:58*	*1*
Dibromofluoromethane (Surr)	*109*		*76 - 132*		*01/04/19 15:58*	*1*
Toluene-d8 (Surr)	*103*		*80 - 128*		*01/04/19 15:58*	*1*

Method: 8015B - Glycols -Direct Injection (GC/FID)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene glycol	ND		10	1.0	mg/L			01/08/19 15:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-butyl alcohol (Surr)	*105*		*70 - 130*		*01/08/19 15:18*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	**16**	**J**	50	16	ug/L		01/08/19 08:34	01/11/19 04:30	1
Motor Oil Range Organics (C25-C36)	ND		500	170	ug/L		01/08/19 08:34	01/11/19 04:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*86*		*56 - 145*	*01/08/19 08:34*	*01/11/19 04:30*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**16**		2.5	1.3	mg/L			01/03/19 22:12	5
Nitrate as N	**0.17**		0.11	0.055	mg/L			01/03/19 16:39	1
Fluoride	**0.31**	**J**	0.50	0.25	mg/L			01/03/19 16:39	1
Nitrite as N	ND		0.15	0.025	mg/L			01/03/19 16:39	1
Sulfate	**250**		10	5.0	mg/L			01/03/19 16:55	20

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			01/23/19 19:20	1

Method: 8330A - Nitroaromatics and Nitramines

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	ND		1.1	0.22	ug/L		01/05/19 16:43	01/07/19 18:04	1

Client Sample ID: MW-5

Date Collected: 01/02/19 08:57
Date Received: 01/03/19 13:00

Lab Sample ID: 440-229045-1

Matrix: Water

Method: 8330A - Nitroaromatics and Nitramines (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dinitrobenzene	ND		0.44	0.098	ug/L		01/05/19 16:43	01/07/19 18:04	1
2,4,6-Trinitrotoluene	ND		0.44	0.080	ug/L		01/05/19 16:43	01/07/19 18:04	1
2,4-Dinitrotoluene	ND		0.44	0.092	ug/L		01/05/19 16:43	01/07/19 18:04	1
2,6-Dinitrotoluene	ND		0.22	0.071	ug/L		01/05/19 16:43	01/07/19 18:04	1
2-Nitrotoluene	ND		0.44	0.094	ug/L		01/05/19 16:43	01/07/19 18:04	1
3-Nitrotoluene	ND		0.44	0.092	ug/L		01/05/19 16:43	01/07/19 18:04	1
4-Nitrotoluene	ND		1.1	0.22	ug/L		01/05/19 16:43	01/07/19 18:04	1
HMX	ND		0.44	0.096	ug/L		01/05/19 16:43	01/07/19 18:04	1
RDX	ND		0.22	0.058	ug/L		01/05/19 16:43	01/07/19 18:04	1
Nitrobenzene	ND		0.44	0.10	ug/L		01/05/19 16:43	01/07/19 18:04	1
Nitroglycerin	ND		3.3	1.0	ug/L		01/05/19 16:43	01/07/19 18:04	1
PETN	ND		2.2	0.46	ug/L		01/05/19 16:43	01/07/19 18:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*101*		*75 - 118*	*01/05/19 16:43*	*01/07/19 18:04*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	**88**		0.50	0.30	mg/L		01/09/19 08:00	01/11/19 11:12	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		01/09/19 08:00	01/15/19 17:50	1
Aluminum	ND		0.050	0.025	mg/L		01/09/19 08:00	01/15/19 17:50	1
Antimony	ND		0.0020	0.00020	mg/L		01/09/19 08:00	01/15/19 17:50	1
Arsenic	**0.81**		0.0020	0.0010	mg/L		01/09/19 08:00	01/15/19 17:50	1
Barium	**0.022**		0.0010	0.00050	mg/L		01/09/19 08:00	01/15/19 17:50	1
Beryllium	ND		0.0010	0.00010	mg/L		01/09/19 08:00	01/15/19 17:50	1
Cadmium	ND		0.0010	0.00050	mg/L		01/09/19 08:00	01/15/19 17:50	1
Calcium	**73**		0.30	0.17	mg/L		01/09/19 08:00	01/15/19 17:50	1
Chromium	ND		0.0020	0.0010	mg/L		01/09/19 08:00	01/15/19 17:50	1
Cobalt	ND		0.0010	0.00060	mg/L		01/09/19 08:00	01/15/19 17:50	1
Copper	**0.0012**	**J**	0.0020	0.0010	mg/L		01/09/19 08:00	01/15/19 17:50	1
Iron	ND		0.050	0.025	mg/L		01/09/19 08:00	01/15/19 17:50	1
Lead	ND		0.0010	0.00060	mg/L		01/09/19 08:00	01/15/19 17:50	1
Magnesium	**20**		0.050	0.025	mg/L		01/09/19 08:00	01/15/19 17:50	1
Manganese	**0.027**		0.0025	0.0014	mg/L		01/09/19 08:00	01/15/19 17:50	1
Molybdenum	**0.0020**		0.0020	0.00060	mg/L		01/09/19 08:00	01/15/19 17:50	1
Nickel	**0.0015**	**J**	0.0020	0.0010	mg/L		01/09/19 08:00	01/15/19 17:50	1
Potassium	**25**		0.050	0.025	mg/L		01/09/19 08:00	01/15/19 17:50	1
Selenium	**0.0072**		0.0020	0.0010	mg/L		01/09/19 08:00	01/15/19 17:50	1
Sodium	**49**		0.10	0.080	mg/L		01/09/19 08:00	01/15/19 17:50	1
Thallium	ND		0.0010	0.00050	mg/L		01/09/19 08:00	01/15/19 17:50	1
Vanadium	ND		0.010	0.0030	mg/L		01/09/19 08:00	01/15/19 17:50	1
Zinc	**0.016**		0.0050	0.0040	mg/L		01/09/19 08:00	01/15/19 17:50	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		01/08/19 10:40	01/08/19 13:23	1

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine_January 2019

TestAmerica Job ID: 440-229045-1

Client Sample ID: MW-5
Date Collected: 01/02/19 08:57
Date Received: 01/03/19 13:00

Lab Sample ID: 440-229045-1
Matrix: Water

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**270**		2.5	2.5	mg/L			01/23/19 14:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.20	0.10	mg/L			01/09/19 14:12	1
Total Dissolved Solids	**590**		10	5.0	mg/L			01/07/19 09:25	1
Cyanide, Total	ND		0.025	0.013	mg/L		01/04/19 16:37	01/04/19 22:15	1
Nitrocellulose	ND		2.0	0.48	mg/L		01/16/19 09:00	01/17/19 11:44	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	**100**		4.0	4.0	mg/L			01/04/19 09:32	1
Bicarbonate Alkalinity as CaCO3	**100**		4.0	4.0	mg/L			01/04/19 09:32	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			01/04/19 09:32	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			01/04/19 09:32	1
Specific Conductance	**780**		1.0	1.0	umhos/cm			01/15/19 10:17	1
pH adj. to 25 deg C	**7.7**	**HF**	0.1	0.1	SU			01/06/19 10:26	1

Client Sample ID: MW-6

Date Collected: 01/02/19 10:29
Date Received: 01/03/19 13:00

Lab Sample ID: 440-229045-2

Matrix: Water

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50	35	ug/L			01/04/19 16:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*107*		*76 - 132*		*01/04/19 16:24*	*1*
4-Bromofluorobenzene (Surr)	*107*		*80 - 120*		*01/04/19 16:24*	*1*
Toluene-d8 (Surr)	*104*		*80 - 128*		*01/04/19 16:24*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.25	ug/L			01/04/19 16:24	1
Ethylbenzene	ND		0.50	0.25	ug/L			01/04/19 16:24	1
m,p-Xylene	ND		1.0	0.50	ug/L			01/04/19 16:24	1
o-Xylene	ND		0.50	0.25	ug/L			01/04/19 16:24	1
Toluene	ND		0.50	0.25	ug/L			01/04/19 16:24	1
Xylenes, Total	ND		1.0	0.50	ug/L			01/04/19 16:24	1
Naphthalene	**1.4**		1.0	0.40	ug/L			01/04/19 16:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*80 - 120*		*01/04/19 16:24*	*1*
Dibromofluoromethane (Surr)	*107*		*76 - 132*		*01/04/19 16:24*	*1*
Toluene-d8 (Surr)	*104*		*80 - 128*		*01/04/19 16:24*	*1*

Method: 8015B - Glycols -Direct Injection (GC/FID)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene glycol	ND		10	1.0	mg/L			01/08/19 15:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-butyl alcohol (Surr)	*104*		*70 - 130*		*01/08/19 15:35*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	**3700**		49	16	ug/L		01/08/19 08:34	01/11/19 04:58	1
Motor Oil Range Organics (C25-C36)	**400**	**J**	490	160	ug/L		01/08/19 08:34	01/11/19 04:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*57*		*56 - 145*	*01/08/19 08:34*	*01/11/19 04:58*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**24**		2.5	1.3	mg/L			01/03/19 19:56	5
Nitrate as N	ND		0.11	0.055	mg/L			01/03/19 17:12	1
Fluoride	**0.79**		0.50	0.25	mg/L			01/03/19 17:12	1
Nitrite as N	**0.073**	**J**	0.15	0.025	mg/L			01/03/19 17:12	1
Sulfate	**1.6**		0.50	0.25	mg/L			01/03/19 17:12	1

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			01/25/19 08:52	1

Client Sample ID: MW-6

Date Collected: 01/02/19 10:29
Date Received: 01/03/19 13:00

Lab Sample ID: 440-229045-2

Matrix: Water

Method: 8330A - Nitroaromatics and Nitramines

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	ND		1.1	0.22	ug/L		01/05/19 16:43	01/07/19 18:27	1
1,3-Dinitrobenzene	ND		0.44	0.098	ug/L		01/05/19 16:43	01/07/19 18:27	1
2,4,6-Trinitrotoluene	ND		0.44	0.080	ug/L		01/05/19 16:43	01/07/19 18:27	1
2,4-Dinitrotoluene	ND		0.44	0.093	ug/L		01/05/19 16:43	01/10/19 08:08	1
2,6-Dinitrotoluene	ND		0.22	0.072	ug/L		01/05/19 16:43	01/07/19 18:27	1
2-Nitrotoluene	ND		0.44	0.095	ug/L		01/05/19 16:43	01/07/19 18:27	1
3-Nitrotoluene	ND		0.44	0.092	ug/L		01/05/19 16:43	01/07/19 18:27	1
4-Nitrotoluene	ND		1.1	0.22	ug/L		01/05/19 16:43	01/07/19 18:27	1
HMX	ND		0.44	0.097	ug/L		01/05/19 16:43	01/10/19 08:08	1
RDX	ND		0.22	0.058	ug/L		01/05/19 16:43	01/10/19 08:08	1
Nitrobenzene	**0.13**	**J p**	0.44	0.10	ug/L		01/05/19 16:43	01/07/19 18:27	1
Nitroglycerin	ND		3.3	1.0	ug/L		01/05/19 16:43	01/07/19 18:27	1
PETN	ND		2.2	0.46	ug/L		01/05/19 16:43	01/07/19 18:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*126*	*X*	*75 - 118*	*01/05/19 16:43*	*01/07/19 18:27*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	**0.52**		0.50	0.30	mg/L		01/09/19 08:00	01/11/19 11:39	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		01/09/19 08:00	01/15/19 18:17	1
Aluminum	ND		0.050	0.025	mg/L		01/09/19 08:00	01/15/19 18:17	1
Antimony	ND		0.0020	0.00020	mg/L		01/09/19 08:00	01/15/19 18:17	1
Arsenic	**0.53**		0.0020	0.0010	mg/L		01/09/19 08:00	01/15/19 18:17	1
Barium	**0.031**		0.0010	0.00050	mg/L		01/09/19 08:00	01/15/19 18:17	1
Beryllium	ND		0.0010	0.00010	mg/L		01/09/19 08:00	01/15/19 18:17	1
Cadmium	ND		0.0010	0.00050	mg/L		01/09/19 08:00	01/15/19 18:17	1
Calcium	**98**		0.30	0.17	mg/L		01/09/19 08:00	01/15/19 18:17	1
Chromium	ND		0.0020	0.0010	mg/L		01/09/19 08:00	01/15/19 18:17	1
Cobalt	ND		0.0010	0.00060	mg/L		01/09/19 08:00	01/15/19 18:17	1
Copper	ND		0.0020	0.0010	mg/L		01/09/19 08:00	01/15/19 18:17	1
Iron	ND		0.050	0.025	mg/L		01/09/19 08:00	01/15/19 18:17	1
Lead	ND		0.0010	0.00060	mg/L		01/09/19 08:00	01/15/19 18:17	1
Magnesium	**36**		0.050	0.025	mg/L		01/09/19 08:00	01/15/19 18:17	1
Manganese	**4.0**		0.0025	0.0014	mg/L		01/09/19 08:00	01/15/19 18:17	1
Molybdenum	**0.0011**	**J**	0.0020	0.00060	mg/L		01/09/19 08:00	01/15/19 18:17	1
Nickel	ND		0.0020	0.0010	mg/L		01/09/19 08:00	01/15/19 18:17	1
Potassium	**19**		0.050	0.025	mg/L		01/09/19 08:00	01/15/19 18:17	1
Selenium	ND		0.0020	0.0010	mg/L		01/09/19 08:00	01/15/19 18:17	1
Sodium	**140**		0.10	0.080	mg/L		01/09/19 08:00	01/15/19 18:17	1
Thallium	ND		0.0010	0.00050	mg/L		01/09/19 08:00	01/15/19 18:17	1
Vanadium	ND		0.010	0.0030	mg/L		01/09/19 08:00	01/15/19 18:17	1
Zinc	ND		0.0050	0.0040	mg/L		01/09/19 08:00	01/15/19 18:17	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		01/08/19 10:40	01/08/19 13:33	1

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine_January 2019

TestAmerica Job ID: 440-229045-1

Client Sample ID: MW-6
Date Collected: 01/02/19 10:29
Date Received: 01/03/19 13:00

Lab Sample ID: 440-229045-2
Matrix: Water

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**390**		2.5	2.5	mg/L			01/23/19 14:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.20	0.10	mg/L			01/09/19 14:17	1
Total Dissolved Solids	**770**		10	5.0	mg/L			01/07/19 09:25	1
Cyanide, Total	ND		0.025	0.013	mg/L		01/04/19 16:37	01/04/19 22:15	1
Nitrocellulose	ND		2.0	0.48	mg/L		01/16/19 09:00	01/17/19 11:50	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	**680**		4.0	4.0	mg/L			01/04/19 09:46	1
Bicarbonate Alkalinity as CaCO3	**680**		4.0	4.0	mg/L			01/04/19 09:46	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			01/04/19 09:46	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			01/04/19 09:46	1
Specific Conductance	**1200**		1.0	1.0	umhos/cm			01/15/19 10:17	1
pH adj. to 25 deg C	**8.1**	**HF**	0.1	0.1	SU			01/06/19 10:26	1

Client Sample ID: MW-3

Date Collected: 01/02/19 11:58
Date Received: 01/03/19 13:00

Lab Sample ID: 440-229045-3

Matrix: Water

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50	35	ug/L			01/04/19 16:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*108*		*76 - 132*		*01/04/19 16:51*	*1*
4-Bromofluorobenzene (Surr)	*109*		*80 - 120*		*01/04/19 16:51*	*1*
Toluene-d8 (Surr)	*101*		*80 - 128*		*01/04/19 16:51*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.25	ug/L			01/04/19 16:51	1
Ethylbenzene	ND		0.50	0.25	ug/L			01/04/19 16:51	1
m,p-Xylene	ND		1.0	0.50	ug/L			01/04/19 16:51	1
o-Xylene	ND		0.50	0.25	ug/L			01/04/19 16:51	1
Toluene	ND		0.50	0.25	ug/L			01/04/19 16:51	1
Xylenes, Total	ND		1.0	0.50	ug/L			01/04/19 16:51	1
Naphthalene	ND		1.0	0.40	ug/L			01/04/19 16:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*80 - 120*		*01/04/19 16:51*	*1*
Dibromofluoromethane (Surr)	*108*		*76 - 132*		*01/04/19 16:51*	*1*
Toluene-d8 (Surr)	*101*		*80 - 128*		*01/04/19 16:51*	*1*

Method: 8015B - Glycols -Direct Injection (GC/FID)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene glycol	ND		10	1.0	mg/L			01/08/19 15:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-butyl alcohol (Surr)	*105*		*70 - 130*		*01/08/19 15:52*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	**56**		49	16	ug/L		01/08/19 08:34	01/11/19 05:27	1
Motor Oil Range Organics (C25-C36)	ND		490	160	ug/L		01/08/19 08:34	01/11/19 05:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*84*		*56 - 145*	*01/08/19 08:34*	*01/11/19 05:27*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**15**		5.0	2.5	mg/L			01/03/19 20:12	10
Nitrate as N	ND		0.11	0.055	mg/L			01/03/19 17:30	1
Fluoride	**0.95**		0.50	0.25	mg/L			01/03/19 17:30	1
Nitrite as N	ND		0.15	0.025	mg/L			01/03/19 17:30	1
Sulfate	**180**		5.0	2.5	mg/L			01/03/19 20:12	10

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			01/23/19 20:11	1

Method: 8330A - Nitroaromatics and Nitramines

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	ND		1.1	0.22	ug/L		01/05/19 16:43	01/07/19 18:50	1

Client Sample ID: MW-3

Date Collected: 01/02/19 11:58
Date Received: 01/03/19 13:00

Lab Sample ID: 440-229045-3

Matrix: Water

Method: 8330A - Nitroaromatics and Nitramines (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dinitrobenzene	ND		0.44	0.098	ug/L		01/05/19 16:43	01/07/19 18:50	1
2,4,6-Trinitrotoluene	ND		0.44	0.080	ug/L		01/05/19 16:43	01/07/19 18:50	1
2,4-Dinitrotoluene	ND		0.44	0.093	ug/L		01/05/19 16:43	01/07/19 18:50	1
2,6-Dinitrotoluene	ND		0.22	0.072	ug/L		01/05/19 16:43	01/07/19 18:50	1
2-Nitrotoluene	ND		0.44	0.095	ug/L		01/05/19 16:43	01/07/19 18:50	1
3-Nitrotoluene	ND		0.44	0.092	ug/L		01/05/19 16:43	01/07/19 18:50	1
4-Nitrotoluene	ND		1.1	0.22	ug/L		01/05/19 16:43	01/07/19 18:50	1
HMX	ND		0.44	0.097	ug/L		01/05/19 16:43	01/07/19 18:50	1
RDX	ND		0.22	0.058	ug/L		01/05/19 16:43	01/07/19 18:50	1
Nitrobenzene	ND		0.44	0.10	ug/L		01/05/19 16:43	01/07/19 18:50	1
Nitroglycerin	ND		3.3	1.0	ug/L		01/05/19 16:43	01/07/19 18:50	1
PETN	ND		2.2	0.46	ug/L		01/05/19 16:43	01/07/19 18:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*95*		*75 - 118*	*01/05/19 16:43*	*01/07/19 18:50*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	**61**		0.50	0.30	mg/L		01/09/19 08:00	01/11/19 11:43	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		01/09/19 08:00	01/15/19 18:20	1
Aluminum	ND		0.050	0.025	mg/L		01/09/19 08:00	01/15/19 18:20	1
Antimony	ND		0.0020	0.00020	mg/L		01/09/19 08:00	01/15/19 18:20	1
Arsenic	**0.31**		0.0020	0.0010	mg/L		01/09/19 08:00	01/15/19 18:20	1
Barium	**0.0073**		0.0010	0.00050	mg/L		01/09/19 08:00	01/15/19 18:20	1
Beryllium	ND		0.0010	0.00010	mg/L		01/09/19 08:00	01/15/19 18:20	1
Cadmium	ND		0.0010	0.00050	mg/L		01/09/19 08:00	01/15/19 18:20	1
Calcium	**27**		0.30	0.17	mg/L		01/09/19 08:00	01/15/19 18:20	1
Chromium	ND		0.0020	0.0010	mg/L		01/09/19 08:00	01/15/19 18:20	1
Cobalt	**0.0012**		0.0010	0.00060	mg/L		01/09/19 08:00	01/15/19 18:20	1
Copper	ND		0.0020	0.0010	mg/L		01/09/19 08:00	01/15/19 18:20	1
Iron	**0.042**	**J B**	0.050	0.025	mg/L		01/09/19 08:00	01/15/19 18:20	1
Lead	ND		0.0010	0.00060	mg/L		01/09/19 08:00	01/15/19 18:20	1
Magnesium	**17**		0.050	0.025	mg/L		01/09/19 08:00	01/15/19 18:20	1
Manganese	**5.4**		0.0025	0.0014	mg/L		01/09/19 08:00	01/15/19 18:20	1
Molybdenum	**0.0043**		0.0020	0.00060	mg/L		01/09/19 08:00	01/15/19 18:20	1
Nickel	**0.0046**		0.0020	0.0010	mg/L		01/09/19 08:00	01/15/19 18:20	1
Potassium	**22**		0.050	0.025	mg/L		01/09/19 08:00	01/15/19 18:20	1
Selenium	ND		0.0020	0.0010	mg/L		01/09/19 08:00	01/15/19 18:20	1
Sodium	**42**		0.10	0.080	mg/L		01/09/19 08:00	01/15/19 18:20	1
Thallium	ND		0.0010	0.00050	mg/L		01/09/19 08:00	01/15/19 18:20	1
Vanadium	ND		0.010	0.0030	mg/L		01/09/19 08:00	01/15/19 18:20	1
Zinc	**1.8**		0.0050	0.0040	mg/L		01/09/19 08:00	01/15/19 18:20	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		01/08/19 10:40	01/08/19 13:36	1

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine_January 2019

TestAmerica Job ID: 440-229045-1

Client Sample ID: MW-3
Date Collected: 01/02/19 11:58
Date Received: 01/03/19 13:00

Lab Sample ID: 440-229045-3
Matrix: Water

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**140**		2.5	2.5	mg/L			01/23/19 14:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.20	0.10	mg/L			01/09/19 14:22	1
Total Dissolved Solids	**420**		10	5.0	mg/L			01/07/19 09:25	1
Cyanide, Total	ND		0.025	0.013	mg/L		01/04/19 16:37	01/04/19 22:15	1
Nitrocellulose	ND		2.0	0.48	mg/L		01/16/19 09:00	01/17/19 11:52	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	**62**		4.0	4.0	mg/L			01/04/19 09:53	1
Bicarbonate Alkalinity as CaCO3	**62**		4.0	4.0	mg/L			01/04/19 09:53	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			01/04/19 09:53	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			01/04/19 09:53	1
Specific Conductance	**570**		1.0	1.0	umhos/cm			01/15/19 10:17	1
pH adj. to 25 deg C	**7.1**	**HF**	0.1	0.1	SU			01/06/19 10:26	1

Client Sample ID: MW-1

Date Collected: 01/02/19 13:11
Date Received: 01/03/19 13:00

Lab Sample ID: 440-229045-4

Matrix: Water

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50	35	ug/L			01/04/19 17:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*110*		*76 - 132*		*01/04/19 17:17*	*1*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*		*01/04/19 17:17*	*1*
Toluene-d8 (Surr)	*101*		*80 - 128*		*01/04/19 17:17*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.25	ug/L			01/04/19 17:17	1
Ethylbenzene	ND		0.50	0.25	ug/L			01/04/19 17:17	1
m,p-Xylene	ND		1.0	0.50	ug/L			01/04/19 17:17	1
o-Xylene	ND		0.50	0.25	ug/L			01/04/19 17:17	1
Toluene	ND		0.50	0.25	ug/L			01/04/19 17:17	1
Xylenes, Total	ND		1.0	0.50	ug/L			01/04/19 17:17	1
Naphthalene	ND		1.0	0.40	ug/L			01/04/19 17:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*		*01/04/19 17:17*	*1*
Dibromofluoromethane (Surr)	*110*		*76 - 132*		*01/04/19 17:17*	*1*
Toluene-d8 (Surr)	*101*		*80 - 128*		*01/04/19 17:17*	*1*

Method: 8015B - Glycols -Direct Injection (GC/FID)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene glycol	ND		10	1.0	mg/L			01/08/19 16:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-butyl alcohol (Surr)	*118*		*70 - 130*		*01/08/19 16:09*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	**44**	**J**	47	15	ug/L		01/08/19 08:34	01/11/19 05:56	1
Motor Oil Range Organics (C25-C36)	ND		470	160	ug/L		01/08/19 08:34	01/11/19 05:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*89*		*56 - 145*	*01/08/19 08:34*	*01/11/19 05:56*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**11**		0.50	0.25	mg/L			01/03/19 17:47	1
Nitrate as N	ND		0.11	0.055	mg/L			01/03/19 17:47	1
Fluoride	**0.56**	**F1**	0.50	0.25	mg/L			01/03/19 17:47	1
Nitrite as N	ND		0.15	0.025	mg/L			01/03/19 17:47	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**720**		25	13	mg/L			01/03/19 18:38	50

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			01/23/19 20:28	1

Client Sample ID: MW-1

Date Collected: 01/02/19 13:11
Date Received: 01/03/19 13:00

Lab Sample ID: 440-229045-4

Matrix: Water

Method: 8330A - Nitroaromatics and Nitramines

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	ND		1.1	0.22	ug/L		01/05/19 16:43	01/07/19 19:13	1
1,3-Dinitrobenzene	ND		0.44	0.098	ug/L		01/05/19 16:43	01/07/19 19:13	1
2,4,6-Trinitrotoluene	ND		0.44	0.080	ug/L		01/05/19 16:43	01/07/19 19:13	1
2,4-Dinitrotoluene	ND		0.44	0.093	ug/L		01/05/19 16:43	01/10/19 08:43	1
2,6-Dinitrotoluene	ND		0.22	0.071	ug/L		01/05/19 16:43	01/07/19 19:13	1
2-Nitrotoluene	ND		0.44	0.094	ug/L		01/05/19 16:43	01/07/19 19:13	1
3-Nitrotoluene	ND		0.44	0.092	ug/L		01/05/19 16:43	01/07/19 19:13	1
4-Nitrotoluene	ND		1.1	0.22	ug/L		01/05/19 16:43	01/07/19 19:13	1
HMX	ND		0.44	0.097	ug/L		01/05/19 16:43	01/07/19 19:13	1
RDX	ND		0.22	0.058	ug/L		01/05/19 16:43	01/10/19 08:43	1
Nitrobenzene	ND		0.44	0.10	ug/L		01/05/19 16:43	01/07/19 19:13	1
Nitroglycerin	ND		3.3	1.0	ug/L		01/05/19 16:43	01/07/19 19:13	1
PETN	ND		2.2	0.46	ug/L		01/05/19 16:43	01/07/19 19:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*114*		*75 - 118*	*01/05/19 16:43*	*01/07/19 19:13*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	**180**		0.50	0.30	mg/L		01/09/19 08:00	01/11/19 11:47	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		01/09/19 08:00	01/15/19 18:23	1
Aluminum	**43**		0.050	0.025	mg/L		01/09/19 08:00	01/15/19 18:23	1
Antimony	**0.0086**		0.0020	0.00020	mg/L		01/09/19 08:00	01/15/19 18:23	1
Arsenic	**5.5**		0.0020	0.0010	mg/L		01/09/19 08:00	01/15/19 18:23	1
Barium	**0.010**		0.0010	0.00050	mg/L		01/09/19 08:00	01/15/19 18:23	1
Beryllium	**0.0096**		0.0010	0.00010	mg/L		01/09/19 08:00	01/15/19 18:23	1
Cadmium	**0.11**		0.0010	0.00050	mg/L		01/09/19 08:00	01/15/19 18:23	1
Calcium	**62**		0.30	0.17	mg/L		01/09/19 08:00	01/15/19 18:23	1
Chromium	**0.0016**	**J**	0.0020	0.0010	mg/L		01/09/19 08:00	01/15/19 18:23	1
Cobalt	**0.23**		0.0010	0.00060	mg/L		01/09/19 08:00	01/15/19 18:23	1
Copper	**0.0027**		0.0020	0.0010	mg/L		01/09/19 08:00	01/15/19 18:23	1
Iron	**40**	**B**	0.050	0.025	mg/L		01/09/19 08:00	01/15/19 18:23	1
Lead	**0.0031**		0.0010	0.00060	mg/L		01/09/19 08:00	01/15/19 18:23	1
Magnesium	**19**		0.050	0.025	mg/L		01/09/19 08:00	01/15/19 18:23	1
Manganese	**1.8**		0.0025	0.0014	mg/L		01/09/19 08:00	01/15/19 18:23	1
Molybdenum	ND		0.0020	0.00060	mg/L		01/09/19 08:00	01/15/19 18:23	1
Nickel	**0.097**		0.0020	0.0010	mg/L		01/09/19 08:00	01/15/19 18:23	1
Potassium	**52**		0.050	0.025	mg/L		01/09/19 08:00	01/15/19 18:23	1
Selenium	**0.0036**		0.0020	0.0010	mg/L		01/09/19 08:00	01/15/19 18:23	1
Sodium	**61**		0.10	0.080	mg/L		01/09/19 08:00	01/15/19 18:23	1
Thallium	**0.014**		0.0010	0.00050	mg/L		01/09/19 08:00	01/15/19 18:23	1
Vanadium	**0.046**		0.010	0.0030	mg/L		01/09/19 08:00	01/15/19 18:23	1
Zinc	**1.5**		0.0050	0.0040	mg/L		01/09/19 08:00	01/15/19 18:23	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00013**	**J**	0.00020	0.00010	mg/L		01/08/19 10:40	01/08/19 13:43	1

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine_January 2019

TestAmerica Job ID: 440-229045-1

Client Sample ID: MW-1
Date Collected: 01/02/19 13:11
Date Received: 01/03/19 13:00

Lab Sample ID: 440-229045-4
Matrix: Water

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**230**		2.5	2.5	mg/L			01/23/19 14:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	**0.13**	**J**	0.20	0.10	mg/L			01/09/19 14:28	1
Total Dissolved Solids	**1100**		10	5.0	mg/L			01/07/19 09:25	1
Cyanide, Total	ND		0.025	0.013	mg/L		01/04/19 16:37	01/04/19 22:16	1
Nitrocellulose	ND		2.0	0.48	mg/L		01/16/19 09:00	01/17/19 11:54	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	ND		4.0	4.0	mg/L			01/04/19 09:57	1
Bicarbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			01/04/19 09:57	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			01/04/19 09:57	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			01/04/19 09:57	1
Specific Conductance	**1300**		1.0	1.0	umhos/cm			01/15/19 10:17	1
pH adj. to 25 deg C	**3.3**	**HF**	0.1	0.1	SU			01/06/19 11:35	1

Client Sample ID: MW-2

Date Collected: 01/03/19 07:53
Date Received: 01/03/19 13:00

Lab Sample ID: 440-229045-5

Matrix: Water

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50	35	ug/L			01/04/19 17:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*113*		*76 - 132*		*01/04/19 17:43*	*1*
4-Bromofluorobenzene (Surr)	*110*		*80 - 120*		*01/04/19 17:43*	*1*
Toluene-d8 (Surr)	*102*		*80 - 128*		*01/04/19 17:43*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.25	ug/L			01/04/19 17:43	1
Ethylbenzene	ND		0.50	0.25	ug/L			01/04/19 17:43	1
m,p-Xylene	ND		1.0	0.50	ug/L			01/04/19 17:43	1
o-Xylene	ND		0.50	0.25	ug/L			01/04/19 17:43	1
Toluene	ND		0.50	0.25	ug/L			01/04/19 17:43	1
Xylenes, Total	ND		1.0	0.50	ug/L			01/04/19 17:43	1
Naphthalene	ND		1.0	0.40	ug/L			01/04/19 17:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*80 - 120*		*01/04/19 17:43*	*1*
Dibromofluoromethane (Surr)	*113*		*76 - 132*		*01/04/19 17:43*	*1*
Toluene-d8 (Surr)	*102*		*80 - 128*		*01/04/19 17:43*	*1*

Method: 8015B - Glycols -Direct Injection (GC/FID)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene glycol	ND		10	1.0	mg/L			01/08/19 16:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-butyl alcohol (Surr)	*106*		*70 - 130*		*01/08/19 16:25*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	**35**	**J**	47	15	ug/L		01/08/19 08:34	01/11/19 06:24	1
Motor Oil Range Organics (C25-C36)	ND		470	160	ug/L		01/08/19 08:34	01/11/19 06:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*89*		*56 - 145*	*01/08/19 08:34*	*01/11/19 06:24*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**14**		0.50	0.25	mg/L			01/03/19 21:04	1
Nitrate as N	ND		0.11	0.055	mg/L			01/03/19 21:04	1
Fluoride	**0.44**	**J F1**	0.50	0.25	mg/L			01/03/19 21:04	1
Nitrite as N	ND		0.15	0.025	mg/L			01/03/19 21:04	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**550**		25	13	mg/L			01/03/19 21:55	50

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			01/23/19 20:44	1

Client Sample ID: MW-2

Date Collected: 01/03/19 07:53
Date Received: 01/03/19 13:00

Lab Sample ID: 440-229045-5

Matrix: Water

Method: 8330A - Nitroaromatics and Nitramines

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	ND		1.1	0.22	ug/L		01/05/19 16:43	01/07/19 19:36	1
1,3-Dinitrobenzene	ND		0.45	0.099	ug/L		01/05/19 16:43	01/07/19 19:36	1
2,4,6-Trinitrotoluene	ND		0.45	0.081	ug/L		01/05/19 16:43	01/07/19 19:36	1
2,4-Dinitrotoluene	ND		0.45	0.094	ug/L		01/05/19 16:43	01/07/19 19:36	1
2,6-Dinitrotoluene	ND		0.22	0.072	ug/L		01/05/19 16:43	01/07/19 19:36	1
2-Nitrotoluene	ND		0.45	0.096	ug/L		01/05/19 16:43	01/07/19 19:36	1
3-Nitrotoluene	ND		0.45	0.094	ug/L		01/05/19 16:43	01/07/19 19:36	1
4-Nitrotoluene	ND		1.1	0.22	ug/L		01/05/19 16:43	01/07/19 19:36	1
HMX	ND		0.45	0.098	ug/L		01/05/19 16:43	01/07/19 19:36	1
RDX	ND		0.22	0.059	ug/L		01/05/19 16:43	01/10/19 09:18	1
Nitrobenzene	ND		0.45	0.10	ug/L		01/05/19 16:43	01/07/19 19:36	1
Nitroglycerin	ND		3.4	1.0	ug/L		01/05/19 16:43	01/07/19 19:36	1
PETN	ND		2.2	0.47	ug/L		01/05/19 16:43	01/07/19 19:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*92*		*75 - 118*	*01/05/19 16:43*	*01/07/19 19:36*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	**170**		0.50	0.30	mg/L		01/09/19 08:00	01/11/19 11:51	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		01/09/19 08:00	01/15/19 18:26	1
Aluminum	**33**		0.050	0.025	mg/L		01/09/19 08:00	01/15/19 18:26	1
Antimony	**0.00040**	**J**	0.0020	0.00020	mg/L		01/09/19 08:00	01/15/19 18:26	1
Arsenic	**0.041**		0.0020	0.0010	mg/L		01/09/19 08:00	01/15/19 18:26	1
Barium	**0.0080**		0.0010	0.00050	mg/L		01/09/19 08:00	01/15/19 18:26	1
Beryllium	**0.0066**		0.0010	0.00010	mg/L		01/09/19 08:00	01/15/19 18:26	1
Cadmium	**0.0028**		0.0010	0.00050	mg/L		01/09/19 08:00	01/15/19 18:26	1
Calcium	**54**		0.30	0.17	mg/L		01/09/19 08:00	01/15/19 18:26	1
Chromium	ND		0.0020	0.0010	mg/L		01/09/19 08:00	01/15/19 18:26	1
Cobalt	**0.15**		0.0010	0.00060	mg/L		01/09/19 08:00	01/15/19 18:26	1
Copper	**0.12**		0.0020	0.0010	mg/L		01/09/19 08:00	01/15/19 18:26	1
Iron	**1.8**	**B**	0.050	0.025	mg/L		01/09/19 08:00	01/15/19 18:26	1
Lead	ND		0.0010	0.00060	mg/L		01/09/19 08:00	01/15/19 18:26	1
Magnesium	**15**		0.050	0.025	mg/L		01/09/19 08:00	01/15/19 18:26	1
Manganese	**1.7**		0.0025	0.0014	mg/L		01/09/19 08:00	01/15/19 18:26	1
Molybdenum	ND		0.0020	0.00060	mg/L		01/09/19 08:00	01/15/19 18:26	1
Nickel	**0.058**		0.0020	0.0010	mg/L		01/09/19 08:00	01/15/19 18:26	1
Potassium	**46**		0.050	0.025	mg/L		01/09/19 08:00	01/15/19 18:26	1
Selenium	ND		0.0020	0.0010	mg/L		01/09/19 08:00	01/15/19 18:26	1
Sodium	**53**		0.10	0.080	mg/L		01/09/19 08:00	01/15/19 18:26	1
Thallium	**0.0015**		0.0010	0.00050	mg/L		01/09/19 08:00	01/15/19 18:26	1
Vanadium	ND		0.010	0.0030	mg/L		01/09/19 08:00	01/15/19 18:26	1
Zinc	**1.3**		0.0050	0.0040	mg/L		01/09/19 08:00	01/15/19 18:26	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		01/08/19 10:40	01/08/19 13:45	1

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine_January 2019

TestAmerica Job ID: 440-229045-1

Client Sample ID: MW-2
Date Collected: 01/03/19 07:53
Date Received: 01/03/19 13:00

Lab Sample ID: 440-229045-5
Matrix: Water

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**200**		2.5	2.5	mg/L			01/23/19 14:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	**0.19**	**J**	0.20	0.10	mg/L			01/09/19 14:58	1
Total Dissolved Solids	**850**		10	5.0	mg/L			01/08/19 09:26	1
Cyanide, Total	ND		0.025	0.013	mg/L		01/04/19 16:37	01/04/19 22:16	1
Nitrocellulose	ND		2.0	0.48	mg/L		01/16/19 09:00	01/17/19 11:56	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	ND		4.0	4.0	mg/L			01/04/19 10:01	1
Bicarbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			01/04/19 10:01	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			01/04/19 10:01	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			01/04/19 10:01	1
Specific Conductance	**890**		1.0	1.0	umhos/cm			01/15/19 10:17	1
pH adj. to 25 deg C	**3.3**	**HF**	0.1	0.1	SU			01/06/19 11:45	1

Client Sample ID: MW-4

Date Collected: 01/03/19 08:53
Date Received: 01/03/19 13:00

Lab Sample ID: 440-229045-6

Matrix: Water

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50	35	ug/L			01/04/19 18:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*110*		*76 - 132*		*01/04/19 18:10*	*1*
4-Bromofluorobenzene (Surr)	*107*		*80 - 120*		*01/04/19 18:10*	*1*
Toluene-d8 (Surr)	*101*		*80 - 128*		*01/04/19 18:10*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.96**		0.50	0.25	ug/L			01/04/19 18:10	1
Ethylbenzene	ND		0.50	0.25	ug/L			01/04/19 18:10	1
m,p-Xylene	ND		1.0	0.50	ug/L			01/04/19 18:10	1
o-Xylene	ND		0.50	0.25	ug/L			01/04/19 18:10	1
Toluene	ND		0.50	0.25	ug/L			01/04/19 18:10	1
Xylenes, Total	ND		1.0	0.50	ug/L			01/04/19 18:10	1
Naphthalene	**0.56**	**J**	1.0	0.40	ug/L			01/04/19 18:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*80 - 120*		*01/04/19 18:10*	*1*
Dibromofluoromethane (Surr)	*110*		*76 - 132*		*01/04/19 18:10*	*1*
Toluene-d8 (Surr)	*101*		*80 - 128*		*01/04/19 18:10*	*1*

Method: 8015B - Glycols -Direct Injection (GC/FID)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene glycol	ND		10	1.0	mg/L			01/08/19 16:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-butyl alcohol (Surr)	*102*		*70 - 130*		*01/08/19 16:42*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	**82**		47	15	ug/L		01/08/19 08:34	01/11/19 06:53	1
Motor Oil Range Organics (C25-C36)	ND		470	160	ug/L		01/08/19 08:34	01/11/19 06:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*93*		*56 - 145*	*01/08/19 08:34*	*01/11/19 06:53*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**22**		1.0	0.50	mg/L			01/03/19 20:29	2
Nitrate as N	ND		0.22	0.11	mg/L			01/03/19 20:29	2
Fluoride	**2.3**		1.0	0.50	mg/L			01/03/19 20:29	2
Nitrite as N	ND		0.30	0.050	mg/L			01/03/19 20:29	2
Sulfate	**2900**		250	130	mg/L			01/04/19 19:08	500

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			01/25/19 08:32	1

Method: 8330A - Nitroaromatics and Nitramines

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	ND		1.1	0.22	ug/L		01/05/19 16:43	01/07/19 19:59	1

Client Sample ID: MW-4

Date Collected: 01/03/19 08:53
Date Received: 01/03/19 13:00

Lab Sample ID: 440-229045-6

Matrix: Water

Method: 8330A - Nitroaromatics and Nitramines (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dinitrobenzene	ND		0.43	0.095	ug/L		01/05/19 16:43	01/07/19 19:59	1
2,4,6-Trinitrotoluene	ND		0.43	0.078	ug/L		01/05/19 16:43	01/07/19 19:59	1
2,4-Dinitrotoluene	ND		0.43	0.090	ug/L		01/05/19 16:43	01/10/19 09:53	1
2,6-Dinitrotoluene	ND		0.22	0.069	ug/L		01/05/19 16:43	01/07/19 19:59	1
2-Nitrotoluene	ND		0.43	0.092	ug/L		01/05/19 16:43	01/07/19 19:59	1
3-Nitrotoluene	ND		0.43	0.090	ug/L		01/05/19 16:43	01/07/19 19:59	1
4-Nitrotoluene	ND		1.1	0.22	ug/L		01/05/19 16:43	01/07/19 19:59	1
HMX	ND		0.43	0.094	ug/L		01/05/19 16:43	01/07/19 19:59	1
RDX	**0.40**	**p**	0.22	0.056	ug/L		01/05/19 16:43	01/10/19 09:53	1
Nitrobenzene	ND		0.43	0.098	ug/L		01/05/19 16:43	01/07/19 19:59	1
Nitroglycerin	ND		3.2	0.99	ug/L		01/05/19 16:43	01/07/19 19:59	1
PETN	ND		2.2	0.45	ug/L		01/05/19 16:43	01/07/19 19:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*119*	*X*	*75 - 118*	*01/05/19 16:43*	*01/07/19 19:59*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	**860**		5.0	3.0	mg/L		01/09/19 08:00	01/15/19 15:22	10

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		01/09/19 08:00	01/15/19 18:29	1
Aluminum	**160**		0.050	0.025	mg/L		01/09/19 08:00	01/15/19 18:29	1
Antimony	**0.0047**		0.0020	0.00020	mg/L		01/09/19 08:00	01/15/19 18:29	1
Arsenic	**80**		0.050	0.025	mg/L		01/09/19 08:00	01/22/19 18:39	25
Barium	**0.032**		0.0010	0.00050	mg/L		01/09/19 08:00	01/15/19 18:29	1
Beryllium	**0.028**		0.0010	0.00010	mg/L		01/09/19 08:00	01/15/19 18:29	1
Cadmium	**0.23**		0.0010	0.00050	mg/L		01/09/19 08:00	01/15/19 18:29	1
Calcium	**360**		7.5	4.3	mg/L		01/09/19 08:00	01/22/19 18:39	25
Chromium	**0.0017**	**J**	0.0020	0.0010	mg/L		01/09/19 08:00	01/15/19 18:29	1
Cobalt	**1.9**		0.0010	0.00060	mg/L		01/09/19 08:00	01/15/19 18:29	1
Copper	**0.079**		0.0020	0.0010	mg/L		01/09/19 08:00	01/15/19 18:29	1
Iron	**340**	**B**	1.3	0.63	mg/L		01/09/19 08:00	01/22/19 18:39	25
Lead	**0.0051**		0.0010	0.00060	mg/L		01/09/19 08:00	01/15/19 18:29	1
Magnesium	**64**		0.050	0.025	mg/L		01/09/19 08:00	01/15/19 18:29	1
Manganese	**7.2**		0.0025	0.0014	mg/L		01/09/19 08:00	01/15/19 18:29	1
Molybdenum	**0.0018**	**J**	0.0020	0.00060	mg/L		01/09/19 08:00	01/15/19 18:29	1
Nickel	**0.50**		0.0020	0.0010	mg/L		01/09/19 08:00	01/15/19 18:29	1
Potassium	**70**		0.050	0.025	mg/L		01/09/19 08:00	01/15/19 18:29	1
Selenium	**0.0075**		0.0020	0.0010	mg/L		01/09/19 08:00	01/15/19 18:29	1
Sodium	**92**		0.10	0.080	mg/L		01/09/19 08:00	01/15/19 18:29	1
Thallium	**0.0094**		0.0010	0.00050	mg/L		01/09/19 08:00	01/15/19 18:29	1
Vanadium	**0.059**		0.010	0.0030	mg/L		01/09/19 08:00	01/15/19 18:29	1
Zinc	**14**		0.0050	0.0040	mg/L		01/09/19 08:00	01/15/19 18:29	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		01/08/19 10:40	01/08/19 13:48	1

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine_January 2019

TestAmerica Job ID: 440-229045-1

Client Sample ID: MW-4
Date Collected: 01/03/19 08:53
Date Received: 01/03/19 13:00

Lab Sample ID: 440-229045-6
Matrix: Water

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**1200**		2.5	2.5	mg/L			01/23/19 14:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.20	0.10	mg/L			01/09/19 15:38	1
Total Dissolved Solids	**4400**		50	25	mg/L			01/09/19 14:11	1
Cyanide, Total	ND		0.025	0.013	mg/L		01/04/19 16:37	01/04/19 22:16	1
Nitrocellulose	ND		2.0	0.48	mg/L		01/16/19 09:00	01/17/19 11:58	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	ND		4.0	4.0	mg/L			01/04/19 10:07	1
Bicarbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			01/04/19 10:07	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			01/04/19 10:07	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			01/04/19 10:07	1
Specific Conductance	**3800**		1.0	1.0	umhos/cm			01/15/19 12:31	1
pH adj. to 25 deg C	**4.0**	**HF**	0.1	0.1	SU			01/06/19 11:45	1

Client Sample ID: Equipment Blank

Date Collected: 01/03/19 09:30
Date Received: 01/03/19 13:00

Lab Sample ID: 440-229045-7

Matrix: Water

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50	35	ug/L			01/04/19 18:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*110*		*76 - 132*		*01/04/19 18:36*	*1*
4-Bromofluorobenzene (Surr)	*108*		*80 - 120*		*01/04/19 18:36*	*1*
Toluene-d8 (Surr)	*101*		*80 - 128*		*01/04/19 18:36*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.25	ug/L			01/04/19 18:36	1
Ethylbenzene	ND		0.50	0.25	ug/L			01/04/19 18:36	1
m,p-Xylene	ND		1.0	0.50	ug/L			01/04/19 18:36	1
o-Xylene	ND		0.50	0.25	ug/L			01/04/19 18:36	1
Toluene	ND		0.50	0.25	ug/L			01/04/19 18:36	1
Xylenes, Total	ND		1.0	0.50	ug/L			01/04/19 18:36	1
Naphthalene	ND		1.0	0.40	ug/L			01/04/19 18:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*80 - 120*		*01/04/19 18:36*	*1*
Dibromofluoromethane (Surr)	*110*		*76 - 132*		*01/04/19 18:36*	*1*
Toluene-d8 (Surr)	*101*		*80 - 128*		*01/04/19 18:36*	*1*

Method: 8015B - Glycols -Direct Injection (GC/FID)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene glycol	ND		10	1.0	mg/L			01/08/19 16:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-butyl alcohol (Surr)	*113*		*70 - 130*		*01/08/19 16:59*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	**41**	**J**	47	15	ug/L		01/08/19 08:34	01/11/19 07:22	1
Motor Oil Range Organics (C25-C36)	ND		470	160	ug/L		01/08/19 08:34	01/11/19 07:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*89*		*56 - 145*	*01/08/19 08:34*	*01/11/19 07:22*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50	0.25	mg/L			01/03/19 19:39	1
Nitrate as N	ND		0.11	0.055	mg/L			01/03/19 19:39	1
Fluoride	ND		0.50	0.25	mg/L			01/03/19 19:39	1
Nitrite as N	ND		0.15	0.025	mg/L			01/03/19 19:39	1
Sulfate	ND		0.50	0.25	mg/L			01/03/19 19:39	1

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			01/23/19 21:18	1

Method: 8330A - Nitroaromatics and Nitramines

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	ND		1.1	0.22	ug/L		01/05/19 16:43	01/07/19 20:22	1

Client Sample ID: Equipment Blank

Date Collected: 01/03/19 09:30
Date Received: 01/03/19 13:00

Lab Sample ID: 440-229045-7

Matrix: Water

Method: 8330A - Nitroaromatics and Nitramines (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dinitrobenzene	ND		0.44	0.098	ug/L		01/05/19 16:43	01/07/19 20:22	1
2,4,6-Trinitrotoluene	ND		0.44	0.080	ug/L		01/05/19 16:43	01/07/19 20:22	1
2,4-Dinitrotoluene	ND		0.44	0.093	ug/L		01/05/19 16:43	01/07/19 20:22	1
2,6-Dinitrotoluene	ND		0.22	0.072	ug/L		01/05/19 16:43	01/07/19 20:22	1
2-Nitrotoluene	ND		0.44	0.095	ug/L		01/05/19 16:43	01/07/19 20:22	1
3-Nitrotoluene	ND		0.44	0.093	ug/L		01/05/19 16:43	01/07/19 20:22	1
4-Nitrotoluene	ND		1.1	0.22	ug/L		01/05/19 16:43	01/07/19 20:22	1
HMX	ND		0.44	0.097	ug/L		01/05/19 16:43	01/07/19 20:22	1
RDX	ND		0.22	0.058	ug/L		01/05/19 16:43	01/07/19 20:22	1
Nitrobenzene	ND		0.44	0.10	ug/L		01/05/19 16:43	01/07/19 20:22	1
Nitroglycerin	ND		3.3	1.0	ug/L		01/05/19 16:43	01/07/19 20:22	1
PETN	ND		2.2	0.46	ug/L		01/05/19 16:43	01/07/19 20:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*99*		*75 - 118*	*01/05/19 16:43*	*01/07/19 20:22*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	**0.42**	**J**	0.50	0.30	mg/L		01/09/19 08:00	01/11/19 11:58	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		01/09/19 08:00	01/15/19 18:32	1
Aluminum	**0.081**		0.050	0.025	mg/L		01/09/19 08:00	01/15/19 18:32	1
Antimony	ND		0.0020	0.00020	mg/L		01/09/19 08:00	01/15/19 18:32	1
Arsenic	ND		0.0020	0.0010	mg/L		01/09/19 08:00	01/22/19 18:42	1
Barium	**0.00091**	**J**	0.0010	0.00050	mg/L		01/09/19 08:00	01/15/19 18:32	1
Beryllium	ND		0.0010	0.00010	mg/L		01/09/19 08:00	01/15/19 18:32	1
Cadmium	ND		0.0010	0.00050	mg/L		01/09/19 08:00	01/15/19 18:32	1
Calcium	**0.43**		0.30	0.17	mg/L		01/09/19 08:00	01/22/19 18:42	1
Chromium	ND		0.0020	0.0010	mg/L		01/09/19 08:00	01/15/19 18:32	1
Cobalt	ND		0.0010	0.00060	mg/L		01/09/19 08:00	01/15/19 18:32	1
Copper	ND		0.0020	0.0010	mg/L		01/09/19 08:00	01/15/19 18:32	1
Iron	ND		0.050	0.025	mg/L		01/09/19 08:00	01/22/19 18:42	1
Lead	ND		0.0010	0.00060	mg/L		01/09/19 08:00	01/15/19 18:32	1
Magnesium	**0.043**	**J**	0.050	0.025	mg/L		01/09/19 08:00	01/15/19 18:32	1
Manganese	ND		0.0025	0.0014	mg/L		01/09/19 08:00	01/15/19 18:32	1
Molybdenum	ND		0.0020	0.00060	mg/L		01/09/19 08:00	01/15/19 18:32	1
Nickel	ND		0.0020	0.0010	mg/L		01/09/19 08:00	01/15/19 18:32	1
Potassium	**0.054**		0.050	0.025	mg/L		01/09/19 08:00	01/15/19 18:32	1
Selenium	ND		0.0020	0.0010	mg/L		01/09/19 08:00	01/15/19 18:32	1
Sodium	**1.0**		0.10	0.080	mg/L		01/09/19 08:00	01/15/19 18:32	1
Thallium	ND		0.0010	0.00050	mg/L		01/09/19 08:00	01/15/19 18:32	1
Vanadium	ND		0.010	0.0030	mg/L		01/09/19 08:00	01/15/19 18:32	1
Zinc	ND		0.0050	0.0040	mg/L		01/09/19 08:00	01/15/19 18:32	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		01/08/19 10:40	01/08/19 13:50	1

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine_January 2019

TestAmerica Job ID: 440-229045-1

Client Sample ID: Equipment Blank
Date Collected: 01/03/19 09:30
Date Received: 01/03/19 13:00

Lab Sample ID: 440-229045-7
Matrix: Water

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	ND		2.5	2.5	mg/L			01/23/19 14:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.20	0.10	mg/L			01/09/19 15:11	1
Total Dissolved Solids	ND		10	5.0	mg/L			01/08/19 09:26	1
Cyanide, Total	ND		0.025	0.013	mg/L		01/04/19 16:37	01/04/19 22:16	1
Nitrocellulose	ND		2.0	0.48	mg/L		01/16/19 09:00	01/17/19 12:06	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	ND		4.0	4.0	mg/L			01/04/19 10:18	1
Bicarbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			01/04/19 10:18	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			01/04/19 10:18	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			01/04/19 10:18	1
Specific Conductance	**4.4**		1.0	1.0	umhos/cm			01/15/19 12:31	1
pH adj. to 25 deg C	**7.3**	**HF**	0.1	0.1	SU			01/06/19 10:26	1

Surrogate Summary

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine_January 2019

TestAmerica Job ID: 440-229045-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(80-120)	(76-132)	(80-128)
440-229045-1	MW-5	110	109	103
440-229045-2	MW-6	107	107	104
440-229045-3	MW-3	109	108	101
440-229045-4	MW-1	106	110	101
440-229045-5	MW-2	110	113	102
440-229045-6	MW-4	107	110	101
440-229045-7	Equipment Blank	108	110	101
LCS 440-520698/6	Lab Control Sample	106	106	98
MB 440-520698/5	Method Blank	110	106	103

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		DBFM	BFB	TOL
Lab Sample ID	Client Sample ID	(76-132)	(80-120)	(80-128)
440-229045-1	MW-5	109	110	103
440-229045-2	MW-6	107	107	104
440-229045-3	MW-3	108	109	101
440-229045-4	MW-1	110	106	101
440-229045-5	MW-2	113	110	102
440-229045-6	MW-4	110	107	101
440-229045-7	Equipment Blank	110	108	101
LCS 440-520727/7	Lab Control Sample	107	109	106
MB 440-520727/5	Method Blank	106	110	103

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)

Method: 8015B - Glycols -Direct Injection (GC/FID)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		nBA1
Lab Sample ID	Client Sample ID	(70-130)
440-229045-1	MW-5	105
440-229045-2	MW-6	104
440-229045-3	MW-3	105
440-229045-4	MW-1	118
440-229045-5	MW-2	106
440-229045-6	MW-4	102
440-229045-7	Equipment Blank	113
LCS 490-568233/8	Lab Control Sample	104

Method: 8015B - Glycols -Direct Injection (GC/FID) (Continued)

Matrix: Water **Prep Type: Total/NA**

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits) nBA1 (70-130)
MB 490-568233/7	Method Blank	102

Surrogate Legend

nBA = n-butyl alcohol (Surr)

Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Water **Prep Type: Total/NA**

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits) OTPH1 (56-145)
440-229045-1	MW-5	86
440-229045-2	MW-6	57
440-229045-3	MW-3	84
440-229045-4	MW-1	89
440-229045-5	MW-2	89
440-229045-6	MW-4	93
440-229045-7	Equipment Blank	89
LCS 320-269400/2-A	Lab Control Sample	92
LCS 320-269400/3-A	Lab Control Sample	88
LCSD 320-269400/4-A	Lab Control Sample Dup	87
MB 320-269400/1-A	Method Blank	89

Surrogate Legend

OTPH = o-Terphenyl (Surr)

Method: 8330A - Nitroaromatics and Nitramines

Matrix: Water **Prep Type: Total/NA**

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits) 12DNB1 (75-118)
440-229045-1	MW-5	101
440-229045-2	MW-6	126 X
440-229045-2	MW-6	77
440-229045-3	MW-3	95
440-229045-4	MW-1	114
440-229045-4	MW-1	92
440-229045-5	MW-2	92
440-229045-5	MW-2	89
440-229045-6	MW-4	119 X
440-229045-6	MW-4	87
440-229045-7	Equipment Blank	99
LCS 280-443392/2-A	Lab Control Sample	99
LCSD 280-443392/3-A	Lab Control Sample Dup	96
MB 280-443392/1-A	Method Blank	101

Surrogate Legend

12DNB = 1,2-Dinitrobenzene

Method Summary

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine_January 2019

TestAmerica Job ID: 440-229045-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL IRV
8260B/CA_LUFTMS	Volatile Organic Compounds by GC/MS	SW846	TAL IRV
8015B	Glycols -Direct Injection (GC/FID)	SW846	TAL NSH
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL SAC
300.0	Anions, Ion Chromatography	MCAWW	TAL IRV
314.0 LL	Perchlorate (IC)	EPA	TAL IRV
8330A	Nitroaromatics and Nitramines	SW846	TAL DEN
6010B	Metals (ICP)	SW846	TAL SAC
6020	Metals (ICP/MS)	SW846	TAL SAC
7470A	Mercury (CVAA)	SW846	TAL SAC
SM 2340B	Total Hardness (as CaCO3) by calculation	SM	TAL SAC
350.1	Nitrogen, Ammonia	MCAWW	TAL IRV
SM 2320B	Alkalinity	SM	TAL IRV
SM 2510B	Conductivity, Specific Conductance	SM	TAL IRV
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL IRV
SM 4500 CN E	Cyanide, Total	SM	TAL IRV
SM 4500 H+ B	pH	SM	TAL IRV
WS-WC-0050	Nitrocellulose	TAL-SAC	TAL SAC
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL SAC
3010A	Preparation, Total Metals	SW846	TAL SAC
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL SAC
353 (NCell-Hyd)	Nitrocellulose Sample Preparation (Hydrolysis)	MCAWW	TAL SAC
353.2 (NCell)	Nitrocellulose Sample Preparation	MCAWW	TAL SAC
3535	Solid-Phase Extraction (SPE)	SW846	TAL DEN
5030B	Purge and Trap	SW846	TAL IRV
7470A	Preparation, Mercury	SW846	TAL SAC
Distill/CN	Distillation, Cyanide	None	TAL IRV
Filtration	Sample Filtration	None	TAL SAC

Protocol References:

EPA = US Environmental Protection Agency
MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
TAL-SAC = TestAmerica Laboratories, West Sacramento, Facility Standard Operating Procedure.

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100
TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022
TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177
TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Lab Chronicle

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine_January 2019

TestAmerica Job ID: 440-229045-1

Client Sample ID: MW-5

Date Collected: 01/02/19 08:57
Date Received: 01/03/19 13:00

Lab Sample ID: 440-229045-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	520698	01/04/19 15:58	AYL	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	520727	01/04/19 15:58	AYL	TAL IRV
Total/NA	Analysis	8015B		1			568233	01/08/19 15:18	ZXS	TAL NSH
Total/NA	Prep	3510C			998.8 mL	3.0 mL	269400	01/08/19 08:34	FDB	TAL SAC
Total/NA	Analysis	8015B		1			270017	01/11/19 04:30	RS1	TAL SAC
Total/NA	Analysis	300.0		1			520530	01/03/19 16:39	NTN	TAL IRV
Total/NA	Analysis	300.0		1			520531	01/03/19 16:39	NTN	TAL IRV
Total/NA	Analysis	300.0		20			520531	01/03/19 16:55	NTN	TAL IRV
Total/NA	Analysis	300.0		5			520531	01/03/19 22:12	NTN	TAL IRV
Total/NA	Analysis	314.0 LL		1			524282	01/23/19 19:20	CTH	TAL IRV
Total/NA	Prep	3535			454.5 mL	5 mL	443392	01/05/19 16:43	KSA	TAL DEN
Total/NA	Analysis	8330A		1			443441	01/07/19 18:04	HKF	TAL DEN
Dissolved	Filtration	Filtration			500 mL	500 mL	269140	01/07/19 07:40	NIM	TAL SAC
Dissolved	Prep	3010A			50 mL	50 mL	269640	01/09/19 08:00	NIM	TAL SAC
Dissolved	Analysis	6010B		1			270441	01/11/19 11:12	JMD	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	269140	01/07/19 07:40	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	269638	01/09/19 08:00	NIM	TAL SAC
Dissolved	Analysis	6020		1			270877	01/15/19 17:50	JMD	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	269140	01/07/19 07:40	NIM	TAL SAC
Dissolved	Prep	7470A			30 mL	30 mL	269460	01/08/19 10:40	DPM	TAL SAC
Dissolved	Analysis	7470A		1			269527	01/08/19 13:23	DPM	TAL SAC
Dissolved	Analysis	SM 2340B		1			272182	01/23/19 14:04	LW1	TAL SAC
Total/NA	Analysis	350.1		1	0.8 mL	8.0 mL	521503	01/09/19 14:12	KMY	TAL IRV
Total/NA	Analysis	SM 2320B		1			520773	01/04/19 09:32	YZ	TAL IRV
Total/NA	Analysis	SM 2510B		1			522462	01/15/19 10:17	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	520954	01/07/19 09:25	XL	TAL IRV
Total/NA	Prep	Distill/CN			50 mL	50 mL	520811	01/04/19 16:37	QTN	TAL IRV
Total/NA	Analysis	SM 4500 CN E		1			520834	01/04/19 22:15	QTN	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			520877	01/06/19 10:26	CMM	TAL IRV
Total/NA	Pre Prep	353.2 (NCell)			100 mL	50 mL	271079	01/15/19 13:00	JCB	TAL SAC
Total/NA	Prep	353 (NCell-Hyd)			50 mL	40 mL	271085	01/16/19 09:00	JCB	TAL SAC
Total/NA	Analysis	WS-WC-0050		1			271213	01/17/19 11:44	TCS	TAL SAC

Client Sample ID: MW-6

Date Collected: 01/02/19 10:29
Date Received: 01/03/19 13:00

Lab Sample ID: 440-229045-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	520698	01/04/19 16:24	AYL	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	520727	01/04/19 16:24	AYL	TAL IRV
Total/NA	Analysis	8015B		1			568233	01/08/19 15:35	ZXS	TAL NSH

Lab Chronicle

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine_January 2019

TestAmerica Job ID: 440-229045-1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			1015.3 mL	3.0 mL	269400	01/08/19 08:34	FDB	TAL SAC
Total/NA	Analysis	8015B		1			270017	01/11/19 04:58	RS1	TAL SAC
Total/NA	Analysis	300.0		1			520530	01/03/19 17:12	NTN	TAL IRV
Total/NA	Analysis	300.0		1			520531	01/03/19 17:12	NTN	TAL IRV
Total/NA	Analysis	300.0		5			520531	01/03/19 19:56	NTN	TAL IRV
Total/NA	Analysis	314.0 LL		1			524619	01/25/19 08:52	CTH	TAL IRV
Total/NA	Prep	3535			451 mL	5 mL	443392	01/05/19 16:43	KSA	TAL DEN
Total/NA	Analysis	8330A		1	1 mL	1.0 mL	443750	01/10/19 08:08	HKF	TAL DEN
Total/NA	Prep	3535			451 mL	5 mL	443392	01/05/19 16:43	KSA	TAL DEN
Total/NA	Analysis	8330A		1			443441	01/07/19 18:27	HKF	TAL DEN
Dissolved	Filtration	Filtration			500 mL	500 mL	269140	01/07/19 07:40	NIM	TAL SAC
Dissolved	Prep	3010A			50 mL	50 mL	269640	01/09/19 08:00	NIM	TAL SAC
Dissolved	Analysis	6010B		1			270441	01/11/19 11:39	JMD	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	269140	01/07/19 07:40	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	269638	01/09/19 08:00	NIM	TAL SAC
Dissolved	Analysis	6020		1			270877	01/15/19 18:17	JMD	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	269140	01/07/19 07:40	NIM	TAL SAC
Dissolved	Prep	7470A			30 mL	30 mL	269460	01/08/19 10:40	DPM	TAL SAC
Dissolved	Analysis	7470A		1			269527	01/08/19 13:33	DPM	TAL SAC
Dissolved	Analysis	SM 2340B		1			272182	01/23/19 14:04	LW1	TAL SAC
Total/NA	Analysis	350.1		1	0.8 mL	8.0 mL	521503	01/09/19 14:17	KMY	TAL IRV
Total/NA	Analysis	SM 2320B		1			520773	01/04/19 09:46	YZ	TAL IRV
Total/NA	Analysis	SM 2510B		1			522462	01/15/19 10:17	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	520954	01/07/19 09:25	XL	TAL IRV
Total/NA	Prep	Distill/CN			50 mL	50 mL	520811	01/04/19 16:37	QTN	TAL IRV
Total/NA	Analysis	SM 4500 CN E		1			520834	01/04/19 22:15	QTN	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			520877	01/06/19 10:26	CMM	TAL IRV
Total/NA	Pre Prep	353.2 (NCell)			100 mL	50 mL	271079	01/15/19 13:00	JCB	TAL SAC
Total/NA	Prep	353 (NCell-Hyd)			50 mL	40 mL	271085	01/16/19 09:00	JCB	TAL SAC
Total/NA	Analysis	WS-WC-0050		1			271213	01/17/19 11:50	TCS	TAL SAC

Client Sample ID: MW-3

Date Collected: 01/02/19 11:58
Date Received: 01/03/19 13:00

Lab Sample ID: 440-229045-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	520698	01/04/19 16:51	AYL	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	520727	01/04/19 16:51	AYL	TAL IRV
Total/NA	Analysis	8015B		1			568233	01/08/19 15:52	ZXS	TAL NSH
Total/NA	Prep	3510C			1014.1 mL	3.0 mL	269400	01/08/19 08:34	FDB	TAL SAC
Total/NA	Analysis	8015B		1			270017	01/11/19 05:27	RS1	TAL SAC
Total/NA	Analysis	300.0		1			520530	01/03/19 17:30	NTN	TAL IRV
Total/NA	Analysis	300.0		1			520531	01/03/19 17:30	NTN	TAL IRV
Total/NA	Analysis	300.0		10			520531	01/03/19 20:12	NTN	TAL IRV
Total/NA	Analysis	314.0 LL		1			524282	01/23/19 20:11	CTH	TAL IRV
Total/NA	Prep	3535			451 mL	5 mL	443392	01/05/19 16:43	KSA	TAL DEN

Lab Chronicle

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine_January 2019

TestAmerica Job ID: 440-229045-1

Client Sample ID: MW-3

Date Collected: 01/02/19 11:58
Date Received: 01/03/19 13:00

Lab Sample ID: 440-229045-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8330A		1			443441	01/07/19 18:50	HKF	TAL DEN
Dissolved	Filtration	Filtration			500 mL	500 mL	269140	01/07/19 07:40	NIM	TAL SAC
Dissolved	Prep	3010A			50 mL	50 mL	269640	01/09/19 08:00	NIM	TAL SAC
Dissolved	Analysis	6010B		1			270441	01/11/19 11:43	JMD	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	269140	01/07/19 07:40	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	269638	01/09/19 08:00	NIM	TAL SAC
Dissolved	Analysis	6020		1			270877	01/15/19 18:20	JMD	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	269140	01/07/19 07:40	NIM	TAL SAC
Dissolved	Prep	7470A			30 mL	30 mL	269460	01/08/19 10:40	DPM	TAL SAC
Dissolved	Analysis	7470A		1			269527	01/08/19 13:36	DPM	TAL SAC
Dissolved	Analysis	SM 2340B		1			272182	01/23/19 14:04	LW1	TAL SAC
Total/NA	Analysis	350.1		1	0.8 mL	8.0 mL	521503	01/09/19 14:22	KMY	TAL IRV
Total/NA	Analysis	SM 2320B		1			520773	01/04/19 09:53	YZ	TAL IRV
Total/NA	Analysis	SM 2510B		1			522462	01/15/19 10:17	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	520954	01/07/19 09:25	XL	TAL IRV
Total/NA	Prep	Distill/CN			50 mL	50 mL	520811	01/04/19 16:37	QTN	TAL IRV
Total/NA	Analysis	SM 4500 CN E		1			520834	01/04/19 22:15	QTN	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			520877	01/06/19 10:26	CMM	TAL IRV
Total/NA	Pre Prep	353.2 (NCell)			100 mL	50 mL	271079	01/15/19 13:00	JCB	TAL SAC
Total/NA	Prep	353 (NCell-Hyd)			50 mL	40 mL	271085	01/16/19 09:00	JCB	TAL SAC
Total/NA	Analysis	WS-WC-0050		1			271213	01/17/19 11:52	TCS	TAL SAC

Client Sample ID: MW-1

Date Collected: 01/02/19 13:11
Date Received: 01/03/19 13:00

Lab Sample ID: 440-229045-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	520698	01/04/19 17:17	AYL	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	520727	01/04/19 17:17	AYL	TAL IRV
Total/NA	Analysis	8015B		1			568233	01/08/19 16:09	ZXS	TAL NSH
Total/NA	Prep	3510C			1057.2 mL	3.0 mL	269400	01/08/19 08:34	FDB	TAL SAC
Total/NA	Analysis	8015B		1			270017	01/11/19 05:56	RS1	TAL SAC
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	520530	01/03/19 17:47	NTN	TAL IRV
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	520531	01/03/19 17:47	NTN	TAL IRV
Total/NA	Analysis	300.0	DL	50			520531	01/03/19 18:38	NTN	TAL IRV
Total/NA	Analysis	314.0 LL		1			524282	01/23/19 20:28	CTH	TAL IRV
Total/NA	Prep	3535			452.8 mL	5 mL	443392	01/05/19 16:43	KSA	TAL DEN
Total/NA	Analysis	8330A		1	1 mL	1.0 mL	443750	01/10/19 08:43	HKF	TAL DEN
Total/NA	Prep	3535			452.8 mL	5 mL	443392	01/05/19 16:43	KSA	TAL DEN
Total/NA	Analysis	8330A		1			443441	01/07/19 19:13	HKF	TAL DEN
Dissolved	Filtration	Filtration			500 mL	500 mL	269140	01/07/19 07:40	NIM	TAL SAC
Dissolved	Prep	3010A			50 mL	50 mL	269640	01/09/19 08:00	NIM	TAL SAC

Client Sample ID: MW-1

Date Collected: 01/02/19 13:11
Date Received: 01/03/19 13:00

Lab Sample ID: 440-229045-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	6010B		1			270441	01/11/19 11:47	JMD	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	269140	01/07/19 07:40	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	269638	01/09/19 08:00	NIM	TAL SAC
Dissolved	Analysis	6020		1			270877	01/15/19 18:23	JMD	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	269140	01/07/19 07:40	NIM	TAL SAC
Dissolved	Prep	7470A			30 mL	30 mL	269460	01/08/19 10:40	DPM	TAL SAC
Dissolved	Analysis	7470A		1			269527	01/08/19 13:43	DPM	TAL SAC
Dissolved	Analysis	SM 2340B		1			272182	01/23/19 14:04	LW1	TAL SAC
Total/NA	Analysis	350.1		1	0.8 mL	8.0 mL	521503	01/09/19 14:28	KMY	TAL IRV
Total/NA	Analysis	SM 2320B		1			520773	01/04/19 09:57	YZ	TAL IRV
Total/NA	Analysis	SM 2510B		1			522462	01/15/19 10:17	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	520954	01/07/19 09:25	XL	TAL IRV
Total/NA	Prep	Distill/CN			50 mL	50 mL	520811	01/04/19 16:37	QTN	TAL IRV
Total/NA	Analysis	SM 4500 CN E		1			520834	01/04/19 22:16	QTN	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			520877	01/06/19 11:35	CMM	TAL IRV
Total/NA	Pre Prep	353.2 (NCell)			100 mL	50 mL	271079	01/15/19 13:00	JCB	TAL SAC
Total/NA	Prep	353 (NCell-Hyd)			50 mL	40 mL	271085	01/16/19 09:00	JCB	TAL SAC
Total/NA	Analysis	WS-WC-0050		1			271213	01/17/19 11:54	TCS	TAL SAC

Client Sample ID: MW-2

Date Collected: 01/03/19 07:53
Date Received: 01/03/19 13:00

Lab Sample ID: 440-229045-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	520698	01/04/19 17:43	AYL	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	520727	01/04/19 17:43	AYL	TAL IRV
Total/NA	Analysis	8015B		1			568233	01/08/19 16:25	ZXS	TAL NSH
Total/NA	Prep	3510C			1055.1 mL	3.0 mL	269400	01/08/19 08:34	FDB	TAL SAC
Total/NA	Analysis	8015B		1			270017	01/11/19 06:24	RS1	TAL SAC
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	520530	01/03/19 21:04	NTN	TAL IRV
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	520531	01/03/19 21:04	NTN	TAL IRV
Total/NA	Analysis	300.0	DL	50			520531	01/03/19 21:55	NTN	TAL IRV
Total/NA	Analysis	314.0 LL		1			524282	01/23/19 20:44	CTH	TAL IRV
Total/NA	Prep	3535			445.8 mL	5 mL	443392	01/05/19 16:43	KSA	TAL DEN
Total/NA	Analysis	8330A		1	1 mL	1.0 mL	443750	01/10/19 09:18	HKF	TAL DEN
Total/NA	Prep	3535			445.8 mL	5 mL	443392	01/05/19 16:43	KSA	TAL DEN
Total/NA	Analysis	8330A		1			443441	01/07/19 19:36	HKF	TAL DEN
Dissolved	Filtration	Filtration			500 mL	500 mL	269140	01/07/19 07:40	NIM	TAL SAC
Dissolved	Prep	3010A			50 mL	50 mL	269640	01/09/19 08:00	NIM	TAL SAC
Dissolved	Analysis	6010B		1			270441	01/11/19 11:51	JMD	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	269140	01/07/19 07:40	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	269638	01/09/19 08:00	NIM	TAL SAC

Client Sample ID: MW-2

Date Collected: 01/03/19 07:53
Date Received: 01/03/19 13:00

Lab Sample ID: 440-229045-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	6020		1			270877	01/15/19 18:26	JMD	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	269140	01/07/19 07:40	NIM	TAL SAC
Dissolved	Prep	7470A			30 mL	30 mL	269460	01/08/19 10:40	DPM	TAL SAC
Dissolved	Analysis	7470A		1			269527	01/08/19 13:45	DPM	TAL SAC
Dissolved	Analysis	SM 2340B		1			272182	01/23/19 14:04	LW1	TAL SAC
Total/NA	Analysis	350.1		1	0.8 mL	8.0 mL	521503	01/09/19 14:58	KMY	TAL IRV
Total/NA	Analysis	SM 2320B		1			520773	01/04/19 10:01	YZ	TAL IRV
Total/NA	Analysis	SM 2510B		1			522462	01/15/19 10:17	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	521161	01/08/19 09:26	XL	TAL IRV
Total/NA	Prep	Distill/CN			50 mL	50 mL	520811	01/04/19 16:37	QTN	TAL IRV
Total/NA	Analysis	SM 4500 CN E		1			520834	01/04/19 22:16	QTN	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			520877	01/06/19 11:45	CMM	TAL IRV
Total/NA	Pre Prep	353.2 (NCell)			100 mL	50 mL	271079	01/15/19 13:00	JCB	TAL SAC
Total/NA	Prep	353 (NCell-Hyd)			50 mL	40 mL	271085	01/16/19 09:00	JCB	TAL SAC
Total/NA	Analysis	WS-WC-0050		1			271213	01/17/19 11:56	TCS	TAL SAC

Client Sample ID: MW-4

Date Collected: 01/03/19 08:53
Date Received: 01/03/19 13:00

Lab Sample ID: 440-229045-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	520698	01/04/19 18:10	AYL	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	520727	01/04/19 18:10	AYL	TAL IRV
Total/NA	Analysis	8015B		1			568233	01/08/19 16:42	ZXS	TAL NSH
Total/NA	Prep	3510C			1055.7 mL	3.0 mL	269400	01/08/19 08:34	FDB	TAL SAC
Total/NA	Analysis	8015B		1			270017	01/11/19 06:53	RS1	TAL SAC
Total/NA	Analysis	300.0		2			520530	01/03/19 20:29	NTN	TAL IRV
Total/NA	Analysis	300.0		2			520531	01/03/19 20:29	NTN	TAL IRV
Total/NA	Analysis	300.0		500			520711	01/04/19 19:08	NTN	TAL IRV
Total/NA	Analysis	314.0 LL		1			524619	01/25/19 08:32	CTH	TAL IRV
Total/NA	Prep	3535			464.6 mL	5 mL	443392	01/05/19 16:43	KSA	TAL DEN
Total/NA	Analysis	8330A		1	1 mL	1.0 mL	443750	01/10/19 09:53	HKF	TAL DEN
Total/NA	Prep	3535			464.6 mL	5 mL	443392	01/05/19 16:43	KSA	TAL DEN
Total/NA	Analysis	8330A		1			443441	01/07/19 19:59	HKF	TAL DEN
Dissolved	Filtration	Filtration			500 mL	500 mL	269140	01/07/19 07:40	NIM	TAL SAC
Dissolved	Prep	3010A			50 mL	50 mL	269640	01/09/19 08:00	NIM	TAL SAC
Dissolved	Analysis	6010B		10			270879	01/15/19 15:22	JMD	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	269140	01/07/19 07:40	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	269638	01/09/19 08:00	NIM	TAL SAC
Dissolved	Analysis	6020		1			270877	01/15/19 18:29	JMD	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	269140	01/07/19 07:40	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	269638	01/09/19 08:00	NIM	TAL SAC

Client Sample ID: MW-4

Lab Sample ID: 440-229045-6

Date Collected: 01/03/19 08:53

Matrix: Water

Date Received: 01/03/19 13:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	6020		25			272035	01/22/19 18:39	JMD	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	269140	01/07/19 07:40	NIM	TAL SAC
Dissolved	Prep	7470A			30 mL	30 mL	269460	01/08/19 10:40	DPM	TAL SAC
Dissolved	Analysis	7470A		1			269527	01/08/19 13:48	DPM	TAL SAC
Dissolved	Analysis	SM 2340B		1			272182	01/23/19 14:04	LW1	TAL SAC
Total/NA	Analysis	350.1		1	0.8 mL	8.0 mL	521503	01/09/19 15:38	KMY	TAL IRV
Total/NA	Analysis	SM 2320B		1			520773	01/04/19 10:07	YZ	TAL IRV
Total/NA	Analysis	SM 2510B		1			522462	01/15/19 12:31	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	20 mL	100 mL	521380	01/09/19 14:11	XL	TAL IRV
Total/NA	Prep	Distill/CN			50 mL	50 mL	520811	01/04/19 16:37	QTN	TAL IRV
Total/NA	Analysis	SM 4500 CN E		1			520834	01/04/19 22:16	QTN	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			520877	01/06/19 11:45	CMM	TAL IRV
Total/NA	Pre Prep	353.2 (NCell)			100 mL	50 mL	271079	01/15/19 13:00	JCB	TAL SAC
Total/NA	Prep	353 (NCell-Hyd)			50 mL	40 mL	271085	01/16/19 09:00	JCB	TAL SAC
Total/NA	Analysis	WS-WC-0050		1			271213	01/17/19 11:58	TCS	TAL SAC

Client Sample ID: Equipment Blank

Lab Sample ID: 440-229045-7

Date Collected: 01/03/19 09:30

Matrix: Water

Date Received: 01/03/19 13:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	520698	01/04/19 18:36	AYL	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	520727	01/04/19 18:36	AYL	TAL IRV
Total/NA	Analysis	8015B		1			568233	01/08/19 16:59	ZXS	TAL NSH
Total/NA	Prep	3510C			1055.7 mL	3.0 mL	269400	01/08/19 08:34	FDB	TAL SAC
Total/NA	Analysis	8015B		1			270017	01/11/19 07:22	RS1	TAL SAC
Total/NA	Analysis	300.0		1			520530	01/03/19 19:39	NTN	TAL IRV
Total/NA	Analysis	300.0		1			520531	01/03/19 19:39	NTN	TAL IRV
Total/NA	Analysis	314.0 LL		1			524282	01/23/19 21:18	CTH	TAL IRV
Total/NA	Prep	3535			450.8 mL	5 mL	443392	01/05/19 16:43	KSA	TAL DEN
Total/NA	Analysis	8330A		1			443441	01/07/19 20:22	HKF	TAL DEN
Dissolved	Filtration	Filtration			500 mL	500 mL	269140	01/07/19 07:40	NIM	TAL SAC
Dissolved	Prep	3010A			50 mL	50 mL	269640	01/09/19 08:00	NIM	TAL SAC
Dissolved	Analysis	6010B		1			270441	01/11/19 11:58	JMD	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	269140	01/07/19 07:40	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	269638	01/09/19 08:00	NIM	TAL SAC
Dissolved	Analysis	6020		1			270877	01/15/19 18:32	JMD	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	269140	01/07/19 07:40	NIM	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	269638	01/09/19 08:00	NIM	TAL SAC
Dissolved	Analysis	6020		1			272035	01/22/19 18:42	JMD	TAL SAC
Dissolved	Filtration	Filtration			500 mL	500 mL	269140	01/07/19 07:40	NIM	TAL SAC
Dissolved	Prep	7470A			30 mL	30 mL	269460	01/08/19 10:40	DPM	TAL SAC

Lab Chronicle

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine_January 2019

TestAmerica Job ID: 440-229045-1

Client Sample ID: Equipment Blank

Lab Sample ID: 440-229045-7

Date Collected: 01/03/19 09:30

Matrix: Water

Date Received: 01/03/19 13:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	7470A		1			269527	01/08/19 13:50	DPM	TAL SAC
Dissolved	Analysis	SM 2340B		1			272182	01/23/19 14:04	LW1	TAL SAC
Total/NA	Analysis	350.1		1	0.8 mL	8.0 mL	521503	01/09/19 15:11	KMY	TAL IRV
Total/NA	Analysis	SM 2320B		1			520773	01/04/19 10:18	YZ	TAL IRV
Total/NA	Analysis	SM 2510B		1			522462	01/15/19 12:31	XL	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	521161	01/08/19 09:26	XL	TAL IRV
Total/NA	Prep	Distill/CN			50 mL	50 mL	520811	01/04/19 16:37	QTN	TAL IRV
Total/NA	Analysis	SM 4500 CN E		1			520834	01/04/19 22:16	QTN	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			520877	01/06/19 10:26	CMM	TAL IRV
Total/NA	Pre Prep	353.2 (NCell)			100 mL	50 mL	271079	01/15/19 13:00	JCB	TAL SAC
Total/NA	Prep	353 (NCell-Hyd)			50 mL	40 mL	271085	01/16/19 09:00	JCB	TAL SAC
Total/NA	Analysis	WS-WC-0050		1			271213	01/17/19 12:06	TCS	TAL SAC

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-520698/5
Matrix: Water
Analysis Batch: 520698

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.25	ug/L			01/04/19 08:45	1
Ethylbenzene	ND		0.50	0.25	ug/L			01/04/19 08:45	1
m,p-Xylene	ND		1.0	0.50	ug/L			01/04/19 08:45	1
o-Xylene	ND		0.50	0.25	ug/L			01/04/19 08:45	1
Toluene	ND		0.50	0.25	ug/L			01/04/19 08:45	1
Xylenes, Total	ND		1.0	0.50	ug/L			01/04/19 08:45	1
Naphthalene	ND		1.0	0.40	ug/L			01/04/19 08:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*80 - 120*		*01/04/19 08:45*	*1*
Dibromofluoromethane (Surr)	*106*		*76 - 132*		*01/04/19 08:45*	*1*
Toluene-d8 (Surr)	*103*		*80 - 128*		*01/04/19 08:45*	*1*

Lab Sample ID: LCS 440-520698/6
Matrix: Water
Analysis Batch: 520698

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	25.0	26.5		ug/L		106	68 - 130
Ethylbenzene	25.0	26.8		ug/L		107	70 - 130
m,p-Xylene	25.0	25.2		ug/L		101	70 - 130
o-Xylene	25.0	25.6		ug/L		102	70 - 130
Toluene	25.0	26.7		ug/L		107	70 - 130
Naphthalene	25.0	20.2		ug/L		81	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*
Dibromofluoromethane (Surr)	*106*		*76 - 132*
Toluene-d8 (Surr)	*98*		*80 - 128*

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 440-520727/5
Matrix: Water
Analysis Batch: 520727

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50	35	ug/L			01/04/19 08:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*106*		*76 - 132*		*01/04/19 08:45*	*1*
4-Bromofluorobenzene (Surr)	*110*		*80 - 120*		*01/04/19 08:45*	*1*
Toluene-d8 (Surr)	*103*		*80 - 128*		*01/04/19 08:45*	*1*

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 440-520727/7
Matrix: Water
Analysis Batch: 520727

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Volatile Fuel Hydrocarbons (C4-C12)			500	625		ug/L		125	55 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*107*		*76 - 132*
4-Bromofluorobenzene (Surr)	*109*		*80 - 120*
Toluene-d8 (Surr)	*106*		*80 - 128*

Method: 8015B - Glycols -Direct Injection (GC/FID)

Lab Sample ID: MB 490-568233/7
Matrix: Water
Analysis Batch: 568233

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene glycol	ND		10	1.0	mg/L			01/08/19 12:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-butyl alcohol (Surr)	*102*		*70 - 130*		*01/08/19 12:48*	*1*

Lab Sample ID: LCS 490-568233/8
Matrix: Water
Analysis Batch: 568233

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ethylene glycol			50.0	40.6		mg/L		81	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
n-butyl alcohol (Surr)	*104*		*70 - 130*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 320-269400/1-A
Matrix: Water
Analysis Batch: 270017

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 269400

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	ND		50	16	ug/L		01/08/19 08:34	01/11/19 00:11	1
Motor Oil Range Organics (C25-C36)	ND		500	170	ug/L		01/08/19 08:34	01/11/19 00:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*89*		*56 - 145*	*01/08/19 08:34*	*01/11/19 00:11*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 320-269400/2-A
Matrix: Water
Analysis Batch: 270017

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 269400

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics (C10-C24)	300	262		ug/L		87	53 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl (Surr)	*92*		*56 - 145*

Lab Sample ID: LCS 320-269400/3-A
Matrix: Water
Analysis Batch: 270017

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 269400

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Motor Oil Range Organics (C25-C36)	900	537		ug/L		60	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl (Surr)	*88*		*56 - 145*

Lab Sample ID: LCSD 320-269400/4-A
Matrix: Water
Analysis Batch: 270017

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 269400

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Motor Oil Range Organics (C25-C36)	900	547		ug/L		61	50 - 150	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
o-Terphenyl (Surr)	*87*		*56 - 145*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 440-520530/6
Matrix: Water
Analysis Batch: 520530

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.11	0.055	mg/L			01/03/19 16:17	1
Nitrite as N	ND		0.15	0.025	mg/L			01/03/19 16:17	1

Lab Sample ID: LCS 440-520530/5
Matrix: Water
Analysis Batch: 520530

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	1.13	1.12		mg/L		99	90 - 110
Nitrite as N	1.52	1.47		mg/L		97	90 - 110

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 440-229045-4 MS
Matrix: Water
Analysis Batch: 520530

Client Sample ID: MW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	ND		1.13	1.11		mg/L		98	80 - 120
Nitrite as N	ND		1.52	1.44		mg/L		95	80 - 120

Lab Sample ID: 440-229045-4 MSD
Matrix: Water
Analysis Batch: 520530

Client Sample ID: MW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	ND		1.13	1.06		mg/L		94	80 - 120	4	20
Nitrite as N	ND		1.52	1.39		mg/L		91	80 - 120	4	20

Lab Sample ID: 440-229045-5 MS
Matrix: Water
Analysis Batch: 520530

Client Sample ID: MW-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	ND		1.13	1.06		mg/L		94	80 - 120
Nitrite as N	ND		1.52	1.37		mg/L		90	80 - 120

Lab Sample ID: 440-229045-5 MSD
Matrix: Water
Analysis Batch: 520530

Client Sample ID: MW-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	ND		1.13	1.06		mg/L		94	80 - 120	0	20
Nitrite as N	ND		1.52	1.37		mg/L		90	80 - 120	0	20

Lab Sample ID: MB 440-520531/6
Matrix: Water
Analysis Batch: 520531

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50	0.25	mg/L			01/03/19 16:17	1
Fluoride	ND		0.50	0.25	mg/L			01/03/19 16:17	1
Sulfate	ND		0.50	0.25	mg/L			01/03/19 16:17	1

Lab Sample ID: LCS 440-520531/5
Matrix: Water
Analysis Batch: 520531

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	5.00	4.75		mg/L		95	90 - 110
Fluoride	5.00	4.82		mg/L		96	90 - 110
Sulfate	5.00	4.95		mg/L		99	90 - 110

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 440-229045-4 MS
Matrix: Water
Analysis Batch: 520531

Client Sample ID: MW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	11		5.00	16.8	E	mg/L		112	80 - 120
Fluoride	0.56	F1	5.00	2.16	F1	mg/L		32	80 - 120
Sulfate	1000	E	5.00	1040	E 4	mg/L		285	80 - 120

Lab Sample ID: 440-229045-4 MSD
Matrix: Water
Analysis Batch: 520531

Client Sample ID: MW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	11		5.00	16.6	E	mg/L		108	80 - 120	1	20
Fluoride	0.56	F1	5.00	2.14	F1	mg/L		32	80 - 120	1	20
Sulfate	1000	E	5.00	1040	E 4	mg/L		225	80 - 120	0	20

Lab Sample ID: 440-229045-5 MS
Matrix: Water
Analysis Batch: 520531

Client Sample ID: MW-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	14		5.00	20.1	E	mg/L		114	80 - 120
Fluoride	0.44	J F1	5.00	2.73	F1	mg/L		46	80 - 120
Sulfate	790	E	5.00	795	E 4	mg/L		106	80 - 120

Lab Sample ID: 440-229045-5 MSD
Matrix: Water
Analysis Batch: 520531

Client Sample ID: MW-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	14		5.00	20.0	E	mg/L		112	80 - 120	1	20
Fluoride	0.44	J F1	5.00	2.58	F1	mg/L		43	80 - 120	6	20
Sulfate	790	E	5.00	794	E 4	mg/L		91	80 - 120	0	20

Lab Sample ID: MB 440-520711/6
Matrix: Water
Analysis Batch: 520711

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		0.50	0.25	mg/L			01/04/19 15:02	1

Lab Sample ID: LCS 440-520711/5
Matrix: Water
Analysis Batch: 520711

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	5.00	4.92		mg/L		98	90 - 110

Method: 314.0 LL - Perchlorate (IC)

Lab Sample ID: MB 440-524282/6
Matrix: Water
Analysis Batch: 524282

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			01/23/19 09:51	1

Lab Sample ID: LCS 440-524282/5
Matrix: Water
Analysis Batch: 524282

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Perchlorate			10.0	9.84		ug/L		98	85 - 115		

Lab Sample ID: MRL 440-524282/4
Matrix: Water
Analysis Batch: 524282

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits		
Perchlorate			1.00	0.973	J	ug/L		97	75 - 125		

Lab Sample ID: MB 440-524619/45
Matrix: Water
Analysis Batch: 524619

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			01/25/19 07:47	1

Lab Sample ID: LCS 440-524619/46
Matrix: Water
Analysis Batch: 524619

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Perchlorate			25.0	24.7		ug/L		99	85 - 115		

Lab Sample ID: 440-229045-6 MS
Matrix: Water
Analysis Batch: 524619

Client Sample ID: MW-4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Perchlorate	ND		25.0	27.9		ug/L		111	80 - 120		

Lab Sample ID: 440-229045-6 MSD
Matrix: Water
Analysis Batch: 524619

Client Sample ID: MW-4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perchlorate	ND		25.0	28.0		ug/L		112	80 - 120	0	15

Method: 8330A - Nitroaromatics and Nitramines

Lab Sample ID: MB 280-443392/1-A
Matrix: Water
Analysis Batch: 443441

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 443392

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	ND		1.0	0.20	ug/L		01/05/19 16:43	01/07/19 13:29	1
1,3-Dinitrobenzene	ND		0.40	0.089	ug/L		01/05/19 16:43	01/07/19 13:29	1
2,4,6-Trinitrotoluene	ND		0.40	0.072	ug/L		01/05/19 16:43	01/07/19 13:29	1
2,4-Dinitrotoluene	ND		0.40	0.084	ug/L		01/05/19 16:43	01/07/19 13:29	1
2,6-Dinitrotoluene	ND		0.20	0.065	ug/L		01/05/19 16:43	01/07/19 13:29	1
2-Nitrotoluene	ND		0.40	0.086	ug/L		01/05/19 16:43	01/07/19 13:29	1
3-Nitrotoluene	ND		0.40	0.083	ug/L		01/05/19 16:43	01/07/19 13:29	1
4-Nitrotoluene	ND		1.0	0.20	ug/L		01/05/19 16:43	01/07/19 13:29	1
HMX	ND		0.40	0.088	ug/L		01/05/19 16:43	01/07/19 13:29	1
RDX	ND		0.20	0.052	ug/L		01/05/19 16:43	01/07/19 13:29	1
Nitrobenzene	ND		0.40	0.091	ug/L		01/05/19 16:43	01/07/19 13:29	1
Nitroglycerin	ND		3.0	0.92	ug/L		01/05/19 16:43	01/07/19 13:29	1
PETN	ND		2.0	0.42	ug/L		01/05/19 16:43	01/07/19 13:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*101*		*75 - 118*	*01/05/19 16:43*	*01/07/19 13:29*	*1*

Lab Sample ID: LCS 280-443392/2-A
Matrix: Water
Analysis Batch: 443441

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 443392

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trinitrobenzene	2.00	2.30		ug/L		115	62 - 127
1,3-Dinitrobenzene	2.00	2.25		ug/L		112	59 - 131
2,4,6-Trinitrotoluene	2.00	2.14		ug/L		107	46 - 139
2,4-Dinitrotoluene	2.00	2.14		ug/L		107	53 - 127
2,6-Dinitrotoluene	2.00	2.08		ug/L		104	51 - 130
2-Nitrotoluene	2.00	1.64		ug/L		82	37 - 138
3-Nitrotoluene	2.00	1.74		ug/L		87	31 - 140
4-Nitrotoluene	2.00	1.71		ug/L		86	41 - 137
HMX	2.00	2.14		ug/L		107	66 - 115
RDX	2.00	2.30		ug/L		115	69 - 122
Nitrobenzene	2.00	1.93		ug/L		96	46 - 144
Nitroglycerin	20.0	21.8		ug/L		109	70 - 125
PETN	20.0	20.5		ug/L		103	67 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dinitrobenzene	*99*		*75 - 118*

Lab Sample ID: LCSD 280-443392/3-A
Matrix: Water
Analysis Batch: 443441

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 443392

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3,5-Trinitrobenzene	2.00	2.24		ug/L		112	62 - 127	3	20
1,3-Dinitrobenzene	2.00	2.18		ug/L		109	59 - 131	3	20
2,4,6-Trinitrotoluene	2.00	2.08		ug/L		104	46 - 139	3	20

Method: 8330A - Nitroaromatics and Nitramines (Continued)

Lab Sample ID: LCSD 280-443392/3-A
Matrix: Water
Analysis Batch: 443441

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 443392

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4-Dinitrotoluene			2.00	2.08		ug/L		104	53 - 127	3	20
2,6-Dinitrotoluene			2.00	2.07		ug/L		103	51 - 130	0	20
2-Nitrotoluene			2.00	1.74		ug/L		87	37 - 138	6	31
3-Nitrotoluene			2.00	1.84		ug/L		92	31 - 140	6	20
4-Nitrotoluene			2.00	1.81		ug/L		91	41 - 137	5	30
HMX			2.00	2.04		ug/L		102	66 - 115	5	20
RDX			2.00	2.22		ug/L		111	69 - 122	3	20
Nitrobenzene			2.00	1.96		ug/L		98	46 - 144	2	20
Nitroglycerin			20.0	21.9		ug/L		110	70 - 125	1	20
PETN			20.0	19.8		ug/L		99	67 - 127	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dinitrobenzene	*96*		*75 - 118*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 320-269140/1-D
Matrix: Water
Analysis Batch: 270441

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 269640

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfur	ND		0.50	0.30	mg/L		01/09/19 08:00	01/11/19 10:48	1

Lab Sample ID: LCS 320-269140/2-C
Matrix: Water
Analysis Batch: 270441

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 269640

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfur			10.0	9.86		mg/L		99	80 - 120		

Lab Sample ID: 440-229045-1 MS
Matrix: Water
Analysis Batch: 270441

Client Sample ID: MW-5
Prep Type: Dissolved
Prep Batch: 269640

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfur	88		10.0	97.5	4	mg/L		95	80 - 120		

Lab Sample ID: 440-229045-1 MSD
Matrix: Water
Analysis Batch: 270441

Client Sample ID: MW-5
Prep Type: Dissolved
Prep Batch: 269640

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfur	88		10.0	97.6	4	mg/L		97	80 - 120	0	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 320-269140/1-C
Matrix: Water
Analysis Batch: 270877

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 269638

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.00030	mg/L		01/09/19 08:00	01/15/19 17:25	1
Aluminum	ND		0.050	0.025	mg/L		01/09/19 08:00	01/15/19 17:25	1
Antimony	ND		0.0020	0.00020	mg/L		01/09/19 08:00	01/15/19 17:25	1
Arsenic	ND		0.0020	0.0010	mg/L		01/09/19 08:00	01/15/19 17:25	1
Barium	ND		0.0010	0.00050	mg/L		01/09/19 08:00	01/15/19 17:25	1
Beryllium	ND		0.0010	0.00010	mg/L		01/09/19 08:00	01/15/19 17:25	1
Cadmium	ND		0.0010	0.00050	mg/L		01/09/19 08:00	01/15/19 17:25	1
Calcium	ND		0.30	0.17	mg/L		01/09/19 08:00	01/15/19 17:25	1
Chromium	ND		0.0020	0.0010	mg/L		01/09/19 08:00	01/15/19 17:25	1
Cobalt	ND		0.0010	0.00060	mg/L		01/09/19 08:00	01/15/19 17:25	1
Copper	ND		0.0020	0.0010	mg/L		01/09/19 08:00	01/15/19 17:25	1
Iron	0.0328	J	0.050	0.025	mg/L		01/09/19 08:00	01/15/19 17:25	1
Lead	ND		0.0010	0.00060	mg/L		01/09/19 08:00	01/15/19 17:25	1
Magnesium	ND		0.050	0.025	mg/L		01/09/19 08:00	01/15/19 17:25	1
Manganese	ND		0.0025	0.0014	mg/L		01/09/19 08:00	01/15/19 17:25	1
Molybdenum	ND		0.0020	0.00060	mg/L		01/09/19 08:00	01/15/19 17:25	1
Nickel	ND		0.0020	0.0010	mg/L		01/09/19 08:00	01/15/19 17:25	1
Potassium	ND		0.050	0.025	mg/L		01/09/19 08:00	01/15/19 17:25	1
Selenium	ND		0.0020	0.0010	mg/L		01/09/19 08:00	01/15/19 17:25	1
Sodium	ND		0.10	0.080	mg/L		01/09/19 08:00	01/15/19 17:25	1
Thallium	ND		0.0010	0.00050	mg/L		01/09/19 08:00	01/15/19 17:25	1
Vanadium	ND		0.010	0.0030	mg/L		01/09/19 08:00	01/15/19 17:25	1
Zinc	ND		0.0050	0.0040	mg/L		01/09/19 08:00	01/15/19 17:25	1

Lab Sample ID: LCS 320-269140/2-B
Matrix: Water
Analysis Batch: 270877

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 269638

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.0500	0.0496		mg/L		99	80 - 120
Aluminum	1.00	0.984		mg/L		98	80 - 120
Antimony	0.200	0.217		mg/L		109	80 - 120
Arsenic	0.200	0.204		mg/L		102	80 - 120
Barium	0.200	0.206		mg/L		103	80 - 120
Beryllium	0.200	0.206		mg/L		103	80 - 120
Cadmium	0.200	0.205		mg/L		102	80 - 120
Calcium	1.00	1.02		mg/L		102	80 - 120
Chromium	0.200	0.200		mg/L		100	80 - 120
Cobalt	0.200	0.199		mg/L		100	80 - 120
Copper	0.200	0.198		mg/L		99	80 - 120
Iron	1.00	1.03		mg/L		103	80 - 120
Lead	0.200	0.204		mg/L		102	80 - 120
Magnesium	1.00	0.947		mg/L		95	80 - 120
Manganese	0.200	0.198		mg/L		99	80 - 120
Molybdenum	0.200	0.209		mg/L		104	80 - 120
Nickel	0.200	0.201		mg/L		100	80 - 120
Potassium	1.00	0.935		mg/L		93	80 - 120
Selenium	0.200	0.220		mg/L		110	80 - 120

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 320-269140/2-B
Matrix: Water
Analysis Batch: 270877

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 269638

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium	1.00	0.931		mg/L		93	80 - 120
Thallium	0.0500	0.0511		mg/L		102	80 - 120
Vanadium	0.200	0.200		mg/L		100	80 - 120
Zinc	0.200	0.201		mg/L		100	80 - 120

Lab Sample ID: 440-229045-1 MS
Matrix: Water
Analysis Batch: 270877

Client Sample ID: MW-5
Prep Type: Dissolved
Prep Batch: 269638

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	ND		0.0500	0.0490		mg/L		98	80 - 120
Aluminum	ND		1.00	1.02		mg/L		102	80 - 120
Antimony	ND		0.200	0.218		mg/L		109	80 - 120
Arsenic	0.81		0.200	0.986	4	mg/L		90	80 - 120
Barium	0.022		0.200	0.229		mg/L		104	80 - 120
Beryllium	ND		0.200	0.203		mg/L		102	80 - 120
Cadmium	ND		0.200	0.202		mg/L		101	80 - 120
Calcium	73		1.00	72.0	4	mg/L		-144	80 - 120
Chromium	ND		0.200	0.204		mg/L		102	80 - 120
Cobalt	ND		0.200	0.204		mg/L		102	80 - 120
Copper	0.0012	J	0.200	0.201		mg/L		100	80 - 120
Iron	ND		1.00	1.06		mg/L		106	80 - 120
Lead	ND		0.200	0.195		mg/L		98	80 - 120
Magnesium	20		1.00	21.6	4	mg/L		116	80 - 120
Manganese	0.027		0.200	0.230		mg/L		102	80 - 120
Molybdenum	0.0020		0.200	0.209		mg/L		103	80 - 120
Nickel	0.0015	J	0.200	0.204		mg/L		101	80 - 120
Potassium	25		1.00	25.8	4	mg/L		103	80 - 120
Selenium	0.0072		0.200	0.212		mg/L		102	80 - 120
Sodium	49		1.00	49.7	4	mg/L		112	80 - 120
Thallium	ND		0.0500	0.0492		mg/L		98	80 - 120
Vanadium	ND		0.200	0.208		mg/L		104	80 - 120
Zinc	0.016		0.200	0.205		mg/L		94	80 - 120

Lab Sample ID: 440-229045-1 MSD
Matrix: Water
Analysis Batch: 270877

Client Sample ID: MW-5
Prep Type: Dissolved
Prep Batch: 269638

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	ND		0.0500	0.0491		mg/L		98	80 - 120	0	15
Aluminum	ND		1.00	1.02		mg/L		102	80 - 120	0	15
Antimony	ND		0.200	0.218		mg/L		109	80 - 120	0	15
Arsenic	0.81		0.200	1.00	4	mg/L		97	80 - 120	2	15
Barium	0.022		0.200	0.229		mg/L		103	80 - 120	0	15
Beryllium	ND		0.200	0.207		mg/L		103	80 - 120	2	15
Cadmium	ND		0.200	0.204		mg/L		102	80 - 120	1	15
Calcium	73		1.00	72.9	4	mg/L		-49	80 - 120	1	15
Chromium	ND		0.200	0.206		mg/L		103	80 - 120	1	15
Cobalt	ND		0.200	0.203		mg/L		101	80 - 120	0	15

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 440-229045-1 MSD
Matrix: Water
Analysis Batch: 270877

Client Sample ID: MW-5
Prep Type: Dissolved
Prep Batch: 269638

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Copper	0.0012	J	0.200	0.199		mg/L		99	80 - 120	1	15
Iron	ND		1.00	1.04		mg/L		104	80 - 120	1	15
Lead	ND		0.200	0.203		mg/L		101	80 - 120	4	15
Magnesium	20		1.00	21.3	4	mg/L		84	80 - 120	2	15
Manganese	0.027		0.200	0.228		mg/L		101	80 - 120	1	15
Molybdenum	0.0020		0.200	0.215		mg/L		106	80 - 120	3	15
Nickel	0.0015	J	0.200	0.204		mg/L		101	80 - 120	0	15
Potassium	25		1.00	25.8	4	mg/L		101	80 - 120	0	17
Selenium	0.0072		0.200	0.218		mg/L		106	80 - 120	3	15
Sodium	49		1.00	49.3	4	mg/L		75	80 - 120	1	15
Thallium	ND		0.0500	0.0500		mg/L		100	80 - 120	2	15
Vanadium	ND		0.200	0.208		mg/L		104	80 - 120	0	15
Zinc	0.016		0.200	0.210		mg/L		97	80 - 120	2	15

Method: 7470A - Mercury (CVAA)

Lab Sample ID: LCS 320-269460/12-A
Matrix: Water
Analysis Batch: 269527

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 269460

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.00100	0.000976		mg/L		98	82 - 113		

Lab Sample ID: MB 320-269140/1-B
Matrix: Water
Analysis Batch: 269527

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 269460

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		01/08/19 10:40	01/08/19 13:16	1

Lab Sample ID: 440-229045-1 MS
Matrix: Water
Analysis Batch: 269527

Client Sample ID: MW-5
Prep Type: Dissolved
Prep Batch: 269460

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	ND		0.00100	0.00102		mg/L		102	82 - 113		

Lab Sample ID: 440-229045-1 MSD
Matrix: Water
Analysis Batch: 269527

Client Sample ID: MW-5
Prep Type: Dissolved
Prep Batch: 269460

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.00100	0.00108		mg/L		108	82 - 113	6	17

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 440-521503/10
Matrix: Water
Analysis Batch: 521503

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.20	0.10	mg/L			01/09/19 13:40	1

Lab Sample ID: LCS 440-521503/11
Matrix: Water
Analysis Batch: 521503

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	5.00	4.91		mg/L		98	90 - 110

Lab Sample ID: MRL 440-521503/9
Matrix: Water
Analysis Batch: 521503

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	0.200	0.183	J	mg/L		92	50 - 150

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 440-520773/3
Matrix: Water
Analysis Batch: 520773

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	ND		4.0	4.0	mg/L			01/04/19 07:45	1
Bicarbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			01/04/19 07:45	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			01/04/19 07:45	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			01/04/19 07:45	1

Lab Sample ID: LCS 440-520773/2
Matrix: Water
Analysis Batch: 520773

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3	80.7	80.1		mg/L		99	80 - 120

Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: MB 440-522462/3
Matrix: Water
Analysis Batch: 522462

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		1.0	1.0	umhos/cm			01/15/19 10:17	1

Method: SM 2510B - Conductivity, Specific Conductance (Continued)

Lab Sample ID: LCS 440-522462/4
Matrix: Water
Analysis Batch: 522462

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Specific Conductance			953	974		umhos/cm		102	90 - 110		

Lab Sample ID: 440-229045-5 DU
Matrix: Water
Analysis Batch: 522462

Client Sample ID: MW-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Specific Conductance	890			856		umhos/cm				4	5

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 440-520954/1
Matrix: Water
Analysis Batch: 520954

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	5.0	mg/L			01/07/19 09:25	1

Lab Sample ID: LCS 440-520954/2
Matrix: Water
Analysis Batch: 520954

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			1000	1010		mg/L		101	90 - 110		

Lab Sample ID: MB 440-521161/1
Matrix: Water
Analysis Batch: 521161

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	5.0	mg/L			01/08/19 09:26	1

Lab Sample ID: LCS 440-521161/2
Matrix: Water
Analysis Batch: 521161

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			1000	982		mg/L		98	90 - 110		

Lab Sample ID: MB 440-521380/1
Matrix: Water
Analysis Batch: 521380

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	5.0	mg/L			01/09/19 09:30	1

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 440-521380/2
Matrix: Water
Analysis Batch: 521380

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1000	960		mg/L		96	90 - 110

Method: SM 4500 CN E - Cyanide, Total

Lab Sample ID: MB 440-520811/1-A
Matrix: Water
Analysis Batch: 520834

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 520811

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.025	0.013	mg/L		01/04/19 16:37	01/04/19 22:15	1

Lab Sample ID: LCS 440-520811/2-A
Matrix: Water
Analysis Batch: 520834

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 520811

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.200	0.189		mg/L		95	90 - 110

Lab Sample ID: 440-229045-3 MS
Matrix: Water
Analysis Batch: 520834

Client Sample ID: MW-3
Prep Type: Total/NA
Prep Batch: 520811

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	ND		0.200	0.187		mg/L		94	70 - 115

Lab Sample ID: 440-229045-3 MSD
Matrix: Water
Analysis Batch: 520834

Client Sample ID: MW-3
Prep Type: Total/NA
Prep Batch: 520811

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	ND		0.200	0.201		mg/L		101	70 - 115	7	15

Method: WS-WC-0050 - Nitrocellulose

Lab Sample ID: MB 320-271079/1-B
Matrix: Water
Analysis Batch: 271213

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 271085

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrocellulose	ND		2.0	0.48	mg/L		01/16/19 09:00	01/17/19 11:40	1

Lab Sample ID: LCS 320-271079/2-B
Matrix: Water
Analysis Batch: 271213

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 271085

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrocellulose	5.06	4.65		mg/L		92	26 - 144

Method: WS-WC-0050 - Nitrocellulose (Continued)

Lab Sample ID: 440-229045-1 MS
Matrix: Water
Analysis Batch: 271213

Client Sample ID: MW-5
Prep Type: Total/NA
Prep Batch: 271085

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrocellulose	ND		5.06	4.61		mg/L		91	26 - 144		

Lab Sample ID: 440-229045-1 MSD
Matrix: Water
Analysis Batch: 271213

Client Sample ID: MW-5
Prep Type: Total/NA
Prep Batch: 271085

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrocellulose	ND		5.06	5.52		mg/L		109	26 - 144	18	45

QC Association Summary

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine_January 2019

TestAmerica Job ID: 440-229045-1

GC/MS VOA

Analysis Batch: 520698

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-229045-1	MW-5	Total/NA	Water	8260B	
440-229045-2	MW-6	Total/NA	Water	8260B	
440-229045-3	MW-3	Total/NA	Water	8260B	
440-229045-4	MW-1	Total/NA	Water	8260B	
440-229045-5	MW-2	Total/NA	Water	8260B	
440-229045-6	MW-4	Total/NA	Water	8260B	
440-229045-7	Equipment Blank	Total/NA	Water	8260B	
MB 440-520698/5	Method Blank	Total/NA	Water	8260B	
LCS 440-520698/6	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 520727

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-229045-1	MW-5	Total/NA	Water	8260B/CA_LUFT MS	
440-229045-2	MW-6	Total/NA	Water	8260B/CA_LUFT MS	
440-229045-3	MW-3	Total/NA	Water	8260B/CA_LUFT MS	
440-229045-4	MW-1	Total/NA	Water	8260B/CA_LUFT MS	
440-229045-5	MW-2	Total/NA	Water	8260B/CA_LUFT MS	
440-229045-6	MW-4	Total/NA	Water	8260B/CA_LUFT MS	
440-229045-7	Equipment Blank	Total/NA	Water	8260B/CA_LUFT MS	
MB 440-520727/5	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	
LCS 440-520727/7	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	

GC VOA

Analysis Batch: 568233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-229045-1	MW-5	Total/NA	Water	8015B	
440-229045-2	MW-6	Total/NA	Water	8015B	
440-229045-3	MW-3	Total/NA	Water	8015B	
440-229045-4	MW-1	Total/NA	Water	8015B	
440-229045-5	MW-2	Total/NA	Water	8015B	
440-229045-6	MW-4	Total/NA	Water	8015B	
440-229045-7	Equipment Blank	Total/NA	Water	8015B	
MB 490-568233/7	Method Blank	Total/NA	Water	8015B	
LCS 490-568233/8	Lab Control Sample	Total/NA	Water	8015B	

GC Semi VOA

Prep Batch: 269400

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-229045-1	MW-5	Total/NA	Water	3510C	
440-229045-2	MW-6	Total/NA	Water	3510C	
440-229045-3	MW-3	Total/NA	Water	3510C	

GC Semi VOA (Continued)

Prep Batch: 269400 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-229045-4	MW-1	Total/NA	Water	3510C	
440-229045-5	MW-2	Total/NA	Water	3510C	
440-229045-6	MW-4	Total/NA	Water	3510C	
440-229045-7	Equipment Blank	Total/NA	Water	3510C	
MB 320-269400/1-A	Method Blank	Total/NA	Water	3510C	
LCS 320-269400/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 320-269400/3-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 320-269400/4-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 270017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-229045-1	MW-5	Total/NA	Water	8015B	269400
440-229045-2	MW-6	Total/NA	Water	8015B	269400
440-229045-3	MW-3	Total/NA	Water	8015B	269400
440-229045-4	MW-1	Total/NA	Water	8015B	269400
440-229045-5	MW-2	Total/NA	Water	8015B	269400
440-229045-6	MW-4	Total/NA	Water	8015B	269400
440-229045-7	Equipment Blank	Total/NA	Water	8015B	269400
MB 320-269400/1-A	Method Blank	Total/NA	Water	8015B	269400
LCS 320-269400/2-A	Lab Control Sample	Total/NA	Water	8015B	269400
LCS 320-269400/3-A	Lab Control Sample	Total/NA	Water	8015B	269400
LCSD 320-269400/4-A	Lab Control Sample Dup	Total/NA	Water	8015B	269400

HPLC/IC

Prep Batch: 443392

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-229045-1	MW-5	Total/NA	Water	3535	
440-229045-2	MW-6	Total/NA	Water	3535	
440-229045-3	MW-3	Total/NA	Water	3535	
440-229045-4	MW-1	Total/NA	Water	3535	
440-229045-5	MW-2	Total/NA	Water	3535	
440-229045-6	MW-4	Total/NA	Water	3535	
440-229045-7	Equipment Blank	Total/NA	Water	3535	
MB 280-443392/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-443392/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 280-443392/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 443441

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-229045-1	MW-5	Total/NA	Water	8330A	443392
440-229045-2	MW-6	Total/NA	Water	8330A	443392
440-229045-3	MW-3	Total/NA	Water	8330A	443392
440-229045-4	MW-1	Total/NA	Water	8330A	443392
440-229045-5	MW-2	Total/NA	Water	8330A	443392
440-229045-6	MW-4	Total/NA	Water	8330A	443392
440-229045-7	Equipment Blank	Total/NA	Water	8330A	443392
MB 280-443392/1-A	Method Blank	Total/NA	Water	8330A	443392
LCS 280-443392/2-A	Lab Control Sample	Total/NA	Water	8330A	443392
LCSD 280-443392/3-A	Lab Control Sample Dup	Total/NA	Water	8330A	443392

HPLC/IC (Continued)

Analysis Batch: 443750

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-229045-2	MW-6	Total/NA	Water	8330A	443392
440-229045-4	MW-1	Total/NA	Water	8330A	443392
440-229045-5	MW-2	Total/NA	Water	8330A	443392
440-229045-6	MW-4	Total/NA	Water	8330A	443392

Analysis Batch: 520530

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-229045-1	MW-5	Total/NA	Water	300.0	
440-229045-2	MW-6	Total/NA	Water	300.0	
440-229045-3	MW-3	Total/NA	Water	300.0	
440-229045-4	MW-1	Total/NA	Water	300.0	
440-229045-5	MW-2	Total/NA	Water	300.0	
440-229045-6	MW-4	Total/NA	Water	300.0	
440-229045-7	Equipment Blank	Total/NA	Water	300.0	
MB 440-520530/6	Method Blank	Total/NA	Water	300.0	
LCS 440-520530/5	Lab Control Sample	Total/NA	Water	300.0	
440-229045-4 MS	MW-1	Total/NA	Water	300.0	
440-229045-4 MSD	MW-1	Total/NA	Water	300.0	
440-229045-5 MS	MW-2	Total/NA	Water	300.0	
440-229045-5 MSD	MW-2	Total/NA	Water	300.0	

Analysis Batch: 520531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-229045-1	MW-5	Total/NA	Water	300.0	
440-229045-1	MW-5	Total/NA	Water	300.0	
440-229045-1	MW-5	Total/NA	Water	300.0	
440-229045-2	MW-6	Total/NA	Water	300.0	
440-229045-2	MW-6	Total/NA	Water	300.0	
440-229045-3	MW-3	Total/NA	Water	300.0	
440-229045-3	MW-3	Total/NA	Water	300.0	
440-229045-4	MW-1	Total/NA	Water	300.0	
440-229045-4 - DL	MW-1	Total/NA	Water	300.0	
440-229045-5	MW-2	Total/NA	Water	300.0	
440-229045-5 - DL	MW-2	Total/NA	Water	300.0	
440-229045-6	MW-4	Total/NA	Water	300.0	
440-229045-7	Equipment Blank	Total/NA	Water	300.0	
MB 440-520531/6	Method Blank	Total/NA	Water	300.0	
LCS 440-520531/5	Lab Control Sample	Total/NA	Water	300.0	
440-229045-4 MS	MW-1	Total/NA	Water	300.0	
440-229045-4 MSD	MW-1	Total/NA	Water	300.0	
440-229045-5 MS	MW-2	Total/NA	Water	300.0	
440-229045-5 MSD	MW-2	Total/NA	Water	300.0	

Analysis Batch: 520711

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-229045-6	MW-4	Total/NA	Water	300.0	
MB 440-520711/6	Method Blank	Total/NA	Water	300.0	
LCS 440-520711/5	Lab Control Sample	Total/NA	Water	300.0	

HPLC/IC (Continued)

Analysis Batch: 524282

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-229045-1	MW-5	Total/NA	Water	314.0 LL	
440-229045-3	MW-3	Total/NA	Water	314.0 LL	
440-229045-4	MW-1	Total/NA	Water	314.0 LL	
440-229045-5	MW-2	Total/NA	Water	314.0 LL	
440-229045-7	Equipment Blank	Total/NA	Water	314.0 LL	
MB 440-524282/6	Method Blank	Total/NA	Water	314.0 LL	
LCS 440-524282/5	Lab Control Sample	Total/NA	Water	314.0 LL	
MRL 440-524282/4	Lab Control Sample	Total/NA	Water	314.0 LL	

Analysis Batch: 524619

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-229045-2	MW-6	Total/NA	Water	314.0 LL	
440-229045-6	MW-4	Total/NA	Water	314.0 LL	
MB 440-524619/45	Method Blank	Total/NA	Water	314.0 LL	
LCS 440-524619/46	Lab Control Sample	Total/NA	Water	314.0 LL	
440-229045-6 MS	MW-4	Total/NA	Water	314.0 LL	
440-229045-6 MSD	MW-4	Total/NA	Water	314.0 LL	

Metals

Filtration Batch: 269140

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-229045-1	MW-5	Dissolved	Water	Filtration	
440-229045-2	MW-6	Dissolved	Water	Filtration	
440-229045-3	MW-3	Dissolved	Water	Filtration	
440-229045-4	MW-1	Dissolved	Water	Filtration	
440-229045-5	MW-2	Dissolved	Water	Filtration	
440-229045-6	MW-4	Dissolved	Water	Filtration	
440-229045-7	Equipment Blank	Dissolved	Water	Filtration	
MB 320-269140/1-B	Method Blank	Dissolved	Water	Filtration	
MB 320-269140/1-C	Method Blank	Dissolved	Water	Filtration	
MB 320-269140/1-D	Method Blank	Dissolved	Water	Filtration	
LCS 320-269140/2-B	Lab Control Sample	Dissolved	Water	Filtration	
LCS 320-269140/2-C	Lab Control Sample	Dissolved	Water	Filtration	
440-229045-1 MS	MW-5	Dissolved	Water	Filtration	
440-229045-1 MSD	MW-5	Dissolved	Water	Filtration	

Prep Batch: 269460

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-229045-1	MW-5	Dissolved	Water	7470A	269140
440-229045-2	MW-6	Dissolved	Water	7470A	269140
440-229045-3	MW-3	Dissolved	Water	7470A	269140
440-229045-4	MW-1	Dissolved	Water	7470A	269140
440-229045-5	MW-2	Dissolved	Water	7470A	269140
440-229045-6	MW-4	Dissolved	Water	7470A	269140
440-229045-7	Equipment Blank	Dissolved	Water	7470A	269140
MB 320-269140/1-B	Method Blank	Dissolved	Water	7470A	269140
LCS 320-269460/12-A	Lab Control Sample	Total/NA	Water	7470A	
440-229045-1 MS	MW-5	Dissolved	Water	7470A	269140
440-229045-1 MSD	MW-5	Dissolved	Water	7470A	269140

Metals (Continued)

Analysis Batch: 269527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-229045-1	MW-5	Dissolved	Water	7470A	269460
440-229045-2	MW-6	Dissolved	Water	7470A	269460
440-229045-3	MW-3	Dissolved	Water	7470A	269460
440-229045-4	MW-1	Dissolved	Water	7470A	269460
440-229045-5	MW-2	Dissolved	Water	7470A	269460
440-229045-6	MW-4	Dissolved	Water	7470A	269460
440-229045-7	Equipment Blank	Dissolved	Water	7470A	269460
MB 320-269140/1-B	Method Blank	Dissolved	Water	7470A	269460
LCS 320-269460/12-A	Lab Control Sample	Total/NA	Water	7470A	269460
440-229045-1 MS	MW-5	Dissolved	Water	7470A	269460
440-229045-1 MSD	MW-5	Dissolved	Water	7470A	269460

Prep Batch: 269638

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-229045-1	MW-5	Dissolved	Water	3005A	269140
440-229045-2	MW-6	Dissolved	Water	3005A	269140
440-229045-3	MW-3	Dissolved	Water	3005A	269140
440-229045-4	MW-1	Dissolved	Water	3005A	269140
440-229045-5	MW-2	Dissolved	Water	3005A	269140
440-229045-6	MW-4	Dissolved	Water	3005A	269140
440-229045-7	Equipment Blank	Dissolved	Water	3005A	269140
MB 320-269140/1-C	Method Blank	Dissolved	Water	3005A	269140
LCS 320-269140/2-B	Lab Control Sample	Dissolved	Water	3005A	269140
440-229045-1 MS	MW-5	Dissolved	Water	3005A	269140
440-229045-1 MSD	MW-5	Dissolved	Water	3005A	269140

Prep Batch: 269640

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-229045-1	MW-5	Dissolved	Water	3010A	269140
440-229045-2	MW-6	Dissolved	Water	3010A	269140
440-229045-3	MW-3	Dissolved	Water	3010A	269140
440-229045-4	MW-1	Dissolved	Water	3010A	269140
440-229045-5	MW-2	Dissolved	Water	3010A	269140
440-229045-6	MW-4	Dissolved	Water	3010A	269140
440-229045-7	Equipment Blank	Dissolved	Water	3010A	269140
MB 320-269140/1-D	Method Blank	Dissolved	Water	3010A	269140
LCS 320-269140/2-C	Lab Control Sample	Dissolved	Water	3010A	269140
440-229045-1 MS	MW-5	Dissolved	Water	3010A	269140
440-229045-1 MSD	MW-5	Dissolved	Water	3010A	269140

Analysis Batch: 270441

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-229045-1	MW-5	Dissolved	Water	6010B	269640
440-229045-2	MW-6	Dissolved	Water	6010B	269640
440-229045-3	MW-3	Dissolved	Water	6010B	269640
440-229045-4	MW-1	Dissolved	Water	6010B	269640
440-229045-5	MW-2	Dissolved	Water	6010B	269640
440-229045-7	Equipment Blank	Dissolved	Water	6010B	269640
MB 320-269140/1-D	Method Blank	Dissolved	Water	6010B	269640
LCS 320-269140/2-C	Lab Control Sample	Dissolved	Water	6010B	269640
440-229045-1 MS	MW-5	Dissolved	Water	6010B	269640

Metals (Continued)

Analysis Batch: 270441 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-229045-1 MSD	MW-5	Dissolved	Water	6010B	269640

Analysis Batch: 270877

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-229045-1	MW-5	Dissolved	Water	6020	269638
440-229045-2	MW-6	Dissolved	Water	6020	269638
440-229045-3	MW-3	Dissolved	Water	6020	269638
440-229045-4	MW-1	Dissolved	Water	6020	269638
440-229045-5	MW-2	Dissolved	Water	6020	269638
440-229045-6	MW-4	Dissolved	Water	6020	269638
440-229045-7	Equipment Blank	Dissolved	Water	6020	269638
MB 320-269140/1-C	Method Blank	Dissolved	Water	6020	269638
LCS 320-269140/2-B	Lab Control Sample	Dissolved	Water	6020	269638
440-229045-1 MS	MW-5	Dissolved	Water	6020	269638
440-229045-1 MSD	MW-5	Dissolved	Water	6020	269638

Analysis Batch: 270879

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-229045-6	MW-4	Dissolved	Water	6010B	269640

Analysis Batch: 272035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-229045-6	MW-4	Dissolved	Water	6020	269638
440-229045-7	Equipment Blank	Dissolved	Water	6020	269638

Analysis Batch: 272182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-229045-1	MW-5	Dissolved	Water	SM 2340B	
440-229045-2	MW-6	Dissolved	Water	SM 2340B	
440-229045-3	MW-3	Dissolved	Water	SM 2340B	
440-229045-4	MW-1	Dissolved	Water	SM 2340B	
440-229045-5	MW-2	Dissolved	Water	SM 2340B	
440-229045-6	MW-4	Dissolved	Water	SM 2340B	
440-229045-7	Equipment Blank	Dissolved	Water	SM 2340B	

General Chemistry

Pre Prep Batch: 271079

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-229045-1	MW-5	Total/NA	Water	353.2 (NCell)	
440-229045-2	MW-6	Total/NA	Water	353.2 (NCell)	
440-229045-3	MW-3	Total/NA	Water	353.2 (NCell)	
440-229045-4	MW-1	Total/NA	Water	353.2 (NCell)	
440-229045-5	MW-2	Total/NA	Water	353.2 (NCell)	
440-229045-6	MW-4	Total/NA	Water	353.2 (NCell)	
440-229045-7	Equipment Blank	Total/NA	Water	353.2 (NCell)	
MB 320-271079/1-B	Method Blank	Total/NA	Water	353.2 (NCell)	
LCS 320-271079/2-B	Lab Control Sample	Total/NA	Water	353.2 (NCell)	
440-229045-1 MS	MW-5	Total/NA	Water	353.2 (NCell)	
440-229045-1 MSD	MW-5	Total/NA	Water	353.2 (NCell)	

General Chemistry (Continued)

Prep Batch: 271085

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-229045-1	MW-5	Total/NA	Water	353 (NCell-Hyd)	271079
440-229045-2	MW-6	Total/NA	Water	353 (NCell-Hyd)	271079
440-229045-3	MW-3	Total/NA	Water	353 (NCell-Hyd)	271079
440-229045-4	MW-1	Total/NA	Water	353 (NCell-Hyd)	271079
440-229045-5	MW-2	Total/NA	Water	353 (NCell-Hyd)	271079
440-229045-6	MW-4	Total/NA	Water	353 (NCell-Hyd)	271079
440-229045-7	Equipment Blank	Total/NA	Water	353 (NCell-Hyd)	271079
MB 320-271079/1-B	Method Blank	Total/NA	Water	353 (NCell-Hyd)	271079
LCS 320-271079/2-B	Lab Control Sample	Total/NA	Water	353 (NCell-Hyd)	271079
440-229045-1 MS	MW-5	Total/NA	Water	353 (NCell-Hyd)	271079
440-229045-1 MSD	MW-5	Total/NA	Water	353 (NCell-Hyd)	271079

Analysis Batch: 271213

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-229045-1	MW-5	Total/NA	Water	WS-WC-0050	271085
440-229045-2	MW-6	Total/NA	Water	WS-WC-0050	271085
440-229045-3	MW-3	Total/NA	Water	WS-WC-0050	271085
440-229045-4	MW-1	Total/NA	Water	WS-WC-0050	271085
440-229045-5	MW-2	Total/NA	Water	WS-WC-0050	271085
440-229045-6	MW-4	Total/NA	Water	WS-WC-0050	271085
440-229045-7	Equipment Blank	Total/NA	Water	WS-WC-0050	271085
MB 320-271079/1-B	Method Blank	Total/NA	Water	WS-WC-0050	271085
LCS 320-271079/2-B	Lab Control Sample	Total/NA	Water	WS-WC-0050	271085
440-229045-1 MS	MW-5	Total/NA	Water	WS-WC-0050	271085
440-229045-1 MSD	MW-5	Total/NA	Water	WS-WC-0050	271085

Analysis Batch: 520773

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-229045-1	MW-5	Total/NA	Water	SM 2320B	
440-229045-2	MW-6	Total/NA	Water	SM 2320B	
440-229045-3	MW-3	Total/NA	Water	SM 2320B	
440-229045-4	MW-1	Total/NA	Water	SM 2320B	
440-229045-5	MW-2	Total/NA	Water	SM 2320B	
440-229045-6	MW-4	Total/NA	Water	SM 2320B	
440-229045-7	Equipment Blank	Total/NA	Water	SM 2320B	
MB 440-520773/3	Method Blank	Total/NA	Water	SM 2320B	
LCS 440-520773/2	Lab Control Sample	Total/NA	Water	SM 2320B	

Prep Batch: 520811

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-229045-1	MW-5	Total/NA	Water	Distill/CN	
440-229045-2	MW-6	Total/NA	Water	Distill/CN	
440-229045-3	MW-3	Total/NA	Water	Distill/CN	
440-229045-4	MW-1	Total/NA	Water	Distill/CN	
440-229045-5	MW-2	Total/NA	Water	Distill/CN	
440-229045-6	MW-4	Total/NA	Water	Distill/CN	
440-229045-7	Equipment Blank	Total/NA	Water	Distill/CN	
MB 440-520811/1-A	Method Blank	Total/NA	Water	Distill/CN	
LCS 440-520811/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	
440-229045-3 MS	MW-3	Total/NA	Water	Distill/CN	
440-229045-3 MSD	MW-3	Total/NA	Water	Distill/CN	

QC Association Summary

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine_January 2019

TestAmerica Job ID: 440-229045-1

Analysis Batch: 520834

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-229045-1	MW-5	Total/NA	Water	SM 4500 CN E	520811
440-229045-2	MW-6	Total/NA	Water	SM 4500 CN E	520811
440-229045-3	MW-3	Total/NA	Water	SM 4500 CN E	520811
440-229045-4	MW-1	Total/NA	Water	SM 4500 CN E	520811
440-229045-5	MW-2	Total/NA	Water	SM 4500 CN E	520811
440-229045-6	MW-4	Total/NA	Water	SM 4500 CN E	520811
440-229045-7	Equipment Blank	Total/NA	Water	SM 4500 CN E	520811
MB 440-520811/1-A	Method Blank	Total/NA	Water	SM 4500 CN E	520811
LCS 440-520811/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN E	520811
440-229045-3 MS	MW-3	Total/NA	Water	SM 4500 CN E	520811
440-229045-3 MSD	MW-3	Total/NA	Water	SM 4500 CN E	520811

Analysis Batch: 520877

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-229045-1	MW-5	Total/NA	Water	SM 4500 H+ B	
440-229045-2	MW-6	Total/NA	Water	SM 4500 H+ B	
440-229045-3	MW-3	Total/NA	Water	SM 4500 H+ B	
440-229045-4	MW-1	Total/NA	Water	SM 4500 H+ B	
440-229045-5	MW-2	Total/NA	Water	SM 4500 H+ B	
440-229045-6	MW-4	Total/NA	Water	SM 4500 H+ B	
440-229045-7	Equipment Blank	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 520954

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-229045-1	MW-5	Total/NA	Water	SM 2540C	
440-229045-2	MW-6	Total/NA	Water	SM 2540C	
440-229045-3	MW-3	Total/NA	Water	SM 2540C	
440-229045-4	MW-1	Total/NA	Water	SM 2540C	
MB 440-520954/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 440-520954/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 521161

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-229045-5	MW-2	Total/NA	Water	SM 2540C	
440-229045-7	Equipment Blank	Total/NA	Water	SM 2540C	
MB 440-521161/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 440-521161/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 521380

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-229045-6	MW-4	Total/NA	Water	SM 2540C	
MB 440-521380/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 440-521380/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 521503

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-229045-1	MW-5	Total/NA	Water	350.1	
440-229045-2	MW-6	Total/NA	Water	350.1	
440-229045-3	MW-3	Total/NA	Water	350.1	
440-229045-4	MW-1	Total/NA	Water	350.1	
440-229045-5	MW-2	Total/NA	Water	350.1	
440-229045-6	MW-4	Total/NA	Water	350.1	
440-229045-7	Equipment Blank	Total/NA	Water	350.1	

General Chemistry (Continued)

Analysis Batch: 521503 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 440-521503/10	Method Blank	Total/NA	Water	350.1	
LCS 440-521503/11	Lab Control Sample	Total/NA	Water	350.1	
MRL 440-521503/9	Lab Control Sample	Total/NA	Water	350.1	

Analysis Batch: 522462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-229045-1	MW-5	Total/NA	Water	SM 2510B	
440-229045-2	MW-6	Total/NA	Water	SM 2510B	
440-229045-3	MW-3	Total/NA	Water	SM 2510B	
440-229045-4	MW-1	Total/NA	Water	SM 2510B	
440-229045-5	MW-2	Total/NA	Water	SM 2510B	
440-229045-6	MW-4	Total/NA	Water	SM 2510B	
440-229045-7	Equipment Blank	Total/NA	Water	SM 2510B	
MB 440-522462/3	Method Blank	Total/NA	Water	SM 2510B	
LCS 440-522462/4	Lab Control Sample	Total/NA	Water	SM 2510B	
440-229045-5 DU	MW-2	Total/NA	Water	SM 2510B	

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
F1	MS and/or MSD Recovery is outside acceptance limits.
E	Result exceeded calibration range.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine_January 2019

TestAmerica Job ID: 440-229045-1

Laboratory: TestAmerica Irvine

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	CA ELAP 2706	06-30-19

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260B		Water	m,p-Xylene
8260B		Water	Xylenes, Total
SM 2320B		Water	Bicarbonate Alkalinity as CaCO3
SM 2320B		Water	Carbonate Alkalinity as CaCO3
SM 2320B		Water	Hydroxide Alkalinity as CaCO3

Laboratory: TestAmerica Denver

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	DoD ELAP		2907.01	10-31-19
A2LA	ISO/IEC 17025		2907.01	10-31-19
Alabama	State Program	4	40730	09-30-12 *
Alaska (UST)	State Program	10	UST-30	02-28-19
Arizona	State Program	9	AZ0713	12-20-19
Arkansas DEQ	State Program	6	88-0687	06-01-19
California	State Program	9	2513	01-18-19 *
Connecticut	State Program	1	PH-0686	09-30-20
Florida	NELAP	4	E87667	06-30-19
Georgia	State Program	4	N/A	01-08-20
Illinois	NELAP	5	200017	04-30-19
Iowa	State Program	7	370	12-01-18 *
Kansas	NELAP	7	E-10166	04-30-19
Louisiana	NELAP	6	02096	06-30-19
Maine	State Program	1	CO0002	03-03-19
Minnesota	NELAP	5	8-999-405	12-31-19
Nevada	State Program	9	CO0026	07-31-19
New Hampshire	NELAP	1	205310	04-28-19
New Jersey	NELAP	2	CO004	06-30-19
New York	NELAP	2	11964	04-01-19
North Carolina (WW/SW)	State Program	4	358	12-31-19
North Dakota	State Program	8	R-034	01-08-19 *
Oklahoma	State Program	6	8614	08-31-19
Pennsylvania	NELAP	3	68-00664	07-31-19
South Carolina	State Program	4	72002001	01-08-19 *
Texas	NELAP	6	T104704183-18-15	09-30-19
US Fish & Wildlife	Federal			07-31-19
USDA	Federal			03-26-21
Utah	NELAP	8	CO00026	07-31-19
Virginia	NELAP	3	460232	06-14-19
Washington	State Program	10	C583	08-03-19
West Virginia DEP	State Program	3	354	01-31-19
Wisconsin	State Program	5	999615430	08-31-19 *
Wyoming (UST)	A2LA	8	2907.01	10-31-19

Laboratory: TestAmerica Nashville

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: GeoPentech, Inc
Project/Site: Blue Eagle Lode Mine_January 2019

TestAmerica Job ID: 440-229045-1

Laboratory: TestAmerica Nashville (Continued)

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2938	06-30-19 *

Laboratory: TestAmerica Sacramento

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2897	01-31-19 *

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6010B	3010A	Water	Sulfur
6020	3005A	Water	Aluminum
6020	3005A	Water	Calcium
6020	3005A	Water	Iron
6020	3005A	Water	Magnesium
6020	3005A	Water	Manganese
6020	3005A	Water	Potassium
6020	3005A	Water	Sodium
8015B	3510C	Water	Motor Oil Range Organics (C25-C36)
WS-WC-0050	353 (NCell-Hyd)	Water	Nitrocellulose

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614
Phone: 949.261.1022 Fax:

Chain of Custody Record

208371

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☒ Other:

Client Contact	Project Manager: Eric Fordham	Site Contact:	Date:	COC No: 208371
Company Name: Geopentech	Tel/Fax: 714-796-9100	Lab Contact:	Carrier:	1 of 1 COCs
Address: 101 Academy Drive Suite #100	Analysis Turnaround Time			Sampler:
City/State/Zip: Irvine, CA 92617	☐ CALENDAR DAYS ☒ WORKING DAYS			For Lab Use Only:
Phone: 714-796-9100	TAT if different from Below: Standard			Walk-in Client
Fax: 714-796-9191	☐ 2 weeks			Lab Sampling:
Project Name: Blue Eagle Mine	☐ 1 week			Job / SDG No:
Site: Rosemond, CA	☐ 2 days			
PO #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	DRO/MRO	Energetics	Nitrocellulose	Dissolved Metals +5	Dissolved Hardness	Ethylene Glycol	Alkalinity	300, EC, pH, TDS	Ammonia	Cyanide	VOC + BRO	perchlorate	Sample Specific Notes:
MW-5	1-2-19	8:57	G	H2O	18			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
MW-6	1-2-19	10:29	G	H2O	18			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
MW-3	1-2-19	11:58	G	H2O	18			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
MW-1	1-2-19	13:11	G	H2O	18			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
MW-2	1-3-19	7:53	G	H2O	18			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
MW-4	1-3-19	8:53	G	H2O	18			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Equip. Blank	1-3-19	9:30	G	H2O	18			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

440-229045 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample

☐ Non-Hazard ☐ Flammable ☒ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:
All samples placed on ice after collection and kept on ice until delivery. Quotation: 3201123 1.0/1.0 1.5/1.5 1.0/1.0 1.4/1.4 1.9/1.9 IR89

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.	Cooler Temp. (°C) Obs'd: _____ Corr'd: _____	Therm ID No.: _____

Relinquished by	Company	Date/Time	Received by	Company	Date/Time
Ryan Wakefield	Geopentech	1-3-19/1330			
Relinquished by	Company	Date/Time	Received by	Company	Date/Time
Relinquished by	Company	Date/Time	Received in Laboratory by	Company	Date/Time
				TARV	1/8/19 1300

1/29/2019

TestAmerica Irvine
17461 Derian Ave Suite 100
Irvine, CA 92614-5817
Phone (949) 261-1022 Fax (949) 260-3297

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Turpen, Laura	Carrier Tracking No(s):	COC No: 440-131668.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: laura.turpen@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 440-229045-1
Address: 4955 Yarrow Street,	Due Date Requested: 1/21/2019			
City: Arvada	TAT Requested (days):			
State, Zip: CO, 80002				
Phone: 303-736-0100(Tel) 303-431-7171(Fax)	PO #:			
Email:	WO #:			
Project Name: Blue Eagle Lode Mine	Project #: 32011165			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8330A/3535 (MOD) Standard List	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-5 (440-229045-1)	1/2/19	08:57 Pacific		Water			X	1	
MW-6 (440-229045-2)	1/2/19	10:29 Pacific		Water			X	1	
MW-3 (440-229045-3)	1/2/19	11:58 Pacific		Water			X	1	
MW-1 (440-229045-4)	1/2/19	13:11 Pacific		Water			X	1	
MW-2 (440-229045-5)	1/3/19	07:53 Pacific		Water			X	1	
MW-4 (440-229045-6)	1/3/19	08:53 Pacific		Water			X	1	
Equipment Blank (440-229045-7)	1/3/19	09:30 Pacific		Water			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.5°C ±0.2 transferred by PSD 1/5/19 0930

Ver: 09/20/2016

TestAmerica Irvine
17461 Derian Ave Suite 100
Irvine, CA 92614-5817
Phone (949) 261-1022 Fax (949) 260-3297

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Turpen, Laura	Carrier Tracking No(s):	COC No: 440-131670.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: laura.turpen@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 440-229045-1
Address: 880 Riverside Parkway, ,	Due Date Requested: 1/21/2019			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: Blue Eagle Lode Mine	Project #: 32011165			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015B_DRO/3510C_IVWT (MOD) CALUFT DRO/MRO	353.2_Nitrocell/NCEL_Prep_A (MOD) Local Method	6010B/Filtration_ME (MOD) Pick Your Analytes	7470A/Filtration_ME Dissolved Mercury	SM2340B/Filtration_AC (MOD) All Hardness Forms	6020/Filtration_ME Dissolved Metals including Ca & Mg	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
MW-5 (440-229045-1)	1/2/19	08:57 Pacific		Water			X	X	X	X	X	X	6	Project was quoted as DRO (C10-C24) and MRO (C25-C36)., Sulfur may be high, may
MW-6 (440-229045-2)	1/2/19	10:29 Pacific		Water			X	X	X	X	X	X	6	Project was quoted as DRO (C10-C24) and MRO (C25-C36)., Sulfur may be high, may
MW-3 (440-229045-3)	1/2/19	11:58 Pacific		Water			X	X	X	X	X	X	6	Project was quoted as DRO (C10-C24) and MRO (C25-C36)., Sulfur may be high, may
MW-1 (440-229045-4)	1/2/19	13:11 Pacific		Water			X	X	X	X	X	X	6	Project was quoted as DRO (C10-C24) and MRO (C25-C36)., Sulfur may be high, may
MW-2 (440-229045-5)	1/3/19	07:53 Pacific		Water			X	X	X	X	X	X	6	Project was quoted as DRO (C10-C24) and MRO (C25-C36)., Sulfur may be high, may
MW-4 (440-229045-6)	1/3/19	08:53 Pacific		Water			X	X	X	X	X	X	6	Project was quoted as DRO (C10-C24) and MRO (C25-C36)., Sulfur may be high, may
Equipment Blank (440-229045-7)	1/3/19	09:30 Pacific		Water			X	X	X	X	X	X	6	Project was quoted as DRO (C10-C24) and MRO (C25-C36)., Sulfur may be high, may

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1					11/5/19 927	TA-WSAC
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☑ Yes ☐ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.9 6.7 1.0 1.1

Ver: 09/20/2016

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

440-229045 Chain of Custody

Cooler Received/Opened On 1/5/2019 @ 1005

Time Samples Removed From Cooler 11:32 Time Samples Placed In Storage 12:02 (2 Hour Window)

1. Tracking # 5395 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 17610176 pH Strip Lot _____ Chlorine Strip Lot _____

2. Temperature of rep. sample or temp blank when opened: 1.4 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: None

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) 2.2

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA 2.2 01/05/19

b. Was there any observable headspace present in any VOA vial? YES...NO...NA 2.2 01/05/19

Larger than this.

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) 2.2

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) 2.2

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) 2.2

I certify that I attached a label with the unique LIMS number to each container (intial) 2.2

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment

TestAmerica Irvine
17461 Derian Ave Suite 100
Irvine, CA 92614-5817
Phone (949) 261-1022 Fax (949) 260-3297

Chain of Custody Record

440-229045

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Turpen, Laura	COC No: 40-131669.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: laura.turpen@testamericainc.com	State of Origin: California
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): State Program - California	Page: Page 1 of 1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 1/21/2019		Job #: 440-229045-1
City: Nashville	TAT Requested (days):		
State, Zip: TN, 37204			
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:		
Email:	WO #:		
Project Name: Blue Eagle Lode Mine	Project #: 32011165		
Site:	SSOW#:		

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015B_DAI_GLY/ (MOD) Custom Glycols List	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-5 (440-229045-1)	1/2/19	08:57 Pacific		Water			X	3	
MW-6 (440-229045-2)	1/2/19	10:29 Pacific		Water			X	3	
MW-3 (440-229045-3)	1/2/19	11:58 Pacific		Water			X	3	
MW-1 (440-229045-4)	1/2/19	13:11 Pacific		Water			X	3	
MW-2 (440-229045-5)	1/3/19	07:53 Pacific		Water			X	3	
MW-4 (440-229045-6)	1/3/19	08:53 Pacific		Water			X	3	
Equipment Blank (440-229045-7)	1/3/19	09:30 Pacific		Water			X	3	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:	Time:		Method of Shipment:		
Relinquished by:	Date/Time: 1/4/19 1700	Company TAL IRV	Received by: Jaweenis Jordan	Date/Time: 01/05/19 10:05	Company TA-NAS		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company		
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 1.4				

Ver: 09/20/2016

Login Sample Receipt Checklist

Client: GeoPentech, Inc

Job Number: 440-229045-1
SDG Number:

Login Number: 229045
List Number: 1
Creator: Avila, Stephanie 1

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	Not present
Sample custody seals, if present, are intact.	N/A	Not Present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: GeoPentech, Inc

Job Number: 440-229045-1
SDG Number:

Login Number: 229045
List Number: 2
Creator: Dunlap, Krista M

List Source: TestAmerica Denver
List Creation: 01/05/19 10:40 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: GeoPentech, Inc

Job Number: 440-229045-1
SDG Number:

Login Number: 229045
List Number: 4
Creator: Rosas, Jaime

List Source: TestAmerica Sacramento
List Creation: 01/05/19 12:39 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.9c 0.7c 1.0c 1.1c
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

APPENDIX C

Prediction Limit Calculation

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Calculation of 95% Prediction Limits

Although the quality of the groundwater beneath the Blue Eagle Lode Mine site is not suitable for a municipal or domestic supply designation (MUN), discharge of the water from dewatering operations into the groundwater is subject the State Water Board's anti-degradation policy. Therefore, Blue Eagle Lode Mining Company (BELMC) has collected background samples from the groundwater beneath the Site to determine the current water quality conditions. Using data from eight sampling events from May 2018 to January 2019, two sampling events in 2014 and three sampling events in 2013, BEMLC has calculated statistical prediction limits to develop groundwater quality limits for the six monitoring wells that will be monitored throughout mining operations.

The U.S. EPA's statistical guidance document, *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities – Unified Guidance*, recommends the use of intra-well prediction limits as a method to determine if activities on a site have caused concentrations of groundwater constituents to exceed background concentrations. Intra-well measurements are often used for comparison purposes if there is a difference in water quality among the different monitoring well locations or if up-gradient/down-gradient comparisons are not applicable. Both of these conditions apply to the Blue Eagle Lode Mine site. Intra-well comparisons require enough data to be collected from each monitoring well before site activities begin to statistically analyze the background conditions.

Prediction limits define the interval inside which a future measurement will fall with a specified confidence level, assuming no change to the background condition. A prediction limit is generally defined as the following:

$$PL = \bar{x} \pm \kappa s,$$

where $\bar{x}$ is the mean background concentration, s is the standard deviation, and κ is a multiplier that is dependent on the background sample set size and the number of future measurements to be compared against the background. Most prediction limits for water quality purposes are one-sided, where only an upper boundary is defined. However, certain parameters such as pH may have two-sided prediction limits defined because both low and high values would impact water quality. Measurements that exceed a prediction limit may be evidence that the background water quality has been impacted by site activities.

BEMLC used the ProUCL Version 5.1 software program developed for the U.S. EPA to calculate separate one-sided prediction limits for each groundwater constituent and for each well, except for pH. A separate spreadsheet was used to calculate the two-sided prediction limits for pH for each well. Various equations have been developed to calculate prediction limits based on the distribution of the background data set (e.g. normal, lognormal, gamma, or no distribution). ProUCL determines the distribution of the data set and calculates prediction limits that are appropriate based on the various distributions. When the background data set had multiple possible distributions, the prediction limit was selected favoring solutions in the following order 1. normal, 2. gamma, 3. lognormal. This bias resulted in more conservative prediction limits. When the background data set did not have a discernable distribution, the non-parametric prediction limit was selected.

All prediction limits were calculated with a 95% confidence level for one future measurement. Assuming more than one future measurement in the calculation would result in a larger confidence interval (higher prediction limit) and reduce the likelihood of false positives; however, it would also reduce the power of the limit to protect against degradation of groundwater quality. On the other hand, selecting a smaller confidence level (e.g. 90% confidence), would result in a lower prediction limit, but would increase the potential for false positives. The chosen prediction limits balance the need for groundwater protection with the need to reduce false positives. In the event of a prediction limit exceedance, the well will be resampled for the constituent that exceeded the prediction limit. If a resample value is below the prediction limit, then the original exceedance will be considered a false positive (non-exceedance).

Non-detect values were input into the ProUCL program as the method detection limit. Detections below the reporting limit (j-flag values) were used when present. Although j-flag values are estimated values, they provide a better estimate of the true concentration than using half the reporting limit. Furthermore, for many constituents, there were not enough detection values to determine a statistically estimated value. While using the method detection limit can potentially over-estimate the actual concentration present in the water sample, the lowest potential groundwater limit that will be established for each analyte is the reporting limit, which is higher than the method detection limit. If a calculated prediction limit for a constituent was calculated to be below the reporting limit, then the reporting limit was used as the groundwater protection limit.

For each constituent that is analyzed the ProUCL output sheet contains overall sample set statistics (e.g. mean, standard deviation, coefficient of variance), and then it provides sections broken into the four main distribution types (normal, gamma, lognormal, and non-parametric). Each distribution type section contains test results for determining if that distribution is present and then the relevant background statistics, including the upper prediction limit, for that distribution type. ProUCL provides each of these calculation results even if it determines that the specific distribution is not present. To save space, only the applicable ProUCL output for the relevant statistical distribution has been provided here, and the non-applicable distribution information has been removed. The applicable upper prediction limit has been highlighted in yellow on the output sheet for each constituent. The complete ProUCL output may be provided upon request. A summary of the resulting prediction limits is provided in Appendix C Tables 1, 2 and 3.

Appendix C, Table 1
Inorganic and General Chemistry Parameter Prediction Limits by Well

Parameter	Prediction Limit						Reporting Limit	Units
	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6		
Aluminum	48	33	ND	199.2	1.02	0.935	0.050	mg/L
Ammonia	2.949	0.258	0.307	2.525	0.16	0.21	0.20	mg/L
Antimony	0.00933	0.00674	0.00022	0.00938	0.218	0.205	0.0020	mg/L
Arsenic	8.155	14.8	0.34	182.3	1.073	2.381	0.0020	mg/L
Barium	0.057	0.0168	0.0309	0.0433	0.229	0.226	0.0010	mg/L
Beryllium	0.0126	0.00679	0.00011	0.0329	0.207	0.212	0.0010	mg/L
Bicarbonate	21	ND	128.2	60	133.3	730	4.0	mg/L
Cadmium	0.11	0.01	0.0011	0.264	0.161	0.199	0.0010	mg/L
Calcium	69.76	84.54	35.89	394.4	80.05	128.6	0.30	mg/L
Carbonate	ND	ND	2.7	ND	ND	ND	4.0	mg/L
Chloride	18	15	18.4	31.29	20.63	28.35	0.50	mg/L
Chromium	0.0072	ND	0.0027	0.00185	0.206	0.197	0.0020	mg/L
Cobalt	0.25	0.53	0.0147	2.21	0.869	0.195	0.0010	mg/L
Copper	0.00983	0.177	0.00295	1.357	0.195	0.187	0.0020	mg/L
Cyanide	0.0941	ND	0.201	ND	ND	ND	0.025	mg/L
Fluoride	1.378	1.1	1.8	2.762	0.31	0.996	0.50	mg/L
Iron	40	16.92	1.683	455.8	1.06	1.571	0.050	mg/L
Lead	0.00629	0.0437	ND	0.0067	0.203	0.202	0.0010	mg/L
Magnesium	20	17.55	20.81	75.68	21.76	41.6	0.050	mg/L
Manganese	1.8	1.9	6.508	8.579	0.426	6.735	0.0025	mg/L
Mercury	0.000231	0.00014	0.00015	0.00037	0.00108	0.00023	0.00020	mg/L
Molybdenum	0.0064	0.00807	0.0125	0.102	0.215	0.216	0.0020	mg/L
Nickel	0.099	0.0657	0.0061	0.582	0.204	0.188	0.0020	mg/L
Nitrate (as N)	0.46	0.66	0.62	ND	0.192	0.079	0.11	mg/L
Nitrite (as N)	0.472	0.213	0.33	0.19	ND	0.073	0.15	mg/L
Perchlorate	ND	ND	ND	28	ND	ND	1.0	µg/L
Potassium	55.81	52.84	23.2	84.18	27.3	21.02	0.050	mg/L
Selenium	0.029	0.0165	ND	0.00777	0.218	0.189	0.0020	mg/L
Silver	0.0097	0.011	0.005	ND	0.0491	0.0501	0.0010	mg/L
Sodium	56.6	59.84	51.7	390	68.06	145.2	0.10	mg/L
Sulfate	780	641.8	220	3170	260	333.3	0.50	mg/L
Sulfur	244.3	190	66.76	860	99.77	718.5	0.50	mg/L
Thallium	0.0158	0.015	ND	0.0122	0.05	0.0501	0.0010	mg/L
Titanium								
Total Dissolved Solids	1200	1004	446.2	4991	623.4	1160	10	mg/L
Vanadium	0.055	ND	0.0193	0.0676	0.208	0.2	0.010	mg/L
Zinc	6.2	1.479	2.642	17.44	0.293	0.202	0.0050	mg/L

Red parameters = parameters not required in Waste Discharge Requirements/Monitoring and Reporting Program R6V-2017-0001

Blue highlighted values = Prediction limit is below the reporting limit. Reporting limit will be used as the groundwater limit.

ND = Not detected during background sampling

Appendix C, Table 2
Organic Monitoring Parameter Prediction Limits

Parameter	Prediction Limit						Reporting Limit	Units
	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6		
Total Petroleum Hydrocarbons (C_4-C_{12})	19	ND	17	125	ND	143	50	µg/L
Total Petroleum Hydrocarbons (C_{10}-C_{24})	62.04	48.79	144.1	90.06	25.31	10012	47	µg/L
Total Petroleum Hydrocarbons (C_{25}-C_{36})	ND	230	610	ND	170	2808	470	µg/L
Ethylene Glycol	ND	ND	ND	ND	ND	ND	10	mg/L
Benzene	ND	ND	ND	1.306	ND	ND	0.50	µg/L
Toluene	ND	ND	0.62	19.5	ND	ND	0.50	µg/L
Ethylbenzene	ND	ND	ND	ND	ND	ND	0.50	µg/L
Xylene	ND	ND	ND	ND	ND	ND	1.0	µg/L
Naphthalene	ND	ND	ND	1.267	1.2	5.423	1.0	µg/L
HMX	ND	ND	ND	ND	ND	0.46	0.10	µg/L
RDX	ND	ND	ND	ND	ND	ND	0.10	µg/L
1,3,5-Trinitrobenzene	0.22	0.17	0.043	0.105	ND	0.22	0.10	µg/L
1,3-Dinitrobenzene	ND	ND	ND	ND	ND	ND	0.10	µg/L
Nitrobenzene	0.078	ND	0.16	0.526	ND	5.647	0.10	µg/L
Nitrocellulose	ND	ND	ND	ND	5.52	4.37	2.0	mg/L
Nitroglycerine	ND	ND	ND	ND	ND	0.715	0.65	µg/L
PETN	ND	ND	ND	ND	ND	ND	0.65	µg/L
2,4,6-Trinitrotoluene	ND	ND	ND	ND	ND	ND	0.10	µg/L
2,4-Dinitrotoluene	ND	ND	ND	ND	ND	0.0655	0.10	µg/L
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	0.12	0.10	µg/L
2-Nitrotoluene	ND	ND	ND	ND	ND	0.125	0.50	µg/L
3-Nitrotoluene	ND	ND	ND	ND	ND	ND	0.50	µg/L
4-Nitrotoluene	ND	ND	ND	ND	ND	0.119	0.50	µg/L

Red parameters = parameters not required in Waste Discharge Requirements/Monitoring and Reporting Program R6V-2017-0001

Blue highlighted values = Prediction limit is below the reporting limit. Reporting limit will be used as the groundwater limit.

Appendix C, Table 3: pH Upper and Lower Prediction Limit Calculation

Date	pH					
	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6
5/8/2018	4.53	4.97	6.09	6.78	6.96	6.31
6/5/2018	4.35	4.27	6.3	6.86	6.89	6.94
7/5/2018	5.21	5.5	5.97	6.76	7.15	6.31
8/6/2018	4.03	3.63	6.62	4.16	6.86	7.53
9/17/2018	3.85	4.14	6.2	4.08	6.94	6.4
10/31/2018	4.47	4.34	6.94	4.71	7.09	7.22
11/27/2018	3.87	3.66	6.73	3.77	7.2	6.94
1/2/2019	3.45	3.93	7.2	4.14	7.05	7.05

2-Sided Prediction Intervals:

$$PI = \bar{x} \pm t_{1-\frac{\alpha}{2},n-1} s\sqrt{1+1/n}$$

$\bar{x}$ = mean

$t_{1-\frac{\alpha}{2},n-1}$=2-tail t value

s = standard deviation

n = number of measurements

	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6
mean	4.22	4.31	6.51	5.16	7.02	6.84
standard dev	0.51	0.60	0.41	1.29	0.12	0.42
2-tail t value	2.36	2.36	2.36	2.36	2.36	2.36
lower limit	**2.95**	**2.79**	**5.48**	**1.91**	**6.73**	**5.77**
upper limit	**5.49**	**5.82**	**7.53**	**8.41**	**7.31**	**7.90**

Background Statistics for Data Sets with Non-Detects

General Chemistry - MW-1

User Selected Options

Date/Time of Computation	ProUCL 5.1 4/8/2019 1:25:52 PM
From File	General Chemistry Input.xls
Full Precision	OFF
Confidence Coefficient	95%
Coverage	95%
Different or Future K Observations	1
Number of Bootstrap Operations	2000

Bicarbonate

General Statistics

Total Number of Observations	13	Number of Missing Observations	0
Number of Distinct Observations	4		
Number of Detects	1	Number of Non-Detects	12
Number of Distinct Detects	1	Number of Distinct Non-Detects	3
Minimum Detect	21	Minimum Non-Detect	4
Maximum Detect	21	Maximum Non-Detect	10
Variance Detected	N/A	Percent Non-Detects	92.31%
Mean Detected	21	SD Detected	N/A
Mean of Detected Logged Data	3.045	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!

It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Bicarbonate was not processed!

Total Alkalinity

General Statistics

Total Number of Observations	13	Number of Missing Observations	0
Number of Distinct Observations	3		
Number of Detects	1	Number of Non-Detects	12
Number of Distinct Detects	1	Number of Distinct Non-Detects	2
Minimum Detect	17	Minimum Non-Detect	4
Maximum Detect	17	Maximum Non-Detect	4.1
Variance Detected	N/A	Percent Non-Detects	92.31%
Mean Detected	17	SD Detected	N/A
Mean of Detected Logged Data	2.833	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!

It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Total Alkalinity was not processed!

TDS

General Statistics

Total Number of Observations	13	Number of Distinct Observations	7
Minimum	580	First Quartile	850
Second Largest	1200	Median	1100
Maximum	1200	Third Quartile	1200
Mean	1008	SD	230
Coefficient of Variation	0.228	Skewness	-0.968
Mean of logged Data	6.887	SD of logged Data	0.262

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for Background Threshold Values

Order of Statistic, r	13	95% UTL with 95% Coverage	1200
Approx, f used to compute achieved CC	0.684	Approximate Actual Confidence Coefficient achieved by UTL	0.487
		Approximate Sample Size needed to achieve specified CC	59
95% Percentile Bootstrap UTL with 95% Coverage	1200	95% BCA Bootstrap UTL with 95% Coverage	1140
95% UPL	1200	90% Percentile	1200
90% Chebyshev UPL	1724	95% Percentile	1200
95% Chebyshev UPL	2048	99% Percentile	1200
95% USL	1200		

Background Statistics for Data Sets with Non-Detects

General Chemistry - MW-2

User Selected Options

Date/Time of Computation	ProUCL 5.1 4/8/2019 1:26:23 PM
From File	General Chemistry Input_a.xls
Full Precision	OFF
Confidence Coefficient	95%
Coverage	95%
Different or Future K Observations	1
Number of Bootstrap Operations	2000

TDS

General Statistics

Total Number of Observations	13	Number of Distinct Observations	10
Minimum	850	First Quartile	910
Second Largest	980	Median	930
Maximum	1000	Third Quartile	960
Mean	929.2	SD	40.51
Coefficient of Variation	0.0436	Skewness	-0.023
Mean of logged Data	6.833	SD of logged Data	0.0437

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Normal GOF Test

Shapiro Wilk Test Statistic	0.974	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.866	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.185	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.234	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	1037	90% Percentile (z)	981.1
	95% UPL (t)	1004	95% Percentile (z)	995.9
	95% USL	1024	99% Percentile (z)	1023

Background Statistics for Data Sets with Non-Detects

General Chemistry - MW-3

User Selected Options

Date/Time of Computation	ProUCL 5.1 4/8/2019 1:26:57 PM
From File	General Chemistry Input_b.xls
Full Precision	OFF
Confidence Coefficient	95%
Coverage	95%
Different or Future K Observations	1
Number of Bootstrap Operations	2000

Bicarbonate

General Statistics

Total Number of Observations	13	Number of Distinct Observations	11
Minimum	47	First Quartile	56
Second Largest	120	Median	66
Maximum	130	Third Quartile	89
Mean	76.23	SD	28.11
Coefficient of Variation	0.369	Skewness	0.883
Mean of logged Data	4.276	SD of logged Data	0.348

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Normal GOF Test

Shapiro Wilk Test Statistic	0.875	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.866	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.231	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.234	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with 95% Coverage	151.3	90% Percentile (z)	112.3
95% UPL (t)	128.2	95% Percentile (z)	122.5
95% USL	141.7	99% Percentile (z)	141.6

Carbonate

General Statistics

Total Number of Observations	13	Number of Missing Observations	0
Number of Distinct Observations	3		
Number of Detects	1	Number of Non-Detects	12
Number of Distinct Detects	1	Number of Distinct Non-Detects	2
Minimum Detect	2.7	Minimum Non-Detect	2.5
Maximum Detect	2.7	Maximum Non-Detect	4
Variance Detected	N/A	Percent Non-Detects	92.31%
Mean Detected	2.7	SD Detected	N/A
Mean of Detected Logged Data	0.993	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!
It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Carbonate was not processed!

Total Alkalinity

General Statistics

Total Number of Observations	13	Number of Distinct Observations	9
Minimum	47	First Quartile	56
Second Largest	99	Median	66
Maximum	100	Third Quartile	73
Mean	69.08	SD	19.02
Coefficient of Variation	0.275	Skewness	0.763
Mean of logged Data	4.202	SD of logged Data	0.264

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Normal GOF Test

Shapiro Wilk Test Statistic	0.857	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.866	Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.215	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.234	Data appear Normal at 5% Significance Level	

Data appear Approximate Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	119.9	90% Percentile (z)	93.45
	95% UPL (t)	104.2	95% Percentile (z)	100.4
	95% USL	113.4	99% Percentile (z)	113.3

TDS

General Statistics

Total Number of Observations	13	Number of Distinct Observations	5
Minimum	400	First Quartile	420
Second Largest	440	Median	420
Maximum	440	Third Quartile	430
Mean	423.1	SD	12.51
Coefficient of Variation	0.0296	Skewness	-0.0858
Mean of logged Data	6.047	SD of logged Data	0.0296

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Normal GOF Test

Shapiro Wilk Test Statistic	0.916	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.866	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.213	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.234	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	456.5	90% Percentile (z)	439.1
	95% UPL (t)	446.2	95% Percentile (z)	443.6
	95% USL	452.2	99% Percentile (z)	452.2

Background Statistics for Data Sets with Non-Detects

General Chemistry - MW-4

User Selected Options

Date/Time of Computation	ProUCL 5.1 4/8/2019 1:27:30 PM
From File	General Chemistry Input_c.xls
Full Precision	OFF
Confidence Coefficient	95%
Coverage	95%
Different or Future K Observations	1
Number of Bootstrap Operations	2000

Bicarbonate

General Statistics

Total Number of Observations	8	Number of Missing Observations	0
Number of Distinct Observations	2		
Number of Detects	1	Number of Non-Detects	7
Number of Distinct Detects	1	Number of Distinct Non-Detects	1
Minimum Detect	60	Minimum Non-Detect	4
Maximum Detect	60	Maximum Non-Detect	4
Variance Detected	N/A	Percent Non-Detects	87.5%
Mean Detected	60	SD Detected	N/A
Mean of Detected Logged Data	4.094	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!

It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Bicarbonate was not processed!

Total Alkalinity

General Statistics

Total Number of Observations	8	Number of Missing Observations	0
Number of Distinct Observations	2		
Number of Detects	1	Number of Non-Detects	7
Number of Distinct Detects	1	Number of Distinct Non-Detects	1
Minimum Detect	60	Minimum Non-Detect	4
Maximum Detect	60	Maximum Non-Detect	4
Variance Detected	N/A	Percent Non-Detects	87.5%
Mean Detected	60	SD Detected	N/A
Mean of Detected Logged Data	4.094	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!

It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Total Alkalinity was not processed!

TDS

General Statistics

Total Number of Observations	8	Number of Distinct Observations	8
Minimum	2000	First Quartile	2250
Second Largest	4400	Median	2460
Maximum	4600	Third Quartile	3425
Mean	2928	SD	1027
Coefficient of Variation	0.351	Skewness	1.065
Mean of logged Data	7.934	SD of logged Data	0.323

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test

Shapiro Wilk Test Statistic	0.812	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.818	Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.279	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.283	Data appear Normal at 5% Significance Level	

Data appear Approximate Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	6199	90% Percentile (z)	4243
	95% UPL (t)	4991	95% Percentile (z)	4616
	95% USL	5013	99% Percentile (z)	5316

Background Statistics for Data Sets with Non-Detects

General Chemistry - MW-5

User Selected Options

Date/Time of Computation	ProUCL 5.1 4/8/2019 1:27:58 PM
From File	General Chemistry Input_d.xls
Full Precision	OFF
Confidence Coefficient	95%
Coverage	95%
Different or Future K Observations	1
Number of Bootstrap Operations	2000

Bicarbonate

General Statistics

Total Number of Observations	8	Number of Distinct Observations	7
Minimum	60	First Quartile	88.18
Second Largest	110	Median	98.5
Maximum	121	Third Quartile	102.5
Mean	94.36	SD	19.35
Coefficient of Variation	0.205	Skewness	-0.681
Mean of logged Data	4.526	SD of logged Data	0.225

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test

Shapiro Wilk Test Statistic	0.943	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.818	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.22	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.283	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with 95% Coverage	156	90% Percentile (z)	119.2
95% UPL (t)	133.3	95% Percentile (z)	126.2
95% USL	133.7	99% Percentile (z)	139.4

Total Alkalinity

General Statistics

Total Number of Observations	8	Number of Distinct Observations	7
Minimum	60	First Quartile	88.18
Second Largest	110	Median	98.5
Maximum	121	Third Quartile	102.5
Mean	94.36	SD	19.35
Coefficient of Variation	0.205	Skewness	-0.681
Mean of logged Data	4.526	SD of logged Data	0.225

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test

Shapiro Wilk Test Statistic	0.943	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.818	Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.22	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.283	Data appear Normal at 5% Significance Level

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	156	90% Percentile (z)	119.2
	95% UPL (t)	133.3	95% Percentile (z)	126.2
	95% USL	133.7	99% Percentile (z)	139.4

TDS

General Statistics

Total Number of Observations	8	Number of Distinct Observations	5
Minimum	550	First Quartile	570
Second Largest	590	Median	581.3
Maximum	620	Third Quartile	590
Mean	581.6	SD	20.83
Coefficient of Variation	0.0358	Skewness	0.491
Mean of logged Data	6.365	SD of logged Data	0.0356

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test

Shapiro Wilk Test Statistic	0.931	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.818	Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.218	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.283	Data appear Normal at 5% Significance Level

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	647.9	90% Percentile (z)	608.3
	95% UPL (t)	623.4	95% Percentile (z)	615.8
	95% USL	623.9	99% Percentile (z)	630

Background Statistics for Data Sets with Non-Detects

General Chemistry - MW-6

User Selected Options

Date/Time of Computation	ProUCL 5.1 4/8/2019 1:28:32 PM
From File	General Chemistry Input_e.xls
Full Precision	OFF
Confidence Coefficient	95%
Coverage	95%
Different or Future K Observations	1
Number of Bootstrap Operations	2000

Bicarbonate

General Statistics

Total Number of Observations	8	Number of Distinct Observations	5
Minimum	500	First Quartile	635
Second Largest	720	Median	680
Maximum	730	Third Quartile	712.5
Mean	650	SD	94.57
Coefficient of Variation	0.145	Skewness	-1.261
Mean of logged Data	6.467	SD of logged Data	0.158

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for Background Threshold Values

Order of Statistic, r	8	95% UTL with 95% Coverage	730
Approx, f used to compute achieved CC	0.421	Approximate Actual Confidence Coefficient achieved by UTL	0.337
		Approximate Sample Size needed to achieve specified CC	59
95% Percentile Bootstrap UTL with 95% Coverage	730	95% BCA Bootstrap UTL with 95% Coverage	730
95% UPL	730	90% Percentile	723
90% Chebyshev UPL	950.9	95% Percentile	726.5
95% Chebyshev UPL	1087	99% Percentile	729.3
95% USL	730		

Total Alkalinity

General Statistics

Total Number of Observations	8	Number of Distinct Observations	5
Minimum	500	First Quartile	635
Second Largest	720	Median	680
Maximum	730	Third Quartile	712.5
Mean	650	SD	94.57
Coefficient of Variation	0.145	Skewness	-1.261
Mean of logged Data	6.467	SD of logged Data	0.158

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for Background Threshold Values

Order of Statistic, r	8	95% UTL with 95% Coverage	730
Approx, f used to compute achieved CC	0.421	Approximate Actual Confidence Coefficient achieved by UTL	0.337
95% Percentile Bootstrap UTL with 95% Coverage	730	Approximate Sample Size needed to achieve specified CC	59
95% UPL	730	95% BCA Bootstrap UTL with 95% Coverage	730
90% Chebyshev UPL	950.9	90% Percentile	723
95% Chebyshev UPL	1087	95% Percentile	726.5
95% USL	730	99% Percentile	729.3

TDS

General Statistics

Total Number of Observations	8	Number of Distinct Observations	6
Minimum	770	First Quartile	843.8
Second Largest	1100	Median	880
Maximum	1100	Third Quartile	950
Mean	913.1	SD	122.6
Coefficient of Variation	0.134	Skewness	0.933
Mean of logged Data	6.809	SD of logged Data	0.13

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test

Shapiro Wilk Test Statistic	0.842	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.818	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.293	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.283	Data Not Normal at 5% Significance Level	

Data appear Approximate Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with 95% Coverage	1304	90% Percentile (z)	1070
95% UPL (t)	1160	95% Percentile (z)	1115
95% USL	1162	99% Percentile (z)	1198

Background Statistics for Data Sets with Non-Detects

Anions and Cations - MW-1

User Selected Options

Date/Time of Computation	ProUCL 5.1 4/8/2019 1:12:53 PM
From File	Anions and Cations Input.xls
Full Precision	OFF
Confidence Coefficient	95%
Coverage	95%
Different or Future K Observations	1
Number of Bootstrap Operations	2000

Ammonia

General Statistics

Total Number of Observations	8	Number of Missing Observations	5
Number of Distinct Observations	5		
Number of Detects	4	Number of Non-Detects	4
Number of Distinct Detects	4	Number of Distinct Non-Detects	1
Minimum Detect	0.12	Minimum Non-Detect	0.1
Maximum Detect	1.3	Maximum Non-Detect	0.1
Variance Detected	0.332	Percent Non-Detects	50%
Mean Detected	0.438	SD Detected	0.576
Mean of Detected Logged Data	-1.377	SD of Detected Logged Data	1.116

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.783	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.748	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.333	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.375	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.225	Mean in Log Scale	-3.071
SD in Original Scale	0.44	SD in Log Scale	2.066
95% UTL95% Coverage	33.6	95% BCA UTL95% Coverage	1.3
95% Bootstrap (%) UTL95% Coverage	1.3	95% UPL (t)	2.949
90% Percentile (z)	0.655	95% Percentile (z)	1.388
99% Percentile (z)	5.675	95% USL	3.087

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-1.84	95% KM UTL (Lognormal)95% Coverage	2.204
KM SD of Logged Data	0.825	95% KM UPL (Lognormal)	0.834
95% KM Percentile Lognormal (z)	0.617	95% KM USL (Lognormal)	0.849

Calcium

General Statistics

Total Number of Observations	13	Number of Distinct Observations	10
Minimum	36	First Quartile	53
Second Largest	63	Median	58
Maximum	63	Third Quartile	61
Mean	55.31	SD	7.814
Coefficient of Variation	0.141	Skewness	-1.407
Mean of logged Data	4.002	SD of logged Data	0.158

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Normal GOF Test

Shapiro Wilk Test Statistic	0.864	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.866	Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.182	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.234	Data appear Normal at 5% Significance Level	

Data appear Approximate Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with 95% Coverage	76.18	90% Percentile (z)	65.32
95% UPL (t)	69.76	95% Percentile (z)	68.16
95% USL	73.52	99% Percentile (z)	73.49

Chloride

General Statistics

Total Number of Observations	13	Number of Distinct Observations	5
Minimum	11	First Quartile	11
Second Largest	14	Median	11
Maximum	18	Third Quartile	12
Mean	12.08	SD	2.019
Coefficient of Variation	0.167	Skewness	2.461
Mean of logged Data	2.481	SD of logged Data	0.146

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for Background Threshold Values

Order of Statistic, r	13	95% UTL with 95% Coverage	18
Approx, f used to compute achieved CC	0.684	Approximate Actual Confidence Coefficient achieved by UTL	0.487
95% Percentile Bootstrap UTL with 95% Coverage	18	Approximate Sample Size needed to achieve specified CC	59
95% UPL	18	95% BCA Bootstrap UTL with 95% Coverage	18
90% Chebyshev UPL	18.36	90% Percentile	13.8
95% Chebyshev UPL	21.21	95% Percentile	15.6
95% USL	18	99% Percentile	17.52

Fluoride

General Statistics

Total Number of Observations	13	Number of Missing Observations	0
Number of Distinct Observations	11		
Number of Detects	12	Number of Non-Detects	1
Number of Distinct Detects	11	Number of Distinct Non-Detects	1
Minimum Detect	0.25	Minimum Non-Detect	0.25
Maximum Detect	1.6	Maximum Non-Detect	0.25
Variance Detected	0.118	Percent Non-Detects	7.692%
Mean Detected	0.778	SD Detected	0.344
Mean of Detected Logged Data	-0.342	SD of Detected Logged Data	0.458

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.911	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.859	Detected Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.18	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.243	Detected Data appear Normal at 5% Significance Level	

Detected Data appear Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.737	KM SD	0.346
95% UTL95% Coverage	1.662	95% KM UPL (t)	1.378
90% KM Percentile (z)	1.181	95% KM Percentile (z)	1.307
99% KM Percentile (z)	1.543	95% KM USL	1.544

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.727	SD	0.376
95% UTL95% Coverage	1.731	95% UPL (t)	1.423
90% Percentile (z)	1.209	95% Percentile (z)	1.346
99% Percentile (z)	1.602	95% USL	1.603

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Magnesium

General Statistics

Total Number of Observations	13	Number of Distinct Observations	7
Minimum	8.7	First Quartile	17
Second Largest	19	Median	19
Maximum	20	Third Quartile	19
Mean	17	SD	3.699
Coefficient of Variation	0.218	Skewness	-1.853
Mean of logged Data	2.803	SD of logged Data	0.276

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for Background Threshold Values

Order of Statistic, r	13	95% UTL with 95% Coverage	20
Approx, f used to compute achieved CC	0.684	Approximate Actual Confidence Coefficient achieved by UTL	0.487
95% Percentile Bootstrap UTL with 95% Coverage	20	Approximate Sample Size needed to achieve specified CC	59
95% UPL	20	95% BCA Bootstrap UTL with 95% Coverage	20
90% Chebyshev UPL	28.52	90% Percentile	19
95% Chebyshev UPL	33.73	95% Percentile	19.4
95% USL	20	99% Percentile	19.88

Nitrate

General Statistics

Total Number of Observations	13	Number of Missing Observations	0
Number of Distinct Observations	4		
Number of Detects	2	Number of Non-Detects	11
Number of Distinct Detects	2	Number of Distinct Non-Detects	2
Minimum Detect	0.4	Minimum Non-Detect	0.055
Maximum Detect	0.46	Maximum Non-Detect	0.22
Variance Detected	0.0018	Percent Non-Detects	84.62%
Mean Detected	0.43	SD Detected	0.0424
Mean of Detected Logged Data	-0.846	SD of Detected Logged Data	0.0988

Warning: Data set has only 2 Detected Values.

This is not enough to compute meaningful or reliable statistics and estimates.

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	13	95% UTL with95% Coverage	0.46
Approx, f used to compute achieved CC	0.684	Approximate Actual Confidence Coefficient achieved by UTL	0.487
Approximate Sample Size needed to achieve specified CC	59	95% UPL	0.46
95% USL	0.46	95% KM Chebyshev UPL	0.727

Nitrite

General Statistics

Total Number of Observations	13	Number of Missing Observations	0
Number of Distinct Observations	8		
Number of Detects	5	Number of Non-Detects	8
Number of Distinct Detects	5	Number of Distinct Non-Detects	3
Minimum Detect	0.24	Minimum Non-Detect	0.025
Maximum Detect	0.49	Maximum Non-Detect	0.07
Variance Detected	0.00862	Percent Non-Detects	61.54%
Mean Detected	0.362	SD Detected	0.0928
Mean of Detected Logged Data	-1.044	SD of Detected Logged Data	0.266

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.997	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.762	Detected Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.141	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.343	Detected Data appear Normal at 5% Significance Level

Detected Data appear Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.155	KM SD	0.172
95% UTL95% Coverage	0.614	95% KM UPL (t)	0.472
90% KM Percentile (z)	0.375	95% KM Percentile (z)	0.437
99% KM Percentile (z)	0.554	95% KM USL	0.555

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.151	SD	0.182
95% UTL95% Coverage	0.637	95% UPL (t)	0.487
90% Percentile (z)	0.384	95% Percentile (z)	0.45
99% Percentile (z)	0.574	95% USL	0.575

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Potassium

General Statistics

Total Number of Observations	13	Number of Distinct Observations	9
Minimum	39	First Quartile	45
Second Largest	52	Median	49
Maximum	52	Third Quartile	51
Mean	47.38	SD	4.556
Coefficient of Variation	0.0961	Skewness	-0.751
Mean of logged Data	3.854	SD of logged Data	0.0998

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Normal GOF Test

Shapiro Wilk Test Statistic	0.88	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.866	Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.179	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.234	Data appear Normal at 5% Significance Level

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	59.55	90% Percentile (z)	53.22
	95% UPL (t)	55.81	95% Percentile (z)	54.88
	95% USL	58	99% Percentile (z)	57.98

Sodium

General Statistics

Total Number of Observations	13	Number of Distinct Observations	10
Minimum	34	First Quartile	37
Second Largest	50	Median	38
Maximum	61	Third Quartile	46
Mean	42.08	SD	7.697
Coefficient of Variation	0.183	Skewness	1.351
Mean of logged Data	3.726	SD of logged Data	0.17

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Gamma GOF Test

A-D Test Statistic	0.608	**Anderson-Darling Gamma GOF Test**
5% A-D Critical Value	0.733	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.246	**Kolmogorov-Smirnov Gamma GOF Test**
5% K-S Critical Value	0.236	Data Not Gamma Distributed at 5% Significance Level

Detected data follow Appr. Gamma Distribution at 5% Significance Level

Gamma Statistics

k hat (MLE)	35.95	k star (bias corrected MLE)	27.71
Theta hat (MLE)	1.17	Theta star (bias corrected MLE)	1.519
nu hat (MLE)	934.8	nu star (bias corrected)	720.4
MLE Mean (bias corrected)	42.08	MLE Sd (bias corrected)	7.994

Background Statistics Assuming Gamma Distribution

95% Wilson Hilferty (WH) Approx. Gamma UPL	56.6	90% Percentile	52.59
95% Hawkins Wixley (HW) Approx. Gamma UPL	56.65	95% Percentile	56.03
95% WH Approx. Gamma UTL with 95% Coverage	64.23	99% Percentile	62.87
95% HW Approx. Gamma UTL with 95% Coverage	64.48		
95% WH USL	60.99	95% HW USL	61.14

Sulfate

General Statistics

Total Number of Observations	13	Number of Distinct Observations	11
Minimum	290	First Quartile	560
Second Largest	730	Median	690
Maximum	780	Third Quartile	720
Mean	613.8	SD	160.2
Coefficient of Variation	0.261	Skewness	-1.341
Mean of logged Data	6.377	SD of logged Data	0.329

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for Background Threshold Values

Order of Statistic, r	13	95% UTL with 95% Coverage	780
Approx, f used to compute achieved CC	0.684	Approximate Actual Confidence Coefficient achieved by UTL	0.487
95% Percentile Bootstrap UTL with 95% Coverage	780	Approximate Sample Size needed to achieve specified CC	59
95% UPL	780	95% BCA Bootstrap UTL with 95% Coverage	780
90% Chebyshev UPL	1113	90% Percentile	728
95% Chebyshev UPL	1338	95% Percentile	750
95% USL	780	99% Percentile	774

Background Statistics for Data Sets with Non-Detects

Anions and Cations - MW-2

User Selected Options

Date/Time of Computation	ProUCL 5.1 4/8/2019 1:14:38 PM
From File	Anions and Cations Input_a.xls
Full Precision	OFF
Confidence Coefficient	95%
Coverage	95%
Different or Future K Observations	1
Number of Bootstrap Operations	2000

Ammonia

General Statistics

Total Number of Observations	8	Number of Missing Observations	5
Number of Distinct Observations	4		
Number of Detects	3	Number of Non-Detects	5
Number of Distinct Detects	3	Number of Distinct Non-Detects	1
Minimum Detect	0.14	Minimum Non-Detect	0.1
Maximum Detect	0.24	Maximum Non-Detect	0.1
Variance Detected	0.0025	Percent Non-Detects	62.5%
Mean Detected	0.19	SD Detected	0.05
Mean of Detected Logged Data	-1.685	SD of Detected Logged Data	0.27

Warning: Data set has only 3 Detected Values.

This is not enough to compute meaningful or reliable statistics and estimates.

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	1	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.767	Detected Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.175	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.425	Detected Data appear Normal at 5% Significance Level	

Detected Data appear Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.134	KM SD	0.0502
95% UTL95% Coverage	0.294	95% KM UPL (t)	0.235
90% KM Percentile (z)	0.198	95% KM Percentile (z)	0.216
99% KM Percentile (z)	0.251	95% KM USL	0.236

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.103	SD	0.0772
95% UTL95% Coverage	0.349	95% UPL (t)	0.258
90% Percentile (z)	0.201	95% Percentile (z)	0.23
99% Percentile (z)	0.282	95% USL	0.259

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Calcium

General Statistics

Total Number of Observations	13	Number of Distinct Observations	12
Minimum	48	First Quartile	51
Second Largest	85	Median	56
Maximum	86	Third Quartile	67
Mean	60.69	SD	12.89
Coefficient of Variation	0.212	Skewness	1.153
Mean of logged Data	4.087	SD of logged Data	0.198

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Normal GOF Test

Shapiro Wilk Test Statistic	0.841	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.866	Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.198	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.234	Data appear Normal at 5% Significance Level	

Data appear Approximate Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with 95% Coverage	95.13	90% Percentile (z)	77.22
95% UPL (t)	84.54	95% Percentile (z)	81.9
95% USL	90.74	99% Percentile (z)	90.69

Chloride

General Statistics

Total Number of Observations	13	Number of Distinct Observations	4
Minimum	12	First Quartile	13
Second Largest	15	Median	14
Maximum	15	Third Quartile	15
Mean	13.85	SD	1.068
Coefficient of Variation	0.0771	Skewness	-0.617
Mean of logged Data	2.625	SD of logged Data	0.0791

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for Background Threshold Values

Order of Statistic, r	13	95% UTL with 95% Coverage	15
Approx, f used to compute achieved CC	0.684	Approximate Actual Confidence Coefficient achieved by UTL	0.487
95% Percentile Bootstrap UTL with 95% Coverage	15	Approximate Sample Size needed to achieve specified CC	59
95% UPL	15	95% BCA Bootstrap UTL with 95% Coverage	15
90% Chebyshev UPL	17.17	90% Percentile	15
95% Chebyshev UPL	18.68	95% Percentile	15
95% USL	15	99% Percentile	15

Fluoride

General Statistics

Total Number of Observations	13	Number of Missing Observations	0
Number of Distinct Observations	11		
Number of Detects	12	Number of Non-Detects	1
Number of Distinct Detects	10	Number of Distinct Non-Detects	1
Minimum Detect	0.41	Minimum Non-Detect	0.25
Maximum Detect	1.1	Maximum Non-Detect	0.25
Variance Detected	0.0649	Percent Non-Detects	7.692%
Mean Detected	0.658	SD Detected	0.255
Mean of Detected Logged Data	-0.482	SD of Detected Logged Data	0.359

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	13	95% UTL with95% Coverage	1.1
Approx, f used to compute achieved CC	0.684	Approximate Actual Confidence Coefficient achieved by UTL	0.487
Approximate Sample Size needed to achieve specified CC	59	95% UPL	1.1
95% USL	1.1	95% KM Chebyshev UPL	1.794

Magnesium

General Statistics

Total Number of Observations	13	Number of Distinct Observations	5
Minimum	14	First Quartile	15
Second Largest	17	Median	15
Maximum	18	Third Quartile	16
Mean	15.46	SD	1.127
Coefficient of Variation	0.0729	Skewness	0.939
Mean of logged Data	2.736	SD of logged Data	0.0712

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Normal GOF Test

Shapiro Wilk Test Statistic	0.881	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.866	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.274	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.234	Data Not Normal at 5% Significance Level	

Data appear Approximate Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	18.47	90% Percentile (z)	16.91
	95% UPL (t)	17.55	95% Percentile (z)	17.31
	95% USL	18.09	99% Percentile (z)	18.08

Nitrate

General Statistics

Total Number of Observations	13	Number of Missing Observations	0
Number of Distinct Observations	4		
Number of Detects	1	Number of Non-Detects	12
Number of Distinct Detects	1	Number of Distinct Non-Detects	3
Minimum Detect	0.66	Minimum Non-Detect	0.055
Maximum Detect	0.66	Maximum Non-Detect	0.22
Variance Detected	N/A	Percent Non-Detects	92.31%
Mean Detected	0.66	SD Detected	N/A
Mean of Detected Logged Data	-0.416	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!

It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Nitrate was not processed!

Nitrite

General Statistics

Total Number of Observations	13	Number of Missing Observations	0
Number of Distinct Observations	7		
Number of Detects	5	Number of Non-Detects	8
Number of Distinct Detects	5	Number of Distinct Non-Detects	2
Minimum Detect	0.1	Minimum Non-Detect	0.025
Maximum Detect	0.23	Maximum Non-Detect	0.07
Variance Detected	0.00298	Percent Non-Detects	61.54%
Mean Detected	0.156	SD Detected	0.0546
Mean of Detected Logged Data	-1.907	SD of Detected Logged Data	0.353

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.937	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.762	Detected Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.2	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.343	Detected Data appear Normal at 5% Significance Level	

Detected Data appear Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.0754	KM SD	0.0706
95% UTL95% Coverage	0.264	95% KM UPL (t)	0.206
90% KM Percentile (z)	0.166	95% KM Percentile (z)	0.191
99% KM Percentile (z)	0.24	95% KM USL	0.24

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.0729	SD	0.0758
95% UTL95% Coverage	0.275	95% UPL (t)	0.213
90% Percentile (z)	0.17	95% Percentile (z)	0.198
99% Percentile (z)	0.249	95% USL	0.25

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Potassium

General Statistics

Total Number of Observations	13	Number of Distinct Observations	9
Minimum	38	First Quartile	45
Second Largest	50	Median	47
Maximum	51	Third Quartile	49
Mean	46.54	SD	3.406
Coefficient of Variation	0.0732	Skewness	-1.266
Mean of logged Data	3.838	SD of logged Data	0.0767

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Normal GOF Test

Shapiro Wilk Test Statistic	0.912	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.866	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.172	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.234	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	55.64	90% Percentile (z)	50.9
	95% UPL (t)	52.84	95% Percentile (z)	52.14
	95% USL	54.48	99% Percentile (z)	54.46

Sodium

General Statistics

Total Number of Observations	13	Number of Distinct Observations	9
Minimum	45	First Quartile	51
Second Largest	57	Median	53
Maximum	60	Third Quartile	55
Mean	52.85	SD	3.783
Coefficient of Variation	0.0716	Skewness	-0.187
Mean of logged Data	3.965	SD of logged Data	0.0724

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Normal GOF Test

Shapiro Wilk Test Statistic	0.98	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.866	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.131	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.234	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	62.95	90% Percentile (z)	57.69
	95% UPL (t)	59.84	95% Percentile (z)	59.07
	95% USL	61.66	99% Percentile (z)	61.65

Sulfate

General Statistics

Total Number of Observations	13	Number of Distinct Observations	9
Minimum	520	First Quartile	550
Second Largest	630	Median	550
Maximum	630	Third Quartile	600
Mean	570.8	SD	38.4
Coefficient of Variation	0.0673	Skewness	0.526
Mean of logged Data	6.345	SD of logged Data	0.0664

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Normal GOF Test

Shapiro Wilk Test Statistic	0.883	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.866	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.244	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.234	Data Not Normal at 5% Significance Level	

Data appear Approximate Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	673.3	90% Percentile (z)	620
	95% UPL (t)	641.8	95% Percentile (z)	633.9
	95% USL	660.3	99% Percentile (z)	660.1

Background Statistics for Data Sets with Non-Detects

Anions and Cations - MW-3

User Selected Options

Date/Time of Computation	ProUCL 5.1 4/8/2019 1:16:17 PM
From File	Anions and Cations Input_b.xls
Full Precision	OFF
Confidence Coefficient	95%
Coverage	95%
Different or Future K Observations	1
Number of Bootstrap Operations	2000

Ammonia

General Statistics

Total Number of Observations	8	Number of Missing Observations	5
Number of Distinct Observations	4		
Number of Detects	3	Number of Non-Detects	5
Number of Distinct Detects	3	Number of Distinct Non-Detects	1
Minimum Detect	0.22	Minimum Non-Detect	0.1
Maximum Detect	0.29	Maximum Non-Detect	0.1
Variance Detected	0.0013	Percent Non-Detects	62.5%
Mean Detected	0.25	SD Detected	0.0361
Mean of Detected Logged Data	-1.393	SD of Detected Logged Data	0.141

Warning: Data set has only 3 Detected Values.

This is not enough to compute meaningful or reliable statistics and estimates.

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.942	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.767	Detected Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.276	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.425	Detected Data appear Normal at 5% Significance Level	

Detected Data appear Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.156	KM SD	0.0748
95% UTL95% Coverage	0.395	95% KM UPL (t)	0.307
90% KM Percentile (z)	0.252	95% KM Percentile (z)	0.279
99% KM Percentile (z)	0.33	95% KM USL	0.308

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.125	SD	0.105
95% UTL95% Coverage	0.461	95% UPL (t)	0.337
90% Percentile (z)	0.26	95% Percentile (z)	0.298
99% Percentile (z)	0.37	95% USL	0.339

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Calcium

General Statistics

Total Number of Observations	13	Number of Distinct Observations	9
Minimum	23	First Quartile	24
Second Largest	35	Median	27
Maximum	37	Third Quartile	30
Mean	27.92	SD	4.31
Coefficient of Variation	0.154	Skewness	1.021
Mean of logged Data	3.319	SD of logged Data	0.147

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Normal GOF Test

Shapiro Wilk Test Statistic	0.891	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.866	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.2	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.234	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	39.44	90% Percentile (z)	33.45
	95% UPL (t)	35.89	95% Percentile (z)	35.01
	95% USL	37.97	99% Percentile (z)	37.95

Chloride

General Statistics

Total Number of Observations	13	Number of Distinct Observations	5
Minimum	14	First Quartile	15
Second Largest	18	Median	16
Maximum	18	Third Quartile	17
Mean	16.15	SD	1.214
Coefficient of Variation	0.0752	Skewness	-0.0117
Mean of logged Data	2.78	SD of logged Data	0.0755

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Normal GOF Test

Shapiro Wilk Test Statistic	0.938	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.866	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.166	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.234	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	19.4	90% Percentile (z)	17.71
	95% UPL (t)	18.4	95% Percentile (z)	18.15
	95% USL	18.98	99% Percentile (z)	18.98

Fluoride

General Statistics

Total Number of Observations	13	Number of Distinct Observations	10
Minimum	0.79	First Quartile	0.88
Second Largest	1.8	Median	0.95
Maximum	1.8	Third Quartile	1.3
Mean	1.152	SD	0.396
Coefficient of Variation	0.344	Skewness	1.011
Mean of logged Data	0.0931	SD of logged Data	0.315

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for Background Threshold Values

Order of Statistic, r	13	95% UTL with 95% Coverage	1.8
Approx, f used to compute achieved CC	0.684	Approximate Actual Confidence Coefficient achieved by UTL	0.487
95% Percentile Bootstrap UTL with 95% Coverage	1.8	Approximate Sample Size needed to achieve specified CC	59
95% UPL	1.8	95% BCA Bootstrap UTL with 95% Coverage	1.8
90% Chebyshev UPL	2.387	90% Percentile	1.8
95% Chebyshev UPL	2.946	95% Percentile	1.8
95% USL	1.8	99% Percentile	1.8

Magnesium

General Statistics

Total Number of Observations	13	Number of Distinct Observations	6
Minimum	15	First Quartile	16
Second Largest	20	Median	16
Maximum	21	Third Quartile	19
Mean	17.08	SD	2.019
Coefficient of Variation	0.118	Skewness	0.81
Mean of logged Data	2.832	SD of logged Data	0.115

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Normal GOF Test

Shapiro Wilk Test Statistic	0.869	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.866	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.242	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.234	Data Not Normal at 5% Significance Level	

Data appear Approximate Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with 95% Coverage	22.47	90% Percentile (z)	19.66
95% UPL (t)	20.81	95% Percentile (z)	20.4
95% USL	21.78	99% Percentile (z)	21.77

Nitrate

General Statistics

Total Number of Observations	13	Number of Missing Observations	0
Number of Distinct Observations	4		
Number of Detects	1	Number of Non-Detects	12
Number of Distinct Detects	1	Number of Distinct Non-Detects	3
Minimum Detect	0.62	Minimum Non-Detect	0.055
Maximum Detect	0.62	Maximum Non-Detect	0.22
Variance Detected	N/A	Percent Non-Detects	92.31%
Mean Detected	0.62	SD Detected	N/A
Mean of Detected Logged Data	-0.478	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!

It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Nitrate was not processed!

Nitrite

General Statistics

Total Number of Observations	13	Number of Missing Observations	0
Number of Distinct Observations	5		
Number of Detects	2	Number of Non-Detects	11
Number of Distinct Detects	2	Number of Distinct Non-Detects	3
Minimum Detect	0.013	Minimum Non-Detect	0.025
Maximum Detect	0.33	Maximum Non-Detect	0.07
Variance Detected	0.0502	Percent Non-Detects	84.62%
Mean Detected	0.172	SD Detected	0.224
Mean of Detected Logged Data	-2.726	SD of Detected Logged Data	2.287

Warning: Data set has only 2 Detected Values.

This is not enough to compute meaningful or reliable statistics and estimates.

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	13	95% UTL with95% Coverage	0.33
Approx, f used to compute achieved CC	0.684	Approximate Actual Confidence Coefficient achieved by UTL	0.487
Approximate Sample Size needed to achieve specified CC	59	95% UPL	0.33
95% USL	0.33	95% KM Chebyshev UPL	0.419

Potassium

General Statistics

Total Number of Observations	13	Number of Distinct Observations	7
Minimum	17	First Quartile	19
Second Largest	22	Median	20
Maximum	23	Third Quartile	21
Mean	20	SD	1.732
Coefficient of Variation	0.0866	Skewness	-0.114
Mean of logged Data	2.992	SD of logged Data	0.0875

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Normal GOF Test

Shapiro Wilk Test Statistic	0.962	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.866	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.18	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.234	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	24.63	90% Percentile (z)	22.22
	95% UPL (t)	23.2	95% Percentile (z)	22.85
	95% USL	24.04	99% Percentile (z)	24.03

Sodium

General Statistics

Total Number of Observations	13	Number of Distinct Observations	9
Minimum	38	First Quartile	40
Second Largest	49	Median	42
Maximum	50	Third Quartile	48
Mean	43.38	SD	4.35
Coefficient of Variation	0.1	Skewness	0.46
Mean of logged Data	3.766	SD of logged Data	0.0988

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Gamma GOF Test

A-D Test Statistic	0.814	**Anderson-Darling Gamma GOF Test**	
5% A-D Critical Value	0.732	Data Not Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.236	**Kolmogorov-Smirnov Gamma GOF Test**	
5% K-S Critical Value	0.236	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data follow Appr. Gamma Distribution at 5% Significance Level

Gamma Statistics

k hat (MLE)	110	k star (bias corrected MLE)	84.7
Theta hat (MLE)	0.394	Theta star (bias corrected MLE)	0.512
nu hat (MLE)	2861	nu star (bias corrected)	2202
MLE Mean (bias corrected)	43.38	MLE Sd (bias corrected)	4.714

Background Statistics Assuming Gamma Distribution

95% Wilson Hilferty (WH) Approx. Gamma UPL	51.7	90% Percentile	49.53
95% Hawkins Wixley (HW) Approx. Gamma UPL	51.73	95% Percentile	51.42
95% WH Approx. Gamma UTL with 95% Coverage	55.77	99% Percentile	55.1
95% HW Approx. Gamma UTL with 95% Coverage	55.88		
95% WH USL	54.06	95% HW USL	54.13

Sulfate

General Statistics

Total Number of Observations	13	Number of Distinct Observations	5
Minimum	160	First Quartile	180
Second Largest	190	Median	180
Maximum	220	Third Quartile	180
Mean	181.5	SD	14.05
Coefficient of Variation	0.0774	Skewness	1.598
Mean of logged Data	5.199	SD of logged Data	0.0742

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for Background Threshold Values

Order of Statistic, r	13	95% UTL with 95% Coverage	220
Approx, f used to compute achieved CC	0.684	Approximate Actual Confidence Coefficient achieved by UTL	0.487
95% Percentile Bootstrap UTL with 95% Coverage	220	Approximate Sample Size needed to achieve specified CC	59
95% UPL	220	95% BCA Bootstrap UTL with 95% Coverage	220
90% Chebyshev UPL	225.3	90% Percentile	190
95% Chebyshev UPL	245.1	95% Percentile	202
95% USL	220	99% Percentile	216.4

Background Statistics for Data Sets with Non-Detects

Anions and Cations - MW-4

User Selected Options

Date/Time of Computation	ProUCL 5.1 4/8/2019 1:17:06 PM
From File	Anions and Cations Input_c.xls
Full Precision	OFF
Confidence Coefficient	95%
Coverage	95%
Different or Future K Observations	1
Number of Bootstrap Operations	2000

Ammonia

General Statistics

Total Number of Observations	8	Number of Missing Observations	0
Number of Distinct Observations	6		
Number of Detects	7	Number of Non-Detects	1
Number of Distinct Detects	5	Number of Distinct Non-Detects	1
Minimum Detect	1.3	Minimum Non-Detect	0.1
Maximum Detect	2	Maximum Non-Detect	0.1
Variance Detected	0.0648	Percent Non-Detects	12.5%
Mean Detected	1.614	SD Detected	0.254
Mean of Detected Logged Data	0.468	SD of Detected Logged Data	0.156

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.925	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.803	Detected Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.245	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.304	Detected Data appear Normal at 5% Significance Level

Detected Data appear Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	1.425	KM SD	0.547
95% UTL95% Coverage	3.169	95% KM UPL (t)	2.525
90% KM Percentile (z)	2.126	95% KM Percentile (z)	2.325
99% KM Percentile (z)	2.698	95% KM USL	2.537

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	1.419	SD	0.601
95% UTL95% Coverage	3.335	95% UPL (t)	2.627
90% Percentile (z)	2.189	95% Percentile (z)	2.408
99% Percentile (z)	2.817	95% USL	2.64

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Calcium

General Statistics

Total Number of Observations	8	Number of Distinct Observations	8
Minimum	83	First Quartile	96
Second Largest	320	Median	140
Maximum	360	Third Quartile	222.5
Mean	177.4	SD	108
Coefficient of Variation	0.609	Skewness	1.002
Mean of logged Data	5.027	SD of logged Data	0.576

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test

Shapiro Wilk Test Statistic	0.832	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.818	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.234	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.283	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	521.6	90% Percentile (z)	315.8
	95% UPL (t)	394.4	95% Percentile (z)	355
	95% USL	396.8	99% Percentile (z)	428.6

Chloride

General Statistics

Total Number of Observations	8	Number of Distinct Observations	5
Minimum	19	First Quartile	19
Second Largest	25	Median	19.5
Maximum	32	Third Quartile	22.75
Mean	21.88	SD	4.612
Coefficient of Variation	0.211	Skewness	1.878
Mean of logged Data	3.069	SD of logged Data	0.188

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Gamma GOF Test

A-D Test Statistic	0.973	**Anderson-Darling Gamma GOF Test**	
5% A-D Critical Value	0.716	Data Not Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.289	**Kolmogorov-Smirnov Gamma GOF Test**	
5% K-S Critical Value	0.294	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data follow Appr. Gamma Distribution at 5% Significance Level

Gamma Statistics

k hat (MLE)	30.1	k star (bias corrected MLE)	18.9
Theta hat (MLE)	0.727	Theta star (bias corrected MLE)	1.158
nu hat (MLE)	481.6	nu star (bias corrected)	302.4
MLE Mean (bias corrected)	21.88	MLE Sd (bias corrected)	5.032

Background Statistics Assuming Gamma Distribution

95% Wilson Hilferty (WH) Approx. Gamma UPL	31.29	90% Percentile	28.52
95% Hawkins Wixley (HW) Approx. Gamma UPL	31.31	95% Percentile	30.76
95% WH Approx. Gamma UTL with 95% Coverage	38.1	99% Percentile	35.25
95% HW Approx. Gamma UTL with 95% Coverage	38.35		
95% WH USL	31.41	95% HW USL	31.44

Fluoride

General Statistics

Total Number of Observations	8	Number of Distinct Observations	6
Minimum	0.77	First Quartile	1.039
Second Largest	2.3	Median	1.2
Maximum	2.6	Third Quartile	1.55
Mean	1.416	SD	0.67
Coefficient of Variation	0.473	Skewness	1.167
Mean of logged Data	0.261	SD of logged Data	0.433

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test

Shapiro Wilk Test Statistic	0.826	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.818	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.319	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.283	Data Not Normal at 5% Significance Level	

Data appear Approximate Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with 95% Coverage	3.551	90% Percentile (z)	2.274
95% UPL (t)	2.762	95% Percentile (z)	2.518
95% USL	2.777	99% Percentile (z)	2.974

Magnesium

General Statistics

Total Number of Observations	8	Number of Distinct Observations	8
Minimum	10	First Quartile	26.75
Second Largest	64	Median	31.5
Maximum	65	Third Quartile	48.25
Mean	37.25	SD	19.12
Coefficient of Variation	0.513	Skewness	0.479
Mean of logged Data	3.481	SD of logged Data	0.597

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test

Shapiro Wilk Test Statistic	0.906	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.818	Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.233	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.283	Data appear Normal at 5% Significance Level

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	98.19	90% Percentile (z)	61.76
	95% UPL (t)	75.68	95% Percentile (z)	68.7
	95% USL	76.1	99% Percentile (z)	81.73

Nitrite

General Statistics

Total Number of Observations	8	Number of Missing Observations	0
Number of Distinct Observations	2		
Number of Detects	1	Number of Non-Detects	7
Number of Distinct Detects	1	Number of Distinct Non-Detects	1
Minimum Detect	0.19	Minimum Non-Detect	0.07
Maximum Detect	0.19	Maximum Non-Detect	0.07
Variance Detected	N/A	Percent Non-Detects	87.5%
Mean Detected	0.19	SD Detected	N/A
Mean of Detected Logged Data	-1.661	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!

It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Nitrite was not processed!

Potassium

General Statistics

Total Number of Observations	8	Number of Distinct Observations	7
Minimum	28.5	First Quartile	55
Second Largest	67	Median	61
Maximum	70	Third Quartile	66.25
Mean	57.69	SD	13.18
Coefficient of Variation	0.229	Skewness	-1.807
Mean of logged Data	4.024	SD of logged Data	0.289

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test

Shapiro Wilk Test Statistic	0.821	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.818	Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.224	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.283	Data appear Normal at 5% Significance Level

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	99.7	90% Percentile (z)	74.58
	95% UPL (t)	84.18	95% Percentile (z)	79.37
	95% USL	84.47	99% Percentile (z)	88.35

Sodium

General Statistics

Total Number of Observations	8	Number of Distinct Observations	8
Minimum	88	First Quartile	93.5
Second Largest	345	Median	96.5
Maximum	390	Third Quartile	183.8
Mean	166.5	SD	125.3
Coefficient of Variation	0.753	Skewness	1.436
Mean of logged Data	4.92	SD of logged Data	0.62

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for Background Threshold Values

Order of Statistic, r	8	95% UTL with	95% Coverage	390
Approx, f used to compute achieved CC	0.421	Approximate Actual Confidence Coefficient achieved by UTL		0.337
95% Percentile Bootstrap UTL with	95% Coverage	390	Approximate Sample Size needed to achieve specified CC	59
95% UPL	390	95% BCA Bootstrap UTL with	95% Coverage	390
90% Chebyshev UPL	565.2	90% Percentile		358.5
95% Chebyshev UPL	745.9	95% Percentile		374.3
95% USL	390	99% Percentile		386.9

Sulfate

General Statistics

Total Number of Observations	8	Number of Distinct Observations	7
Minimum	1150	First Quartile	1450
Second Largest	2800	Median	1600
Maximum	2900	Third Quartile	2125
Mean	1844	SD	659.8
Coefficient of Variation	0.358	Skewness	0.987
Mean of logged Data	7.468	SD of logged Data	0.335

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test

Shapiro Wilk Test Statistic	0.844	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.818	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.269	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.283	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	3946	90% Percentile (z)	2689
	95% UPL (t)	3170	95% Percentile (z)	2929
	95% USL	3184	99% Percentile (z)	3379

Background Statistics for Data Sets with Non-Detects

Anions and Cations - MW-5

User Selected Options

Date/Time of Computation	ProUCL 5.1 4/8/2019 1:17:45 PM
From File	Anions and Cations Input_d.xls
Full Precision	OFF
Confidence Coefficient	95%
Coverage	95%
Different or Future K Observations	1
Number of Bootstrap Operations	2000

Ammonia

General Statistics

Total Number of Observations	8	Number of Missing Observations	0
Number of Distinct Observations	2		
Number of Detects	1	Number of Non-Detects	7
Number of Distinct Detects	1	Number of Distinct Non-Detects	1
Minimum Detect	0.16	Minimum Non-Detect	0.1
Maximum Detect	0.16	Maximum Non-Detect	0.1
Variance Detected	N/A	Percent Non-Detects	87.5%
Mean Detected	0.16	SD Detected	N/A
Mean of Detected Logged Data	-1.833	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!

It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Ammonia was not processed!

Calcium

General Statistics

Total Number of Observations	8	Number of Distinct Observations	8
Minimum	39	First Quartile	54.25
Second Largest	66	Median	61.5
Maximum	73	Third Quartile	65.25
Mean	59.13	SD	10.41
Coefficient of Variation	0.176	Skewness	-0.903
Mean of logged Data	4.064	SD of logged Data	0.193

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test

Shapiro Wilk Test Statistic	0.947	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.818	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.196	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.283	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	92.31	90% Percentile (z)	72.47
	95% UPL (t)	80.05	95% Percentile (z)	76.25
	95% USL	80.28	99% Percentile (z)	83.35

Chloride

General Statistics

Total Number of Observations	8	Number of Distinct Observations	3
Minimum	16	First Quartile	17.5
Second Largest	19	Median	18.5
Maximum	19	Third Quartile	19
Mean	18	SD	1.309
Coefficient of Variation	0.0727	Skewness	-1.018
Mean of logged Data	2.888	SD of logged Data	0.075

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test

Shapiro Wilk Test Statistic	0.748	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.818	Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.277	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.283	Data appear Normal at 5% Significance Level	

Data appear Approximate Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	22.17	90% Percentile (z)	19.68
	95% UPL (t)	20.63	95% Percentile (z)	20.15
	95% USL	20.66	99% Percentile (z)	21.05

Fluoride

General Statistics

Total Number of Observations	8	Number of Missing Observations	0
Number of Distinct Observations	3		
Number of Detects	2	Number of Non-Detects	6
Number of Distinct Detects	2	Number of Distinct Non-Detects	1
Minimum Detect	0.26	Minimum Non-Detect	0.25
Maximum Detect	0.31	Maximum Non-Detect	0.25
Variance Detected	0.00125	Percent Non-Detects	75%
Mean Detected	0.285	SD Detected	0.0354
Mean of Detected Logged Data	-1.259	SD of Detected Logged Data	0.124

Warning: Data set has only 2 Detected Values.

This is not enough to compute meaningful or reliable statistics and estimates.

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	8	95% UTL with95% Coverage	0.31
Approx, f used to compute achieved CC	0.421	Approximate Actual Confidence Coefficient achieved by UTL	0.337
Approximate Sample Size needed to achieve specified CC	59	95% UPL	0.31
95% USL	0.31	95% KM Chebyshev UPL	0.35

Magnesium

General Statistics

Total Number of Observations	8	Number of Distinct Observations	4
Minimum	17	First Quartile	19
Second Largest	20	Median	19.5
Maximum	21	Third Quartile	20
Mean	19.38	SD	1.188
Coefficient of Variation	0.0613	Skewness	-0.97
Mean of logged Data	2.962	SD of logged Data	0.0629

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test

Shapiro Wilk Test Statistic	0.892	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.818	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.251	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.283	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	23.16	90% Percentile (z)	20.9
	95% UPL (t)	21.76	95% Percentile (z)	21.33
	95% USL	21.79	99% Percentile (z)	22.14

Nitrate

General Statistics

Total Number of Observations	8	Number of Distinct Observations	5
Minimum	0.14	First Quartile	0.158
Second Largest	0.17	Median	0.16
Maximum	0.19	Third Quartile	0.17
Mean	0.163	SD	0.0149
Coefficient of Variation	0.0916	Skewness	0.477
Mean of logged Data	-1.821	SD of logged Data	0.0908

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test

Shapiro Wilk Test Statistic	0.948	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.818	Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.192	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.283	Data appear Normal at 5% Significance Level

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	0.21	90% Percentile (z)	0.182
	95% UPL (t)	0.192	95% Percentile (z)	0.187
	95% USL	0.193	99% Percentile (z)	0.197

Potassium

General Statistics

Total Number of Observations	8	Number of Distinct Observations	4
Minimum	18	First Quartile	22.25
Second Largest	25	Median	23
Maximum	25	Third Quartile	23.5
Mean	22.5	SD	2.39
Coefficient of Variation	0.106	Skewness	-1.046
Mean of logged Data	3.108	SD of logged Data	0.112

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test

Shapiro Wilk Test Statistic	0.846	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.818	Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.333	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.283	Data Not Normal at 5% Significance Level

Data appear Approximate Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	30.12	90% Percentile (z)	25.56
	95% UPL (t)	27.3	95% Percentile (z)	26.43
	95% USL	27.36	99% Percentile (z)	28.06

Sodium

General Statistics

Total Number of Observations	8	Number of Distinct Observations	7
Minimum	43	First Quartile	52
Second Largest	56	Median	53.5
Maximum	68	Third Quartile	55.25
Mean	53.88	SD	7.06
Coefficient of Variation	0.131	Skewness	0.772
Mean of logged Data	3.979	SD of logged Data	0.129

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test

Shapiro Wilk Test Statistic	0.903	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.818	Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.257	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.283	Data appear Normal at 5% Significance Level

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	76.37	90% Percentile (z)	62.92
	95% UPL (t)	68.06	95% Percentile (z)	65.49
	95% USL	68.22	99% Percentile (z)	70.3

Sulfate

General Statistics

Total Number of Observations	8	Number of Distinct Observations	3
Minimum	240	First Quartile	250
Second Largest	250	Median	250
Maximum	260	Third Quartile	250
Mean	250	SD	5.345
Coefficient of Variation	0.0214	Skewness	0
Mean of logged Data	5.521	SD of logged Data	0.0214

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for Background Threshold Values

Order of Statistic, r		8	95% UTL with 95% Coverage	260
Approx, f used to compute achieved CC		0.421	Approximate Actual Confidence Coefficient achieved by UTL	0.337
			Approximate Sample Size needed to achieve specified CC	59
95% Percentile Bootstrap UTL with	95% Coverage	N/A	95% BCA Bootstrap UTL with 95% Coverage	N/A
	95% UPL	260	90% Percentile	253
	90% Chebyshev UPL	267	95% Percentile	256.5
	95% Chebyshev UPL	274.7	99% Percentile	259.3
	95% USL	260		

Background Statistics for Data Sets with Non-Detects

User Selected Options

Date/Time of Computation	ProUCL 5.1 4/8/2019 1:18:35 PM
From File	Anions and Cations Input_e.xls
Full Precision	OFF
Confidence Coefficient	95%
Coverage	95%
Different or Future K Observations	1
Number of Bootstrap Operations	2000

Ammonia

General Statistics

Total Number of Observations	8	Number of Missing Observations	0
Number of Distinct Observations	2		
Number of Detects	1	Number of Non-Detects	7
Number of Distinct Detects	1	Number of Distinct Non-Detects	1
Minimum Detect	0.21	Minimum Non-Detect	0.1
Maximum Detect	0.21	Maximum Non-Detect	0.1
Variance Detected	N/A	Percent Non-Detects	87.5%
Mean Detected	0.21	SD Detected	N/A
Mean of Detected Logged Data	-1.561	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!

It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Ammonia was not processed!

Calcium

General Statistics

Total Number of Observations	8	Number of Distinct Observations	5
Minimum	94	First Quartile	99.5
Second Largest	110	Median	100
Maximum	130	Third Quartile	110
Mean	105.3	SD	11.46
Coefficient of Variation	0.109	Skewness	1.662
Mean of logged Data	4.652	SD of logged Data	0.103

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Gamma GOF Test

A-D Test Statistic	0.688	**Anderson-Darling Gamma GOF Test**
5% A-D Critical Value	0.715	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.311	**Kolmogorov-Smirnov Gamma GOF Test**
5% K-S Critical Value	0.294	Data Not Gamma Distributed at 5% Significance Level

Detected data follow Appr. Gamma Distribution at 5% Significance Level

Gamma Statistics

k hat (MLE)	104.2	k star (bias corrected MLE)	65.22
Theta hat (MLE)	1.01	Theta star (bias corrected MLE)	1.614
nu hat (MLE)	1668	nu star (bias corrected)	1044
MLE Mean (bias corrected)	105.3	MLE Sd (bias corrected)	13.03

Background Statistics Assuming Gamma Distribution

95% Wilson Hilferty (WH) Approx. Gamma UPL	128.6	90% Percentile	122.3
95% Hawkins Wixley (HW) Approx. Gamma UPL	128.6	95% Percentile	127.6
95% WH Approx. Gamma UTL with 95% Coverage	144	99% Percentile	137.9
95% HW Approx. Gamma UTL with 95% Coverage	144.3		
95% WH USL	128.9	95% HW USL	128.9

Chloride

General Statistics

Total Number of Observations	8	Number of Distinct Observations	5
Minimum	23	First Quartile	23.75
Second Largest	26	Median	24.5
Maximum	28	Third Quartile	26
Mean	24.88	SD	1.727
Coefficient of Variation	0.0694	Skewness	0.697
Mean of logged Data	3.212	SD of logged Data	0.0684

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test

Shapiro Wilk Test Statistic	0.919	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.818	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.194	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.283	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with 95% Coverage	30.38	90% Percentile (z)	27.09
95% UPL (t)	28.35	95% Percentile (z)	27.72
95% USL	28.38	99% Percentile (z)	28.89

Fluoride

General Statistics

Total Number of Observations	8	Number of Missing Observations	0
Number of Distinct Observations	8		
Number of Detects	7	Number of Non-Detects	1
Number of Distinct Detects	7	Number of Distinct Non-Detects	1
Minimum Detect	0.6	Minimum Non-Detect	0.25
Maximum Detect	0.795	Maximum Non-Detect	0.25
Variance Detected	0.005	Percent Non-Detects	12.5%
Mean Detected	0.719	SD Detected	0.0707
Mean of Detected Logged Data	-0.334	SD of Detected Logged Data	0.101

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.919	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.803	Detected Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.192	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.304	Detected Data appear Normal at 5% Significance Level	

Detected Data appear Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.661	KM SD	0.167
95% UTL95% Coverage	1.192	95% KM UPL (t)	0.996
90% KM Percentile (z)	0.874	95% KM Percentile (z)	0.935
99% KM Percentile (z)	1.049	95% KM USL	1

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.645	SD	0.22
95% UTL95% Coverage	1.346	95% UPL (t)	1.087
90% Percentile (z)	0.927	95% Percentile (z)	1.007
99% Percentile (z)	1.157	95% USL	1.092

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Magnesium

General Statistics

Total Number of Observations	8	Number of Distinct Observations	5
Minimum	36	First Quartile	36.75
Second Largest	39	Median	38.5
Maximum	41	Third Quartile	39
Mean	38.13	SD	1.727
Coefficient of Variation	0.0453	Skewness	0.191
Mean of logged Data	3.64	SD of logged Data	0.0452

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test

Shapiro Wilk Test Statistic	0.919	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.818	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.194	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.283	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	43.63		90% Percentile (z)	40.34
	95% UPL (t)	41.6		95% Percentile (z)	40.97
	95% USL	41.63		99% Percentile (z)	42.14

Nitrate

General Statistics

Total Number of Observations	8	Number of Missing Observations	0
Number of Distinct Observations	2		
Number of Detects	1	Number of Non-Detects	7
Number of Distinct Detects	1	Number of Distinct Non-Detects	1
Minimum Detect	0.079	Minimum Non-Detect	0.055
Maximum Detect	0.079	Maximum Non-Detect	0.055
Variance Detected	N/A	Percent Non-Detects	87.5%
Mean Detected	0.079	SD Detected	N/A
Mean of Detected Logged Data	-2.538	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!

It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Nitrate was not processed!

Nitrite

General Statistics

Total Number of Observations	8	Number of Missing Observations	0
Number of Distinct Observations	3		
Number of Detects	2	Number of Non-Detects	6
Number of Distinct Detects	2	Number of Distinct Non-Detects	1
Minimum Detect	0.032	Minimum Non-Detect	0.07
Maximum Detect	0.073	Maximum Non-Detect	0.07
Variance Detected	8.4050E-4	Percent Non-Detects	75%
Mean Detected	0.0525	SD Detected	0.029
Mean of Detected Logged Data	-3.03	SD of Detected Logged Data	0.583

Warning: Data set has only 2 Detected Values.

This is not enough to compute meaningful or reliable statistics and estimates.

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	8	95% UTL with95% Coverage	0.073
Approx, f used to compute achieved CC	0.421	Approximate Actual Confidence Coefficient achieved by UTL	0.337
Approximate Sample Size needed to achieve specified CC	59	95% UPL	0.073
95% USL	0.073	95% KM Chebyshev UPL	0.0998

Potassium

General Statistics

Total Number of Observations	8	Number of Distinct Observations	5
Minimum	12	First Quartile	15.5
Second Largest	19	Median	16.5
Maximum	19	Third Quartile	17.5
Mean	16.25	SD	2.375
Coefficient of Variation	0.146	Skewness	-0.65
Mean of logged Data	2.778	SD of logged Data	0.154

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test

Shapiro Wilk Test Statistic	0.926	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.818	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.208	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.283	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	23.82	90% Percentile (z)	19.29
	95% UPL (t)	21.02	95% Percentile (z)	20.16
	95% USL	21.08	99% Percentile (z)	21.78

Sodium

General Statistics

Total Number of Observations	8	Number of Distinct Observations	3
Minimum	120	First Quartile	127.5
Second Largest	140	Median	130
Maximum	140	Third Quartile	132.5
Mean	130	SD	7.559
Coefficient of Variation	0.0581	Skewness	0
Mean of logged Data	4.866	SD of logged Data	0.0583

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test

Shapiro Wilk Test Statistic	0.849	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.818	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.25	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.283	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	154.1	90% Percentile (z)	139.7
	95% UPL (t)	145.2	95% Percentile (z)	142.4
	95% USL	145.4	99% Percentile (z)	147.6

Sulfate

General Statistics

Total Number of Observations	8	Number of Distinct Observations	8
Minimum	0.325	First Quartile	0.993
Second Largest	200	Median	3.15
Maximum	210	Third Quartile	68.75
Mean	55.42	SD	92.72
Coefficient of Variation	1.673	Skewness	1.412
Mean of logged Data	1.807	SD of logged Data	2.534

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Gamma GOF Test

A-D Test Statistic	0.715	**Anderson-Darling Gamma GOF Test**	
5% A-D Critical Value	0.795	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.266	**Kolmogorov-Smirnov Gamma GOF Test**	
5% K-S Critical Value	0.317	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	0.31	k star (bias corrected MLE)	0.277
Theta hat (MLE)	178.5	Theta star (bias corrected MLE)	199.8
nu hat (MLE)	4.968	nu star (bias corrected)	4.438
MLE Mean (bias corrected)	55.42	MLE Sd (bias corrected)	105.2

Background Statistics Assuming Gamma Distribution

95% Wilson Hilferty (WH) Approx. Gamma UPL	333.3	90% Percentile	164.9
95% Hawkins Wixley (HW) Approx. Gamma UPL	378.8	95% Percentile	259.9
95% WH Approx. Gamma UTL with 95% Coverage	862.8	99% Percentile	509.3
95% HW Approx. Gamma UTL with 95% Coverage	1205		
95% WH USL	340.4	95% HW USL	388.4

Background Statistics for Data Sets with Non-Detects

Metals - MW-1

User Selected Options

Date/Time of Computation	ProUCL 5.1 4/8/2019 1:30:14 PM
From File	Metals Input.xls
Full Precision	OFF
Confidence Coefficient	95%
Coverage	95%
Different or Future K Observations	1
Number of Bootstrap Operations	2000

Aluminum

General Statistics

Total Number of Observations	13	Number of Missing Observations	0
Number of Distinct Observations	10		
Number of Detects	12	Number of Non-Detects	1
Number of Distinct Detects	9	Number of Distinct Non-Detects	1
Minimum Detect	1.8	Minimum Non-Detect	0.023
Maximum Detect	48	Maximum Non-Detect	0.023
Variance Detected	225.3	Percent Non-Detects	7.692%
Mean Detected	36.23	SD Detected	15.01
Mean of Detected Logged Data	3.374	SD of Detected Logged Data	0.936

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	13	95% UTL with95% Coverage	48
Approx, f used to compute achieved CC	0.684	Approximate Actual Confidence Coefficient achieved by UTL	0.487
Approximate Sample Size needed to achieve specified CC	59	95% UPL	48
95% USL	48	95% KM Chebyshev UPL	109.6

Antimony

General Statistics

Total Number of Observations	10	Number of Missing Observations	3
Number of Distinct Observations	7		
Number of Detects	8	Number of Non-Detects	2
Number of Distinct Detects	6	Number of Distinct Non-Detects	1
Minimum Detect	0.0054	Minimum Non-Detect	0.0049
Maximum Detect	0.0086	Maximum Non-Detect	0.0049
Variance Detected	1.9527E-6	Percent Non-Detects	20%
Mean Detected	0.00699	SD Detected	0.0014
Mean of Detected Logged Data	-4.981	SD of Detected Logged Data	0.202

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.911	d2max (for USL)	2.176

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.841	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.818	Detected Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.237	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.283	Detected Data appear Normal at 5% Significance Level	

Detected Data appear Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.00657	KM SD	0.00144
95% UTL95% Coverage	0.0108	95% KM UPL (t)	0.00933
90% KM Percentile (z)	0.00841	95% KM Percentile (z)	0.00893
99% KM Percentile (z)	0.00991	95% KM USL	0.0097

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.00608	SD	0.00228
95% UTL95% Coverage	0.0127	95% UPL (t)	0.0105
90% Percentile (z)	0.009	95% Percentile (z)	0.00982
99% Percentile (z)	0.0114	95% USL	0.011

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Arsenic

General Statistics

Total Number of Observations	13	Number of Distinct Observations	12
Minimum	1.1	First Quartile	3.1
Second Largest	6.9	Median	4.6
Maximum	7.5	Third Quartile	5.6
Mean	4.423	SD	2.017
Coefficient of Variation	0.456	Skewness	-0.154
Mean of logged Data	1.357	SD of logged Data	0.58

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Normal GOF Test

Shapiro Wilk Test Statistic	0.968	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.866	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.0955	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.234	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with 95% Coverage	9.812	90% Percentile (z)	7.009
95% UPL (t)	8.155	95% Percentile (z)	7.742
95% USL	9.125	99% Percentile (z)	9.116

Barium

General Statistics

Total Number of Observations	13	Number of Distinct Observations	11
Minimum	0.0091	First Quartile	0.0097
Second Largest	0.048	Median	0.01
Maximum	0.057	Third Quartile	0.017
Mean	0.0184	SD	0.0159
Coefficient of Variation	0.864	Skewness	1.929
Mean of logged Data	-4.231	SD of logged Data	0.643

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for Background Threshold Values

Order of Statistic, r	13	95% UTL with 95% Coverage	0.057
Approx, f used to compute achieved CC	0.684	Approximate Actual Confidence Coefficient achieved by UTL	0.487
		Approximate Sample Size needed to achieve specified CC	59
95% Percentile Bootstrap UTL with 95% Coverage	0.057	95% BCA Bootstrap UTL with 95% Coverage	0.057
95% UPL	0.057	90% Percentile	0.0432
90% Chebyshev UPL	0.0678	95% Percentile	0.0516
95% Chebyshev UPL	0.0902	99% Percentile	0.0559
95% USL	0.057		

Beryllium

General Statistics

Total Number of Observations	13	Number of Missing Observations	0
Number of Distinct Observations	12		
Number of Detects	12	Number of Non-Detects	1
Number of Distinct Detects	11	Number of Distinct Non-Detects	1
Minimum Detect	0.0044	Minimum Non-Detect	5.0000E-4
Maximum Detect	0.0098	Maximum Non-Detect	5.0000E-4
Variance Detected	2.3097E-6	Percent Non-Detects	7.692%
Mean Detected	0.00847	SD Detected	0.00152
Mean of Detected Logged Data	-4.791	SD of Detected Logged Data	0.222

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.783	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.859	Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.233	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.243	Detected Data appear Normal at 5% Significance Level	

Detected Data appear Approximate Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.00785	KM SD	0.00254
95% UTL95% Coverage	0.0146	95% KM UPL (t)	0.0126
90% KM Percentile (z)	0.0111	95% KM Percentile (z)	0.012
99% KM Percentile (z)	0.0138	95% KM USL	0.0138

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.00783	SD	0.0027
95% UTL95% Coverage	0.0151	95% UPL (t)	0.0128
90% Percentile (z)	0.0113	95% Percentile (z)	0.0123
99% Percentile (z)	0.0141	95% USL	0.0141

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Cadmium

General Statistics

Total Number of Observations	13	Number of Missing Observations	0
Number of Distinct Observations	8		
Number of Detects	12	Number of Non-Detects	1
Number of Distinct Detects	7	Number of Distinct Non-Detects	1
Minimum Detect	0.0068	Minimum Non-Detect	0.0011
Maximum Detect	0.11	Maximum Non-Detect	0.0011
Variance Detected	0.00213	Percent Non-Detects	7.692%
Mean Detected	0.0763	SD Detected	0.0462
Mean of Detected Logged Data	-2.957	SD of Detected Logged Data	1.119

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	13	95% UTL with95% Coverage	0.11
Approx, f used to compute achieved CC	0.684	Approximate Actual Confidence Coefficient achieved by UTL	0.487
Approximate Sample Size needed to achieve specified CC	59	95% UPL	0.11
95% USL	0.11	95% KM Chebyshev UPL	0.283

Chromium

General Statistics

Total Number of Observations	13	Number of Missing Observations	0
Number of Distinct Observations	11		
Number of Detects	12	Number of Non-Detects	1
Number of Distinct Detects	10	Number of Distinct Non-Detects	1
Minimum Detect	0.0014	Minimum Non-Detect	0.001
Maximum Detect	0.0072	Maximum Non-Detect	0.001
Variance Detected	3.9197E-6	Percent Non-Detects	7.692%
Mean Detected	0.00288	SD Detected	0.00198
Mean of Detected Logged Data	-6.025	SD of Detected Logged Data	0.585

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	13	95% UTL with95% Coverage	0.0072
Approx, f used to compute achieved CC	0.684	Approximate Actual Confidence Coefficient achieved by UTL	0.487
Approximate Sample Size needed to achieve specified CC	59	95% UPL	0.0072
95% USL	0.0072	95% KM Chebyshev UPL	0.0113

Cobalt

General Statistics

Total Number of Observations	13	Number of Distinct Observations	10
Minimum	0.041	First Quartile	0.15
Second Largest	0.24	Median	0.22
Maximum	0.25	Third Quartile	0.24
Mean	0.183	SD	0.0734
Coefficient of Variation	0.4	Skewness	-1.171
Mean of logged Data	-1.828	SD of logged Data	0.626

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for Background Threshold Values

Order of Statistic, r	13	95% UTL with 95% Coverage	0.25
Approx, f used to compute achieved CC	0.684	Approximate Actual Confidence Coefficient achieved by UTL	0.487
		Approximate Sample Size needed to achieve specified CC	59
95% Percentile Bootstrap UTL with 95% Coverage	0.25	95% BCA Bootstrap UTL with 95% Coverage	0.25
95% UPL	0.25	90% Percentile	0.24
90% Chebyshev UPL	0.412	95% Percentile	0.244
95% Chebyshev UPL	0.516	99% Percentile	0.249
95% USL	0.25		

Copper

General Statistics

Total Number of Observations	13	Number of Missing Observations	0
Number of Distinct Observations	11		
Number of Detects	11	Number of Non-Detects	2
Number of Distinct Detects	10	Number of Distinct Non-Detects	1
Minimum Detect	0.0018	Minimum Non-Detect	0.001
Maximum Detect	0.012	Maximum Non-Detect	0.001
Variance Detected	8.7042E-6	Percent Non-Detects	15.38%
Mean Detected	0.00497	SD Detected	0.00295
Mean of Detected Logged Data	-5.442	SD of Detected Logged Data	0.54

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.858	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.85	Detected Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.227	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.251	Detected Data appear Normal at 5% Significance Level	

Detected Data appear Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.00436	KM SD	0.00296
95% UTL95% Coverage	0.0123	95% KM UPL (t)	0.00983
90% KM Percentile (z)	0.00815	95% KM Percentile (z)	0.00923
99% KM Percentile (z)	0.0112	95% KM USL	0.0113

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.00428	SD	0.00317
95% UTL95% Coverage	0.0128	95% UPL (t)	0.0102
90% Percentile (z)	0.00835	95% Percentile (z)	0.00951
99% Percentile (z)	0.0117	95% USL	0.0117

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Cyanide

General Statistics

Total Number of Observations	13	Number of Missing Observations	0
Number of Distinct Observations	6		
Number of Detects	3	Number of Non-Detects	10
Number of Distinct Detects	3	Number of Distinct Non-Detects	3
Minimum Detect	0.041	Minimum Non-Detect	0.0014
Maximum Detect	0.15	Maximum Non-Detect	0.013
Variance Detected	0.00385	Percent Non-Detects	76.92%
Mean Detected	0.0783	SD Detected	0.0621
Mean of Detected Logged Data	-2.738	SD of Detected Logged Data	0.729

Warning: Data set has only 3 Detected Values.

This is not enough to compute meaningful or reliable statistics and estimates.

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.771	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.767	Detected Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.377	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.425	Detected Data appear Normal at 5% Significance Level	

Detected Data appear Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.0192	KM SD	0.0405
95% UTL95% Coverage	0.127	95% KM UPL (t)	0.0941
90% KM Percentile (z)	0.0711	95% KM Percentile (z)	0.0858
99% KM Percentile (z)	0.113	95% KM USL	0.114

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.0222	SD	0.0409
95% UTL95% Coverage	0.131	95% UPL (t)	0.0978
90% Percentile (z)	0.0746	95% Percentile (z)	0.0894
99% Percentile (z)	0.117	95% USL	0.117

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Iron

General Statistics

Total Number of Observations	13	Number of Distinct Observations	10
Minimum	8.7	First Quartile	30
Second Largest	35	Median	33
Maximum	40	Third Quartile	34
Mean	29.82	SD	8.338
Coefficient of Variation	0.28	Skewness	-1.716
Mean of logged Data	3.336	SD of logged Data	0.408

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for Background Threshold Values

Order of Statistic, r	13	95% UTL with 95% Coverage	40
Approx, f used to compute achieved CC	0.684	Approximate Actual Confidence Coefficient achieved by UTL	0.487
		Approximate Sample Size needed to achieve specified CC	59
95% Percentile Bootstrap UTL with 95% Coverage	40	95% BCA Bootstrap UTL with 95% Coverage	40
95% UPL	40	90% Percentile	34.8
90% Chebyshev UPL	55.78	95% Percentile	37
95% Chebyshev UPL	67.54	99% Percentile	39.4
95% USL	40		

Lead

General Statistics

Total Number of Observations	13	Number of Missing Observations	0
Number of Distinct Observations	9		
Number of Detects	9	Number of Non-Detects	4
Number of Distinct Detects	8	Number of Distinct Non-Detects	1
Minimum Detect	0.0023	Minimum Non-Detect	0.0035
Maximum Detect	0.0063	Maximum Non-Detect	0.0035
Variance Detected	1.6925E-6	Percent Non-Detects	30.77%
Mean Detected	0.0044	SD Detected	0.0013
Mean of Detected Logged Data	-5.469	SD of Detected Logged Data	0.32

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.971	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.829	Detected Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.128	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.274	Detected Data appear Normal at 5% Significance Level	

Detected Data appear Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.00388	KM SD	0.00131
95% UTL95% Coverage	0.00737	95% KM UPL (t)	0.00629
90% KM Percentile (z)	0.00555	95% KM Percentile (z)	0.00603
99% KM Percentile (z)	0.00692	95% KM USL	0.00692

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.00358	SD	0.00166
95% UTL95% Coverage	0.00801	95% UPL (t)	0.00665
90% Percentile (z)	0.00571	95% Percentile (z)	0.00631
99% Percentile (z)	0.00744	95% USL	0.00745

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Manganese

General Statistics

Total Number of Observations	13	Number of Distinct Observations	5
Minimum	0.96	First Quartile	1.7
Second Largest	1.8	Median	1.7
Maximum	1.8	Third Quartile	1.8
Mean	1.62	SD	0.276
Coefficient of Variation	0.17	Skewness	-1.864
Mean of logged Data	0.466	SD of logged Data	0.203

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for Background Threshold Values

Order of Statistic, r	13	95% UTL with 95% Coverage	1.8
Approx, f used to compute achieved CC	0.684	Approximate Actual Confidence Coefficient achieved by UTL	0.487
95% Percentile Bootstrap UTL with 95% Coverage	1.8	Approximate Sample Size needed to achieve specified CC	59
95% UPL	1.8	95% BCA Bootstrap UTL with 95% Coverage	1.74
90% Chebyshev UPL	2.479	90% Percentile	1.8
95% Chebyshev UPL	2.869	95% Percentile	1.8
95% USL	1.8	99% Percentile	1.8

Mercury

General Statistics

Total Number of Observations	13	Number of Missing Observations	0
Number of Distinct Observations	6		
Number of Detects	3	Number of Non-Detects	10
Number of Distinct Detects	3	Number of Distinct Non-Detects	3
Minimum Detect	1.3000E-4	Minimum Non-Detect	2.4000E-5
Maximum Detect	3.3000E-4	Maximum Non-Detect	1.0000E-4
Variance Detected	1.1200E-8	Percent Non-Detects	76.92%
Mean Detected	2.1000E-4	SD Detected	1.0583E-4
Mean of Detected Logged Data	-8.548	SD of Detected Logged Data	0.48

Warning: Data set has only 3 Detected Values.

This is not enough to compute meaningful or reliable statistics and estimates.

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.893	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.767	Detected Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.314	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.425	Detected Data appear Normal at 5% Significance Level	

Detected Data appear Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	6.6923E-5	KM SD	8.8681E-5
95% UTL95% Coverage	3.0379E-4	95% KM UPL (t)	2.3095E-4
90% KM Percentile (z)	1.8057E-4	95% KM Percentile (z)	2.1279E-4
99% KM Percentile (z)	2.7323E-4	95% KM USL	2.7360E-4

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	7.2654E-5	SD	9.1025E-5
95% UTL95% Coverage	3.1578E-4	95% UPL (t)	2.4101E-4
90% Percentile (z)	1.8931E-4	95% Percentile (z)	2.2238E-4
99% Percentile (z)	2.8441E-4	95% USL	2.8479E-4

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Molybdenum

General Statistics

Total Number of Observations	13	Number of Missing Observations	0
Number of Distinct Observations	7		
Number of Detects	5	Number of Non-Detects	8
Number of Distinct Detects	5	Number of Distinct Non-Detects	2
Minimum Detect	6.2000E-4	Minimum Non-Detect	6.0000E-4
Maximum Detect	0.0092	Maximum Non-Detect	0.0014
Variance Detected	1.0520E-5	Percent Non-Detects	61.54%
Mean Detected	0.00378	SD Detected	0.00324
Mean of Detected Logged Data	-5.907	SD of Detected Logged Data	0.978

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.86	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.762	Detected Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.335	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.343	Detected Data appear Normal at 5% Significance Level	

Detected Data appear Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.00182	KM SD	0.00237
95% UTL95% Coverage	0.00817	95% KM UPL (t)	0.00622
90% KM Percentile (z)	0.00487	95% KM Percentile (z)	0.00573
99% KM Percentile (z)	0.00735	95% KM USL	0.00736

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.00167	SD	0.00256
95% UTL95% Coverage	0.0085	95% UPL (t)	0.0064
90% Percentile (z)	0.00495	95% Percentile (z)	0.00588
99% Percentile (z)	0.00762	95% USL	0.00763

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Nickel

General Statistics

Total Number of Observations	13	Number of Distinct Observations	11
Minimum	0.024	First Quartile	0.069
Second Largest	0.098	Median	0.093
Maximum	0.099	Third Quartile	0.097
Mean	0.0783	SD	0.0264
Coefficient of Variation	0.337	Skewness	-1.394
Mean of logged Data	-2.632	SD of logged Data	0.486

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for Background Threshold Values

Order of Statistic, r	13	95% UTL with 95% Coverage	0.099
Approx, f used to compute achieved CC	0.684	Approximate Actual Confidence Coefficient achieved by UTL	0.487
		Approximate Sample Size needed to achieve specified CC	59
95% Percentile Bootstrap UTL with 95% Coverage	0.099	95% BCA Bootstrap UTL with 95% Coverage	0.099
95% UPL	0.099	90% Percentile	0.0978
90% Chebyshev UPL	0.16	95% Percentile	0.0984
95% Chebyshev UPL	0.198	99% Percentile	0.0989
95% USL	0.099		

Selenium

General Statistics

Total Number of Observations	13	Number of Missing Observations	0
Number of Distinct Observations	10		
Number of Detects	9	Number of Non-Detects	4
Number of Distinct Detects	8	Number of Distinct Non-Detects	2
Minimum Detect	0.0026	Minimum Non-Detect	0.0015
Maximum Detect	0.029	Maximum Non-Detect	0.015
Variance Detected	7.3983E-5	Percent Non-Detects	30.77%
Mean Detected	0.0061	SD Detected	0.0086
Mean of Detected Logged Data	-5.499	SD of Detected Logged Data	0.748

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	13	95% UTL with95% Coverage	0.029
Approx, f used to compute achieved CC	0.684	Approximate Actual Confidence Coefficient achieved by UTL	0.487
Approximate Sample Size needed to achieve specified CC	59	95% UPL	0.029
95% USL	0.029	95% KM Chebyshev UPL	0.0366

Silver

General Statistics

Total Number of Observations	13	Number of Missing Observations	0
Number of Distinct Observations	4		
Number of Detects	2	Number of Non-Detects	11
Number of Distinct Detects	2	Number of Distinct Non-Detects	2
Minimum Detect	0.0094	Minimum Non-Detect	3.0000E-4
Maximum Detect	0.0097	Maximum Non-Detect	0.0012
Variance Detected	4.5000E-8	Percent Non-Detects	84.62%
Mean Detected	0.00955	SD Detected	2.1213E-4
Mean of Detected Logged Data	-4.651	SD of Detected Logged Data	0.0222

Warning: Data set has only 2 Detected Values.

This is not enough to compute meaningful or reliable statistics and estimates.

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	13	95% UTL with95% Coverage	0.0097
Approx, f used to compute achieved CC	0.684	Approximate Actual Confidence Coefficient achieved by UTL	0.487
Approximate Sample Size needed to achieve specified CC	59	95% UPL	0.0097
95% USL	0.0097	95% KM Chebyshev UPL	0.0168

Sulfur

General Statistics

Total Number of Observations	8	Number of Distinct Observations	6
		Number of Missing Observations	5
Minimum	180	First Quartile	197.5
Second Largest	220	Median	210
Maximum	240	Third Quartile	212.5
Mean	207.5	SD	18.32
Coefficient of Variation	0.0883	Skewness	0.302
Mean of logged Data	5.332	SD of logged Data	0.088

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test

Shapiro Wilk Test Statistic	0.962	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.818	Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.196	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.283	Data appear Normal at 5% Significance Level

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	265.9	90% Percentile (z)	231
	95% UPL (t)	244.3	95% Percentile (z)	237.6
	95% USL	244.7	99% Percentile (z)	250.1

Thallium

General Statistics

Total Number of Observations	13	Number of Missing Observations	0
Number of Distinct Observations	5		
Number of Detects	10	Number of Non-Detects	3
Number of Distinct Detects	5	Number of Distinct Non-Detects	1
Minimum Detect	0.01	Minimum Non-Detect	0.01
Maximum Detect	0.017	Maximum Non-Detect	0.01
Variance Detected	3.2111E-6	Percent Non-Detects	23.08%
Mean Detected	0.0129	SD Detected	0.00179
Mean of Detected Logged Data	-4.359	SD of Detected Logged Data	0.135

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.869	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.842	Detected Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.278	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.262	Data Not Normal at 5% Significance Level

Detected Data appear Approximate Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.0122	KM SD	0.00193
95% UTL95% Coverage	0.0174	95% KM UPL (t)	0.0158
90% KM Percentile (z)	0.0147	95% KM Percentile (z)	0.0154
99% KM Percentile (z)	0.0167	95% KM USL	0.0167

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.0111	SD	0.0038
95% UTL95% Coverage	0.0212	95% UPL (t)	0.0181
90% Percentile (z)	0.0159	95% Percentile (z)	0.0173
99% Percentile (z)	0.0199	95% USL	0.0199

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Vanadium

General Statistics

Total Number of Observations	13	Number of Missing Observations	0
Number of Distinct Observations	12		
Number of Detects	12	Number of Non-Detects	1
Number of Distinct Detects	11	Number of Distinct Non-Detects	1
Minimum Detect	0.0077	Minimum Non-Detect	0.0022
Maximum Detect	0.055	Maximum Non-Detect	0.0022
Variance Detected	2.0419E-4	Percent Non-Detects	7.692%
Mean Detected	0.0442	SD Detected	0.0143
Mean of Detected Logged Data	-3.218	SD of Detected Logged Data	0.566

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	13	95% UTL with95% Coverage	0.055
Approx, f used to compute achieved CC	0.684	Approximate Actual Confidence Coefficient achieved by UTL	0.487
Approximate Sample Size needed to achieve specified CC	59	95% UPL	0.055
95% USL	0.055	95% KM Chebyshev UPL	0.119

Zinc

General Statistics

Total Number of Observations	13	Number of Distinct Observations	7
Minimum	1.3	First Quartile	1.5
Second Largest	4.3	Median	1.6
Maximum	6.2	Third Quartile	3.7
Mean	2.554	SD	1.531
Coefficient of Variation	0.6	Skewness	1.312
Mean of logged Data	0.797	SD of logged Data	0.53

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for Background Threshold Values

Order of Statistic, r	13	95% UTL with 95% Coverage	6.2
Approx, f used to compute achieved CC	0.684	Approximate Actual Confidence Coefficient achieved by UTL	0.487
		Approximate Sample Size needed to achieve specified CC	59
95% Percentile Bootstrap UTL with 95% Coverage	6.2	95% BCA Bootstrap UTL with 95% Coverage	6.2
95% UPL	6.2	90% Percentile	4.18
90% Chebyshev UPL	7.321	95% Percentile	5.06
95% Chebyshev UPL	9.48	99% Percentile	5.972
95% USL	6.2		

Background Statistics for Data Sets with Non-Detects

Metals - MW-2

User Selected Options

Date/Time of Computation	ProUCL 5.1 4/8/2019 1:32:58 PM
From File	Metals Input_a.xls
Full Precision	OFF
Confidence Coefficient	95%
Coverage	95%
Different or Future K Observations	1
Number of Bootstrap Operations	2000

Aluminum

General Statistics

Total Number of Observations	13	Number of Distinct Observations	6
Minimum	23	First Quartile	29
Second Largest	32	Median	31
Maximum	33	Third Quartile	32
Mean	30.15	SD	2.672
Coefficient of Variation	0.0886	Skewness	-1.835
Mean of logged Data	3.402	SD of logged Data	0.0962

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for Background Threshold Values

Order of Statistic, r	13	95% UTL with 95% Coverage	33
Approx, f used to compute achieved CC	0.684	Approximate Actual Confidence Coefficient achieved by UTL	0.487
95% Percentile Bootstrap UTL with 95% Coverage	33	Approximate Sample Size needed to achieve specified CC	59
95% UPL	33	95% BCA Bootstrap UTL with 95% Coverage	33
90% Chebyshev UPL	38.47	90% Percentile	32
95% Chebyshev UPL	42.24	95% Percentile	32.4
95% USL	33	99% Percentile	32.88

Antimony

General Statistics

Total Number of Observations	10	Number of Missing Observations	3
Number of Distinct Observations	10		
Number of Detects	9	Number of Non-Detects	1
Number of Distinct Detects	9	Number of Distinct Non-Detects	1
Minimum Detect	4.0000E-4	Minimum Non-Detect	0.0049
Maximum Detect	0.0084	Maximum Non-Detect	0.0049
Variance Detected	5.5869E-6	Percent Non-Detects	10%
Mean Detected	0.00268	SD Detected	0.00236
Mean of Detected Logged Data	-6.228	SD of Detected Logged Data	0.854

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.911	d2max (for USL)	2.176

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.79	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.829	Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.237	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.274	Detected Data appear Normal at 5% Significance Level	

Detected Data appear Approximate Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.00261	KM SD	0.00215
95% UTL95% Coverage	0.00886	95% KM UPL (t)	0.00674
90% KM Percentile (z)	0.00536	95% KM Percentile (z)	0.00614
99% KM Percentile (z)	0.0076	95% KM USL	0.00728

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.00266	SD	0.00223
95% UTL95% Coverage	0.00915	95% UPL (t)	0.00694
90% Percentile (z)	0.00551	95% Percentile (z)	0.00632
99% Percentile (z)	0.00784	95% USL	0.00751

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Arsenic

General Statistics

Total Number of Observations	13	Number of Distinct Observations	13
Minimum	0.011	First Quartile	0.1
Second Largest	3.5	Median	0.14
Maximum	5	Third Quartile	2.7
Mean	1.377	SD	1.733
Coefficient of Variation	1.259	Skewness	0.976
Mean of logged Data	-1.036	SD of logged Data	2.017

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.902	**Shapiro Wilk Lognormal GOF Test**	
5% Shapiro Wilk Critical Value	0.866	Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.216	**Lilliefors Lognormal GOF Test**	
5% Lilliefors Critical Value	0.234	Data appear Lognormal at 5% Significance Level	

Data appear Lognormal at 5% Significance Level

Background Statistics assuming Lognormal Distribution

95% UTL with	95% Coverage	77.57	90% Percentile (z)	4.705
	95% UPL (t)	14.8	95% Percentile (z)	9.79
	95% USL	39.04	99% Percentile (z)	38.71

Barium

General Statistics

Total Number of Observations	13	Number of Distinct Observations	13
Minimum	0.0057	First Quartile	0.0074
Second Largest	0.015	Median	0.0078
Maximum	0.021	Third Quartile	0.0094
Mean	0.00938	SD	0.00417
Coefficient of Variation	0.444	Skewness	2.225
Mean of logged Data	-4.735	SD of logged Data	0.35

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.841	**Shapiro Wilk Lognormal GOF Test**	
5% Shapiro Wilk Critical Value	0.866	Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.221	**Lilliefors Lognormal GOF Test**	
5% Lilliefors Critical Value	0.234	Data appear Lognormal at 5% Significance Level	

Data appear Approximate Lognormal at 5% Significance Level

Background Statistics assuming Lognormal Distribution

95% UTL with	95% Coverage	0.0224	90% Percentile (z)	0.0138
	95% UPL (t)	0.0168	95% Percentile (z)	0.0156
	95% USL	0.0199	99% Percentile (z)	0.0199

Beryllium

General Statistics

Total Number of Observations	13	Number of Distinct Observations	8
Minimum	0.0051	First Quartile	0.0059
Second Largest	0.0066	Median	0.0061
Maximum	0.0066	Third Quartile	0.0063
Mean	0.00606	SD	3.9484E-4
Coefficient of Variation	0.0651	Skewness	-0.929
Mean of logged Data	-5.108	SD of logged Data	0.0673

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Normal GOF Test

Shapiro Wilk Test Statistic	0.915	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.866	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.187	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.234	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	0.00712	90% Percentile (z)	0.00657
	95% UPL (t)	0.00679	95% Percentile (z)	0.00671
	95% USL	0.00698	99% Percentile (z)	0.00698

Cadmium

General Statistics

Total Number of Observations	13	Number of Missing Observations	0
Number of Distinct Observations	10		
Number of Detects	12	Number of Non-Detects	1
Number of Distinct Detects	9	Number of Distinct Non-Detects	1
Minimum Detect	0.0021	Minimum Non-Detect	0.0011
Maximum Detect	0.01	Maximum Non-Detect	0.0011
Variance Detected	8.3761E-6	Percent Non-Detects	7.692%
Mean Detected	0.00398	SD Detected	0.00289
Mean of Detected Logged Data	-5.709	SD of Detected Logged Data	0.585

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	13	95% UTL with95% Coverage	0.01
Approx, f used to compute achieved CC	0.684	Approximate Actual Confidence Coefficient achieved by UTL	0.487
Approximate Sample Size needed to achieve specified CC	59	95% UPL	0.01
95% USL	0.01	95% KM Chebyshev UPL	0.0163

Cobalt

General Statistics

Total Number of Observations	13	Number of Distinct Observations	7
Minimum	0.06	First Quartile	0.15
Second Largest	0.2	Median	0.15
Maximum	0.53	Third Quartile	0.16
Mean	0.178	SD	0.11
Coefficient of Variation	0.621	Skewness	3.065
Mean of logged Data	-1.84	SD of logged Data	0.458

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for Background Threshold Values

Order of Statistic, r	13	95% UTL with 95% Coverage	0.53
Approx, f used to compute achieved CC	0.684	Approximate Actual Confidence Coefficient achieved by UTL	0.487
		Approximate Sample Size needed to achieve specified CC	59
95% Percentile Bootstrap UTL with 95% Coverage	0.53	95% BCA Bootstrap UTL with 95% Coverage	0.53
95% UPL	0.53	90% Percentile	0.196
90% Chebyshev UPL	0.521	95% Percentile	0.332
95% Chebyshev UPL	0.677	99% Percentile	0.49
95% USL	0.53		

Copper

General Statistics

Total Number of Observations	13	Number of Distinct Observations	10
Minimum	0.038	First Quartile	0.1
Second Largest	0.16	Median	0.11
Maximum	0.17	Third Quartile	0.13
Mean	0.113	SD	0.0348
Coefficient of Variation	0.308	Skewness	-0.369
Mean of logged Data	-2.237	SD of logged Data	0.381

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Normal GOF Test

Shapiro Wilk Test Statistic	0.969	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.866	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.124	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.234	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	0.206	90% Percentile (z)	0.158
	95% UPL (t)	0.177	95% Percentile (z)	0.17
	95% USL	0.194	99% Percentile (z)	0.194

Iron

General Statistics

Total Number of Observations	13	Number of Distinct Observations	11
Minimum	0.63	First Quartile	3.8
Second Largest	15	Median	7.8
Maximum	15	Third Quartile	11
Mean	7.533	SD	5.075
Coefficient of Variation	0.674	Skewness	0.295
Mean of logged Data	1.707	SD of logged Data	0.945

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Normal GOF Test

Shapiro Wilk Test Statistic	0.92	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.866	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.16	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.234	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	21.09	90% Percentile (z)	14.04
	95% UPL (t)	16.92	95% Percentile (z)	15.88
	95% USL	19.36	99% Percentile (z)	19.34

Lead

General Statistics

Total Number of Observations	13	Number of Missing Observations	0
Number of Distinct Observations	6		
Number of Detects	4	Number of Non-Detects	9
Number of Distinct Detects	4	Number of Distinct Non-Detects	2
Minimum Detect	0.0011	Minimum Non-Detect	6.0000E-4
Maximum Detect	0.042	Maximum Non-Detect	0.0035
Variance Detected	3.6716E-4	Percent Non-Detects	69.23%
Mean Detected	0.0135	SD Detected	0.0192
Mean of Detected Logged Data	-5.123	SD of Detected Logged Data	1.505

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.976	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.748	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.227	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.375	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.00419	Mean in Log Scale	-8.878
SD in Original Scale	0.0115	SD in Log Scale	3.108
95% UTL95% Coverage	0.562	95% BCA UTL95% Coverage	0.042
95% Bootstrap (%) UTL95% Coverage	0.042	95% UPL (t)	0.0437
90% Percentile (z)	0.00749	95% Percentile (z)	0.0232
99% Percentile (z)	0.193	95% USL	0.195

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-6.701	95% KM UTL (Lognormal)95% Coverage	0.0375
KM SD of Logged Data	1.279	95% KM UPL (Lognormal)	0.0131
95% KM Percentile Lognormal (z)	0.0101	95% KM USL (Lognormal)	0.0242

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.00457	Mean in Log Scale	-6.921
SD in Original Scale	0.0114	SD in Log Scale	1.589
95% UTL95% Coverage	0.0689	95% UPL (t)	0.0187
90% Percentile (z)	0.00757	95% Percentile (z)	0.0135
99% Percentile (z)	0.0398	95% USL	0.0401

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Manganese

General Statistics

Total Number of Observations	13	Number of Distinct Observations	4
Minimum	1.4	First Quartile	1.6
Second Largest	1.7	Median	1.6
Maximum	1.9	Third Quartile	1.6
Mean	1.608	SD	0.126
Coefficient of Variation	0.0781	Skewness	0.429
Mean of logged Data	0.472	SD of logged Data	0.0777

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for Background Threshold Values

Order of Statistic, r	13	95% UTL with 95% Coverage	1.9
Approx, f used to compute achieved CC	0.684	Approximate Actual Confidence Coefficient achieved by UTL	0.487
		Approximate Sample Size needed to achieve specified CC	59
95% Percentile Bootstrap UTL with 95% Coverage	1.9	95% BCA Bootstrap UTL with 95% Coverage	1.9
95% UPL	1.9	90% Percentile	1.7
90% Chebyshev UPL	1.999	95% Percentile	1.78
95% Chebyshev UPL	2.176	99% Percentile	1.876
95% USL	1.9		

Mercury

General Statistics

Total Number of Observations	13	Number of Missing Observations	0
Number of Distinct Observations	5		
Number of Detects	2	Number of Non-Detects	11
Number of Distinct Detects	2	Number of Distinct Non-Detects	3
Minimum Detect	4.2000E-5	Minimum Non-Detect	2.4000E-5
Maximum Detect	1.4000E-4	Maximum Non-Detect	1.0000E-4
Variance Detected	4.8020E-9	Percent Non-Detects	84.62%
Mean Detected	9.1000E-5	SD Detected	6.9296E-5
Mean of Detected Logged Data	-9.476	SD of Detected Logged Data	0.851

Warning: Data set has only 2 Detected Values.

This is not enough to compute meaningful or reliable statistics and estimates.

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	13	95% UTL with95% Coverage	1.4000E-4
Approx, f used to compute achieved CC	0.684	Approximate Actual Confidence Coefficient achieved by UTL	0.487
Approximate Sample Size needed to achieve specified CC	59	95% UPL	1.4000E-4
95% USL	1.4000E-4	95% KM Chebyshev UPL	1.7530E-4

Molybdenum

General Statistics

Total Number of Observations	13	Number of Missing Observations	0
Number of Distinct Observations	6		
Number of Detects	4	Number of Non-Detects	9
Number of Distinct Detects	4	Number of Distinct Non-Detects	2
Minimum Detect	0.0024	Minimum Non-Detect	0.0014
Maximum Detect	0.011	Maximum Non-Detect	0.006
Variance Detected	1.5069E-5	Percent Non-Detects	69.23%
Mean Detected	0.00578	SD Detected	0.00388
Mean of Detected Logged Data	-5.327	SD of Detected Logged Data	0.681

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.914	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.748	Detected Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.238	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.375	Detected Data appear Normal at 5% Significance Level	

Detected Data appear Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.00334	KM SD	0.00256
95% UTL95% Coverage	0.0102	95% KM UPL (t)	0.00807
90% KM Percentile (z)	0.00662	95% KM Percentile (z)	0.00755
99% KM Percentile (z)	0.00929	95% KM USL	0.0093

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.00368	SD	0.00251
95% UTL95% Coverage	0.0104	95% UPL (t)	0.00831
90% Percentile (z)	0.00689	95% Percentile (z)	0.0078
99% Percentile (z)	0.00951	95% USL	0.00952

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Nickel

General Statistics

Total Number of Observations	13	Number of Distinct Observations	10
Minimum	0.051	First Quartile	0.054
Second Largest	0.064	Median	0.056
Maximum	0.065	Third Quartile	0.061
Mean	0.0569	SD	0.00475
Coefficient of Variation	0.0835	Skewness	0.486
Mean of logged Data	-2.869	SD of logged Data	0.0824

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Normal GOF Test

Shapiro Wilk Test Statistic	0.921	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.866	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.192	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.234	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	0.0696	90% Percentile (z)	0.063
	95% UPL (t)	0.0657	95% Percentile (z)	0.0647
	95% USL	0.068	99% Percentile (z)	0.068

Selenium

General Statistics

Total Number of Observations	13	Number of Missing Observations	0
Number of Distinct Observations	5		
Number of Detects	4	Number of Non-Detects	9
Number of Distinct Detects	3	Number of Distinct Non-Detects	2
Minimum Detect	0.0011	Minimum Non-Detect	0.001
Maximum Detect	0.023	Maximum Non-Detect	0.015
Variance Detected	1.2102E-4	Percent Non-Detects	69.23%
Mean Detected	0.0103	SD Detected	0.011
Mean of Detected Logged Data	-5.383	SD of Detected Logged Data	1.657

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.848	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.748	Detected Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.299	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.375	Detected Data appear Normal at 5% Significance Level	

Detected Data appear Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.00387	KM SD	0.00681
95% UTL95% Coverage	0.022	95% KM UPL (t)	0.0165
90% KM Percentile (z)	0.0126	95% KM Percentile (z)	0.0151
99% KM Percentile (z)	0.0197	95% KM USL	0.0197

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.00513	SD	0.00716
95% UTL95% Coverage	0.0243	95% UPL (t)	0.0184
90% Percentile (z)	0.0143	95% Percentile (z)	0.0169
99% Percentile (z)	0.0218	95% USL	0.0218

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Silver

General Statistics

Total Number of Observations	13	Number of Missing Observations	0
Number of Distinct Observations	4		
Number of Detects	2	Number of Non-Detects	11
Number of Distinct Detects	2	Number of Distinct Non-Detects	2
Minimum Detect	0.0095	Minimum Non-Detect	3.0000E-4
Maximum Detect	0.011	Maximum Non-Detect	0.0012
Variance Detected	1.1250E-6	Percent Non-Detects	84.62%
Mean Detected	0.0103	SD Detected	0.00106
Mean of Detected Logged Data	-4.583	SD of Detected Logged Data	0.104

Warning: Data set has only 2 Detected Values.

This is not enough to compute meaningful or reliable statistics and estimates.

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	13	95% UTL with95% Coverage	0.011
Approx, f used to compute achieved CC	0.684	Approximate Actual Confidence Coefficient achieved by UTL	0.487
Approximate Sample Size needed to achieve specified CC	59	95% UPL	0.011
95% USL	0.011	95% KM Chebyshev UPL	0.0181

Sulfur

General Statistics

Total Number of Observations	8	Number of Distinct Observations	3
		Number of Missing Observations	5
Minimum	160	First Quartile	167.5
Second Largest	170	Median	170
Maximum	190	Third Quartile	170
Mean	170	SD	9.258
Coefficient of Variation	0.0545	Skewness	1.44
Mean of logged Data	5.135	SD of logged Data	0.0531

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for Background Threshold Values

Order of Statistic, r	8	95% UTL with 95% Coverage	190
Approx, f used to compute achieved CC	0.421	Approximate Actual Confidence Coefficient achieved by UTL	0.337
95% Percentile Bootstrap UTL with 95% Coverage	N/A	Approximate Sample Size needed to achieve specified CC	59
95% UPL	190	95% BCA Bootstrap UTL with 95% Coverage	N/A
90% Chebyshev UPL	199.5	90% Percentile	176
95% Chebyshev UPL	212.8	95% Percentile	183
95% USL	190	99% Percentile	188.6

Thallium

General Statistics

Total Number of Observations	13	Number of Missing Observations	0
Number of Distinct Observations	6		
Number of Detects	9	Number of Non-Detects	4
Number of Distinct Detects	5	Number of Distinct Non-Detects	1
Minimum Detect	0.0011	Minimum Non-Detect	0.01
Maximum Detect	0.015	Maximum Non-Detect	0.01
Variance Detected	2.0728E-5	Percent Non-Detects	30.77%
Mean Detected	0.00287	SD Detected	0.00455
Mean of Detected Logged Data	-6.347	SD of Detected Logged Data	0.814

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	13	95% UTL with95% Coverage	0.015
Approx, f used to compute achieved CC	0.684	Approximate Actual Confidence Coefficient achieved by UTL	0.487
Approximate Sample Size needed to achieve specified CC	59	95% UPL	0.015
95% USL	0.015	95% KM Chebyshev UPL	0.0189

Zinc

General Statistics

Total Number of Observations	13	Number of Distinct Observations	5
Minimum	1.1	First Quartile	1.2
Second Largest	1.4	Median	1.3
Maximum	1.5	Third Quartile	1.3
Mean	1.277	SD	0.109
Coefficient of Variation	0.0855	Skewness	0.534
Mean of logged Data	0.241	SD of logged Data	0.0844

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Normal GOF Test

Shapiro Wilk Test Statistic	0.919	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.866	Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.221	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.234	Data appear Normal at 5% Significance Level

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	1.569	90% Percentile (z)	1.417
	95% UPL (t)	1.479	95% Percentile (z)	1.457
	95% USL	1.531	99% Percentile (z)	1.531

Background Statistics for Data Sets with Non-Detects

Metals - MW-3

User Selected Options

Date/Time of Computation	ProUCL 5.1 4/8/2019 1:34:23 PM
From File	Metals Input_b.xls
Full Precision	OFF
Confidence Coefficient	95%
Coverage	95%
Different or Future K Observations	1
Number of Bootstrap Operations	2000

Antimony

General Statistics

Total Number of Observations	10	Number of Missing Observations	3
Number of Distinct Observations	3		
Number of Detects	1	Number of Non-Detects	9
Number of Distinct Detects	1	Number of Distinct Non-Detects	2
Minimum Detect	2.2000E-4	Minimum Non-Detect	2.0000E-4
Maximum Detect	2.2000E-4	Maximum Non-Detect	0.0049
Variance Detected	N/A	Percent Non-Detects	90%
Mean Detected	2.2000E-4	SD Detected	N/A
Mean of Detected Logged Data	-8.422	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!

It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Antimony was not processed!

Arsenic

General Statistics

Total Number of Observations	13	Number of Distinct Observations	11
Minimum	0.043	First Quartile	0.093
Second Largest	0.34	Median	0.29
Maximum	0.34	Third Quartile	0.32
Mean	0.221	SD	0.123
Coefficient of Variation	0.555	Skewness	-0.519
Mean of logged Data	-1.736	SD of logged Data	0.78

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for Background Threshold Values

Order of Statistic, r	13	95% UTL with 95% Coverage	0.34
Approx, f used to compute achieved CC	0.684	Approximate Actual Confidence Coefficient achieved by UTL	0.487
95% Percentile Bootstrap UTL with 95% Coverage	0.34	Approximate Sample Size needed to achieve specified CC	59
95% UPL	0.34	95% BCA Bootstrap UTL with 95% Coverage	0.34
90% Chebyshev UPL	0.603	90% Percentile	0.336
95% Chebyshev UPL	0.775	95% Percentile	0.34
95% USL	0.34	99% Percentile	0.34

Barium

General Statistics

Total Number of Observations	13	Number of Distinct Observations	13
Minimum	0.002	First Quartile	0.006
Second Largest	0.026	Median	0.0078
Maximum	0.029	Third Quartile	0.0097
Mean	0.0107	SD	0.00902
Coefficient of Variation	0.847	Skewness	1.241
Mean of logged Data	-4.869	SD of logged Data	0.863

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Gamma GOF Test

A-D Test Statistic	0.532	**Anderson-Darling Gamma GOF Test**
5% A-D Critical Value	0.748	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.213	**Kolmogorov-Smirnov Gamma GOF Test**
5% K-S Critical Value	0.24	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	1.676	k star (bias corrected MLE)	1.341
Theta hat (MLE)	0.00636	Theta star (bias corrected MLE)	0.00795
nu hat (MLE)	43.59	nu star (bias corrected)	34.86
MLE Mean (bias corrected)	0.0107	MLE Sd (bias corrected)	0.0092

Background Statistics Assuming Gamma Distribution

95% Wilson Hilferty (WH) Approx. Gamma UPL	0.0309	90% Percentile	0.0228
95% Hawkins Wixley (HW) Approx. Gamma UPL	0.032	95% Percentile	0.0288
95% WH Approx. Gamma UTL with 95% Coverage	0.0475	99% Percentile	0.0425
95% HW Approx. Gamma UTL with 95% Coverage	0.0515		
95% WH USL	0.04	95% HW USL	0.0426

Beryllium

General Statistics

Total Number of Observations	13	Number of Missing Observations	0
Number of Distinct Observations	3		
Number of Detects	1	Number of Non-Detects	12
Number of Distinct Detects	1	Number of Distinct Non-Detects	2
Minimum Detect	1.1000E-4	Minimum Non-Detect	1.0000E-4
Maximum Detect	1.1000E-4	Maximum Non-Detect	5.0000E-4
Variance Detected	N/A	Percent Non-Detects	92.31%
Mean Detected	1.1000E-4	SD Detected	N/A
Mean of Detected Logged Data	-9.115	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!

It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Beryllium was not processed!

Cadmium

General Statistics

Total Number of Observations	13	Number of Missing Observations	0
Number of Distinct Observations	3		
Number of Detects	2	Number of Non-Detects	11
Number of Distinct Detects	2	Number of Distinct Non-Detects	2
Minimum Detect	5.0000E-4	Minimum Non-Detect	5.0000E-4
Maximum Detect	5.4000E-4	Maximum Non-Detect	0.0011
Variance Detected	8.000E-10	Percent Non-Detects	84.62%
Mean Detected	5.2000E-4	SD Detected	2.8284E-5
Mean of Detected Logged Data	-7.562	SD of Detected Logged Data	0.0544

Warning: Data set has only 2 Detected Values.

This is not enough to compute meaningful or reliable statistics and estimates.

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	13	95% UTL with95% Coverage	0.0011
Approx, f used to compute achieved CC	0.684	Approximate Actual Confidence Coefficient achieved by UTL	0.487
Approximate Sample Size needed to achieve specified CC	59	95% UPL	0.0011
95% USL	0.0011	95% KM Chebyshev UPL	5.6484E-4

Chromium

General Statistics

Total Number of Observations	13	Number of Missing Observations	0
Number of Distinct Observations	3		
Number of Detects	2	Number of Non-Detects	11
Number of Distinct Detects	2	Number of Distinct Non-Detects	1
Minimum Detect	0.0012	Minimum Non-Detect	0.001
Maximum Detect	0.0027	Maximum Non-Detect	0.001
Variance Detected	1.1250E-6	Percent Non-Detects	84.62%
Mean Detected	0.00195	SD Detected	0.00106
Mean of Detected Logged Data	-6.32	SD of Detected Logged Data	0.573

Warning: Data set has only 2 Detected Values.

This is not enough to compute meaningful or reliable statistics and estimates.

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	13	95% UTL with95% Coverage	0.0027
Approx, f used to compute achieved CC	0.684	Approximate Actual Confidence Coefficient achieved by UTL	0.487
Approximate Sample Size needed to achieve specified CC	59	95% UPL	0.0027
95% USL	0.0027	95% KM Chebyshev UPL	0.00319

Cobalt

General Statistics

Total Number of Observations	13	Number of Missing Observations	0
Number of Distinct Observations	9		
Number of Detects	9	Number of Non-Detects	4
Number of Distinct Detects	8	Number of Distinct Non-Detects	2
Minimum Detect	0.0011	Minimum Non-Detect	6.0000E-4
Maximum Detect	0.0072	Maximum Non-Detect	0.0011
Variance Detected	4.0344E-6	Percent Non-Detects	30.77%
Mean Detected	0.00252	SD Detected	0.00201
Mean of Detected Logged Data	-6.193	SD of Detected Logged Data	0.641

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.74	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.728	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.281	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.282	Detected data appear Gamma Distributed at 5% Significance Level

Detected data follow Appr. Gamma Distribution at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	2.528	k star (bias corrected MLE)	1.759
Theta hat (MLE)	9.9775E-4	Theta star (bias corrected MLE)	0.00143
nu hat (MLE)	45.5	nu star (bias corrected)	31.67
MLE Mean (bias corrected)	0.00252		
MLE Sd (bias corrected)	0.0019	95% Percentile of Chisquare (2kstar)	8.696

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.0011	Mean	0.00482
Maximum	0.01	Median	0.0031
SD	0.00395	CV	0.819
k hat (MLE)	1.495	k star (bias corrected MLE)	1.201
Theta hat (MLE)	0.00323	Theta star (bias corrected MLE)	0.00401
nu hat (MLE)	38.87	nu star (bias corrected)	31.24
MLE Mean (bias corrected)	0.00482	MLE Sd (bias corrected)	0.0044
95% Percentile of Chisquare (2kstar)	6.751	90% Percentile	0.0106
95% Percentile	0.0135	99% Percentile	0.0203

The following statistics are computed using Gamma ROS Statistics on Imputed Data

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.023	0.0253	95% Approx. Gamma UPL	0.0147	0.0153
95% Gamma USL	0.0193	0.0207			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.00193	SD (KM)	0.00181
Variance (KM)	3.2698E-6	SE of Mean (KM)	5.3194E-4
k hat (KM)	1.14	k star (KM)	0.928
nu hat (KM)	29.64	nu star (KM)	24.13
theta hat (KM)	0.00169	theta star (KM)	0.00208
80% gamma percentile (KM)	0.00313	90% gamma percentile (KM)	0.00453
95% gamma percentile (KM)	0.00594	99% gamma percentile (KM)	0.00923

The following statistics are computed using gamma distribution and KM estimates

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.00802	0.00842	95% Approx. Gamma UPL	0.00529	0.00535
95% KM Gamma Percentile	0.00472	0.00473	95% Gamma USL	0.0068	0.00702

Copper

General Statistics

Total Number of Observations	13	Number of Missing Observations	0
Number of Distinct Observations	4		
Number of Detects	4	Number of Non-Detects	9
Number of Distinct Detects	4	Number of Distinct Non-Detects	1
Minimum Detect	0.001	Minimum Non-Detect	0.001
Maximum Detect	0.0029	Maximum Non-Detect	0.001
Variance Detected	8.1667E-7	Percent Non-Detects	69.23%
Mean Detected	0.00155	SD Detected	9.0370E-4
Mean of Detected Logged Data	-6.572	SD of Detected Logged Data	0.492

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.768	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.748	Detected Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.372	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.375	Detected Data appear Lognormal at 5% Significance Level

Detected Data appear Lognormal at 5% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	6.5768E-4	Mean in Log Scale	-7.878
SD in Original Scale	7.7818E-4	SD in Log Scale	1.109
95% UTL95% Coverage	0.00733	95% BCA UTL95% Coverage	0.0029
95% Bootstrap (%) UTL95% Coverage	0.0029	95% UPL (t)	0.00295
90% Percentile (z)	0.00157	95% Percentile (z)	0.00235
99% Percentile (z)	0.005	95% USL	0.00503

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-6.804	95% KM UTL (Lognormal)95% Coverage	0.00236
KM SD of Logged Data	0.282	95% KM UPL (Lognormal)	0.00187
95% KM Percentile Lognormal (z)	0.00176	95% KM USL (Lognormal)	0.00214

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	8.2308E-4	Mean in Log Scale	-7.284
SD in Original Scale	6.7719E-4	SD in Log Scale	0.552
95% UTL95% Coverage	0.003	95% UPL (t)	0.0019
90% Percentile (z)	0.00139	95% Percentile (z)	0.0017
99% Percentile (z)	0.00248	95% USL	0.00248

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Cyanide

General Statistics

Total Number of Observations	13	Number of Missing Observations	0
Number of Distinct Observations	3		
Number of Detects	1	Number of Non-Detects	12
Number of Distinct Detects	1	Number of Distinct Non-Detects	2
Minimum Detect	0.201	Minimum Non-Detect	0.0026
Maximum Detect	0.201	Maximum Non-Detect	0.013
Variance Detected	N/A	Percent Non-Detects	92.31%
Mean Detected	0.201	SD Detected	N/A
Mean of Detected Logged Data	-1.604	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!

It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Cyanide was not processed!

Iron

General Statistics

Total Number of Observations	13	Number of Missing Observations	0
Number of Distinct Observations	7		
Number of Detects	6	Number of Non-Detects	7
Number of Distinct Detects	5	Number of Distinct Non-Detects	2
Minimum Detect	0.027	Minimum Non-Detect	0.025
Maximum Detect	1.8	Maximum Non-Detect	0.03
Variance Detected	0.698	Percent Non-Detects	53.85%
Mean Detected	0.902	SD Detected	0.835
Mean of Detected Logged Data	-1.028	SD of Detected Logged Data	1.908

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.837	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.788	Detected Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.21	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.325	Detected Data appear Normal at 5% Significance Level	

Detected Data appear Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.43	KM SD	0.678
95% UTL95% Coverage	2.24	95% KM UPL (t)	1.683
90% KM Percentile (z)	1.298	95% KM Percentile (z)	1.544
99% KM Percentile (z)	2.006	95% KM USL	2.009

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.423	SD	0.71
95% UTL95% Coverage	2.318	95% UPL (t)	1.735
90% Percentile (z)	1.332	95% Percentile (z)	1.59
99% Percentile (z)	2.074	95% USL	2.077

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Manganese

General Statistics

Total Number of Observations	13	Number of Distinct Observations	13
Minimum	0.063	First Quartile	0.68
Second Largest	5.9	Median	2.5
Maximum	6	Third Quartile	3.4
Mean	2.535	SD	2.148
Coefficient of Variation	0.847	Skewness	0.542
Mean of logged Data	0.306	SD of logged Data	1.457

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Normal GOF Test

Shapiro Wilk Test Statistic	0.892	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.866	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.174	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.234	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	8.272	90% Percentile (z)	5.288
	95% UPL (t)	6.508	95% Percentile (z)	6.068
	95% USL	7.541	99% Percentile (z)	7.532

Mercury

General Statistics

Total Number of Observations	13	Number of Missing Observations	0
Number of Distinct Observations	3		
Number of Detects	1	Number of Non-Detects	12
Number of Distinct Detects	1	Number of Distinct Non-Detects	2
Minimum Detect	1.5000E-4	Minimum Non-Detect	2.4000E-5
Maximum Detect	1.5000E-4	Maximum Non-Detect	1.0000E-4
Variance Detected	N/A	Percent Non-Detects	92.31%
Mean Detected	1.5000E-4	SD Detected	N/A
Mean of Detected Logged Data	-8.805	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!

It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Mercury was not processed!

Molybdenum

General Statistics

Total Number of Observations	13	Number of Missing Observations	0
Number of Distinct Observations	10		
Number of Detects	10	Number of Non-Detects	3
Number of Distinct Detects	9	Number of Distinct Non-Detects	2
Minimum Detect	7.6000E-4	Minimum Non-Detect	6.0000E-4
Maximum Detect	0.013	Maximum Non-Detect	0.0014
Variance Detected	1.6685E-5	Percent Non-Detects	23.08%
Mean Detected	0.00612	SD Detected	0.00408
Mean of Detected Logged Data	-5.392	SD of Detected Logged Data	0.919

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.946	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.842	Detected Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.179	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.262	Detected Data appear Normal at 5% Significance Level	

Detected Data appear Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.00485	KM SD	0.00411
95% UTL95% Coverage	0.0158	95% KM UPL (t)	0.0125
90% KM Percentile (z)	0.0101	95% KM Percentile (z)	0.0116
99% KM Percentile (z)	0.0144	95% KM USL	0.0144

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.0048	SD	0.00433
95% UTL95% Coverage	0.0164	95% UPL (t)	0.0128
90% Percentile (z)	0.0104	95% Percentile (z)	0.0119
99% Percentile (z)	0.0149	95% USL	0.0149

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Nickel

General Statistics

Total Number of Observations	13	Number of Missing Observations	0
Number of Distinct Observations	9		
Number of Detects	9	Number of Non-Detects	4
Number of Distinct Detects	8	Number of Distinct Non-Detects	1
Minimum Detect	0.0012	Minimum Non-Detect	0.0024
Maximum Detect	0.0054	Maximum Non-Detect	0.0024
Variance Detected	2.1169E-6	Percent Non-Detects	30.77%
Mean Detected	0.00388	SD Detected	0.00145
Mean of Detected Logged Data	-5.651	SD of Detected Logged Data	0.528

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.815	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.829	Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.254	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.274	Detected Data appear Normal at 5% Significance Level	

Detected Data appear Approximate Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.00313	KM SD	0.00161
95% UTL95% Coverage	0.00742	95% KM UPL (t)	0.0061
90% KM Percentile (z)	0.00519	95% KM Percentile (z)	0.00577
99% KM Percentile (z)	0.00687	95% KM USL	0.00687

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.00305	SD	0.00175
95% UTL95% Coverage	0.00773	95% UPL (t)	0.00629
90% Percentile (z)	0.0053	95% Percentile (z)	0.00593
99% Percentile (z)	0.00713	95% USL	0.00713

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Silver

General Statistics

Total Number of Observations	13	Number of Missing Observations	0
Number of Distinct Observations	4		
Number of Detects	2	Number of Non-Detects	11
Number of Distinct Detects	2	Number of Distinct Non-Detects	2
Minimum Detect	0.0041	Minimum Non-Detect	3.0000E-4
Maximum Detect	0.005	Maximum Non-Detect	0.0012
Variance Detected	4.0500E-7	Percent Non-Detects	84.62%
Mean Detected	0.00455	SD Detected	6.3640E-4
Mean of Detected Logged Data	-5.398	SD of Detected Logged Data	0.14

Warning: Data set has only 2 Detected Values.

This is not enough to compute meaningful or reliable statistics and estimates.

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	13	95% UTL with95% Coverage	0.005
Approx, f used to compute achieved CC	0.684	Approximate Actual Confidence Coefficient achieved by UTL	0.487
Approximate Sample Size needed to achieve specified CC	59	95% UPL	0.005
95% USL	0.005	95% KM Chebyshev UPL	0.00794

Sulfur

General Statistics

Total Number of Observations	8	Number of Distinct Observations	7
		Number of Missing Observations	5
Minimum	52	First Quartile	56.25
Second Largest	63	Median	58
Maximum	64	Third Quartile	61.5
Mean	58.38	SD	4.173
Coefficient of Variation	0.0715	Skewness	-0.132
Mean of logged Data	4.065	SD of logged Data	0.072

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test

Shapiro Wilk Test Statistic	0.958	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.818	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.161	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.283	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with 95% Coverage	71.67	90% Percentile (z)	63.72
95% UPL (t)	66.76	95% Percentile (z)	65.24
95% USL	66.85	99% Percentile (z)	68.08

Vanadium

General Statistics

Total Number of Observations	13	Number of Missing Observations	0
Number of Distinct Observations	6		
Number of Detects	5	Number of Non-Detects	8
Number of Distinct Detects	5	Number of Distinct Non-Detects	1
Minimum Detect	0.0024	Minimum Non-Detect	0.003
Maximum Detect	0.029	Maximum Non-Detect	0.003
Variance Detected	1.2548E-4	Percent Non-Detects	61.54%
Mean Detected	0.0107	SD Detected	0.0112
Mean of Detected Logged Data	-4.971	SD of Detected Logged Data	1.04

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.818	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.762	Detected Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.296	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.343	Detected Data appear Normal at 5% Significance Level

Detected Data appear Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.00561	KM SD	0.00742
95% UTL95% Coverage	0.0254	95% KM UPL (t)	0.0193
90% KM Percentile (z)	0.0151	95% KM Percentile (z)	0.0178
99% KM Percentile (z)	0.0229	95% KM USL	0.0229

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.00505	SD	0.00798
95% UTL95% Coverage	0.0264	95% UPL (t)	0.0198
90% Percentile (z)	0.0153	95% Percentile (z)	0.0182
99% Percentile (z)	0.0236	95% USL	0.0237

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Zinc

General Statistics

Total Number of Observations	13	Number of Distinct Observations	13
Minimum	0.087	First Quartile	0.69
Second Largest	2.1	Median	1.2
Maximum	2.4	Third Quartile	1.9
Mean	1.292	SD	0.73
Coefficient of Variation	0.565	Skewness	-0.0576
Mean of logged Data	0.00452	SD of logged Data	0.899

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.671	d2max (for USL)	2.331

Normal GOF Test

Shapiro Wilk Test Statistic	0.943	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.866	Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.173	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.234	Data appear Normal at 5% Significance Level

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	3.242	90% Percentile (z)	2.227
	95% UPL (t)	2.642	95% Percentile (z)	2.493
	95% USL	2.993	99% Percentile (z)	2.99

Background Statistics for Data Sets with Non-Detects

Metals - MW-4

User Selected Options

Date/Time of Computation	ProUCL 5.1 4/8/2019 1:35:30 PM
From File	Metals Input_c.xls
Full Precision	OFF
Confidence Coefficient	95%
Coverage	95%
Different or Future K Observations	1
Number of Bootstrap Operations	2000

Aluminum

General Statistics

Total Number of Observations	8	Number of Distinct Observations	7
Minimum	0.095	First Quartile	47.75
Second Largest	160	Median	56.5
Maximum	160	Third Quartile	130
Mean	80.26	SD	59.17
Coefficient of Variation	0.737	Skewness	0.398
Mean of logged Data	3.527	SD of logged Data	2.44

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test

Shapiro Wilk Test Statistic	0.89	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.818	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.265	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.283	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with 95% Coverage	268.8	90% Percentile (z)	156.1
95% UPL (t)	199.2	95% Percentile (z)	177.6
95% USL	200.5	99% Percentile (z)	217.9

Antimony

General Statistics

Total Number of Observations	8	Number of Distinct Observations	8
Minimum	0.00205	First Quartile	0.0042
Second Largest	0.0066	Median	0.0051
Maximum	0.009	Third Quartile	0.00608
Mean	0.00524	SD	0.00206
Coefficient of Variation	0.392	Skewness	0.433
Mean of logged Data	-5.327	SD of logged Data	0.437

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test

Shapiro Wilk Test Statistic	0.978	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.818	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.132	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.283	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	0.0118	90% Percentile (z)	0.00788
	95% UPL (t)	0.00938	95% Percentile (z)	0.00863
	95% USL	0.00942	99% Percentile (z)	0.01

Arsenic

General Statistics

Total Number of Observations	8	Number of Distinct Observations	7
Minimum	18	First Quartile	79
Second Largest	130	Median	115
Maximum	140	Third Quartile	130
Mean	100.5	SD	40.7
Coefficient of Variation	0.405	Skewness	-1.309
Mean of logged Data	4.471	SD of logged Data	0.678

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test

Shapiro Wilk Test Statistic	0.866	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.818	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.217	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.283	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	230.2	90% Percentile (z)	152.7
	95% UPL (t)	182.3	95% Percentile (z)	167.5
	95% USL	183.2	99% Percentile (z)	195.2

Barium

General Statistics

Total Number of Observations	8	Number of Distinct Observations	8
Minimum	0.01	First Quartile	0.0128
Second Largest	0.034	Median	0.0205
Maximum	0.036	Third Quartile	0.0325
Mean	0.0223	SD	0.0105
Coefficient of Variation	0.471	Skewness	0.236
Mean of logged Data	-3.912	SD of logged Data	0.504

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test

Shapiro Wilk Test Statistic	0.883	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.818	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.199	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.283	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	0.0557	90% Percentile (z)	0.0357
	95% UPL (t)	0.0433	95% Percentile (z)	0.0395
	95% USL	0.0436	99% Percentile (z)	0.0466

Beryllium

General Statistics

Total Number of Observations	8	Number of Distinct Observations	7
Minimum	1.4000E-4	First Quartile	0.0105
Second Largest	0.026	Median	0.0115
Maximum	0.028	Third Quartile	0.02
Mean	0.0144	SD	0.0092
Coefficient of Variation	0.639	Skewness	0.238
Mean of logged Data	-4.782	SD of logged Data	1.705

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test

Shapiro Wilk Test Statistic	0.93	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.818	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.228	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.283	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	0.0437	90% Percentile (z)	0.0262
	95% UPL (t)	0.0329	95% Percentile (z)	0.0295
	95% USL	0.0331	99% Percentile (z)	0.0358

Cadmium

General Statistics

Total Number of Observations	8	Number of Distinct Observations	8
Minimum	0.0031	First Quartile	0.0523
Second Largest	0.22	Median	0.065
Maximum	0.23	Third Quartile	0.125
Mean	0.0974	SD	0.0827
Coefficient of Variation	0.849	Skewness	1.035
Mean of logged Data	-2.817	SD of logged Data	1.338

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test

Shapiro Wilk Test Statistic	0.823	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.818	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.271	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.283	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	0.361	90% Percentile (z)	0.203
	95% UPL (t)	0.264	95% Percentile (z)	0.233
	95% USL	0.265	99% Percentile (z)	0.29

Chromium

General Statistics

Total Number of Observations	8	Number of Missing Observations	0
Number of Distinct Observations	4		
Number of Detects	5	Number of Non-Detects	3
Number of Distinct Detects	4	Number of Distinct Non-Detects	1
Minimum Detect	0.001	Minimum Non-Detect	0.001
Maximum Detect	0.0017	Maximum Non-Detect	0.001
Variance Detected	8.7000E-8	Percent Non-Detects	37.5%
Mean Detected	0.00142	SD Detected	2.9496E-4
Mean of Detected Logged Data	-6.576	SD of Detected Logged Data	0.22

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.907	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.762	Detected Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.229	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.343	Detected Data appear Normal at 5% Significance Level	

Detected Data appear Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.00126	KM SD	2.9128E-4
95% UTL95% Coverage	0.00219	95% KM UPL (t)	0.00185
90% KM Percentile (z)	0.00164	95% KM Percentile (z)	0.00174
99% KM Percentile (z)	0.00194	95% KM USL	0.00185

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.00108	SD	5.2576E-4
95% UTL95% Coverage	0.00275	95% UPL (t)	0.00213
90% Percentile (z)	0.00175	95% Percentile (z)	0.00194
99% Percentile (z)	0.0023	95% USL	0.00214

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Cobalt

General Statistics

Total Number of Observations	8	Number of Distinct Observations	8
Minimum	0.135	First Quartile	0.72
Second Largest	1.8	Median	0.84
Maximum	1.9	Third Quartile	1.35
Mean	1.014	SD	0.595
Coefficient of Variation	0.587	Skewness	0.386
Mean of logged Data	-0.208	SD of logged Data	0.827

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test

Shapiro Wilk Test Statistic	0.927	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.818	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.201	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.283	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	2.911	90% Percentile (z)	1.777
	95% UPL (t)	2.21	95% Percentile (z)	1.993
	95% USL	2.223	99% Percentile (z)	2.399

Copper

General Statistics

Total Number of Observations	8	Number of Missing Observations	0
Number of Distinct Observations	7		
Number of Detects	7	Number of Non-Detects	1
Number of Distinct Detects	6	Number of Distinct Non-Detects	1
Minimum Detect	0.066	Minimum Non-Detect	0.001
Maximum Detect	1.3	Maximum Non-Detect	0.001
Variance Detected	0.184	Percent Non-Detects	12.5%
Mean Detected	0.588	SD Detected	0.429
Mean of Detected Logged Data	-0.95	SD of Detected Logged Data	1.179

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.913	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.803	Detected Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.226	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.304	Detected Data appear Normal at 5% Significance Level	

Detected Data appear Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.515	KM SD	0.419
95% UTL95% Coverage	1.85	95% KM UPL (t)	1.357
90% KM Percentile (z)	1.052	95% KM Percentile (z)	1.204
99% KM Percentile (z)	1.49	95% KM USL	1.366

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.514	SD	0.448
95% UTL95% Coverage	1.943	95% UPL (t)	1.415
90% Percentile (z)	1.089	95% Percentile (z)	1.252
99% Percentile (z)	1.557	95% USL	1.425

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Lead

General Statistics

Total Number of Observations	8	Number of Missing Observations	0
Number of Distinct Observations	7		
Number of Detects	6	Number of Non-Detects	2
Number of Distinct Detects	6	Number of Distinct Non-Detects	1
Minimum Detect	6.6000E-4	Minimum Non-Detect	6.0000E-4
Maximum Detect	0.0055	Maximum Non-Detect	6.0000E-4
Variance Detected	4.0195E-6	Percent Non-Detects	25%
Mean Detected	0.00339	SD Detected	0.002
Mean of Detected Logged Data	-5.913	SD of Detected Logged Data	0.834

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.903	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.788	Detected Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.243	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.325	Detected Data appear Normal at 5% Significance Level	

Detected Data appear Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.0027	KM SD	0.00199
95% UTL95% Coverage	0.00905	95% KM UPL (t)	0.0067
90% KM Percentile (z)	0.00525	95% KM Percentile (z)	0.00597
99% KM Percentile (z)	0.00733	95% KM USL	0.00675

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.00262	SD	0.00222
95% UTL95% Coverage	0.00969	95% UPL (t)	0.00708
90% Percentile (z)	0.00546	95% Percentile (z)	0.00627
99% Percentile (z)	0.00778	95% USL	0.00713

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Manganese

General Statistics

Total Number of Observations	8	Number of Distinct Observations	7
Minimum	0.625	First Quartile	2.975
Second Largest	7.2	Median	3.55
Maximum	7.2	Third Quartile	5.325
Mean	4.091	SD	2.233
Coefficient of Variation	0.546	Skewness	0.264
Mean of logged Data	1.215	SD of logged Data	0.769

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test

Shapiro Wilk Test Statistic	0.912	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.818	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.212	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.283	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	11.21	90% Percentile (z)	6.953
	95% UPL (t)	8.579	95% Percentile (z)	7.764
	95% USL	8.628	99% Percentile (z)	9.286

Mercury

General Statistics

Total Number of Observations	8	Number of Missing Observations	0
Number of Distinct Observations	2		
Number of Detects	1	Number of Non-Detects	7
Number of Distinct Detects	1	Number of Distinct Non-Detects	1
Minimum Detect	3.7000E-4	Minimum Non-Detect	1.0000E-4
Maximum Detect	3.7000E-4	Maximum Non-Detect	1.0000E-4
Variance Detected	N/A	Percent Non-Detects	87.5%
Mean Detected	3.7000E-4	SD Detected	N/A
Mean of Detected Logged Data	-7.902	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!

It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Mercury was not processed!

Molybdenum

General Statistics

Total Number of Observations	8	Number of Distinct Observations	8
Minimum	0.0018	First Quartile	0.00353
Second Largest	0.027	Median	0.0069
Maximum	0.115	Third Quartile	0.0158
Mean	0.022	SD	0.0385
Coefficient of Variation	1.752	Skewness	2.596
Mean of logged Data	-4.77	SD of logged Data	1.377

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Gamma GOF Test

A-D Test Statistic	0.638	**Anderson-Darling Gamma GOF Test**
5% A-D Critical Value	0.753	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.252	**Kolmogorov-Smirnov Gamma GOF Test**
5% K-S Critical Value	0.306	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	0.643	k star (bias corrected MLE)	0.485
Theta hat (MLE)	0.0342	Theta star (bias corrected MLE)	0.0453
nu hat (MLE)	10.28	nu star (bias corrected)	7.76
MLE Mean (bias corrected)	0.022	MLE Sd (bias corrected)	0.0315

Background Statistics Assuming Gamma Distribution

95% Wilson Hilferty (WH) Approx. Gamma UPL	0.102	90% Percentile	0.0598
95% Hawkins Wixley (HW) Approx. Gamma UPL	0.105	95% Percentile	0.0853
95% WH Approx. Gamma UTL with 95% Coverage	0.225	99% Percentile	0.148
95% HW Approx. Gamma UTL with 95% Coverage	0.262		
95% WH USL	0.103	95% HW USL	0.107

Nickel

General Statistics

Total Number of Observations	8	Number of Distinct Observations	8
Minimum	0.035	First Quartile	0.188
Second Largest	0.48	Median	0.225
Maximum	0.5	Third Quartile	0.345
Mean	0.267	SD	0.157
Coefficient of Variation	0.587	Skewness	0.429
Mean of logged Data	-1.543	SD of logged Data	0.829

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test

Shapiro Wilk Test Statistic	0.914	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.818	Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.218	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.283	Data appear Normal at 5% Significance Level

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with 95% Coverage	0.766	90% Percentile (z)	0.468
95% UPL (t)	0.582	95% Percentile (z)	0.524
95% USL	0.585	99% Percentile (z)	0.631

Selenium

General Statistics

Total Number of Observations	8	Number of Missing Observations	0
Number of Distinct Observations	7		
Number of Detects	7	Number of Non-Detects	1
Number of Distinct Detects	6	Number of Distinct Non-Detects	1
Minimum Detect	0.0014	Minimum Non-Detect	0.001
Maximum Detect	0.0075	Maximum Non-Detect	0.001
Variance Detected	6.3248E-6	Percent Non-Detects	12.5%
Mean Detected	0.00341	SD Detected	0.00251
Mean of Detected Logged Data	-5.909	SD of Detected Logged Data	0.721

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.815	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.803	Detected Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.298	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.304	Detected Data appear Normal at 5% Significance Level	

Detected Data appear Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.00311	KM SD	0.00232
95% UTL95% Coverage	0.0105	95% KM UPL (t)	0.00777
90% KM Percentile (z)	0.00609	95% KM Percentile (z)	0.00693
99% KM Percentile (z)	0.00851	95% KM USL	0.00783

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.00305	SD	0.00255
95% UTL95% Coverage	0.0112	95% UPL (t)	0.00817
90% Percentile (z)	0.00631	95% Percentile (z)	0.00724
99% Percentile (z)	0.00897	95% USL	0.00822

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Sulfur

General Statistics

Total Number of Observations	8	Number of Distinct Observations	7
Minimum	380	First Quartile	400
Second Largest	790	Median	427.5
Maximum	860	Third Quartile	632.5
Mean	533.1	SD	191.4
Coefficient of Variation	0.359	Skewness	1.119
Mean of logged Data	6.229	SD of logged Data	0.327

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for Background Threshold Values

Order of Statistic, r	8	95% UTL with 95% Coverage	860
Approx, f used to compute achieved CC	0.421	Approximate Actual Confidence Coefficient achieved by UTL	0.337
		Approximate Sample Size needed to achieve specified CC	59
95% Percentile Bootstrap UTL with 95% Coverage	860	95% BCA Bootstrap UTL with 95% Coverage	860
95% UPL	860	90% Percentile	811
90% Chebyshev UPL	1142	95% Percentile	835.5
95% Chebyshev UPL	1418	99% Percentile	855.1
95% USL	860		

Thallium

General Statistics

Total Number of Observations	8	Number of Distinct Observations	8
Minimum	0.0012	First Quartile	0.00675
Second Largest	0.0088	Median	0.00755
Maximum	0.0094	Third Quartile	0.00858
Mean	0.00703	SD	0.00257
Coefficient of Variation	0.366	Skewness	-1.965
Mean of logged Data	-5.089	SD of logged Data	0.675

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test

Shapiro Wilk Test Statistic	0.797	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.818	Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.264	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.283	Data appear Normal at 5% Significance Level	

Data appear Approximate Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with 95% Coverage	0.0152	90% Percentile (z)	0.0103
95% UPL (t)	0.0122	95% Percentile (z)	0.0113
95% USL	0.0122	99% Percentile (z)	0.013

Vanadium

General Statistics

Total Number of Observations	8	Number of Missing Observations	0
Number of Distinct Observations	8		
Number of Detects	7	Number of Non-Detects	1
Number of Distinct Detects	7	Number of Distinct Non-Detects	1
Minimum Detect	0.021	Minimum Non-Detect	0.003
Maximum Detect	0.059	Maximum Non-Detect	0.003
Variance Detected	2.4190E-4	Percent Non-Detects	12.5%
Mean Detected	0.0367	SD Detected	0.0156
Mean of Detected Logged Data	-3.382	SD of Detected Logged Data	0.423

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.881	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.803	Detected Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.238	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.304	Detected Data appear Normal at 5% Significance Level

Detected Data appear Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.0325	KM SD	0.0175
95% UTL95% Coverage	0.0882	95% KM UPL (t)	0.0676
90% KM Percentile (z)	0.0549	95% KM Percentile (z)	0.0613
99% KM Percentile (z)	0.0732	95% KM USL	0.068

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.0323	SD	0.019
95% UTL95% Coverage	0.093	95% UPL (t)	0.0706
90% Percentile (z)	0.0567	95% Percentile (z)	0.0636
99% Percentile (z)	0.0766	95% USL	0.071

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Zinc

General Statistics

Total Number of Observations	8	Number of Distinct Observations	8
Minimum	0.625	First Quartile	5.225
Second Largest	14	Median	6.35
Maximum	15	Third Quartile	10.48
Mean	7.716	SD	4.839
Coefficient of Variation	0.627	Skewness	0.396
Mean of logged Data	1.754	SD of logged Data	0.996

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test

Shapiro Wilk Test Statistic	0.934	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.818	Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.2	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.283	Data appear Normal at 5% Significance Level

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	23.14	90% Percentile (z)	13.92
	95% UPL (t)	17.44	95% Percentile (z)	15.68
	95% USL	17.55	99% Percentile (z)	18.97

Background Statistics for Data Sets with Non-Detects

Metals - MW-5

User Selected Options

Date/Time of Computation	ProUCL 5.1 4/8/2019 1:36:35 PM
From File	Metals Input_d.xls
Full Precision	OFF
Confidence Coefficient	95%
Coverage	95%
Different or Future K Observations	1
Number of Bootstrap Operations	2000

Aluminum

General Statistics

Total Number of Observations	8	Number of Missing Observations	0
Number of Distinct Observations	7		
Number of Detects	6	Number of Non-Detects	2
Number of Distinct Detects	6	Number of Distinct Non-Detects	1
Minimum Detect	0.029	Minimum Non-Detect	0.025
Maximum Detect	1.02	Maximum Non-Detect	0.025
Variance Detected	0.162	Percent Non-Detects	25%
Mean Detected	0.198	SD Detected	0.403
Mean of Detected Logged Data	-2.832	SD of Detected Logged Data	1.401

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	8	95% UTL with95% Coverage	1.02
Approx, f used to compute achieved CC	0.421	Approximate Actual Confidence Coefficient achieved by UTL	0.337
Approximate Sample Size needed to achieve specified CC	59	95% UPL	1.02
95% USL	1.02	95% KM Chebyshev UPL	1.667

Antimony

General Statistics

Total Number of Observations	8	Number of Missing Observations	0
Number of Distinct Observations	6		
Number of Detects	6	Number of Non-Detects	2
Number of Distinct Detects	5	Number of Distinct Non-Detects	1
Minimum Detect	2.3000E-4	Minimum Non-Detect	2.0000E-4
Maximum Detect	0.218	Maximum Non-Detect	2.0000E-4
Variance Detected	0.00789	Percent Non-Detects	25%
Mean Detected	0.0367	SD Detected	0.0888
Mean of Detected Logged Data	-6.777	SD of Detected Logged Data	2.618

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	8	95% UTL with95% Coverage	0.218
Approx, f used to compute achieved CC	0.421	Approximate Actual Confidence Coefficient achieved by UTL	0.337
Approximate Sample Size needed to achieve specified CC	59	95% UPL	0.218
95% USL	0.218	95% KM Chebyshev UPL	0.36

Arsenic

General Statistics

Total Number of Observations	8	Number of Distinct Observations	7
Minimum	0.56	First Quartile	0.688
Second Largest	0.88	Median	0.82
Maximum	1	Third Quartile	0.865
Mean	0.786	SD	0.143
Coefficient of Variation	0.182	Skewness	-0.22
Mean of logged Data	-0.256	SD of logged Data	0.189

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test

Shapiro Wilk Test Statistic	0.968	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.818	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.197	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.283	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with 95% Coverage	1.241	90% Percentile (z)	0.969
95% UPL (t)	1.073	95% Percentile (z)	1.021
95% USL	1.076	99% Percentile (z)	1.118

Barium

General Statistics

Total Number of Observations	8	Number of Distinct Observations	7
Minimum	0.015	First Quartile	0.0168
Second Largest	0.025	Median	0.0195
Maximum	0.229	Third Quartile	0.022
Mean	0.0453	SD	0.0743
Coefficient of Variation	1.642	Skewness	2.818
Mean of logged Data	-3.665	SD of logged Data	0.901

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for Background Threshold Values

Order of Statistic, r	8	95% UTL with 95% Coverage	0.229
Approx, f used to compute achieved CC	0.421	Approximate Actual Confidence Coefficient achieved by UTL	0.337
95% Percentile Bootstrap UTL with 95% Coverage	0.229	Approximate Sample Size needed to achieve specified CC	59
95% UPL	0.229	95% BCA Bootstrap UTL with 95% Coverage	0.229
90% Chebyshev UPL	0.282	90% Percentile	0.0862
95% Chebyshev UPL	0.389	95% Percentile	0.158
95% USL	0.229	99% Percentile	0.215

Beryllium

General Statistics

Total Number of Observations	8	Number of Missing Observations	0
Number of Distinct Observations	5		
Number of Detects	5	Number of Non-Detects	3
Number of Distinct Detects	4	Number of Distinct Non-Detects	1
Minimum Detect	1.1000E-4	Minimum Non-Detect	1.0000E-4
Maximum Detect	0.207	Maximum Non-Detect	1.0000E-4
Variance Detected	0.00855	Percent Non-Detects	37.5%
Mean Detected	0.0415	SD Detected	0.0925
Mean of Detected Logged Data	-7.229	SD of Detected Logged Data	3.172

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	8	95% UTL with95% Coverage	0.207
Approx, f used to compute achieved CC	0.421	Approximate Actual Confidence Coefficient achieved by UTL	0.337
Approximate Sample Size needed to achieve specified CC	59	95% UPL	0.207
95% USL	0.207	95% KM Chebyshev UPL	0.342

Cadmium

General Statistics

Total Number of Observations	8	Number of Missing Observations	0
Number of Distinct Observations	5		
Number of Detects	3	Number of Non-Detects	5
Number of Distinct Detects	3	Number of Distinct Non-Detects	2
Minimum Detect	7.0000E-4	Minimum Non-Detect	5.0000E-4
Maximum Detect	0.204	Maximum Non-Detect	5.0500E-4
Variance Detected	0.0138	Percent Non-Detects	62.5%
Mean Detected	0.0685	SD Detected	0.117
Mean of Detected Logged Data	-5.359	SD of Detected Logged Data	3.264

Warning: Data set has only 3 Detected Values.

This is not enough to compute meaningful or reliable statistics and estimates.

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.75	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.767	Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.385	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.425	Detected Data appear Normal at 5% Significance Level

Detected Data appear Approximate Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.026	KM SD	0.0673
95% UTL95% Coverage	0.24	95% KM UPL (t)	0.161
90% KM Percentile (z)	0.112	95% KM Percentile (z)	0.137
99% KM Percentile (z)	0.183	95% KM USL	0.163

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.0258	SD	0.072
95% UTL95% Coverage	0.255	95% UPL (t)	0.17
90% Percentile (z)	0.118	95% Percentile (z)	0.144
99% Percentile (z)	0.193	95% USL	0.172

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Chromium

General Statistics

Total Number of Observations	8	Number of Missing Observations	0
Number of Distinct Observations	2		
Number of Detects	1	Number of Non-Detects	7
Number of Distinct Detects	1	Number of Distinct Non-Detects	1
Minimum Detect	0.206	Minimum Non-Detect	0.001
Maximum Detect	0.206	Maximum Non-Detect	0.001
Variance Detected	N/A	Percent Non-Detects	87.5%
Mean Detected	0.206	SD Detected	N/A
Mean of Detected Logged Data	-1.58	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!

It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Chromium was not processed!

Cobalt

General Statistics

Total Number of Observations	8	Number of Missing Observations	0
Number of Distinct Observations	6		
Number of Detects	5	Number of Non-Detects	3
Number of Distinct Detects	5	Number of Distinct Non-Detects	1
Minimum Detect	7.7000E-4	Minimum Non-Detect	6.0000E-4
Maximum Detect	0.204	Maximum Non-Detect	6.0000E-4
Variance Detected	0.00809	Percent Non-Detects	37.5%
Mean Detected	0.0432	SD Detected	0.0899
Mean of Detected Logged Data	-5.355	SD of Detected Logged Data	2.297

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.829	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.762	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.296	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.343	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.027	Mean in Log Scale	-7.692
SD in Original Scale	0.0716	SD in Log Scale	3.758
95% UTL95% Coverage	72.53	95% BCA UTL95% Coverage	0.204
95% Bootstrap (%) UTL95% Coverage	0.204	95% UPL (t)	0.869
90% Percentile (z)	0.0563	95% Percentile (z)	0.221
99% Percentile (z)	2.857	95% USL	0.944

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-6.129	95% KM UTL (Lognormal)95% Coverage	0.949
KM SD of Logged Data	1.907	95% KM UPL (Lognormal)	0.101
95% KM Percentile Lognormal (z)	0.0501	95% KM USL (Lognormal)	0.105

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.0271	Mean in Log Scale	-6.389
SD in Original Scale	0.0715	SD in Log Scale	2.247
95% UTL95% Coverage	2.166	95% UPL (t)	0.154
90% Percentile (z)	0.0299	95% Percentile (z)	0.0677
99% Percentile (z)	0.313	95% USL	0.161

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Copper

General Statistics

Total Number of Observations	7	Number of Distinct Observations	7
		Number of Missing Observations	1
Minimum	0.0012	First Quartile	0.00335
Second Largest	0.017	Median	0.012
Maximum	0.201	Third Quartile	0.015
Mean	0.0358	SD	0.0731
Coefficient of Variation	2.039	Skewness	2.608
Mean of logged Data	-4.692	SD of logged Data	1.705

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.399	d2max (for USL)	1.938

Gamma GOF Test

A-D Test Statistic	0.709	**Anderson-Darling Gamma GOF Test**	
5% A-D Critical Value	0.756	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.337	**Kolmogorov-Smirnov Gamma GOF Test**	
5% K-S Critical Value	0.328	Data Not Gamma Distributed at 5% Significance Level	

Detected data follow Appr. Gamma Distribution at 5% Significance Level

Gamma Statistics

k hat (MLE)	0.47	k star (bias corrected MLE)	0.364
Theta hat (MLE)	0.0762	Theta star (bias corrected MLE)	0.0985
nu hat (MLE)	6.584	nu star (bias corrected)	5.096
MLE Mean (bias corrected)	0.0358	MLE Sd (bias corrected)	0.0594

Background Statistics Assuming Gamma Distribution

95% Wilson Hilferty (WH) Approx. Gamma UPL	0.195	90% Percentile	0.103
95% Hawkins Wixley (HW) Approx. Gamma UPL	0.204	95% Percentile	0.154
95% WH Approx. Gamma UTL with 95% Coverage	0.499	99% Percentile	0.283
95% HW Approx. Gamma UTL with 95% Coverage	0.617		
95% WH USL	0.173	95% HW USL	0.178

Iron

General Statistics

Total Number of Observations	8	Number of Missing Observations	0
Number of Distinct Observations	2		
Number of Detects	1	Number of Non-Detects	7
Number of Distinct Detects	1	Number of Distinct Non-Detects	1
Minimum Detect	1.06	Minimum Non-Detect	0.025
Maximum Detect	1.06	Maximum Non-Detect	0.025
Variance Detected	N/A	Percent Non-Detects	87.5%
Mean Detected	1.06	SD Detected	N/A
Mean of Detected Logged Data	0.0583	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!

It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Iron was not processed!

Lead

General Statistics

Total Number of Observations	2	Number of Missing Observations	6
Number of Distinct Observations	2		
Number of Detects	1	Number of Non-Detects	1
Number of Distinct Detects	1	Number of Distinct Non-Detects	1
Minimum Detect	0.203	Minimum Non-Detect	6.8000E-4
Maximum Detect	0.203	Maximum Non-Detect	6.8000E-4
Variance Detected	N/A	Percent Non-Detects	50%
Mean Detected	0.203	SD Detected	N/A
Mean of Detected Logged Data	-1.595	SD of Detected Logged Data	N/A

Warning: This data set only has 2 observations!

Data set is too small to compute reliable and meaningful statistics and estimates!

The data set for variable Lead was not processed!

It is suggested to collect at least 8 to 10 observations before using these statistical methods!

If possible, compute and collect Data Quality Objectives (DQO) based sample size and analytical results.

Manganese

General Statistics

Total Number of Observations	8	Number of Distinct Observations	8
Minimum	0.022	First Quartile	0.0655
Second Largest	0.23	Median	0.106
Maximum	0.45	Third Quartile	0.17
Mean	0.148	SD	0.138
Coefficient of Variation	0.931	Skewness	1.767
Mean of logged Data	-2.265	SD of logged Data	0.928

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test

Shapiro Wilk Test Statistic	0.824	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.818	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.245	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.283	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	0.588	90% Percentile (z)	0.325
	95% UPL (t)	0.426	95% Percentile (z)	0.375
	95% USL	0.429	99% Percentile (z)	0.469

Mercury

General Statistics

Total Number of Observations	8	Number of Missing Observations	0
Number of Distinct Observations	3		
Number of Detects	2	Number of Non-Detects	6
Number of Distinct Detects	2	Number of Distinct Non-Detects	1
Minimum Detect	9.9900E-4	Minimum Non-Detect	1.0000E-4
Maximum Detect	0.00108	Maximum Non-Detect	1.0000E-4
Variance Detected	3.2805E-9	Percent Non-Detects	75%
Mean Detected	0.00104	SD Detected	5.7276E-5
Mean of Detected Logged Data	-6.87	SD of Detected Logged Data	0.0551

Warning: Data set has only 2 Detected Values.

This is not enough to compute meaningful or reliable statistics and estimates.

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	8	95% UTL with95% Coverage	0.00108
Approx, f used to compute achieved CC	0.421	Approximate Actual Confidence Coefficient achieved by UTL	0.337
Approximate Sample Size needed to achieve specified CC	59	95% UPL	0.00108
95% USL	0.00108	95% KM Chebyshev UPL	0.00222

Molybdenum

General Statistics

Total Number of Observations	8	Number of Distinct Observations	7
Minimum	0.0012	First Quartile	0.00258
Second Largest	0.0071	Median	0.0029
Maximum	0.215	Third Quartile	0.0044
Mean	0.0297	SD	0.0749
Coefficient of Variation	2.52	Skewness	2.825
Mean of logged Data	-5.313	SD of logged Data	1.602

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for Background Threshold Values

Order of Statistic, r	8	95% UTL with 95% Coverage	0.215
Approx, f used to compute achieved CC	0.421	Approximate Actual Confidence Coefficient achieved by UTL	0.337
		Approximate Sample Size needed to achieve specified CC	59
95% Percentile Bootstrap UTL with 95% Coverage	0.215	95% BCA Bootstrap UTL with 95% Coverage	0.215
95% UPL	0.215	90% Percentile	0.0695
90% Chebyshev UPL	0.268	95% Percentile	0.142
95% Chebyshev UPL	0.376	99% Percentile	0.2
95% USL	0.215		

Nickel

General Statistics

Total Number of Observations	8	Number of Distinct Observations	8
Minimum	0.0029	First Quartile	0.00395
Second Largest	0.0095	Median	0.00523
Maximum	0.204	Third Quartile	0.00748
Mean	0.0302	SD	0.0703
Coefficient of Variation	2.328	Skewness	2.823
Mean of logged Data	-4.84	SD of logged Data	1.367

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for Background Threshold Values

Order of Statistic, r	8	95% UTL with 95% Coverage	0.204
Approx, f used to compute achieved CC	0.421	Approximate Actual Confidence Coefficient achieved by UTL	0.337
95% Percentile Bootstrap UTL with 95% Coverage	0.204	Approximate Sample Size needed to achieve specified CC	59
95% UPL	0.204	95% BCA Bootstrap UTL with 95% Coverage	0.204
90% Chebyshev UPL	0.254	90% Percentile	0.0679
95% Chebyshev UPL	0.355	95% Percentile	0.136
95% USL	0.204	99% Percentile	0.19

Selenium

General Statistics

Total Number of Observations	8	Number of Distinct Observations	8
Minimum	0.0051	First Quartile	0.00585
Second Largest	0.007	Median	0.0061
Maximum	0.218	Third Quartile	0.00663
Mean	0.0326	SD	0.0749
Coefficient of Variation	2.302	Skewness	2.828
Mean of logged Data	-4.662	SD of logged Data	1.272

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for Background Threshold Values

Order of Statistic, r	8	95% UTL with 95% Coverage	0.218
Approx, f used to compute achieved CC	0.421	Approximate Actual Confidence Coefficient achieved by UTL	0.337
95% Percentile Bootstrap UTL with 95% Coverage	0.218	Approximate Sample Size needed to achieve specified CC	59
95% UPL	0.218	95% BCA Bootstrap UTL with 95% Coverage	0.218
90% Chebyshev UPL	0.271	90% Percentile	0.0703
95% Chebyshev UPL	0.379	95% Percentile	0.144
95% USL	0.218	99% Percentile	0.203

Silver

General Statistics

Total Number of Observations	8	Number of Missing Observations	0
Number of Distinct Observations	2		
Number of Detects	1	Number of Non-Detects	7
Number of Distinct Detects	1	Number of Distinct Non-Detects	1
Minimum Detect	0.0491	Minimum Non-Detect	3.0000E-4
Maximum Detect	0.0491	Maximum Non-Detect	3.0000E-4
Variance Detected	N/A	Percent Non-Detects	87.5%
Mean Detected	0.0491	SD Detected	N/A
Mean of Detected Logged Data	-3.014	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!

It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Silver was not processed!

Sulfur

General Statistics

Total Number of Observations	8	Number of Distinct Observations	7
Minimum	79	First Quartile	84
Second Largest	92	Median	88
Maximum	97.6	Third Quartile	90.5
Mean	87.58	SD	6.068
Coefficient of Variation	0.0693	Skewness	0.159
Mean of logged Data	4.47	SD of logged Data	0.0692

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test

Shapiro Wilk Test Statistic	0.973	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.818	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.155	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.283	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	106.9	90% Percentile (z)	95.35
	95% UPL (t)	99.77	95% Percentile (z)	97.56
	95% USL	99.9	99% Percentile (z)	101.7

Thallium

General Statistics

Total Number of Observations	8	Number of Missing Observations	0
Number of Distinct Observations	2		
Number of Detects	1	Number of Non-Detects	7
Number of Distinct Detects	1	Number of Distinct Non-Detects	1
Minimum Detect	0.05	Minimum Non-Detect	5.0000E-4
Maximum Detect	0.05	Maximum Non-Detect	5.0000E-4
Variance Detected	N/A	Percent Non-Detects	87.5%
Mean Detected	0.05	SD Detected	N/A
Mean of Detected Logged Data	-2.996	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!

It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Thallium was not processed!

Vanadium

General Statistics

Total Number of Observations	8	Number of Missing Observations	0
Number of Distinct Observations	2		
Number of Detects	1	Number of Non-Detects	7
Number of Distinct Detects	1	Number of Distinct Non-Detects	1
Minimum Detect	0.208	Minimum Non-Detect	0.003
Maximum Detect	0.208	Maximum Non-Detect	0.003
Variance Detected	N/A	Percent Non-Detects	87.5%
Mean Detected	0.208	SD Detected	N/A
Mean of Detected Logged Data	-1.57	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!

It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Vanadium was not processed!

Zinc

General Statistics

Total Number of Observations	8	Number of Distinct Observations	8
Minimum	0.029	First Quartile	0.0383
Second Largest	0.21	Median	0.0563
Maximum	0.23	Third Quartile	0.119
Mean	0.0927	SD	0.081
Coefficient of Variation	0.874	Skewness	1.241
Mean of logged Data	-2.681	SD of logged Data	0.807

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Gamma GOF Test

A-D Test Statistic	0.602	**Anderson-Darling Gamma GOF Test**	
5% A-D Critical Value	0.726	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.256	**Kolmogorov-Smirnov Gamma GOF Test**	
5% K-S Critical Value	0.298	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	1.802	k star (bias corrected MLE)	1.21
Theta hat (MLE)	0.0514	Theta star (bias corrected MLE)	0.0766
nu hat (MLE)	28.84	nu star (bias corrected)	19.36
MLE Mean (bias corrected)	0.0927	MLE Sd (bias corrected)	0.0843

Background Statistics Assuming Gamma Distribution

95% Wilson Hilferty (WH) Approx. Gamma UPL	0.293	90% Percentile	0.204
95% Hawkins Wixley (HW) Approx. Gamma UPL	0.303	95% Percentile	0.26
95% WH Approx. Gamma UTL with 95% Coverage	0.524	99% Percentile	0.388
95% HW Approx. Gamma UTL with 95% Coverage	0.576		
95% WH USL	0.297	95% HW USL	0.307

Background Statistics for Data Sets with Non-Detects

Metals - MW-6

User Selected Options

Date/Time of Computation	ProUCL 5.1 4/8/2019 1:37:30 PM
From File	Metals Input_e.xls
Full Precision	OFF
Confidence Coefficient	95%
Coverage	95%
Different or Future K Observations	1
Number of Bootstrap Operations	2000

Aluminum

General Statistics

Total Number of Observations	8	Number of Missing Observations	0
Number of Distinct Observations	2		
Number of Detects	1	Number of Non-Detects	7
Number of Distinct Detects	1	Number of Distinct Non-Detects	1
Minimum Detect	0.935	Minimum Non-Detect	0.025
Maximum Detect	0.935	Maximum Non-Detect	0.025
Variance Detected	N/A	Percent Non-Detects	87.5%
Mean Detected	0.935	SD Detected	N/A
Mean of Detected Logged Data	-0.0672	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!
It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Aluminum was not processed!

Antimony

General Statistics

Total Number of Observations	8	Number of Missing Observations	0
Number of Distinct Observations	2		
Number of Detects	1	Number of Non-Detects	7
Number of Distinct Detects	1	Number of Distinct Non-Detects	1
Minimum Detect	0.205	Minimum Non-Detect	2.0000E-4
Maximum Detect	0.205	Maximum Non-Detect	2.0000E-4
Variance Detected	N/A	Percent Non-Detects	87.5%
Mean Detected	0.205	SD Detected	N/A
Mean of Detected Logged Data	-1.585	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!
It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Antimony was not processed!

Arsenic

General Statistics

Total Number of Observations	8	Number of Distinct Observations	7
Minimum	0.039	First Quartile	0.415
Second Largest	1.7	Median	0.965
Maximum	1.85	Third Quartile	1.475
Mean	0.952	SD	0.711
Coefficient of Variation	0.746	Skewness	-0.00799
Mean of logged Data	-0.539	SD of logged Data	1.327

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test

Shapiro Wilk Test Statistic	0.889	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.818	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.236	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.283	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	3.218	90% Percentile (z)	1.863
	95% UPL (t)	2.381	95% Percentile (z)	2.122
	95% USL	2.397	99% Percentile (z)	2.606

Barium

General Statistics

Total Number of Observations	8	Number of Distinct Observations	7
Minimum	0.0057	First Quartile	0.014
Second Largest	0.033	Median	0.022
Maximum	0.248	Third Quartile	0.0315
Mean	0.0485	SD	0.0812
Coefficient of Variation	1.677	Skewness	2.743
Mean of logged Data	-3.737	SD of logged Data	1.12

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.89	**Shapiro Wilk Lognormal GOF Test**	
5% Shapiro Wilk Critical Value	0.818	Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.261	**Lilliefors Lognormal GOF Test**	
5% Lilliefors Critical Value	0.283	Data appear Lognormal at 5% Significance Level	

Data appear Lognormal at 5% Significance Level

Background Statistics assuming Lognormal Distribution

95% UTL with 95% Coverage		0.844	90% Percentile (z)	0.1
	95% UPL (t)	0.226	95% Percentile (z)	0.15
	95% USL	0.232	99% Percentile (z)	0.322

Beryllium

General Statistics

Total Number of Observations	8	Number of Missing Observations	0
Number of Distinct Observations	2		
Number of Detects	1	Number of Non-Detects	7
Number of Distinct Detects	1	Number of Distinct Non-Detects	1
Minimum Detect	0.212	Minimum Non-Detect	1.0000E-4
Maximum Detect	0.212	Maximum Non-Detect	1.0000E-4
Variance Detected	N/A	Percent Non-Detects	87.5%
Mean Detected	0.212	SD Detected	N/A
Mean of Detected Logged Data	-1.551	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!
It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Beryllium was not processed!

Cadmium

General Statistics

Total Number of Observations	8	Number of Missing Observations	0
Number of Distinct Observations	2		
Number of Detects	1	Number of Non-Detects	7
Number of Distinct Detects	1	Number of Distinct Non-Detects	1
Minimum Detect	0.199	Minimum Non-Detect	5.0000E-4
Maximum Detect	0.199	Maximum Non-Detect	5.0000E-4
Variance Detected	N/A	Percent Non-Detects	87.5%
Mean Detected	0.199	SD Detected	N/A
Mean of Detected Logged Data	-1.614	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!
It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Cadmium was not processed!

Chromium

General Statistics

Total Number of Observations	8	Number of Missing Observations	0
Number of Distinct Observations	2		
Number of Detects	1	Number of Non-Detects	7
Number of Distinct Detects	1	Number of Distinct Non-Detects	1
Minimum Detect	0.197	Minimum Non-Detect	0.001
Maximum Detect	0.197	Maximum Non-Detect	0.001
Variance Detected	N/A	Percent Non-Detects	87.5%
Mean Detected	0.197	SD Detected	N/A
Mean of Detected Logged Data	-1.625	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!
It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Chromium was not processed!

Cobalt

General Statistics

Total Number of Observations	8	Number of Missing Observations	0
Number of Distinct Observations	3		
Number of Detects	2	Number of Non-Detects	6
Number of Distinct Detects	2	Number of Distinct Non-Detects	1
Minimum Detect	0.0011	Minimum Non-Detect	6.0000E-4
Maximum Detect	0.195	Maximum Non-Detect	6.0000E-4
Variance Detected	0.0188	Percent Non-Detects	75%
Mean Detected	0.0981	SD Detected	0.137
Mean of Detected Logged Data	-4.224	SD of Detected Logged Data	3.661

Warning: Data set has only 2 Detected Values.

This is not enough to compute meaningful or reliable statistics and estimates.

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	8	95% UTL with95% Coverage	0.195
Approx, f used to compute achieved CC	0.421	Approximate Actual Confidence Coefficient achieved by UTL	0.337
Approximate Sample Size needed to achieve specified CC	59	95% UPL	0.195
95% USL	0.195	95% KM Chebyshev UPL	0.322

Copper

General Statistics

Total Number of Observations	8	Number of Missing Observations	0
Number of Distinct Observations	3		
Number of Detects	2	Number of Non-Detects	6
Number of Distinct Detects	2	Number of Distinct Non-Detects	1
Minimum Detect	0.0026	Minimum Non-Detect	0.001
Maximum Detect	0.187	Maximum Non-Detect	0.001
Variance Detected	0.017	Percent Non-Detects	75%
Mean Detected	0.0948	SD Detected	0.13
Mean of Detected Logged Data	-3.814	SD of Detected Logged Data	3.023

Warning: Data set has only 2 Detected Values.

This is not enough to compute meaningful or reliable statistics and estimates.

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	8	95% UTL with95% Coverage	0.187
Approx, f used to compute achieved CC	0.421	Approximate Actual Confidence Coefficient achieved by UTL	0.337
Approximate Sample Size needed to achieve specified CC	59	95% UPL	0.187
95% USL	0.187	95% KM Chebyshev UPL	0.309

Iron

General Statistics

Total Number of Observations	8	Number of Missing Observations	0
Number of Distinct Observations	7		
Number of Detects	5	Number of Non-Detects	3
Number of Distinct Detects	5	Number of Distinct Non-Detects	2
Minimum Detect	0.04	Minimum Non-Detect	0.025
Maximum Detect	1.84	Maximum Non-Detect	0.308
Variance Detected	0.57	Percent Non-Detects	37.5%
Mean Detected	0.578	SD Detected	0.755
Mean of Detected Logged Data	-1.38	SD of Detected Logged Data	1.531

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.794	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.762	Detected Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.296	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.343	Detected Data appear Normal at 5% Significance Level	

Detected Data appear Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.377	KM SD	0.594
95% UTL95% Coverage	2.271	95% KM UPL (t)	1.571
90% KM Percentile (z)	1.139	95% KM Percentile (z)	1.355
99% KM Percentile (z)	1.76	95% KM USL	1.584

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.384	SD	0.632
95% UTL95% Coverage	2.399	95% UPL (t)	1.654
90% Percentile (z)	1.194	95% Percentile (z)	1.424
99% Percentile (z)	1.855	95% USL	1.668

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Lead

General Statistics

Total Number of Observations	8	Number of Missing Observations	0
Number of Distinct Observations	3		
Number of Detects	2	Number of Non-Detects	6
Number of Distinct Detects	2	Number of Distinct Non-Detects	1
Minimum Detect	7.1000E-4	Minimum Non-Detect	6.0000E-4
Maximum Detect	0.202	Maximum Non-Detect	6.0000E-4
Variance Detected	0.0203	Percent Non-Detects	75%
Mean Detected	0.101	SD Detected	0.142
Mean of Detected Logged Data	-4.425	SD of Detected Logged Data	3.996

Warning: Data set has only 2 Detected Values.

This is not enough to compute meaningful or reliable statistics and estimates.

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	8	95% UTL with95% Coverage	0.202
Approx, f used to compute achieved CC	0.421	Approximate Actual Confidence Coefficient achieved by UTL	0.337
Approximate Sample Size needed to achieve specified CC	59	95% UPL	0.202
95% USL	0.202	95% KM Chebyshev UPL	0.334

Manganese

General Statistics

Total Number of Observations	8	Number of Distinct Observations	7
Minimum	3.8	First Quartile	4.075
Second Largest	5.8	Median	4.95
Maximum	6.3	Third Quartile	5.425
Mean	4.9	SD	0.913
Coefficient of Variation	0.186	Skewness	0.25
Mean of logged Data	1.574	SD of logged Data	0.187

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Normal GOF Test

Shapiro Wilk Test Statistic	0.93	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.818	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.184	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.283	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	7.811	90% Percentile (z)	6.071
	95% UPL (t)	6.735	95% Percentile (z)	6.402
	95% USL	6.756	99% Percentile (z)	7.025

Mercury

General Statistics

Total Number of Observations	8	Number of Missing Observations	0
Number of Distinct Observations	2		
Number of Detects	2	Number of Non-Detects	6
Number of Distinct Detects	2	Number of Distinct Non-Detects	1
Minimum Detect	1.0000E-4	Minimum Non-Detect	1.0000E-4
Maximum Detect	2.3000E-4	Maximum Non-Detect	1.0000E-4
Variance Detected	8.4500E-9	Percent Non-Detects	75%
Mean Detected	1.6500E-4	SD Detected	9.1924E-5
Mean of Detected Logged Data	-8.794	SD of Detected Logged Data	0.589

Warning: Data set has only 2 Detected Values.

This is not enough to compute meaningful or reliable statistics and estimates.

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	8	95% UTL with95% Coverage	2.3000E-4
Approx, f used to compute achieved CC	0.421	Approximate Actual Confidence Coefficient achieved by UTL	0.337
Approximate Sample Size needed to achieve specified CC	59	95% UPL	2.3000E-4
95% USL	2.3000E-4	95% KM Chebyshev UPL	3.1502E-4

Molybdenum

General Statistics

Total Number of Observations	8	Number of Distinct Observations	5
Minimum	9.0500E-4	First Quartile	0.00118
Second Largest	0.0019	Median	0.0012
Maximum	0.216	Third Quartile	0.0019
Mean	0.0282	SD	0.0759
Coefficient of Variation	2.694	Skewness	2.828
Mean of logged Data	-6.008	SD of logged Data	1.827

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for Background Threshold Values

Order of Statistic, r	8	95% UTL with 95% Coverage	0.216
Approx, f used to compute achieved CC	0.421	Approximate Actual Confidence Coefficient achieved by UTL	0.337
95% Percentile Bootstrap UTL with 95% Coverage	0.216	Approximate Sample Size needed to achieve specified CC	59
95% UPL	0.216	95% BCA Bootstrap UTL with 95% Coverage	0.216
90% Chebyshev UPL	0.27	90% Percentile	0.0661
95% Chebyshev UPL	0.379	95% Percentile	0.141
95% USL	0.216	99% Percentile	0.201

Nickel

General Statistics

Total Number of Observations	8	Number of Missing Observations	0
Number of Distinct Observations	2		
Number of Detects	1	Number of Non-Detects	7
Number of Distinct Detects	1	Number of Distinct Non-Detects	1
Minimum Detect	0.188	Minimum Non-Detect	0.001
Maximum Detect	0.188	Maximum Non-Detect	0.001
Variance Detected	N/A	Percent Non-Detects	87.5%
Mean Detected	0.188	SD Detected	N/A
Mean of Detected Logged Data	-1.671	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!
It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Nickel was not processed!

Selenium

General Statistics

Total Number of Observations	8	Number of Missing Observations	0
Number of Distinct Observations	2		
Number of Detects	1	Number of Non-Detects	7
Number of Distinct Detects	1	Number of Distinct Non-Detects	1
Minimum Detect	0.189	Minimum Non-Detect	0.001
Maximum Detect	0.189	Maximum Non-Detect	0.001
Variance Detected	N/A	Percent Non-Detects	87.5%
Mean Detected	0.189	SD Detected	N/A
Mean of Detected Logged Data	-1.666	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!
It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Selenium was not processed!

Silver

General Statistics

Total Number of Observations	8	Number of Missing Observations	0
Number of Distinct Observations	2		
Number of Detects	1	Number of Non-Detects	7
Number of Distinct Detects	1	Number of Distinct Non-Detects	1
Minimum Detect	0.0501	Minimum Non-Detect	3.0000E-4
Maximum Detect	0.0501	Maximum Non-Detect	3.0000E-4
Variance Detected	N/A	Percent Non-Detects	87.5%
Mean Detected	0.0501	SD Detected	N/A
Mean of Detected Logged Data	-2.994	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!
It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Silver was not processed!

Sulfur

General Statistics

Total Number of Observations	8	Number of Missing Observations	0
Number of Distinct Observations	8		
Number of Detects	6	Number of Non-Detects	2
Number of Distinct Detects	6	Number of Distinct Non-Detects	2
Minimum Detect	0.37	Minimum Non-Detect	0.3
Maximum Detect	84.1	Maximum Non-Detect	1.05
Variance Detected	1729	Percent Non-Detects	25%
Mean Detected	29.98	SD Detected	41.58
Mean of Detected Logged Data	1.786	SD of Detected Logged Data	2.355

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.187	d2max (for USL)	2.032

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.885	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.788	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.202	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.325	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	22.52	Mean in Log Scale	0.665
SD in Original Scale	37.76	SD in Log Scale	2.942
95% UTL95% Coverage	22957	95% BCA UTL95% Coverage	84.1
95% Bootstrap (%) UTL95% Coverage	84.1	95% UPL (t)	718.5
90% Percentile (z)	84.39	95% Percentile (z)	245.7
99% Percentile (z)	1825	95% USL	766.8

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	1.07	95% KM UTL (Lognormal)95% Coverage	3663
KM SD of Logged Data	2.239	95% KM UPL (Lognormal)	262.3
95% KM Percentile Lognormal (z)	115.9	95% KM USL (Lognormal)	275.7

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	22.57	Mean in Log Scale	1.022
SD in Original Scale	37.72	SD in Log Scale	2.465
95% UTL95% Coverage	7166	95% UPL (t)	393.4
90% Percentile (z)	65.41	95% Percentile (z)	160.1
99% Percentile (z)	859	95% USL	415.5

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Thallium

General Statistics

Total Number of Observations	8	Number of Missing Observations	0
Number of Distinct Observations	2		
Number of Detects	1	Number of Non-Detects	7
Number of Distinct Detects	1	Number of Distinct Non-Detects	1
Minimum Detect	0.0501	Minimum Non-Detect	5.0000E-4
Maximum Detect	0.0501	Maximum Non-Detect	5.0000E-4
Variance Detected	N/A	Percent Non-Detects	87.5%
Mean Detected	0.0501	SD Detected	N/A
Mean of Detected Logged Data	-2.994	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!
It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Thallium was not processed!

Vanadium

General Statistics

Total Number of Observations	8	Number of Missing Observations	0
Number of Distinct Observations	2		
Number of Detects	1	Number of Non-Detects	7
Number of Distinct Detects	1	Number of Distinct Non-Detects	1
Minimum Detect	0.2	Minimum Non-Detect	0.003
Maximum Detect	0.2	Maximum Non-Detect	0.003
Variance Detected	N/A	Percent Non-Detects	87.5%
Mean Detected	0.2	SD Detected	N/A
Mean of Detected Logged Data	-1.609	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!
It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Vanadium was not processed!

Zinc

General Statistics

Total Number of Observations	8	Number of Missing Observations	0
Number of Distinct Observations	2		
Number of Detects	1	Number of Non-Detects	7
Number of Distinct Detects	1	Number of Distinct Non-Detects	1
Minimum Detect	0.202	Minimum Non-Detect	0.004
Maximum Detect	0.202	Maximum Non-Detect	0.004
Variance Detected	N/A	Percent Non-Detects	87.5%
Mean Detected	0.202	SD Detected	N/A
Mean of Detected Logged Data	-1.599	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!
It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Zinc was not processed!

Background Statistics for Data Sets with Non-Detects

Energetics - MW-1

User Selected Options

Date/Time of Computation	ProUCL 5.1 4/8/2019 1:21:08 PM
From File	Energetics Input.xls
Full Precision	OFF
Confidence Coefficient	95%
Coverage	95%
Different or Future K Observations	1
Number of Bootstrap Operations	2000

1,3,5-Trinitrobenzene

General Statistics

Total Number of Observations	5	Number of Missing Observations	0
Number of Distinct Observations	5		
Number of Detects	2	Number of Non-Detects	3
Number of Distinct Detects	2	Number of Distinct Non-Detects	3
Minimum Detect	0.046	Minimum Non-Detect	0.031
Maximum Detect	0.058	Maximum Non-Detect	0.22
Variance Detected	7.2000E-5	Percent Non-Detects	60%
Mean Detected	0.052	SD Detected	0.00849
Mean of Detected Logged Data	-2.963	SD of Detected Logged Data	0.164

Warning: Data set has only 2 Detected Values.

This is not enough to compute meaningful or reliable statistics and estimates.

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	4.203	d2max (for USL)	1.671

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	5	95% UTL with95% Coverage	0.22
Approx, f used to compute achieved CC	0.263	Approximate Actual Confidence Coefficient achieved by UTL	0.226
Approximate Sample Size needed to achieve specified CC	59	95% UPL	0.22
95% USL	0.22	95% KM Chebyshev UPL	0.0956

Nitrobenzene

General Statistics

Total Number of Observations	5	Number of Missing Observations	0
Number of Distinct Observations	4		
Number of Detects	1	Number of Non-Detects	4
Number of Distinct Detects	1	Number of Distinct Non-Detects	3
Minimum Detect	0.078	Minimum Non-Detect	0.05
Maximum Detect	0.078	Maximum Non-Detect	0.1
Variance Detected	N/A	Percent Non-Detects	80%
Mean Detected	0.078	SD Detected	N/A
Mean of Detected Logged Data	-2.551	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!
It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Nitrobenzene was not processed!

Background Statistics for Data Sets with Non-Detects

Energetics - MW-2

User Selected Options

Date/Time of Computation	ProUCL 5.1 4/9/2019 9:40:41 AM
From File	Energetics Input_a.xls
Full Precision	OFF
Confidence Coefficient	95%
Coverage	95%
Different or Future K Observations	1
Number of Bootstrap Operations	2000

1,3,5-Trinitrobenzene

General Statistics

Total Number of Observations	5	Number of Missing Observations	0
Number of Distinct Observations	5		
Number of Detects	1	Number of Non-Detects	4
Number of Distinct Detects	1	Number of Distinct Non-Detects	4
Minimum Detect	0.17	Minimum Non-Detect	0.032
Maximum Detect	0.17	Maximum Non-Detect	0.22
Variance Detected	N/A	Percent Non-Detects	80%
Mean Detected	0.17	SD Detected	N/A
Mean of Detected Logged Data	-1.772	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!

It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable 1,3,5-Trinitrobenzene was not processed!

Background Statistics for Data Sets with Non-Detects

Energetics - MW-3

User Selected Options

Date/Time of Computation	ProUCL 5.1 4/9/2019 9:41:20 AM
From File	Energetics Input_b.xls
Full Precision	OFF
Confidence Coefficient	95%
Coverage	95%
Different or Future K Observations	1
Number of Bootstrap Operations	2000

1,3,5-Trinitrobenzene

General Statistics

Total Number of Observations	5	Number of Missing Observations	0
Number of Distinct Observations	4		
Number of Detects	1	Number of Non-Detects	4
Number of Distinct Detects	1	Number of Distinct Non-Detects	3
Minimum Detect	0.043	Minimum Non-Detect	0.032
Maximum Detect	0.043	Maximum Non-Detect	0.22
Variance Detected	N/A	Percent Non-Detects	80%
Mean Detected	0.043	SD Detected	N/A
Mean of Detected Logged Data	-3.147	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!

It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable 1,3,5-Trinitrobenzene was not processed!

Nitrobenzene

General Statistics

Total Number of Observations	5	Number of Missing Observations	0
Number of Distinct Observations	4		
Number of Detects	1	Number of Non-Detects	4
Number of Distinct Detects	1	Number of Distinct Non-Detects	3
Minimum Detect	0.16	Minimum Non-Detect	0.051
Maximum Detect	0.16	Maximum Non-Detect	0.1
Variance Detected	N/A	Percent Non-Detects	80%
Mean Detected	0.16	SD Detected	N/A
Mean of Detected Logged Data	-1.833	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!

It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Nitrobenzene was not processed!

Background Statistics for Data Sets with Non-Detects

Energetics - MW-4

User Selected Options

Date/Time of Computation	ProUCL 5.1 4/9/2019 9:41:53 AM
From File	Energetics Input_c.xls
Full Precision	OFF
Confidence Coefficient	95%
Coverage	95%
Different or Future K Observations	1
Number of Bootstrap Operations	2000

1,3,5-Trinitrobenzene

General Statistics

Total Number of Observations	4	Number of Missing Observations	0
Number of Distinct Observations	4		
Number of Detects	1	Number of Non-Detects	3
Number of Distinct Detects	1	Number of Distinct Non-Detects	3
Minimum Detect	0.105	Minimum Non-Detect	0.031
Maximum Detect	0.105	Maximum Non-Detect	0.22
Variance Detected	N/A	Percent Non-Detects	75%
Mean Detected	0.105	SD Detected	N/A
Mean of Detected Logged Data	-2.254	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!

It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable 1,3,5-Trinitrobenzene was not processed!

Nitrobenzene

General Statistics

Total Number of Observations	4	Number of Missing Observations	0
Number of Distinct Observations	4		
Number of Detects	1	Number of Non-Detects	3
Number of Distinct Detects	1	Number of Distinct Non-Detects	3
Minimum Detect	0.526	Minimum Non-Detect	0.05
Maximum Detect	0.526	Maximum Non-Detect	0.43
Variance Detected	N/A	Percent Non-Detects	75%
Mean Detected	0.526	SD Detected	N/A
Mean of Detected Logged Data	-0.642	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!

It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Nitrobenzene was not processed!

Background Statistics for Data Sets with Non-Detects

Energetics - MW-6

User Selected Options

Date/Time of Computation	ProUCL 5.1 4/9/2019 9:42:27 AM
From File	Energetics Input_d.xls
Full Precision	OFF
Confidence Coefficient	95%
Coverage	95%
Different or Future K Observations	1
Number of Bootstrap Operations	2000

1,3,5-Trinitrobenzene

General Statistics

Total Number of Observations	4	Number of Missing Observations	0
Number of Distinct Observations	4		
Number of Detects	2	Number of Non-Detects	2
Number of Distinct Detects	2	Number of Distinct Non-Detects	2
Minimum Detect	0.071	Minimum Non-Detect	0.032
Maximum Detect	0.125	Maximum Non-Detect	0.22
Variance Detected	0.00143	Percent Non-Detects	50%
Mean Detected	0.0978	SD Detected	0.0378
Mean of Detected Logged Data	-2.364	SD of Detected Logged Data	0.397

Warning: Data set has only 2 Detected Values.

This is not enough to compute meaningful or reliable statistics and estimates.

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	5.144	d2max (for USL)	1.462

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	4	95% UTL with95% Coverage	0.22
Approx, f used to compute achieved CC	0.211	Approximate Actual Confidence Coefficient achieved by UTL	0.185
Approximate Sample Size needed to achieve specified CC	59	95% UPL	0.22
95% USL	0.22	95% KM Chebyshev UPL	0.261

2,4-Dinitrotoluene

General Statistics

Total Number of Observations	4	Number of Missing Observations	0
Number of Distinct Observations	3		
Number of Detects	1	Number of Non-Detects	3
Number of Distinct Detects	1	Number of Distinct Non-Detects	2
Minimum Detect	0.0655	Minimum Non-Detect	0.051
Maximum Detect	0.0655	Maximum Non-Detect	0.093
Variance Detected	N/A	Percent Non-Detects	75%
Mean Detected	0.0655	SD Detected	N/A
Mean of Detected Logged Data	-2.726	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!
It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable 2,4-Dinitrotoluene was not processed!

2,6-Dinitrotoluene

General Statistics

Total Number of Observations	4	Number of Missing Observations	0
Number of Distinct Observations	4		
Number of Detects	2	Number of Non-Detects	2
Number of Distinct Detects	2	Number of Distinct Non-Detects	2
Minimum Detect	0.0705	Minimum Non-Detect	0.051
Maximum Detect	0.12	Maximum Non-Detect	0.072
Variance Detected	0.00123	Percent Non-Detects	50%
Mean Detected	0.0953	SD Detected	0.035
Mean of Detected Logged Data	-2.386	SD of Detected Logged Data	0.376

Warning: Data set has only 2 Detected Values.
This is not enough to compute meaningful or reliable statistics and estimates.

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	5.144	d2max (for USL)	1.462

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	4	95% UTL with95% Coverage	0.12
Approx, f used to compute achieved CC	0.211	Approximate Actual Confidence Coefficient achieved by UTL	0.185
Approximate Sample Size needed to achieve specified CC	59	95% UPL	0.12
95% USL	0.12	95% KM Chebyshev UPL	0.207

2-Nitrotoluene

General Statistics

Total Number of Observations	4	Number of Missing Observations	0
Number of Distinct Observations	3		
Number of Detects	1	Number of Non-Detects	3
Number of Distinct Detects	1	Number of Distinct Non-Detects	2
Minimum Detect	0.125	Minimum Non-Detect	0.09
Maximum Detect	0.125	Maximum Non-Detect	0.095
Variance Detected	N/A	Percent Non-Detects	75%
Mean Detected	0.125	SD Detected	N/A
Mean of Detected Logged Data	-2.083	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!
It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable 2-Nitrotoluene was not processed!

4-Nitrotoluene

General Statistics

Total Number of Observations	4	Number of Missing Observations	0
Number of Distinct Observations	3		
Number of Detects	1	Number of Non-Detects	3
Number of Distinct Detects	1	Number of Distinct Non-Detects	2
Minimum Detect	0.119	Minimum Non-Detect	0.09
Maximum Detect	0.119	Maximum Non-Detect	0.22
Variance Detected	N/A	Percent Non-Detects	75%
Mean Detected	0.119	SD Detected	N/A
Mean of Detected Logged Data	-2.133	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!

It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable 4-Nitrotoluene was not processed!

HMX

General Statistics

Total Number of Observations	4	Number of Missing Observations	0
Number of Distinct Observations	4		
Number of Detects	2	Number of Non-Detects	2
Number of Distinct Detects	2	Number of Distinct Non-Detects	2
Minimum Detect	0.0405	Minimum Non-Detect	0.037
Maximum Detect	0.46	Maximum Non-Detect	0.097
Variance Detected	0.088	Percent Non-Detects	50%
Mean Detected	0.25	SD Detected	0.297
Mean of Detected Logged Data	-1.991	SD of Detected Logged Data	1.718

Warning: Data set has only 2 Detected Values.

This is not enough to compute meaningful or reliable statistics and estimates.

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	5.144	d2max (for USL)	1.462

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	4	95% UTL with95% Coverage	0.46
Approx, f used to compute achieved CC	0.211	Approximate Actual Confidence Coefficient achieved by UTL	0.185
Approximate Sample Size needed to achieve specified CC	59	95% UPL	0.46
95% USL	0.46	95% KM Chebyshev UPL	1.033

Nitrobenzene

General Statistics

Total Number of Observations	4	Number of Missing Observations	0
Number of Distinct Observations	4		
Number of Detects	3	Number of Non-Detects	1
Number of Distinct Detects	3	Number of Distinct Non-Detects	1
Minimum Detect	0.13	Minimum Non-Detect	0.05
Maximum Detect	3.2	Maximum Non-Detect	0.05
Variance Detected	3.043	Percent Non-Detects	25%
Mean Detected	2.143	SD Detected	1.744
Mean of Detected Logged Data	0.0848	SD of Detected Logged Data	1.84

Warning: Data set has only 3 Detected Values.

This is not enough to compute meaningful or reliable statistics and estimates.

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	5.144	d2max (for USL)	1.462

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.774	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.767	Detected Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.375	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.425	Detected Data appear Normal at 5% Significance Level	

Detected Data appear Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	1.62	KM SD	1.531
95% UTL95% Coverage	9.494	95% KM UPL (t)	5.647
90% KM Percentile (z)	3.582	95% KM Percentile (z)	4.138
99% KM Percentile (z)	5.181	95% KM USL	3.859

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	1.614	SD	1.775
95% UTL95% Coverage	10.74	95% UPL (t)	6.284
90% Percentile (z)	3.888	95% Percentile (z)	4.533
99% Percentile (z)	5.743	95% USL	4.21

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Nitrocellulose

General Statistics

Total Number of Observations	4	Number of Missing Observations	0
Number of Distinct Observations	2		
Number of Detects	1	Number of Non-Detects	3
Number of Distinct Detects	1	Number of Distinct Non-Detects	1
Minimum Detect	4.37	Minimum Non-Detect	0.48
Maximum Detect	4.37	Maximum Non-Detect	0.48
Variance Detected	N/A	Percent Non-Detects	75%
Mean Detected	4.37	SD Detected	N/A
Mean of Detected Logged Data	1.475	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!
It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Nitrocellulose was not processed!

Nitroglycerin

General Statistics

Total Number of Observations	4	Number of Missing Observations	0
Number of Distinct Observations	3		
Number of Detects	1	Number of Non-Detects	3
Number of Distinct Detects	1	Number of Distinct Non-Detects	2
Minimum Detect	0.715	Minimum Non-Detect	0.34
Maximum Detect	0.715	Maximum Non-Detect	1
Variance Detected	N/A	Percent Non-Detects	75%
Mean Detected	0.715	SD Detected	N/A
Mean of Detected Logged Data	-0.335	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!
It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Nitroglycerin was not processed!

Background Statistics for Data Sets with Non-Detects

Organics - MW-1

User Selected Options

Date/Time of Computation	ProUCL 5.1 4/8/2019 1:38:54 PM
From File	Organics Input.xls
Full Precision	OFF
Confidence Coefficient	95%
Coverage	95%
Different or Future K Observations	1
Number of Bootstrap Operations	2000

Diesel Range Organics (C10-C24)

General Statistics

Total Number of Observations	6	Number of Missing Observations	0
Number of Distinct Observations	6		
Number of Detects	5	Number of Non-Detects	1
Number of Distinct Detects	5	Number of Distinct Non-Detects	1
Minimum Detect	15	Minimum Non-Detect	16
Maximum Detect	52	Maximum Non-Detect	16
Variance Detected	213.7	Percent Non-Detects	16.67%
Mean Detected	34.8	SD Detected	14.62
Mean of Detected Logged Data	3.462	SD of Detected Logged Data	0.494

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.708	d2max (for USL)	1.822

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.979	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.762	Detected Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.16	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.343	Detected Data appear Normal at 5% Significance Level

Detected Data appear Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	31.5	KM SD	14.03
95% UTL95% Coverage	83.53	95% KM UPL (t)	62.04
90% KM Percentile (z)	49.48	95% KM Percentile (z)	54.58
99% KM Percentile (z)	64.14	95% KM USL	57.07

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	30.33	SD	17.05
95% UTL95% Coverage	93.55	95% UPL (t)	67.44
90% Percentile (z)	52.18	95% Percentile (z)	58.38
99% Percentile (z)	70	95% USL	61.4

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Volatile Fuel Hydrocarbons (C4-C12)

General Statistics

Total Number of Observations	6	Number of Missing Observations	0
Number of Distinct Observations	2		
Number of Detects	1	Number of Non-Detects	5
Number of Distinct Detects	1	Number of Distinct Non-Detects	1
Minimum Detect	19	Minimum Non-Detect	35
Maximum Detect	19	Maximum Non-Detect	35
Variance Detected	N/A	Percent Non-Detects	83.33%
Mean Detected	19	SD Detected	N/A
Mean of Detected Logged Data	2.944	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!

It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Volatile Fuel Hydrocarbons (C4-C12) was not processed!

Background Statistics for Data Sets with Non-Detects

Organics - MW-2

User Selected Options

Date/Time of Computation	ProUCL 5.1 4/8/2019 1:39:28 PM
From File	Organics Input_a.xls
Full Precision	OFF
Confidence Coefficient	95%
Coverage	95%
Different or Future K Observations	1
Number of Bootstrap Operations	2000

Diesel Range Organics (C10-C24)

General Statistics

Total Number of Observations	6	Number of Distinct Observations	6
Minimum	20	First Quartile	26
Second Largest	38	Median	33.5
Maximum	40	Third Quartile	37.25
Mean	31.5	SD	7.944
Coefficient of Variation	0.252	Skewness	-0.605
Mean of logged Data	3.42	SD of logged Data	0.275

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.708	d2max (for USL)	1.822

Normal GOF Test

Shapiro Wilk Test Statistic	0.922	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.788	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.192	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.325	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with 95% Coverage	60.95	90% Percentile (z)	41.68
95% UPL (t)	48.79	95% Percentile (z)	44.57
95% USL	45.97	99% Percentile (z)	49.98

Motor Oil Range Organics (C25-C36)

General Statistics

Total Number of Observations	6	Number of Missing Observations	0
Number of Distinct Observations	3		
Number of Detects	1	Number of Non-Detects	5
Number of Distinct Detects	1	Number of Distinct Non-Detects	2
Minimum Detect	230	Minimum Non-Detect	81
Maximum Detect	230	Maximum Non-Detect	160
Variance Detected	N/A	Percent Non-Detects	83.33%
Mean Detected	230	SD Detected	N/A
Mean of Detected Logged Data	5.438	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!
It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Motor Oil Range Organics (C25-C36) was not processed!

Background Statistics for Data Sets with Non-Detects

Organics - MW-3

User Selected Options

Date/Time of Computation	ProUCL 5.1 4/8/2019 1:40:05 PM
From File	Organics Input_b.xls
Full Precision	OFF
Confidence Coefficient	95%
Coverage	95%
Different or Future K Observations	1
Number of Bootstrap Operations	2000

Diesel Range Organics (C10-C24)

General Statistics

Total Number of Observations	6	Number of Distinct Observations	6
Minimum	22	First Quartile	39.5
Second Largest	91	Median	61.5
Maximum	120	Third Quartile	85
Mean	65	SD	36.32
Coefficient of Variation	0.559	Skewness	0.463
Mean of logged Data	4.024	SD of logged Data	0.628

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.708	d2max (for USL)	1.822

Normal GOF Test

Shapiro Wilk Test Statistic	0.97	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.788	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.145	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.325	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with 95% Coverage	199.7	90% Percentile (z)	111.5
95% UPL (t)	144.1	95% Percentile (z)	124.7
95% USL	131.2	99% Percentile (z)	149.5

Motor Oil Range Organics (C25-C36)

General Statistics

Total Number of Observations	6	Number of Missing Observations	0
Number of Distinct Observations	3		
Number of Detects	2	Number of Non-Detects	4
Number of Distinct Detects	2	Number of Distinct Non-Detects	1
Minimum Detect	330	Minimum Non-Detect	160
Maximum Detect	610	Maximum Non-Detect	160
Variance Detected	39200	Percent Non-Detects	66.67%
Mean Detected	470	SD Detected	198
Mean of Detected Logged Data	6.106	SD of Detected Logged Data	0.434

Warning: Data set has only 2 Detected Values.

This is not enough to compute meaningful or reliable statistics and estimates.

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.708	d2max (for USL)	1.822

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	6	95% UTL with95% Coverage	610
Approx, f used to compute achieved CC	0.316	Approximate Actual Confidence Coefficient achieved by UTL	0.265
Approximate Sample Size needed to achieve specified CC	59	95% UPL	610
95% USL	610	95% KM Chebyshev UPL	1050

Toluene

General Statistics

Total Number of Observations	6	Number of Missing Observations	0
Number of Distinct Observations	2		
Number of Detects	1	Number of Non-Detects	5
Number of Distinct Detects	1	Number of Distinct Non-Detects	1
Minimum Detect	0.62	Minimum Non-Detect	0.25
Maximum Detect	0.62	Maximum Non-Detect	0.25
Variance Detected	N/A	Percent Non-Detects	83.33%
Mean Detected	0.62	SD Detected	N/A
Mean of Detected Logged Data	-0.478	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!

It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Toluene was not processed!

Volatile Fuel Hydrocarbons (C4-C12)

General Statistics

Total Number of Observations	6	Number of Missing Observations	0
Number of Distinct Observations	2		
Number of Detects	1	Number of Non-Detects	5
Number of Distinct Detects	1	Number of Distinct Non-Detects	1
Minimum Detect	17	Minimum Non-Detect	35
Maximum Detect	17	Maximum Non-Detect	35
Variance Detected	N/A	Percent Non-Detects	83.33%
Mean Detected	17	SD Detected	N/A
Mean of Detected Logged Data	2.833	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!

It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Volatile Fuel Hydrocarbons (C4-C12) was not processed!

Background Statistics for Data Sets with Non-Detects

Organics - MW-4

User Selected Options

Date/Time of Computation	ProUCL 5.1 4/8/2019 1:40:49 PM
From File	Organics Input_c.xls
Full Precision	OFF
Confidence Coefficient	95%
Coverage	95%
Different or Future K Observations	1
Number of Bootstrap Operations	2000

Benzene

General Statistics

Total Number of Observations	5	Number of Missing Observations	0
Number of Distinct Observations	5		
Number of Detects	4	Number of Non-Detects	1
Number of Distinct Detects	4	Number of Distinct Non-Detects	1
Minimum Detect	0.59	Minimum Non-Detect	0.265
Maximum Detect	0.96	Maximum Non-Detect	0.265
Variance Detected	0.0314	Percent Non-Detects	20%
Mean Detected	0.813	SD Detected	0.177
Mean of Detected Logged Data	-0.227	SD of Detected Logged Data	0.231

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	4.203	d2max (for USL)	1.671

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.88	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.748	Detected Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.281	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.375	Detected Data appear Normal at 5% Significance Level	

Detected Data appear Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.703	KM SD	0.258
95% UTL95% Coverage	1.789	95% KM UPL (t)	1.306
90% KM Percentile (z)	1.034	95% KM Percentile (z)	1.128
99% KM Percentile (z)	1.304	95% KM USL	1.135

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.677	SD	0.341
95% UTL95% Coverage	2.108	95% UPL (t)	1.472
90% Percentile (z)	1.113	95% Percentile (z)	1.237
99% Percentile (z)	1.469	95% USL	1.246

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Diesel Range Organics (C10-C24)

General Statistics

Total Number of Observations	5	Number of Distinct Observations	4
Minimum	54	First Quartile	54
Second Largest	65	Median	57
Maximum	82	Third Quartile	65
Mean	62.4	SD	11.84
Coefficient of Variation	0.19	Skewness	1.556
Mean of logged Data	4.12	SD of logged Data	0.177

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	4.203	d2max (for USL)	1.671

Normal GOF Test

Shapiro Wilk Test Statistic	0.806	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.762	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.276	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.343	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	112.2	90% Percentile (z)	77.58
	95% UPL (t)	90.06	95% Percentile (z)	81.88
	95% USL	82.2	99% Percentile (z)	89.96

Naphthalene

General Statistics

Total Number of Observations	5	Number of Missing Observations	0
Number of Distinct Observations	5		
Number of Detects	4	Number of Non-Detects	1
Number of Distinct Detects	4	Number of Distinct Non-Detects	1
Minimum Detect	0.56	Minimum Non-Detect	0.4
Maximum Detect	1.1	Maximum Non-Detect	0.4
Variance Detected	0.0618	Percent Non-Detects	20%
Mean Detected	0.773	SD Detected	0.249
Mean of Detected Logged Data	-0.295	SD of Detected Logged Data	0.312

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	4.203	d2max (for USL)	1.671

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.905	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.748	Detected Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.256	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.375	Detected Data appear Normal at 5% Significance Level	

Detected Data appear Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.698	KM SD	0.244
95% UTL95% Coverage	1.721	95% KM UPL (t)	1.267
90% KM Percentile (z)	1.01	95% KM Percentile (z)	1.099
99% KM Percentile (z)	1.264	95% KM USL	1.105

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.658	SD	0.335
95% UTL95% Coverage	2.064	95% UPL (t)	1.439
90% Percentile (z)	1.087	95% Percentile (z)	1.208
99% Percentile (z)	1.436	95% USL	1.217

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Toluene

General Statistics

Total Number of Observations	5	Number of Missing Observations	0
Number of Distinct Observations	3		
Number of Detects	2	Number of Non-Detects	3
Number of Distinct Detects	2	Number of Distinct Non-Detects	1
Minimum Detect	1.8	Minimum Non-Detect	0.25
Maximum Detect	19.5	Maximum Non-Detect	0.25
Variance Detected	156.6	Percent Non-Detects	60%
Mean Detected	10.65	SD Detected	12.52
Mean of Detected Logged Data	1.779	SD of Detected Logged Data	1.685

Warning: Data set has only 2 Detected Values.

This is not enough to compute meaningful or reliable statistics and estimates.

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	4.203	d2max (for USL)	1.671

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	5	95% UTL with95% Coverage	19.5
Approx, f used to compute achieved CC	0.263	Approximate Actual Confidence Coefficient achieved by UTL	0.226
Approximate Sample Size needed to achieve specified CC	59	95% UPL	19.5
95% USL	19.5	95% KM Chebyshev UPL	40.55

Volatile Fuel Hydrocarbons (C4-C12)

General Statistics

Total Number of Observations	5	Number of Missing Observations	0
Number of Distinct Observations	3		
Number of Detects	2	Number of Non-Detects	3
Number of Distinct Detects	2	Number of Distinct Non-Detects	1
Minimum Detect	47	Minimum Non-Detect	35
Maximum Detect	125	Maximum Non-Detect	35
Variance Detected	3042	Percent Non-Detects	60%
Mean Detected	86	SD Detected	55.15
Mean of Detected Logged Data	4.339	SD of Detected Logged Data	0.692

Warning: Data set has only 2 Detected Values.

This is not enough to compute meaningful or reliable statistics and estimates.

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	4.203	d2max (for USL)	1.671

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	5	95% UTL with95% Coverage	125
Approx, f used to compute achieved CC	0.263	Approximate Actual Confidence Coefficient achieved by UTL	0.226
Approximate Sample Size needed to achieve specified CC	59	95% UPL	125
95% USL	125	95% KM Chebyshev UPL	223

Background Statistics for Data Sets with Non-Detects

Organics - MW-5

User Selected Options

Date/Time of Computation	ProUCL 5.1 4/8/2019 1:41:22 PM
From File	Organics Input_d.xls
Full Precision	OFF
Confidence Coefficient	95%
Coverage	95%
Different or Future K Observations	1
Number of Bootstrap Operations	2000

Diesel Range Organics (C10-C24)

General Statistics

Total Number of Observations	5	Number of Missing Observations	0
Number of Distinct Observations	5		
Number of Detects	4	Number of Non-Detects	1
Number of Distinct Detects	4	Number of Distinct Non-Detects	1
Minimum Detect	16	Minimum Non-Detect	15
Maximum Detect	22	Maximum Non-Detect	15
Variance Detected	6.917	Percent Non-Detects	20%
Mean Detected	19.75	SD Detected	2.63
Mean of Detected Logged Data	2.976	SD of Detected Logged Data	0.141

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	4.203	d2max (for USL)	1.671

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.887	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.748	Detected Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.288	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.375	Detected Data appear Normal at 5% Significance Level

Detected Data appear Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	18.8	KM SD	2.786
95% UTL95% Coverage	30.51	95% KM UPL (t)	25.31
90% KM Percentile (z)	22.37	95% KM Percentile (z)	23.38
99% KM Percentile (z)	25.28	95% KM USL	23.46

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	17.3	SD	5.933
95% UTL95% Coverage	42.24	95% UPL (t)	31.16
90% Percentile (z)	24.9	95% Percentile (z)	27.06
99% Percentile (z)	31.1	95% USL	27.22

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Motor Oil Range Organics (C25-C36)

General Statistics

Total Number of Observations	5	Number of Missing Observations	0
Number of Distinct Observations	2		
Number of Detects	1	Number of Non-Detects	4
Number of Distinct Detects	1	Number of Distinct Non-Detects	1
Minimum Detect	170	Minimum Non-Detect	160
Maximum Detect	170	Maximum Non-Detect	160
Variance Detected	N/A	Percent Non-Detects	80%
Mean Detected	170	SD Detected	N/A
Mean of Detected Logged Data	5.136	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!
It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Motor Oil Range Organics (C25-C36) was not processed!

Naphthalene

General Statistics

Total Number of Observations	5	Number of Missing Observations	0
Number of Distinct Observations	2		
Number of Detects	1	Number of Non-Detects	4
Number of Distinct Detects	1	Number of Distinct Non-Detects	1
Minimum Detect	1.2	Minimum Non-Detect	0.4
Maximum Detect	1.2	Maximum Non-Detect	0.4
Variance Detected	N/A	Percent Non-Detects	80%
Mean Detected	1.2	SD Detected	N/A
Mean of Detected Logged Data	0.182	SD of Detected Logged Data	N/A

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!
It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Naphthalene was not processed!

Background Statistics for Data Sets with Non-Detects

Organics - MW-6

User Selected Options

Date/Time of Computation	ProUCL 5.1 4/8/2019 1:41:54 PM
From File	Organics Input_e.xls
Full Precision	OFF
Confidence Coefficient	95%
Coverage	95%
Different or Future K Observations	1
Number of Bootstrap Operations	2000

Diesel Range Organics (C10-C24)

General Statistics

Total Number of Observations	5	Number of Distinct Observations	5
Minimum	3700	First Quartile	3800
Second Largest	7000	Median	6050
Maximum	7800	Third Quartile	7000
Mean	5670	SD	1859
Coefficient of Variation	0.328	Skewness	-0.137
Mean of logged Data	8.596	SD of logged Data	0.347

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	4.203	d2max (for USL)	1.671

Normal GOF Test

Shapiro Wilk Test Statistic	0.884	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.762	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.243	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.343	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with 95% Coverage	13485	90% Percentile (z)	8053
95% UPL (t)	10012	95% Percentile (z)	8728
95% USL	8778	99% Percentile (z)	9995

Motor Oil Range Organics (C25-C36)

General Statistics

Total Number of Observations	5	Number of Missing Observations	0
Number of Distinct Observations	5		
Number of Detects	4	Number of Non-Detects	1
Number of Distinct Detects	4	Number of Distinct Non-Detects	1
Minimum Detect	400	Minimum Non-Detect	545
Maximum Detect	2400	Maximum Non-Detect	545
Variance Detected	856667	Percent Non-Detects	20%
Mean Detected	1150	SD Detected	925.6
Mean of Detected Logged Data	6.79	SD of Detected Logged Data	0.837

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	4.203	d2max (for USL)	1.671

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.886	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.748	Detected Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.259	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.375	Detected Data appear Normal at 5% Significance Level

Detected Data appear Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	1010	KM SD	770
95% UTL95% Coverage	4246	95% KM UPL (t)	2808
90% KM Percentile (z)	1997	95% KM Percentile (z)	2277
99% KM Percentile (z)	2801	95% KM USL	2297

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	974.5	SD	892.5
95% UTL95% Coverage	4726	95% UPL (t)	3059
90% Percentile (z)	2118	95% Percentile (z)	2442
99% Percentile (z)	3051	95% USL	2466

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Naphthalene

General Statistics

Total Number of Observations	5	Number of Distinct Observations	5
Minimum	1.4	First Quartile	2.05
Second Largest	3.2	Median	2.7
Maximum	4.4	Third Quartile	3.2
Mean	2.75	SD	1.145
Coefficient of Variation	0.416	Skewness	0.495
Mean of logged Data	0.938	SD of logged Data	0.436

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	4.203	d2max (for USL)	1.671

Normal GOF Test

Shapiro Wilk Test Statistic	0.985	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.762	Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.147	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.343	Data appear Normal at 5% Significance Level

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	7.561	90% Percentile (z)	4.217
	95% UPL (t)	5.423	95% Percentile (z)	4.633
	95% USL	4.663	99% Percentile (z)	5.413

Volatile Fuel Hydrocarbons (C4-C12)

General Statistics

Total Number of Observations	5	Number of Missing Observations	0
Number of Distinct Observations	5		
Number of Detects	4	Number of Non-Detects	1
Number of Distinct Detects	4	Number of Distinct Non-Detects	1
Minimum Detect	60	Minimum Non-Detect	35
Maximum Detect	120	Maximum Non-Detect	35
Variance Detected	662.9	Percent Non-Detects	20%
Mean Detected	86.38	SD Detected	25.75
Mean of Detected Logged Data	4.426	SD of Detected Logged Data	0.295

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	4.203	d2max (for USL)	1.671

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.973	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.748	Detected Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.179	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.375	Detected Data appear Normal at 5% Significance Level

Detected Data appear Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	76.1	KM SD	28.64
95% UTL95% Coverage	196.5	95% KM UPL (t)	143
90% KM Percentile (z)	112.8	95% KM Percentile (z)	123.2
99% KM Percentile (z)	142.7	95% KM USL	124

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	72.6	SD	38.03
95% UTL95% Coverage	232.4	95% UPL (t)	161.4
90% Percentile (z)	121.3	95% Percentile (z)	135.1
99% Percentile (z)	161.1	95% USL	136.2

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

APPENDIX D

Blaine Tech Services, Inc. Equipment Decontamination Procedure

Blaine Tech Services, Inc.
Standard Procedure

DECONTAMINATION OF EQUIPMENT

Decontamination of the equipment that is re-used in the process of sample collection is necessary to ensure the validity of the samples collected. Equipment decontamination occurs before, during and after each sampling event.

The nature and extent of decontamination efforts is proportional to the suspected level and volatility of the contamination. That is, it varies. When equipment and cross contamination risk is minimal, so should decontamination efforts. When equipment and cross contamination risk is severe, so should decontamination efforts. When in doubt, err on the side of caution.

All attempts should be made to understand the risk level so that the appropriate effort is applied. Performing superfluous cleaning may raise the confidence level of the Sampling Technician, but does nothing to increase the validity of the sample. Accordingly, superfluous cleaning should be avoided.

Outlined below are equipment decontamination descriptions and guidelines. They should be viewed as minimum standards. Conditions in the field may require greater decontamination efforts. Lesser efforts should not be applied unless first approved by the Project Coordinator.

Decontamination Effort Levels

1. Light. De-ionized or clean water spray rinse with hand held sprayer.
2. Moderate. De-ionized or clean water spray rinse with Pressure Washer.
3. Heavy. De-ionized or clean water spray rinse with Pressure Washer plus non-phosphate soap wash.

The BTS on-board pressure washer system consists of three main components. These are the stainless steel supply tank, Hotsy pressure washer and integrated decontamination sink.

Note: This system uses new water for each decontamination procedure. No rinsate water is ever reused or recycled.

Stainless Steel Supply Tank. All BTS Sampling Vehicles are equipped with custom-built stainless steel supply tanks. These tanks vary in capacity from 80 to 130 gallons and serve as the source for all decontamination activities on the vehicles. The water contained in the tank is routed to both the pressure washer and the integrated decontamination sink.

Hotsy Pressure Washer. An industrial grade Hotsy brand pressure washer/steam cleaner is mounted on all BTS Sampling Vehicles. The wand is located at the rear of the vehicle so that the washer may be used in conjunction with the decontamination sink.

Integrated Decontamination Sink. A custom-built stainless steel decontamination sink is mounted to the rear of all BTS Sampling Vehicles. This deep sink provides an ideal workstation to perform equipment decontamination. All rinsate water is automatically collected in the sink and pumped into the on-board effluent tank(s) thus eliminating potentially hazardous water handling activities.

APPENDIX E

Blaine Tech Services Inc. Low Flow Sampling Procedure

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Blaine Tech Services, Inc.
Standard Operating Procedure

LOW-FLOW SAMPLING

SAMPLE-PRO BLADDER PUMP

1. Calibrate YSI Flow Cell as per manufacturer's specifications. Thoroughly rinse probe and cup between parameters. Calibration order as follows:

    A. pH (use 3-point calibration of 7, 4, 10)
    B. Oxygen Reduction Potential (ORP)
    C. Specific Conductance
    D. Dissolved Oxygen (DO) (calibrate simulating 100% oxygen saturation)

2. Insert new bladder into Sample-Pro pump housing.
3. Remove dedicated PE tubing from the well or start with new PE tubing cut to the required length.
4. Attach the PE tubing to the Sample-Pro Bladder Pump.
5. Gently lower the Sample-Pro Bladder Pump, and PE tubing into the well, placing the Sample-Pro Bladder Pump intake at the center of the screened interval. Take care to minimize disturbance to the water column.
6. Direct effluent line into YSI 556 Flow Cell.
7. Set Sample-Pro Bladder Pump speed at 100 - 500 ml/min.
8. Collect water quality parameter measurements for temperature, pH, conductivity, turbidity, DO and ORP every 3-5 minutes.
9. Monitor drawdown during purging with electronic water level meter. Record water level with each parameter measurement. MAXIMUM DRAWDOWN IS 0.33 FEET.
10. Collect parameter measurements until stability is achieved. Stability is defined as three consecutive measurements where:

Temp	± 1° Celsius
pH	± 0.1
Conductivity	± 3%
Turbidity	± 10% NTU
DO	± 0.3 mg/l
ORP	± 10 Mv

11. Disconnect effluent line from YSI 556 Flow Cell.
12. Sample through effluent line while maintaining constant flow rate.
13. Remove Sample-Pro Bladder Pump, and PE tubing from well.
14. Detach and reinstall dedicated PE tubing in well.

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APPENDIX F

Dewatering Effluent Flow and Ponding Logs

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Blue Eagle Lode Mine
Dewatering Effluent Flow Log

Month and Year: _____

Day	Volume of Water Entering Storage Tank (gallons)	Volume of Water Exiting Storage Tank			Times Dewatering System Was Not Operating *(for example, from 08:00 to 14:00)*
		Volume to Dust Control (gallons)	Volume Infiltrated into Pit (gallons)	Volume Sprayed on Pit Walls for Evaporation (gallons)	
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					

Monthly Totals / Averages:

Total Dewatering Volume Entering Storage Tank _____ gallons

Total Dewatering Volume Leaving Storage Tank _____ gallons

Average Flow Rate of Dewatering Effluent Leaving Tank:

To dust suppression _____ gallons/day

To pit infiltration _____ gallons/day

To pit sidewall (evaporation) _____ gallons/day

Blue Eagle Lode Mine
Water Ponding Log

Month and Year: _____

Day	Ponding Present (yes/no)	General Location(s) of Ponding	Reason for Ponding (e.g. rain, dewatering effluent evaporation)	Approximate Volume of Ponded Water (gallons)
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				

BLUE EAGLE LODE MINING CO.
Middle Buttes
Kern County, California

162 Prospect Avenue
Sausalito, CA 94965-2305
415-332-1330

January 31, 2025

Todd Battey
Lahontan Regional Water Quality Control Board
15095 Amargosa Road, Bldg. 2, Suite 210
Victorville, CA 92394

Subject: Annual Monitoring Report
Blue Eagle Lode Mine
Board Order No. R6V-2017-0001
WDID No. 6B151404003

Dear Mr. Battey:

We are pleased to submit herewith the annual monitoring report for 2024, prepared by GeoPentech, Inc. for the Blue Eagle Lode Mine.

Please contact either Eric Fordham at GeoPentech, or myself, with any questions.

Sincerely,
BLUE EAGLE LODE MINING CO.

John C. Burton
President

GeoPentech

January 30, 2025
Project No. 20049A

Mr. John C. Burton
BLUE EAGLE LODE MINING CO.
Middle Buttes, Kern County, California
162 Prospect Avenue
Sausalito, CA 94965

SUBJECT: BLUE EAGLE LODE MINE
ANNUAL MONITORING REPORT (2024 OPERATIONS)
MIDDLE BUTTES, KERN COUNTY, CALIFORNIA
BOARD ORDER NO. R6V-2017-0001
WDID NO. 6B151404003

Dear Mr. Burton,

This document presents the 2024 operational and water quality monitoring results for the Blue Eagle Lode Mine in Kern County, California, as required by the site-specific Waste Discharge Requirements (WDRs) issued by the California Regional Water Quality Control Board (RWQCB), Lahontan District for the project site on January 11, 2017 (Order No. R6V-2017-0001, WDID No. 6B151404003). The monitoring described in this report was performed as described in the Blue Eagle Lode Mining Company's (BELMC's) 2019 Sampling and Analysis Plan (SAP) and 2022 Temporary Shutdown Maintenance Plan.

Site Description

The Blue Eagle Lode Mine is an underground mine operation that was under development from July 2020 to September 2021 by BELMC to extract gold ore from the Middle Buttes in Kern County, California (Figure 1). Development of this mining operation was temporarily halted in September 2021 and has not yet resumed. The planned operation entails mining a decline from the bottom of the existing Shumake open pit to a gold-bearing vein. Ore extracted from the decline will be shipped off-site by truck to an approved, suitably permitted facility for processing (i.e., ore processing will not be performed on site).

Decline excavation activities began in late July 2020 and were completed in February 2021 with additional exploration activities occurring within the decline from February to September 2021. The decline was driven with an arch shape measuring approximately 10 feet high by 10 feet wide (12-foot wide at the entrance portal) and extends beneath the eastern wall of the Shumake Pit. The decline begins at an elevation of 2,800 feet above mean sea level (msl; North American Vertical Datum 1988, NAVD88) and slopes downward at an approximate 15% grade over a distance of 600 feet to an

elevation of 2,710 feet msl. Photographs of the decline tunnel and portal opening are shown in Attachment A.

Groundwater Control, Discharge and Level

Groundwater in the vicinity of the Shumake Pit has historically occurred at approximately 2,792 feet msl. The decline intercepts the historic N-6 drift, which acts as a pathway for water flow. Consequently, dewatering of the decline and N-6 drift was necessary for construction and will continue to be needed upon resumption of mining operations. Initially, the decline was dewatered by pumping from well MW-2, which was completed into the N-6 drift beneath the pit floor near the decline portal. An initial dewatering effluent sample was collected on June 4, 2020, from well MW-2 before construction of the decline started. Starting around October 7, 2020, BELMC began pumping water directly from the decline in addition to pumping from well MW-2 to minimize and control the accumulation of groundwater at the face of the decline. Photographs of MW-2 and water being pumped directly from the decline are included in Attachment A.

During dewatering operations, the dewatering effluent was conveyed to tanks located on the construction pad within the Shumake Pit near the portal. The discharge water volume was measured daily, and the water was used for on-site dust control on the mine property haul roads. BELMC is authorized to discharge the collected dewatering effluent water into a subsurface infiltration gallery system located on the construction pad within the Shumake Pit near well MW-4 or spray the water onto the pit's highwalls if the water produced exceeds the volume that can be used for dust control. However, prior to the temporary shutdown of operations, BELMC only used the dewatering effluent for dust control. Dewatering has not occurred since the temporary shutdown began in September 2021.

In accordance with the WDRs, use of the dewatering effluent for dust control is not considered a discharge as long as the water does not pond or flow. Dust control was accomplished using a water truck equipped with multiple spray nozzles configured to disperse water to prevent ponding. Although BELMC did not discharge dewatering effluent to the infiltration system, the collected water was still sampled and tested quarterly for the analytes listed in the WDRs and SAP. These analytes are shown in Tables 1, 2, and 3. Effluent sampling has not occurred since dewatering ended in September 2021.

The site's groundwater level and quality are monitored using a network of six groundwater monitoring wells installed in and around the Shumake Pit. These monitoring wells are shown on Figure 2 along with the mine portal location and decline alignment. A summary of well construction details for the six wells is provided in Table 4. Drilling and well construction logs for the wells can be found in the SAP. Groundwater from the wells was sampled quarterly prior to the temporary shutdown of operations and is now sampled annually. The sampled groundwater is analyzed for the parameters listed in Tables 5, 6, and 7.

Sampling and Analysis Methods

Water samples from monitoring wells MW-1 through MW-6 were sampled on November 19 and 20, 2024, (annual sampling) in accordance with the SAP and the Temporary Shutdown Maintenance Plan. Groundwater samples were collected using low-flow sampling methods by Blaine Tech Services, Inc,

a professional groundwater sampling company. Blaine Tech personnel were accompanied by a GeoPentech engineer. Prior to sampling, the pumped groundwater was monitored for the following parameters for stability to ensure that the sampled water was representative of the formation groundwater:

- Depth to groundwater (ft below ground surface)
- Electrical conductivity (microsiemens/cm)
- pH
- Temperature (°C)
- Turbidity (NTUs)
- Dissolved Oxygen (mg/L)
- Oxygen Reduction Potential (ORP, mV)

Field data sheets completed by Blaine Tech Services are provided in Attachment B.

All groundwater and effluent water samples were collected in clean, new, sealed, laboratory-provided sample containers, labeled with the location, date, time, and analyses required, and placed under chain of custody protocols in an ice-filled cooler for transport to the environmental laboratory for testing. One set of duplicate water samples (from MW-4) was collected during the November 2024 sampling event. All water samples were taken to the Eurofins Calscience[1] laboratory in Tustin, California, a California-certified environmental laboratory for analysis, except for nitrocellulose samples, which were shipped directly to Pace Analytical in Mount Juliet, Tennessee[2].

Prior to the ongoing temporary shutdown, well MW-2 was used for dewatering and had a dedicated pump installed in the well. Although samples from MW-2 were not collected under low flow conditions (flow rate was approximately 15-20 gpm) during past sampling events, water stability parameters were measured to demonstrate that the water conditions were stable prior to sample collection. During past sampling events, well MW-2 samples were collected prior to the water entering the water storage tanks. Dewatering effluent samples, on the other hand, were collected from a sample outlet on the water storage tanks and contained a mixture of water originating from MW-2 and from the decline. The dewatering pump in MW-2 was removed prior to the 2023 water sampling event, and currently remains out of the well.

Monitoring Results

Dewatering operations have not occurred since September 2021. Water ponding observations at the bottom of the pit are currently only recorded while personnel are on site for water level measurement, groundwater sampling, or other intermittent site activities (e.g. slope stability study). A water ponding log for dates personnel were on site is provided in Attachment C. Water levels were measured from

[1] BELMC's SAP states that Test America will analyze water samples; however, Test America and Eurofins laboratories merged into Eurofins Test America, between 2019 and 2020. The Eurofins Test America laboratory in Tustin (operating as Eurofins Calscience) was selected to receive the samples based on changes to sampling capabilities in the Irvine and Sacramento Test America laboratories.

[2] Starting in 2023, Eurofins Test America no longer performed nitrocellulose sampling within their network of laboratories. Pace Analytical is a California-accredited laboratory.

each of the six monitoring wells during the November groundwater sampling event and in March, June, and September of 2023. Quarterly water levels collected since the start of operations in 2020 are shown in Table 8. Groundwater potentiometric surface maps are provided on Figures 3 through 7 for September 2021 (the end of dewatering) and for March, June, September and November of 2024, respectively. A hydrograph showing water levels in each well over time is presented in Figure 8. The contoured potentiometric surface in September 2021 indicated a groundwater flow gradient towards the dewatered decline. However, now that the water level has recovered in the decline and pit area, groundwater flow occurs at a low hydraulic gradient to the south and southeast across the pit and toward MW-6. During periods of heavy seasonal rainfall, radial flow away from the pit is observed as water collects in the low area of the pit floor and infiltrates as seen in the March and June 2024 water elevations (Figures 4 and 5).

The groundwater gradient towards the decline was stable from March to September 2021 at approximately 0.13 ft/ft. After BELMC stopped dewatering, the groundwater gradient below the pit (between MW-1, MW-2, and MW-4) flattened as seen by comparing Figure 3 to Figures 4 through 7. The gradient was approximately 0.002 to 0.005 ft/ft away from the pit bottom (radial except where blocked by the Silver Prince Fault) in March 2024 and 0.001 ft/ft toward MW-6 (southeast) in November 2024. The water levels in the monitoring wells have risen 20 to 32 feet from September 2021 to November 2024 except for MW-3, which has dropped 5 feet as a result of pumping from the neighboring property and its location on the opposite side of the Silver Prince Fault from the mine pit.

The groundwater elevation difference across the Silver Prince Fault increased to 118 feet as measured at MW-3 and MW-4, with the pit side of the fault having the higher water level. This elevation difference demonstrates that the Silver Prince Fault acts as a barrier to groundwater flow. Further evidence of this lack of hydraulic connection between the two sides of the fault is provided by the large difference in analyte concentrations between wells MW-3 and MW-4.

Water sampling results for the dewatering effluent prior to the operations hiatus (pre-September 2021) are shown in Table 9. These results were compared to the dewatering effluent discharge limits listed in the WDRs. Although BELMC collected dewatering effluent water quality samples, the dewatering effluent was only used as dust control for the mine's haul roads. Dust control is not considered a discharge in accordance with the WDRs. The comparisons to discharge limits are provided only as additional background information.

Monitoring well sample results for the November 2024 sampling event are provided in Table 10, and laboratory analysis reports for the sampling events are provided in Attachment D. Background analyte concentrations were determined for each well by calculating prediction limits (PL) at a 95% confidence level based on baseline analyte concentrations. These concentrations are shown on Table 10. Further explanation of the calculation of these PLs can be found in the SAP. California's Maximum Contaminant Levels (MCL) or Water Quality Goals (WQG) are also provided in Table 10 for those parameters where the State of California has an established value. The following table summarizes the monitored parameters where PLs and other WQGs were exceeded.

Well	Purpose	Parameter Exceeds PL	Parameter Exceeds PL and MCL/WQG	Notes
MW-1	Pit Area	TDS, ammonia, sulfate, metals (antimony, arsenic, cadmium, chromium, cobalt, copper, iron, lead, mercury, nickel selenium, vanadium)	TDS, sulfate, metals (antimony, arsenic, cadmium, iron, lead, nickel, selenium)	Above normal turbidity in sampled water. Turbidity measurements stabilized around 71 NTU after 40 minutes of pumping.
MW-2	Pit Area and Dewatering	TDS, ammonia, calcium, magnesium, sulfate, metals (aluminum, beryllium, cadmium, chromium, cobalt, copper, iron, manganese, nickel, selenium, sulfur, vanadium, zinc), diesel-range organics	TDS, sulfate, metals (aluminum, beryllium, cadmium, copper, iron, nickel, zinc)	
MW-3	Downgradient side of Silver Prince Fault from mining activities	No exceedances	No exceedances of both	
MW-4	Pit Area	sodium, selenium	No exceedances of both	
MW-5	Up-gradient (northwest)	pH, magnesium, potassium, sulfate	sulfate	
MW-6	Down-gradient (southeast)	TDS, calcium, magnesium, potassium, sulfate, metals (arsenic, iron, manganese, sulfur)	TDS, sulfate, metals (arsenic, iron)	

Analysis and Interpretation

Water Levels: Groundwater elevations in the five wells with hydraulic connection to the pit area (all wells except MW-3) have fully recovered to pre-dewatering water levels. Quarterly, water levels responded to wet/dry weather cycles. Groundwater gradients are slight (approximately 0.001 ft/ft) across the pit toward the south and southeast during dry weather. After large consistent rain events where water can accumulate in the low area of the pit floor, groundwater flow moves radially away from the pit floor with observed gradients of approximately 0.002 to 0.005 ft/ft. Locally, seepage from the pit area is blocked from spreading to the west/southwest by the Silver Prince Fault and forced toward the east into the N-6 drift, which provides a preferential flow pathway into the decline directly southeast of the pit wall.

Water Quality: Metals and sulfate concentrations have substantially decreased between December 2021 and the present time. At the same time, metals concentrations have increased in MW-1, MW-2, and downgradient in MW-6. This time period corresponds with water level recovery in the pit area and two consecutive wet winter seasons (early 2023 and early 2024). During heavy rainfall events, water accumulates in the pit floor near MW-4 and infiltrates into the shallow groundwater (10-12 ft below the pond bottom). From there, much of the water moves toward the highly conductive N-6 drift near MW-2 and into the decline, which intercepts the N-6 drift. The N-6 drift is a subsurface remnant of past mining activities that currently consists of open underground mine works containing bedrock rubble and mining support debris. Consequently, it appears that metals have moved preferentially from the MW-4 area toward MW-2 and then downgradient toward MW-6. Metals concentrations at MW-1 have historically been highly variable (especially iron and arsenic) but may also be influenced by local preferential flow pathways and rainfall events. Higher than normal turbidity in sampled water during the November 2024 event may also have impacted MW-1 results.

No prediction level exceedances were observed in MW-3. MW-5 only exceeded prediction limits for pH, and the ions magnesium, potassium, and sulfate. Only the sulfate exceedance also exceeds a water quality guidance level. All four of these exceedances are consistent with water movement from the pit floor area toward MW-5 during heavy rainfall events. It would be expected that pH would rise and that the other ion concentrations would decrease if dry conditions continue through 2025 and flow continues to move from MW-5 toward the pit as seen during September and November 2024 water level measurements.

Conclusions

Water quality results, especially at MW-2, MW-4, and MW-6 appeared to be influenced by the heavy rains that occurred during the last two winter/spring seasons (2022/23 and 2023/24), with dissolved metals and sulfate moving in groundwater from MW-4 toward MW-2 and ultimately MW-6. As would be expected, metal and sulfate concentrations decreased further away from the pit area.

BELMC does not currently have any operations occurring on site, including dewatering, and has removed all personnel from the site. BELMC submitted a temporary shutdown maintenance plan to the California Regional Water Quality Control Board in January 2022 in accordance with the WDRs and BELMC's 2017 Temporary Shutdown Plan. BELMC is currently conducting annual groundwater sampling under the provisions of this plan.

The analyses and interpretations found in this report are based on GeoPentech and BELMC's knowledge of subsurface conditions from sample collection activities and site historical records. Waste discharge data collection and reporting are in accordance with both GeoPentech and BELMC's understanding of the site WDRs. The contents of this report do not constitute legal advice from GeoPentech. If you have any questions or require additional information on the material contained in this report, please contact the undersigned.

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Attachment

TABLES

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TABLE 1
Blue Eagle Lode Mining Company
Inorganic Constituent Effluent Limits[1]

Constituent	MCL	Annual Mean Effluent Discharge Limitation (mg/L)	Daily Maximum Effluent Discharge Limitation (mg/L)
Metals			
Aluminum	0.2	140	260
Antimony	0.006	0.09	0.24
Arsenic	0.01	140	490
Beryllium	0.004	0.01	0.03
Cadmium	0.005	0.17	0.5
Copper	1.3	5.3	18
Iron	0.3	250	670
Lead	0.015	0.016	0.035
Manganese	-	-	-
Mercury	0.002	-	-
Nickel	0.1	0.3	0.6
Selenium	0.05	0.06	0.15
Titanium	0.002	0.041	0.1
Zinc	5	7.6	13
Other Inorganics			
Ammonia	-	-	-
Bicarbonate	-	-	-
Calcium	-	-	-
Carbonate	-	-	-
Chloride	-	-	-
Cyanide	0.15	-	-
Fluoride	2	1.2	2.6
Magnesium	-	-	-
Nitrite	1	7	21
Nitrate	10	0.5	1.5
Nitrite + Nitrate	10	7.5	22.5
Perchlorate	0.006	-	-
Potassium	-	-	-
Sodium	-	-	-
Sulfate	250	2,100	3,100
Total Dissolved Solids	1,000	3,325	5,400

[1] Effluent limits are from page 24 of the Waste Discharge Requirements, Board Order R6V-2017-001, WDID 6B151404003.

TABLE 2
Blue Eagle Lode Mining Company
pH Effluent Limits[1]

Parameter	MCL	Annual Mean Effluent Limitation	Daily Minimum and Maximum Effluent Limitation
pH	6.0<pH<9.0	3.0<pH<9.0	3.0<pH<9.0

[1] Effluent limits are from page 25 of the Waste Discharge Requirements, Board Order R6V-2017-001, WDID 6B151404003.

TABLE 3
Blue Eagle Lode Mining Company
Organic Constituent Effluent Limits[1]

Organic Constituents	Water Quality Goals (µg/L)	5-Year Median Discharge Limit (µg/L)	Daily Maximum Discharge Limit (µg/L)
Total Petroleum Hydrocarbons (C4-C12)	50	< 50	100
Total Petroleum Hydrocarbons (C8-C44)	100	< 100	200
Ethylene Glycol	14,000	< 7,000	< 14,000
Benzene	1	< 0.5	1
Toluene	42	< 21	42
Ethyl benzene	29	< 14.5	29
Total Xylenes	17	< 8.5	17
HMX	350	< 350	400
RDX	0.3	< 0.3	2
1,3,5-Trinitrobenzene	210	< 105	210
1,3-Dinitrobenzene	0.7	< 0.7	1
Nitroglycerin	5	< 3	5
Nitrobenzene	14	< 7	14
PETN	-	-	-
2,4,6-Trinitrotoluene	1	< 1	2
2,4-Dinitrotoluene	14	< 7	14
2,6-Dinitrotoluene	0.5	< 0.3	0.5
2-Nitrotoluene	80	< 40	80
3-Nitrotoluene	80	< 40	80
4-Nitrotoluene	80	< 40	80

[1] Effluent limits are from page 25 of the Waste Discharge Requirements, Board Order R6V-2017-001, WDID 6B151404003.

TABLE 4
Blue Eagle Lode Mining Company
Monitoring Well Construction Information

Monitoring Well	Well Material	Diameter	Screened Interval (Feet, bgs)	Screened Interval (Feet, msl)
MW-1	PVC	4.5 inch	40 - 79.3	2,758.08 - 2,797.38
MW-2	PVC	4.5 inch	45.75 - 50.3	2,753.22 - 2,757.77
MW-3	PVC	4.5 inch	275 - 315	2,632.03 - 2,672.03
MW-4	PVC	4.5 inch	30 - 70	2,767.96 - 2,727.96
MW-5	PVC	4.5 inch	300 - 340	2,706.88 - 2,746.88
MW-6	PVC	4.5 inch	610 - 650	2,749.67 - 2,789.67

TABLE 5
Blue Eagle Lode Mining Company
Inorganic Compound Groundwater Quality Limits by Well

Parameter	Groundwater Quality Limit[1]						Reporting Limit[2]	Units
	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6		
Aluminum	48	33	0.050	200	1.0	0.94	0.050	mg/L
Ammonia	2.9	0.26	0.29	2.0	0.20	0.21	0.20	mg/L
Antimony	0.0093	0.0067	0.0020	0.0094	0.22	0.21	0.0020	mg/L
Arsenic	8.2	15	0.34	180	1.1	2.4	0.0020	mg/L
Barium	0.057	0.017	0.036	0.043	0.23	0.23	0.0010	mg/L
Beryllium	0.013	0.0068	0.0010	0.033	0.21	0.21	0.0010	mg/L
Bicarbonate	21	4.0	140	60	130	730	4.0	mg/L
Cadmium	0.11	0.010	0.0011	0.26	0.20	0.20	0.0010	mg/L
Calcium	70	85	37	390	80	130	0.30	mg/L
Carbonate	4.0	4.0	4.0	4.0	4.0	4.0	4.0	mg/L
Chloride	18	15	20	31	21	28	0.50	mg/L
Chromium	0.0072	0.0020	0.0027	0.0020	0.21	0.20	0.0020	mg/L
Cobalt	0.25	0.53	0.0038	2.2	0.20	0.20	0.0010	mg/L
Copper	0.0098	0.18	0.0029	1.4	0.20	0.19	0.0020	mg/L
Cyanide	0.094	0.025	0.20	0.025	0.025	0.025	0.025	mg/L
Fluoride	1.4	1.1	5.3	2.9	0.50	0.80	0.50	mg/L
Iron	40	17	1.8	460	1.1	2.0	0.050	mg/L
Lead	0.0063	0.044	0.0010	0.0070	0.20	0.20	0.0010	mg/L
Magnesium	20	18	21	76	22	43	0.050	mg/L
Manganese	1.8	1.9	7.0	8.6	0.43	6.7	0.0025	mg/L
Mercury	0.00023	0.00020	0.00020	0.00037	0.0011	0.00023	0.00020	mg/L
Molybdenum	0.0064	0.0081	0.013	0.10	0.22	0.22	0.0020	mg/L
Nickel	0.099	0.066	0.0062	0.58	0.20	0.19	0.0020	mg/L
Nitrate (as N)	0.46	0.66	0.98	0.11	0.19	0.11	0.11	mg/L
Nitrite (as N)	0.47	0.21	1.4	0.19	0.15	0.15	0.15	mg/L
Perchlorate	1.0	1.0	1.0	28	1.0	1.0	1.0	µg/L
Potassium	56	53	24	84	28	21	0.050	mg/L
Selenium	0.029	0.017	0.0020	0.0093	0.22	0.19	0.0020	mg/L
Silver	0.0097	0.011	0.0050	0.0010	0.049	0.050	0.0010	mg/L
Sodium	57	60	49	390	68	150	0.10	mg/L

TABLE 5
Blue Eagle Lode Mining Company
Inorganic Compound Groundwater Quality Limits by Well

Parameter	Groundwater Quality Limit[1]						Reporting Limit[2]	Units
	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6		
Sulfate	780	640	220	3,200	260	330	0.50	mg/L
Sulfur	240	190	67	860	100	130	0.50	mg/L
Thallium	0.016	0.015	0.0010	0.012	0.050	0.050	0.0010	mg/L
Titanium[3]							0.0070	mg/L
Total Dissolved Solids	1,200	1,000	440	5,000	620	1,200	10	mg/L
Vanadium	0.055	0.010	0.029	0.070	0.21	0.20	0.010	mg/L
Zinc	6.2	1.5	2.8	17	0.29	0.20	0.0050	mg/L

[1] Groundwater Quality Limits are based on the 95% Upper Prediction Limits calculated during the baseline water quality investigation.

[2] Reporting Limits shown in this table reflect the reporting limits of TestAmerica Laboratories in Irvine, California when the Sampling and Analysis Plan was created. Due to the merger of TestAmerica and Eurofins and subsequent change in the lab being used to Eurofins Calscience in Garden Grove, California, current reporting limits may vary slightly.

[3] No water quality limit was determined when the HASP was written due to lack of baseline titanium data. There is currently no federal or state drinking water MCL for titanium.

TABLE 6
Blue Eagle Lode Mining Company
Organic Compound Groundwater Quality Limits by Well

Parameter	Groundwater Quality Limit[1]						Reporting Limit[2]	Units
	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6		
Total Petroleum Hydrocarbons (C_4-C_{12})	50	50	50	130	50	140	50	µg/L
Total Petroleum Hydrocarbons (C_{10}-C_{24})	62	49	140	90	26	10,000	47	µg/L
Total Petroleum Hydrocarbons (C_{25}-C_{36})	470	230	610	470	170	2,800	470	µg/L
Ethylene Glycol	10	10	10	10	10	10	10	mg/L
Benzene	0.50	0.50	0.50	1.3	0.50	0.50	0.50	µg/L
Toluene	0.50	0.50	0.62	20	0.50	0.50	0.50	µg/L
Ethylbenzene	0.50	0.50	0.50	0.50	0.50	0.50	0.50	µg/L
Xylene	1.0	1.0	1.0	1.0	1.0	1.0	1.0	µg/L
Naphthalene	1.0	1.0	1.0	1.3	1.2	5.4	1.0	µg/L
HMX	0.10	0.10	0.10	0.10	0.10	0.46	0.10	µg/L
RDX	0.10	0.10	0.10	0.10	0.10	0.10	0.10	µg/L
1,3,5-Trinitrobenzene	0.22	0.17	0.63	0.11	0.10	0.22	0.10	µg/L
1,3-Dinitrobenzene	0.10	0.10	0.10	0.10	0.10	0.10	0.10	µg/L
Nitrobenzene	0.078	0.10	0.16	0.53	0.10	5.6	0.10	µg/L
Nitrocellulose	2.0	2.0	2.0	2.0	5.5	4.4	2.0	mg/L
Nitroglycerine	0.65	0.65	0.65	0.65	0.65	0.72	0.65	µg/L
PETN	0.65	0.65	0.65	0.65	0.65	0.65	0.65	µg/L
2,4,6-Trinitrotoluene	0.10	0.10	0.10	0.10	0.10	0.10	0.10	µg/L
2,4-Dinitrotoluene	0.10	0.10	0.10	0.10	0.10	0.12	0.10	µg/L
2,6-Dinitrotoluene	0.10	0.10	0.10	0.10	0.10	0.12	0.10	µg/L
2-Nitrotoluene	0.50	0.50	0.50	0.50	0.50	0.14	0.50	µg/L
3-Nitrotoluene	0.50	0.50	0.50	0.50	0.50	0.50	0.50	µg/L
4-Nitrotoluene	0.50	0.50	0.50	0.50	0.50	0.29	0.50	µg/L

[1] Groundwater Quality Limits are based on the 95% Upper Prediction Limits calculated during the baseline water quality investigation.

[2] Reporting Limits shown in this table reflect the reporting limits of TestAmerica Laboratories in Irvine, California when the Sampling and Analysis Plan was created. Due to the merger of TestAmerica and Eurofins and subsequent change in the lab being used to Eurofins Calscience in Garden Grove, California, current reporting limits may vary slightly.

TABLE 7
Blue Eagle Lode Mining Company
Groundwater Quality pH Limits by Well

Well	Mean pH	Lower Groundwater Quality Limit	Upper Groundwater Quality Limit
MW-1	4.22	2.95	5.49
MW-2	4.31	2.79	5.82
MW-3	6.51	5.48	7.53
MW-4	5.16	1.91	8.41
MW-5	7.02	6.73	7.31
MW-6	6.84	5.77	7.90

Groundwater Quality Limits are based on two-sided 95% Prediction Limits calculated during the baseline water quality investigation.

TABLE 8
Blue Eagle Lode Mining Company
Groundwater Elevations

Well	Measuring Point Elevation (Feet, MSL)	Date	Depth to Water (Feet)	Water Elevation (Feet, MSL)	Notes
MW-1	2,839.94	9/21/2020	50.72	2,789.22	
		12/21/2020	68.04	2,771.90	
		3/9/2021	71.32	2,768.62	
		6/29/2021	74.04	2,765.90	
		9/28/2021	75.21	2,764.73	
		12/21/2021	74.13	2,765.81	
		3/21/2022	70.99	2,768.95	
		6/17/2022	69.71	2,770.23	
		12/6/2022	68.56	2,771.38	
		3/20/2023	55.49	2,784.45	
		6/15/2023	55.85	2,784.09	
		9/29/2023	51.02	2,788.92	
		11/28/2023	52.22	2,787.72	
		3/21/2024	47.91	2,792.03	
		6/25/2024	48.29	2,791.65	
		9/23/2024	49.24	2,790.70	
		11/19/2024	49.84	2,790.10	
MW-2	2,806.54	9/21/2020	21.58	2,784.96	Pumping water level*
		12/21/2020	45.52	2,761.02	Pumping water level*
		3/9/2021	48.80	2,757.74	Pumping water level*
		6/29/2021	48.87	2,757.67	Pumping water level*
		9/28/2021	48.90	2,757.64	Pumping water level*
		12/21/2021	42.39	2,764.15	Static water level
		3/21/2022	38.34	2,768.20	
		6/17/2022	37.05	2,769.49	
		12/6/2022	35.91	2,770.63	
		3/20/2023	18.66	2,787.88	
		6/15/2023	21.99	2,784.55	
		9/29/2023	17.93	2,788.61	
		11/29/2023	18.52	2,788.02	
		3/21/2024	13.24	2,793.30	
		6/25/2024	14.81	2,791.73	
		9/23/2024	16.12	2,790.42	
		11/20/2024	16.85	2,789.69	
MW-3	2,948.63	9/21/2020	244.15	2,704.48	
		12/21/2020	243.14	2,705.49	
		3/9/2021	242.78	2,705.85	
		6/29/2021	263.52	2,685.11	
		9/28/2021	272.42	2,676.21	
		12/21/2021	275.34	2,673.29	
		3/21/2022	275.37	2,673.26	
		6/17/2022	273.49	2,675.14	
		12/5/2022	270.52	2,678.11	
		3/20/2023	267.82	2,680.81	
		6/15/2023	265.48	2,683.15	
		9/29/2023	262.63	2,686.00	
		11/28/2023	262.14	2,686.49	
		3/21/2024	260.60	2,688.03	
		6/25/2024	260.14	2,688.49	
		9/23/2024	268.73	2,679.90	
		11/19/2024	277.33	2,671.30	

* Well MW-2 was being used for dewatering through 9/28/21.

TABLE 8
Blue Eagle Lode Mining Company
Groundwater Elevations

Well	Measuring Point Elevation (Feet, MSL)	Date	Depth to Water (Feet)	Water Elevation (Feet, MSL)	Notes
MW-4	2,807.66	9/21/2020	21.04	2,786.62	
		12/21/2020	40.73	2,766.93	
		3/9/2021	40.94	2,766.72	
		6/29/2021	43.54	2,764.12	
		9/28/2021	42.75	2,764.91	
		12/21/2021	42.62	2,765.04	
		3/21/2022	39.61	2,768.05	
		6/17/2022	38.30	2,769.36	
		12/6/2022	37.12	2,770.54	
		3/20/2023	19.71	2,787.95	
		6/15/2023	23.18	2,784.48	
		9/29/2023	17.23	2,790.43	
		11/29/2023	19.62	2,788.04	
		3/21/2024	14.36	2,793.30	
		6/25/2024	15.95	2,791.71	
		9/23/2024	17.27	2,790.39	
		11/20/2024	17.96	2,789.70	
MW-5	3,050.87	9/22/2020	257.49	2,793.38	
		12/22/2020	267.87	2,783.00	
		3/9/2021	273.71	2,777.16	
		6/29/2021	279.55	2,771.32	
		9/28/2021	280.82	2,770.05	
		12/21/2021	281.12	2,769.75	
		3/21/2022	280.97	2,769.90	
		6/17/2022	279.79	2,771.08	
		12/5/2022	278.58	2,772.29	
		3/20/2023	270.76	2,780.11	
		6/15/2023	267.80	2,783.07	
		9/29/2023	264.31	2,786.56	
		11/28/2023	263.63	2,787.24	
		3/21/2024	260.69	2,790.18	
		6/25/2024	259.62	2,791.25	
		9/23/2024	260.05	2,790.82	
		11/19/2024	260.45	2,790.42	
MW-6	3,403.65	9/22/2020	615.21	2,788.44	
		12/22/2020	633.42	2,770.23	
		3/9/2021	635.71	2,767.94	
		6/29/2021	638.75	2,764.90	
		9/29/2021	637.85	2,765.80	
		12/21/2021	639.76	2,763.89	
		6/17/2022	635.54	2,768.11	
		12/5/2022	634.15	2,769.50	
		3/20/2023	623.05	2,780.60	
		6/15/2023	619.98	2,783.67	
		9/29/2023	614.68	2,788.97	
		11/29/2023	616.48	2,787.17	
		3/21/2024	611.63	2,792.02	
		6/25/2024	612.96	2,790.69	
		9/23/2024	614.27	2,789.38	
		11/20/2024	614.87	2,788.78	
Shaft		6/17/2022	N/A	2,768.56	
		9/19/2023	N/A	2,789.2	

TABLE 9
Blue Eagle Lode Mining Company
Dewatering Effluent Sampling Results

			GENERAL CHEMISTRY						GENERAL MINERALS (ANIONS AND CATIONS)											
Sample ID	Date Sampled	Parameter	Bicarbonate Alkalinity (as $CaCO_3$)	Carbonate Alkalinity (as $CaCO_3$)	Hydroxide Alkalinity (as $CaCO_3$)	Total Alkalinity (as $CaCO_3$)	Total Dissolved Solids	pH	Ammonia (as N)	Calcium	Chloride	Fluoride	Magnesium	Nitrate (as N)	Nitrite (as N)	Nitrate + Nitrite (as N)	Perchlorate	Potassium	Sodium	Sulfate
		Unit	mg/L	mg/L	mg/L	mg/L	mg/L		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L
		Annual Mean Limit[1]	-	-	-	-	3,325	3.0 < pH < 9.0	-	-	-	1.2	-	0.5	7	7.5	-	-	-	2,100
		Daily Maximum Limit[1]	-	-	-	-	5,400	3.0 < pH < 9.0	-	-	-	2.6	-	1.5	21	22.5	-	-	-	3,100
Startup 1-hr	6/4/2020		30.1	<5.00	<5.00	30.1	1,020	3.4	0.426	52.7	12	0.93	15.2	<0.10	<0.10	0.496	<2.0	43.0	43.8	1,300
Startup 6-hr	6/4/2020		29.1	<5.00	<5.00	29.1	895	3.4	0.274	55.3	12	0.95	14.9	0.12	<0.10	0.207	<2.0	41.2	40.8	1,500
MW-2[2]	9/21/2020		<1.69	<1.69	<1.69	<1.69	1,010	3.3	<0.0665	60.4	12	1.0	19.1	1.2	<0.018	1.27	<0.66	49.0	46.3	1,500
Dewatering Effluent[2]	12/21/2020		<1.69	<1.69	<1.69	<1.69	1,070	4.7	3.51	137	11	1.1	28.5	8.2	0.082 J	5.78	<0.91	57.9	44.3	710
Dewatering Effluent	3/10/2021		<1.69	<1.69	<1.69	<1.69	1,240	3.2	1.33	66.8	<180	<23	20.3	<12	<9.0	0.970	<0.91	53.1	48.6	2,000
Dewatering Effluent	6/29/2021		<1.69	<1.69	<1.69	<1.69	985	3.2	0.482	56.1	14	1.4	20.5	<0.024	<0.018	0.0230 J	<0.91	53.9	57.1	2,000
Dewatering Effluent	9/28/2021		<2.18	<2.18	<2.18	<2.18	950	3.2	0.291	71.1	9.2	2.4	31.4	<0.024	<0.018	0.139	<0.91	56.0	36.8	1,800

			TRACE METALS																				
Sample ID	Date Sampled	Parameter	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Cyanide, Total	Iron	Lead	Manganese	Mercury	Molybdenum	Nickel	Selenium	Silver	Sulfur	Titanium	Vanadium	Zinc
		Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
		Annual Mean Limit	140	0.09	140	-	0.01	0.17	-	-	5.3	-	250	0.016	-	-	-	0.3	0.06	-	-	0.041	-	7.6
		Daily Maximum Limit	260	0.24	490	-	0.03	0.5	-	-	18	-	670	0.035	-	-	-	0.6	0.15	-	-	0.1	-	13
Startup 1-hr	6/4/2020		33.9	0.00612	0.423	NS	0.00571	0.00513	NS	NS	0.264	<0.000692	2.95	0.000304 J	1.45	0.000161 J	NS	0.0649	0.00350	NS	NS	0.00748	NS	1.24
Startup 6-hr	6/4/2020		33.2	0.00562	0.311	NS	0.00568	0.00532	NS	NS	0.310	<0.000692	2.79	0.000223 J	1.45	0.000175 J	NS	0.0644	0.00304	NS	NS	0.00793	NS	1.22
MW-2[2]	9/21/2020		53.6	0.00726	0.769	0.00292	0.00705	0.0165	0.000623 J	0.297	1.29	<0.000692	21.4	0.000440 J	1.84	0.000137 J	<0.000590	0.101	0.00215	<0.000280	222	0.00745	0.0479	2.31
Dewatering Effluent	12/21/2020		22.7	0.0351	16.9	0.0558	0.00746 J	0.0111	<0.00580	0.124	0.0937	0.00648	51.9	0.0123	2.70	0.00427	0.00648 J	0.0604	<0.00780	<0.00280	191	0.0122	0.00646 J	1.30
Dewatering Effluent	3/10/2021		35.9	0.00915	3.20	0.00741	0.0083	0.0132	0.00126	0.226	0.587	0.0158	20.0	0.00154	2.11	<0.000124	0.000694 J	0.0870	0.00176	<0.000280	228	0.00801	0.000852 J	1.75
Dewatering Effluent	6/29/2021		33.3	0.00310 J	2.84	0.00494 J	0.0105	0.0120	<0.00290	0.200	0.352	<0.000692	21.6	<0.000950	2.19	<0.000124	<0.00295	0.0854	<0.00390	<0.00140	217	0.00890	0.00169 J	1.98
Dewatering Effluent	9/28/2021		11.1	0.00138	12.5	0.00711	0.016	0.00260	<0.000580	0.108	0.0179	<0.000692	39.5	0.000777 J	3.03	<0.000124	0.000668 J	0.0536	0.00205	<0.000280	203	0.00952	0.000372 J	0.823

			ENERGETICS												
Sample ID	Date Sampled	Parameter	1,3,5-Trinitrobenzene	1,3-Dinitrobenzene	2,4,6-Trinitrotoluene	2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Nitrotoluene	3-Nitrotoluene	4-Nitrotoluene	HMX	Nitrobenzene	Nitrocellulose	Nitroglycerin	PETN	RDX
		Unit	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L
		5-Year Median Limit	105	0.7	1	7	0.3	40	40	40	350	7	-	3	No Limit	0.3
		Daily Maximum Limit	210	1	2	14	0.5	80	80	80	400	14	-	5	No Limit	2
Startup 1-hr	6/4/2020		<0.60	<0.60	<0.80	<0.60	<0.60	<0.90	0.94	<0.80	<0.6	<0.90	NS	<20	<23	<0.80
Startup 6-hr	6/4/2020		<0.60	<0.60	<0.80	<0.60	<0.60	<0.90	0.76 J	0.81	<0.6	<0.90	NS	<20	<23	<0.80
MW-2[2]	9/21/2020		<0.20	<0.11	<0.14	<0.24	<0.15	<0.31	<0.32	<0.26	<0.20	<0.20	NS	<8.5	<11	<0.35
Dewatering Effluent	12/21/2020		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.475	NS	NS	NS
Dewatering Effluent	9/28/2021		<0.20	<0.11	<0.14	<0.24	<0.15	<0.31	<0.32	<0.26	<0.20	<0.20	NS	<8.5	<11	<0.35

			ORGANIC COMPOUNDS								
Sample ID	Date Sampled	Parameter	Benzene	Diesel Range Organics (C10-C24)	Ethylbenzene	Ethylene Glycol	Total Petroleum Hydrocarbons (C8-C44)	Naphthalene	Toluene	Volatile Fuel Hydrocarbons (C4-C12)	Xylenes, Total
		Unit	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L
		Annual Mean Limit	0.5	-	14.5	7,000	100	-	21	50	8.5
		Daily Maximum Limit	1	-	29	14,000	200	-	42	100	17
Startup 1-hr	6/4/2020		<0.50	23 J	<1.0	6.9 J	43 J	NS	<1.0	<50	<3.0
Startup 6-hr	6/4/2020		<0.50	21 J	<1.0	<10	27 J	NS	<1.0	<50	<3.0
MW-2[2]	9/21/2020		<0.14	<16	<0.14	<5.0	<16	<5.1	<0.13	<30	<0.46
Dewatering Effluent	9/28/2021		<0.20	<34	<0.33	<500	<34	<5.0	<0.34	<30	<2.0

Notes:
[1] Annual and mean discharge limits are provided for comparison purposes only. No discharge to a receiving water occurred in 2020.
[2] On 9/21/20 and 9/22/20, MW-2 was being pumped to dewater the mine and was the only source of dewatering effluent. Therefore, MW-2 and dewatering effluent were the same sample. The dewatering effluent sample on 12/21/20 was collected from inside the mine tunnel. All subsequent samples
Colored cell indicates an exceedance of an annual or mean discharge limit
J = Value is below reporting limit and is therefore estimated
NS = Analyte not sampled (sampling of that analyte is not required in the WDRs for dewatering effluent)

TABLE 10
Blue Eagle Lode Mining Company
Groundwater Quality Sampling Results

MW-1

			GENERAL CHEMISTRY						GENERAL MINERALS (ANIONS AND CATIONS)											
Sample ID	Date Sampled	Parameter	Bicarbonate Alkalinity (as $CaCO_3$)	Carbonate Alkalinity (as $CaCO_3$)	Hydroxide Alkalinity (as $CaCO_3$)	Total Alkalinity (as $CaCO_3$)	Total Dissolved Solids	pH	Ammonia (as N)	Calcium	Chloride	Fluoride	Magnesium	Nitrate (as N)	Nitrite (as N)	Nitrate + Nitrite (as N)	Perchlorate	Potassium	Sodium	Sulfate
		Unit	mg/L	mg/L	mg/L	mg/L	mg/L	S.U.	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L
		MCL/WQG	-	-	-	-	1,000	6.0 < pH < 9.0	-	-	-	2	-	10	1	10	6	-	-	250
		Prediction Limit[1]	21.0	4.0	-	-	1,200	2.95 < pH < 5.49	2.9	70	18	1.4	20	0.46	0.47	-	1.0	56	57	780
MW-1	9/21/2020		<1.69	<1.69	<1.69	<1.69	**1,040**	**3.4**	<0.0665	54.9	11	1.5	20.6	<0.024	<0.018	0.0569 J	<0.66	52.6	37.6	**2,600**
MW-1	12/21/2020		<1.69	<1.69	<1.69	<1.69	780	**3.4**	<0.0665	46.1	11	1.1	17.2	<0.024	<0.018	<0.0292	<0.91	46.8	36.7	**780**
MW-1	3/9/2021		<1.69	<1.69	<1.69	<1.69	785	**3.4**	0.286	36.9	<180	<23	13.7	<12	<9.0	0.0729 J	<0.91	43.1	35.6	**830**
Dup-1	3/9/2021		<1.69	<1.69	<1.69	<1.69	810	**3.5**	0.224	37.2	<180	<23	13.7	<12	<9.0	0.0596 J	<0.91	43.1	35.4	**730**
MW-1	6/29/2021		<1.69	<1.69	<1.69	<1.69	650	**3.1**	<0.0512	37.3	13	1.0	14.7	<0.024	<0.018	0.600	<0.91	45.4	41.8	**870**
MW-1	9/28/2021		<2.18	<2.18	<2.18	<2.18	630	**3.5**	0.162	33.8	12	0.97	11.7	<0.024	<0.018	0.129	<0.91	35.0	37.1	**800**
MW-1	12/21/2021		<4.00	<4.00	<4.00	<4.00	660	**3.0**	0.129	257	12	1.2	54.7	<0.024	<0.018	0.0520 J	<0.91	78.2	100	**990**
MW-1	12/6/2022		<2.18	<2.18	<2.18	<2.18	926	**3.2**	0.0896 J	43.5	12	1.0	16.6	<0.020	<0.043	0.0757 J	<0.91	48.1	41.9	**540**
Dup	12/6/2022		<2.18	<2.18	<2.18	<2.18	928	**3.2**	<0.0626	42.5	12	0.81	16.2	<0.020	<0.043	0.670	<0.91	47.6	42.1	**530**
MW-1	11/28/2023		<2.18	<2.18	<2.18	<2.18	**1,200**	**3.1**	0.106 J	35.6	12	0.69	13.4	<0.039	0.26	<0.0120	<0.91	42.4	40.4	**650**
Dup	11/28/2023		<2.18	<2.18	<2.18	<2.18	**1,180**	**3.1**	<0.105	35.2	12	0.66	13.7	<0.039	0.31	<0.0120 H	<0.91	42.2	40.4	**660**
MW-1	11/19/2024		<2.18	<2.18	<2.18	<2.18	**1,760**	**3.1**	3.30	46.8	15	0.42	15.7	<0.039	<0.086	<0.0580	<0.91	47.2	33.7	**920**

MW-2

			GENERAL CHEMISTRY						GENERAL MINERALS (ANIONS AND CATIONS)											
Sample ID	Date Sampled	Parameter	Bicarbonate Alkalinity (as $CaCO_3$)	Carbonate Alkalinity (as $CaCO_3$)	Hydroxide Alkalinity (as $CaCO_3$)	Total Alkalinity (as $CaCO_3$)	Total Dissolved Solids	pH	Ammonia (as N)	Calcium	Chloride	Fluoride	Magnesium	Nitrate (as N)	Nitrite (as N)	Nitrate + Nitrite (as N)	Perchlorate	Potassium	Sodium	Sulfate
		Unit	mg/L	mg/L	mg/L	mg/L	mg/L	S.U.	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L
		MCL/WQG	-	-	-	-	1,000	6.0 < pH < 9.0	-	-	-	2	-	10	1	10	6	-	-	250
		Prediction Limit[1]	4.0	4.0	-	-	1,000	2.79 < pH < 5.82	0.26	85	15	1.1	18	0.66	0.21	-	1.0	53	60.0	640
MW-2	9/21/2020		<1.69	<1.69	<1.69	<1.69	**1,010**	**3.3**	<0.0665	60.4	12	1.0	19.1	1.2	<0.018	1.27	<0.66	49.0	46.3	**1,500**
MW-2	12/21/2020		<1.69	<1.69	<1.69	<1.69	**1,250**	**3.2**	1.11	57.5	14	1.3	19.1	0.46	<0.018	0.575	<0.91	53.5	57.2	**1,500**
MW-2	3/9/2021		<1.69	<1.69	<1.69	<1.69	**1,080**	**3.2**	1.25	56.8	<180	<23	17.2	<12	<9.0	0.822	<0.91	51.4	51.3	**2,700**
MW-2	6/29/2021		<1.69	<1.69	<1.69	<1.69	935	**3.1**	0.487	49.4	15	1.2	16.4	<0.024	<0.018	0.0337 J	<0.91	53.2	62.4	**1,900**
MW-2	9/28/2021		<2.18	<2.18	<2.18	<2.18	950	**3.2**	0.560	47.5	14	1.2	13.9	<0.024	<0.018	0.117	<0.91	43.4	56.9	**1,600**
MW-2	12/21/2021		Unable to collect sample because dedicated pump equipment was still in well but was disconnected from an electrical source during shutdown of operations																	
MW-2	11/29/2023		<2.18	<2.18	<2.18	<2.18	**2,010**	**3.1**	0.991	95.5	10	0.74	26.1	<0.039	0.19 J	<0.0120	<0.91	38.5	39.6	**1,100**
MW-2	11/20/2024		<2.18	<2.18	<2.18	<2.18	**1,890**	**3.1**	1.00	134	11	0.40	31.7	<0.039	<0.086	<0.0580	<0.91	48.5	49.9	**1,200**

MW-3

			GENERAL CHEMISTRY						GENERAL MINERALS (ANIONS AND CATIONS)											
Sample ID	Date Sampled	Parameter	Bicarbonate Alkalinity (as $CaCO_3$)	Carbonate Alkalinity (as $CaCO_3$)	Hydroxide Alkalinity (as $CaCO_3$)	Total Alkalinity (as $CaCO_3$)	Total Dissolved Solids	pH	Ammonia (as N)	Calcium	Chloride	Fluoride	Magnesium	Nitrate (as N)	Nitrite (as N)	Nitrate + Nitrite (as N)	Perchlorate	Potassium	Sodium	Sulfate
		Unit	mg/L	mg/L	mg/L	mg/L	mg/L	S.U.	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L
		MCL/WQG	-	-	-	-	1,000	6.0 < pH < 9.0	-	-	-	2	-	10	1	10	6	-	-	250
		Prediction Limit[1]	140	4.0	-	-	440	5.48 < pH < 7.53	0.29	37	20	5.3	21	0.98	1.4	-	1.0	24	49	220
MW-3	9/21/2020		48.8	<1.69	<1.69	48.8	325	6.9	<0.0665	24.2	14	3.3	19.6	<0.024	<0.018	<0.0292	<0.66	21.7	48.1	200
MW-3	12/21/2020		48.8	<1.69	<1.69	48.8	330	7.0	<0.0665	24.9	15	0.44	17.8	0.040 J	<0.018	0.0354 J	<0.91	21.1	45.3	170
MW-3	3/9/2021		46.3	<1.69	<1.69	46.3	460	6.9	0.129	24.9	<180	<23	16.6	<12	<9.0	0.133	<0.91	19.9	39.6	240 J
MW-3	6/29/2021		54.9	69.8	<1.69	125	378	9.5*	<0.0512	24.5	14	1.2	18.5	<0.024	<0.018	0.0483 J	<0.91	20.0	46.4	170
MW-3	9/28/2021		47.0	<2.18	<2.18	47.0	370	7.2	0.134	23.5	14	**2.4**	20.4	<0.024	<0.018	0.0682 J	<0.91	21.2	54.9	190
MW-3	12/21/2021		52.2	<4.00	<4.00	52.2	365	6.3	0.0784 J	23.2	14	1.5	18.8	<0.024	<0.018	<0.0172	<0.91	20.0	47.4	220
MW-3	12/5/2022		45.0	<2.18	<2.18	45.0	387	7.1	<0.0626	21.4	14	1.1	16.0	<0.020	<0.043	<0.0172	<0.91	18.5	40.6	170
MW-3	11/28/2023		42.9	<2.18	<2.18	42.9	412	6.6	<0.105	25.4	15	1.0	19.6	<0.020	<0.043	0.0187 J H	<0.91	21.1	48.9	180
MW-3	11/19/2024		43.5	<2.18	<2.18	43.5	385	6.2	<0.105	23.5	14	1.2	19.2	<0.020	<0.043	<0.0580	<0.91	21.0	45.0	190

Notes:
[1] The prediction limit is a statistical indicator that the background concentration at that location may have been exceeded. Prediction limits for each well were calculated in the Sampling and Analysis Plan.
Colored cell indicates a prediction limit was exceeded.
Bold values indicate exceedance of a California groundwater maximum concentration limit (MCL) or water quality goal (WQG).
J = Value is below reporting limit and is therefore estimated H = Analysis was performed by laboratory after the prescribed hold time for the analyte
NS = Analyte not sampled
N/A = Trip Blank is only intended to test for volatile organic compounds (i.e. benzene, toluene, ethylbenzene, xylene, and naphthalene) that are being sampled during that particular sampling event
* Field pH of well MW-3 on 6/29/21 was measured as 6.4. Oxidation of sample prior to lab measurement may have influenced laboratory pH measurement.

TABLE 10
Blue Eagle Lode Mining Company
Groundwater Quality Sampling Results

MW-1

Well ID	Date Sampled	Parameter	TRACE METALS																				
			Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Cyanide, Total	Iron	Lead	Manganese	Mercury	Molybdenum	Nickel	Selenium	Silver	Sulfur	Thallium	Vanadium	Zinc
		Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
		MCL/WQG	0.2	0.006	0.01	1	0.004	0.005	0.05	-	1.3	0.15	0.3	0.015	-	0.002	-	0.1	0.05	-	-	0.002	-	5
		Prediction Limit[1]	48	0.0093	8.2	0.057	0.013	0.11	0.0072	0.25	0.0098	0.094	40	0.0063	1.8	0.00023	0.0064	0.099	0.029	0.0097	240	0.016	0.055	6.2
MW-1	9/21/2020		**49.2**	**0.0186**	**11.5**	0.00688	**0.00730**	**0.142**	0.00155	0.240	0.0212	<0.000692	**41.3**	**0.130**	1.70	0.000271	0.00399	**0.105**	0.00428	0.00106	204	**0.0147**	0.0406	1.62
MW-1	12/21/2020		**17.0**	**0.0194**	**28.5**	0.00611 J	**0.00627 J**	**0.187**	<0.00580	0.177	0.0184	<0.000692	**49.6**	**0.0968**	1.57	<0.000124	<0.00590	0.0695	<0.00780	<0.00280	135	**0.0155**	0.0788	1.13
MW-1	3/9/2021		**10.8**	**0.0118**	**18.6**	0.00513	**0.00448**	**0.0534**	0.00101	0.0774	0.00408	0.00411	**33.7**	**0.0336**	1.25	0.000184 J	0.00163	0.0407	0.00175	0.000320 J	127	**0.0115**	0.0580	0.623
MW-1	3/9/2021		**10.6**	**0.0112**	**17.7**	0.00482	**0.00444**	**0.0546**	0.000937 J	0.0778	0.0285	0.00489	**32.3**	**0.0316**	1.24	0.000127 J	0.00146	0.0409	0.00204	<0.000280	138	**0.0116**	0.0578	0.621
MW-1	6/29/2021		**11.1**	**0.0120**	**16.6**	0.00578	<0.00105	**0.0303**	<0.00290	0.0775	0.00550	<0.000692	**33.3**	**0.0402**	1.36	0.000457	<0.00295	0.0430	<0.00390	<0.00140	134	**0.0135**	0.0564	0.802
MW-1	9/28/2021		**10.2**	**0.0131**	**19.0**	0.00689	**0.00482**	**0.0251**	0.00106	0.0659	0.00242	<0.000692	**31.9**	**0.0335**	1.13	<0.000124	0.00187	0.0368	0.00540	0.000514 J	124	**0.0112**	0.0643	0.560
MW-1	12/21/2021		**178**	<0.0100	**91.1**	0.0267	**0.0352**	**0.272**	<0.0116	1.71	0.0290	<0.00135	**319**	0.00741 J	5.87	<0.000124	<0.0118	**0.385**	<0.0156	<0.00560	771	**0.0110 J**	0.0754	**17.2**
MW-1	12/6/2022		**22.6**	**0.00892 J**	**24.7**	0.00811 J	**0.00574**	**0.137**	0.00408 J B	0.263	0.00914 J	<0.00250	**49.1 B**	**0.0241**	1.68	<0.000124	<0.00250	0.0953	0.0192 J	<0.00228	156	**0.0152**	0.0893	1.27
Dup	12/6/2022		**22.3**	**0.00877 J**	**24.4**	0.00828 J	**0.00869**	**0.134**	0.00494 J B	0.260	0.00912 J	<0.00250	**48.4 B**	**0.0237**	1.65	<0.000124	<0.00250	0.096	0.0282	<0.00228	161	**0.0148**	0.0887	1.26
MW-1	11/28/2023		**29.0**	**0.00874**	**60.1**	0.0140	**0.00609**	**0.265**	0.00335	0.350	0.132	<0.00250 H	**89.9**	**0.0364**	1.40 B	0.000194 J	0.00115 J	**0.121**	0.0235	<0.000228	197	**0.0153**	0.113	2.00
Dup	11/28/2023		<0.172	**0.00856**	**0.0925**	0.0137	**0.00636**	**0.266**	0.00339	0.347	0.132	<0.00250 H	<0.0743	**0.0371**	1.41 B	<0.000124	0.000945 J	**0.120**	0.0217	<0.000228	194	**0.0154**	0.112	2.01
MW-1	11/19/2024		**41.5**	**0.0108 J**	**229**	0.0119 J	**0.00546 J**	**0.224**	0.00846 J	0.362	0.0895	<0.00250	**229**	**0.0220**	1.46	0.000420	<0.00500	**0.138**	**0.0506**	<0.00456	200	**0.0134 J**	0.0882	2.64

MW-2

Well ID	Date Sampled	Parameter	TRACE METALS																				
			Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Cyanide, Total	Iron	Lead	Manganese	Mercury	Molybdenum	Nickel	Selenium	Silver	Sulfur	Thallium	Vanadium	Zinc
		Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
		MCL/WQG	0.2	0.006	0.01	1	0.004	0.005	0.05	-	1.3	0.15	0.3	0.015	-	0.002	-	0.1	0.05	-	-	0.002	-	5
		Prediction Limit[1]	33	0.0067	15	0.017	0.0068	0.010	0.0020	0.53	0.18	0.025	17	0.044	1.9	0.00020	0.0081	0.066	0.017	0.011	190	0.015	0.010	1.5
MW-2	9/21/2020		**53.6**	**0.00726**	**0.769**	0.00292	**0.00705**	**0.0165**	0.000623 J	0.297	1.29	<0.000692	**21.4**	0.000440 J	1.84	0.000137 J	<0.000590	**0.101**	0.00215	<0.000280	222	**0.00571**	0.0479	2.31
MW-2	12/21/2020		**51.2**	**0.00795 J**	**1.94**	0.00425 J	**0.00939 J**	**0.0236**	<0.00580	0.329	**1.41**	0.000923 J	**25.7**	<0.00190	1.91	<0.000124	<0.00590	**0.109**	<0.00780	<0.00280	225	**0.00608 J**	0.00562 J	2.99
MW-2	3/9/2021		**43.0**	**0.00801**	**2.30**	0.00412	**0.00730**	**0.0154**	0.000881 J	0.247	0.765	0.00312	**16.2**	0.000458 J	1.74	<0.000124	<0.000590	0.0870	0.00206	<0.000280	236	**0.00485**	0.00260	1.90
MW-2	6/29/2021		**38.0**	**0.00680**	**6.24**	0.00459 J	**0.00912**	**0.0135**	<0.00290	0.221	0.436	<0.000692	**25.2**	<0.000950	1.69	<0.000124	<0.00295	0.0796	<0.00390	<0.00140	220	**0.00500**	0.00473 J	2.05
MW-2	9/28/2021		**35.9**	**0.00709**	**7.28**	0.00476	**0.00818**	**0.0115**	<0.000580	0.200	0.495	<0.000692	**20.5**	0.00163	1.46	<0.000124	<0.000590	0.0718	0.00522	<0.00100	209	**0.00421**	0.00382	1.36
MW-2	12/21/2021		Unable to collect sample because dedicated pump equipment was still in well but was disconnected from an electrical source during shutdown of operations																					
MW-2	11/29/2023		**114**	**0.0174**	**23.2**	0.00852	**0.0145**	**0.0345**	0.0108	0.887	**5.74**	<0.00250 H	**61.3**	0.00192	2.83 B	0.000431	0.00225	**0.257**	0.0356	0.00103	421	**0.00452**	0.0182	**6.25**
MW-2	11/20/2024		**98.5**	<0.00714	**13.5**	0.00992 J	**0.0129**	**0.0222**	0.00864 J	0.849	**1.44**	<0.00250	**119**	<0.00236	3.44	0.000198	<0.00500	**0.275**	0.0436	<0.00456	428	**0.00386 J**	0.0251 J	**6.58**

MW-3

Well ID	Date Sampled	Parameter	TRACE METALS																				
			Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Cyanide, Total	Iron	Lead	Manganese	Mercury	Molybdenum	Nickel	Selenium	Silver	Sulfur	Thallium	Vanadium	Zinc
		Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
		MCL/WQG	0.2	0.006	0.01	1	0.004	0.005	0.05	-	1.3	0.15	0.3	0.015	-	0.002	-	0.1	0.05	-	-	0.002	-	5
		Prediction Limit[1]	0.050	0.0020	0.34	0.036	0.0010	0.0011	0.0027	0.0038	0.0029	0.20	1.8	0.0010	7.0	0.00020	0.013	0.0062	0.0020	0.0050	67	0.0010	0.029	2.8
MW-3	9/21/2020		0.0806	<0.000500	**0.236**	0.00374	<0.000210	<0.000980	<0.000580	0.000717 J	0.00127	<0.000692	**0.819**	0.00104	0.153	<0.000124	<0.000590	0.000926 J	<0.000780	<0.000280	57.4	<0.000180	0.00110	0.252
MW-3	12/21/2020		<0.106	<0.000500	**0.180**	0.00370 J	<0.00210	<0.00980	<0.00580	<0.00170	<0.00610	<0.000692	0.332 J	<0.00190	0.115	<0.000124	<0.00590	<0.00540	<0.00780	<0.00280	57.1	<0.00180	<0.00200	0.289
MW-3	12/21/2020		0.0257 J	<0.000500	**0.159**	0.00144	<0.000210	<0.000980	<0.000580	0.000219 J	0.00163	0.0043	0.154	0.000372 J	0.122	<0.000124	0.000797 J	0.000934 J	<0.000780	<0.000280	58.3	<0.000180	0.000687 J	0.214
MW-3	6/29/2021		0.171 J	<0.00250	**0.182**	0.00948	<0.00105	<0.00490	<0.00290	0.00118 J	<0.00305	<0.000692	**1.27**	0.00415 J	0.383	<0.000124	<0.00295	<0.00270	<0.00390	<0.00140	59.0	<0.000900	0.00232 J	0.729
MW-3	9/28/2021		**0.442**	<0.00500	**0.241**	0.00477	<0.000210	<0.000980	<0.000580	0.00304	0.00243	0.00222	**1.37**	0.00463	0.375	<0.000124	0.000695 J	0.00142	<0.000780	<0.000280	59.2	<0.000180	0.00216	0.457
MW-3	12/21/2021		0.0382 J	<0.000500	**0.0723**	0.00141	<0.000210	<0.000980	<0.000580	<0.000170	0.00133	<0.00135	0.124	<0.000190	0.0922	<0.000124	<0.000590	<0.000540	<0.000780	<0.000280	100	<0.000180	0.000953	0.0821
MW-3	12/5/2022		0.126 J	<0.00357	**0.196**	0.00178 J	<0.00263	<0.00133	0.00449 J B	<0.00136	<0.00318	<0.00250	0.366 B	<0.00118	0.0559	<0.000124	<0.00250	<0.00165	<0.00516	<0.00228	55.0	<0.00110	<0.00173	0.0568 J
MW-3	11/28/2023		<0.00860	<0.000357	**0.122**	0.00139	<0.000263	<0.000133	0.000310 J	0.000164 J	0.000588 J	<0.00250 H	0.109	<0.000118	0.140 B	<0.000124	0.000559 J	0.000351 J	<0.000516	<0.000228	62.6	<0.000110	0.000807 J	0.120
MW-3	11/19/2024		0.0147 J	<0.00200	**0.0585**	0.00147	<0.000500	<0.000133	0.000674 J	0.000205 J	0.000441 J	<0.00250	0.0748	<0.000118	0.242	<0.000124	0.000557 J	0.000514 J	<0.000516	<0.000228	67.1	<0.000110	0.000851 J	0.177

Notes:

[1] The prediction limit is a statistical indicator that the background concentration at that location may have been exceeded. Prediction limits for each well were calculated in the Sampling and Analysis Plan.

Colored cell indicates a prediction limit was exceeded.

Bold values indicate exceedance of a California groundwater maximum concentration limit (MCL) or water quality goal (WQG).

J = Value is below reporting limit and is therefore estimated H = Analysis was performed by laboratory after the prescribed hold time for the analyte

B = Compound was found in the laboratory's blank and in the sample

TABLE 10
Blue Eagle Lode Mining Company
Groundwater Quality Sampling Results

MW-1

Sample ID	Date Sampled	Parameter	ENERGETICS													
			1,3,5-Trinitrobenzene	1,3-Dinitrobenzene	2,4,6-Trinitrotoluene	2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Nitrotoluene	3-Nitrotoluene	4-Nitrotoluene	HMX	Nitrobenzene	Nitrocellulose	Nitroglycerin	PETN	RDX
		Unit	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L
		MCL/WQG	210	0.7	1	14	0.05	80	80	80	350	14	-	5	-	0.3
		Prediction Limit[1]	0.22	0.10	0.10	0.10	0.10	0.50	0.50	0.50	0.10	0.078	2.0	0.65	0.65	0.10
MW-1	9/21/2020		<0.20	<0.11	<0.14	<0.24	<0.15	<0.31	<0.32	<0.26	<0.20	<0.20	NS	<8.5	<11	<0.35
MW-1	12/21/2020		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.475	NS	NS	NS
MW-1	9/28/2021		<0.20	<0.11	<0.14	<0.24	<0.15	<0.31	1.1	<0.26	<0.20	<0.20	NS	<8.5	<11	<0.35
MW-1	12/21/2022		NS	NS	NS	NS	NS	NS	<0.32	NS	NS	NS	<0.475	NS	NS	NS
MW-1	12/6/2022		<0.46	<0.40	<1.8	<0.33	<0.35	<0.43	0.47 J	<0.44	<0.70	<0.42	<0.475	<7.5	<10	<0.64
Dup	12/6/2022		<0.46	<0.40	<1.8	<0.33	<0.35	<0.43	<0.38	<0.44	<0.70	<0.42	<0.475	<7.5	<10	<0.64
MW-1	11/28/2023		<0.46	<0.40	<1.8	<0.33	<0.35	<0.43	<0.38	<0.44	<0.70	<0.42	<0.110 H	<7.5	<10	<0.64
Dup	11/28/2023		<0.46	<0.40	<1.8	<0.33	<0.35	<0.43	<0.38	<0.44	<0.70	<0.42	<0.192 H	<7.5	<10	<0.64
MW-1	11/19/2024		<0.46	<0.40	<1.8	<0.33	<0.35	<0.43	<0.38	<0.44	<0.70	<0.42	<0.110	<7.5	<10	<0.64

MW-2

Sample ID	Date Sampled	Parameter	ENERGETICS													
			1,3,5-Trinitrobenzene	1,3-Dinitrobenzene	2,4,6-Trinitrotoluene	2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Nitrotoluene	3-Nitrotoluene	4-Nitrotoluene	HMX	Nitrobenzene	Nitrocellulose	Nitroglycerin	PETN	RDX
		Unit	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L
		MCL/WQG	210	0.7	1	14	0.05	80	80	80	350	14	-	5	-	0.3
		Prediction Limit[1]	0.17	0.10	0.10	0.10	0.10	0.50	0.50	0.50	0.10	0.10	2.0	0.65	0.65	0.10
MW-2	9/21/2020		<0.20	<0.11	<0.14	<0.24	<0.15	<0.31	<0.32	<0.26	<0.20	<0.20	NS	<8.5	<11	<0.35
MW-2	12/21/2020		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.475	NS	NS	NS
MW-2	9/28/2021		<0.20	<0.11	<0.14	<0.24	<0.15	<0.31	<0.32	<0.26	<0.20	<0.20	NS	<8.5	<11	<0.35
MW-2	11/29/2023		<0.46	<0.40	<1.8	<0.33	<0.35	<0.43	<0.38	<0.44	<0.70	<0.42	0.228	<7.5	<10	<0.64
MW-2	11/20/2024		<0.46	<0.40	<1.8	<0.33	<0.35	<0.43	<0.38	<0.44	<0.70	<0.42	0.228	<7.5	<10	<0.64

MW-3

Sample ID	Date Sampled	Parameter	ENERGETICS													
			1,3,5-Trinitrobenzene	1,3-Dinitrobenzene	2,4,6-Trinitrotoluene	2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Nitrotoluene	3-Nitrotoluene	4-Nitrotoluene	HMX	Nitrobenzene	Nitrocellulose	Nitroglycerin	PETN	RDX
		Unit	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L
		MCL/WQG	210	0.7	1	14	0.05	80	80	80	350	14	-	5	-	0.3
		Prediction Limit[1]	0.63	0.10	0.10	0.10	0.10	0.50	0.50	0.50	0.10	0.16	2.0	0.65	0.65	0.10
MW-3	9/21/2020		<0.20	<0.11	<0.14	<0.24	<0.15	<0.31	<0.32	<0.26	<0.20	<0.20	NS	<8.5	<11	<0.35
MW-3	12/21/2020		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.475	NS	NS	NS
MW-3	9/28/2021		<0.20	<0.11	<0.14	<0.24	<0.15	<0.31	<0.32	<0.26	<0.20	<0.20	NS	<8.5	<11	<0.35
MW-3	12/21/2021		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.475	NS	NS	NS
MW-3	12/5/2022		<0.46	<0.40	<1.8	<0.33	<0.35	<0.43	<0.38	<0.44	<0.70	<0.42	<0.475	<7.5	<10	<0.64
MW-3	11/28/2023		<0.46	<0.40	<1.8	<0.33	<0.35	<0.43	<0.38	<0.44	<0.70	<0.42	<0.110 H	<7.5	<10	<0.64
MW-3	11/19/2024		<0.46	<0.40	<1.8	<0.33	<0.35	<0.43	<0.38	<0.44	<0.70	<0.42	<0.110	<7.5	<10	<0.64

Notes:
[1] The prediction limit is a statistical indicator that the background concentration at that location may have been exceeded. Prediction limits for each well were calculated in the Sampling and Analysis Plan.
Colored cell indicates a prediction limit was exceeded.
Bold values indicate exceedance of a California groundwater maximum concentration limit (MCL) or water quality goal (WQG).
J = Value is below reporting limit and is therefore estimated H = Analysis was performed by laboratory after the prescribed hold time for the analyte

TABLE 10
Blue Eagle Lode Mining Company
Groundwater Quality Sampling Results

MW-1

Sample ID	Date Sampled	Parameter	ORGANIC COMPOUNDS								
			Benzene	Diesel Range Organics (C10-C24)	Ethylbenzene	Ethylene Glycol	Motor Oil Range Organics (C25-C36)	Naphthalene	Toluene	Volatile Fuel Hydrocarbons (C4-C12)	Xylenes, Total
		Unit	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L
		MCL/WQG	1	100	29	14	100	17	42	50	17
		Prediction Limit[1]	0.50	62	0.50	10	470	1.0	0.50	50	1.0
MW-1	9/21/2020		<0.14	26 J	<0.14	<5.0	<16	<5.1	<0.13	<30	<0.46
MW-1	9/28/2021		<0.20	<36	<0.33	<500	<36	<5.0	<0.34	<30 H	<0.48
MW-1	12/6/2022		<0.24	<37	<0.30	<100	<37	<4.9	<0.30	<30	<0.49
Dup	12/6/2022		<0.24	<37	<0.30	<100	<37	<4.9	<0.30	<30	<0.49
MW-1	11/28/2023		<0.24	<36	<0.30	<1,200	<36	<4.9	<0.30	<30	<0.49
Dup	11/28/2023		<0.24	<36	<0.30	<1,200	<36	<4.9	<0.30	<30	<0.49
MW-1	11/19/2024		<0.24	<44	<0.30	<120	<44	<4.9	<0.30	<29	<0.49

MW-2

Sample ID	Date Sampled	Parameter	ORGANIC COMPOUNDS								
			Benzene	Diesel Range Organics (C10-C24)	Ethylbenzene	Ethylene Glycol	Motor Oil Range Organics (C25-C36)	Naphthalene	Toluene	Volatile Fuel Hydrocarbons (C4-C12)	Xylenes, Total
		Unit	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L
		MCL/WQG	1	100	29	14	100	17	42	50	17
		Prediction Limit[1]	0.50	49	0.50	10	230	1.0	0.50	50	1.0
MW-2	9/21/2020		<0.14	<16	<0.14	<5.0	<16	<5.1	<0.13	<30	<0.46
MW-2	9/28/2021		<0.20	<34	<0.33	**540 J**	<34	<5.0	<0.34	<30 H	<0.48
MW-2	11/29/2023		<0.24	<33	<0.30	<1,200	<33	<4.9	<0.30	<30	<0.49
MW-2	11/20/2024		<0.24	79	<0.30	<120	<42	<4.9	<0.30	<29	<0.49

MW-3

Sample ID	Date Sampled	Parameter	ORGANIC COMPOUNDS								
			Benzene	Diesel Range Organics (C10-C24)	Ethylbenzene	Ethylene Glycol	Motor Oil Range Organics (C25-C36)	Naphthalene	Toluene	Volatile Fuel Hydrocarbons (C4-C12)	Xylenes, Total
		Unit	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L
		MCL/WQG	1	100	29	14	100	17	42	50	17
		Prediction Limit[1]	0.50	140	0.50	10	610	1.0	0.62	50	1.0
MW-3	9/21/2020		<0.14	66	<0.14	<5.0	<16	<5.1	<0.13	<30	<0.46
MW-3	9/28/2021		<0.20	<35	<0.33	<5.0	<35	<5.0	<0.34	<30	<0.48
MW-3	12/5/2022		<0.24	<37	<0.30	<5.0	<37	<4.9	0.73 J	<30	<0.49
MW-3	11/28/2023		<0.24	<36	<0.30	<12	<36	<4.9	<0.30	<30	<0.49
MW-3	11/19/2024		<0.24	<42	<0.30	<12	<42	<4.9	<0.30	<29	<0.49

Notes:

[1] The prediction limit is a statistical indicator that the background concentration at that location may have been exceeded. Prediction limits for each well were calculated in the Sampling and Analysis Plan.

Colored cell indicates a prediction limit was exceeded.

Bold values indicate exceedance of a California groundwater maximum concentration limit (MCL) or water quality goal (WQG).

J = Value is below reporting limit and is therefore estimated H = Analysis was performed by laboratory after the prescribed hold time for the analyte

TABLE 10
Blue Eagle Lode Mining Company
Groundwater Quality Sampling Results

MW-4

			GENERAL CHEMISTRY						GENERAL MINERALS (ANIONS AND CATIONS)											
Sample ID	Date Sampled	Parameter	Bicarbonate Alkalinity (as $CaCO_3$)	Carbonate Alkalinity (as $CaCO_3$)	Hydroxide Alkalinity (as $CaCO_3$)	Total Alkalinity (as $CaCO_3$)	Total Dissolved Solids	pH	Ammonia (as N)	Calcium	Chloride	Fluoride	Magnesium	Nitrate (as N)	Nitrite (as N)	Nitrate + Nitrite (as N)	Perchlorate	Potassium	Sodium	Sulfate
		Unit	mg/L	mg/L	mg/L	mg/L	mg/L	S.U.	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L
		MCL/WQG	-	-	-	-	1,000	6.0 < pH < 9.0	-	-	-	2	-	10	1	10	6	-	-	250
		Prediction Limit[1]	60	4.0	-	-	5,000	1.91 < pH < 8.41	2.0	390	31	2.9	76	0.11	0.19	-	28	84	390	3,200
MW-4	9/21/2020		<1.69	<1.69	<1.69	<1.69	**4,270**	**4.2**	0.633	402	21	1.8	68.8	<0.024	<0.018	<0.0292	5.2	82.1	111	**7,000**
MW-4	12/21/2020		<1.69	<1.69	<1.69	<1.69	**4,240**	**4.1**	1.11	293	22	**2.2**	55.9	<0.024	<0.018	<0.0292	<0.91	76.8	107	**5,200**
MW-4	3/9/2021		<1.69	<1.69	<1.69	<1.69	**3,620**	**4.0**	1.19	283	<180	<23	49.2	<12	<9.0	<0.0292	<0.91	73.4	94.0	**7,200**
MW-4	6/29/2021		<1.69	<1.69	<1.69	<1.69	**3,680**	**3.2**	1.05	279	24	**3.4**	52.3	<0.024	<0.018	<0.0172	<0.91	74.9	99.6	**7,500**
MW-4	9/28/2021		<2.18	<2.18	<2.18	<2.18	**3,760**	**4.0**	1.18	275	23	**3.5**	38.0	<0.024	<0.018	0.0703 J	<0.91	53.8	82.1	**6,700**
MW-4	12/21/2021		<4.00	<4.00	<4.00	<4.00	**2,000**	**2.9**	1.14	244	21	**3.5**	45.6	<0.024	<0.018	<0.0172	<0.91	66.3	89.4	**7,300**
Dup	12/21/2021		<4.00	<4.00	<4.00	<4.00	**2,090**	**2.9**	1.11	242	21	**3.5**	47.4	<0.024	<0.018	<0.0172	<0.91	68.5	93.6	**7,200**
MW-4	12/6/2022		<2.18	<2.18	<2.18	<2.18	**2,730**	**3.5**	1.18	102	16	0.29	38.5	0.095 J	<0.086	0.156	<0.91	64.6	107	**1,700**
MW-4	11/29/2023		<2.18	<2.18	<2.18	<2.18	**1,560**	**3.6**	1.60	46.6	12	0.59	13.4	0.29	0.24	0.261	<0.91	17.5	301	**940**
MW-4	11/20/2024		<2.18	<2.18	<2.18	<2.18	**1,800**	**4.1**	1.56	50.5	11	0.48	12.6	<0.020	<0.043	<0.0580	<0.91	11.8	441	**1,300**
Dup	11/20/2024		<2.18	<2.18	<2.18	<2.18	**1,790**	**4.0**	1.37	52.3	11	0.62	12.9	<0.020	<0.043	<0.0580	<0.91	12.2	456	**1,300**

MW-5

			GENERAL CHEMISTRY						GENERAL MINERALS (ANIONS AND CATIONS)											
Sample ID	Date Sampled	Parameter	Bicarbonate Alkalinity (as $CaCO_3$)	Carbonate Alkalinity (as $CaCO_3$)	Hydroxide Alkalinity (as $CaCO_3$)	Total Alkalinity (as $CaCO_3$)	Total Dissolved Solids	pH	Ammonia (as N)	Calcium	Chloride	Fluoride	Magnesium	Nitrate (as N)	Nitrite (as N)	Nitrate + Nitrite (as N)	Perchlorate	Potassium	Sodium	Sulfate
		Unit	mg/L	mg/L	mg/L	mg/L	mg/L	S.U.	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L
		MCL/WQG	-	-	-	-	1,000	6.0 < pH < 9.0	-	-	-	2	-	10	1	10	6	-	-	250
		Prediction Limit[1]	130	4.0	-	-	620	6.73 < pH < 7.31	0.20	80	21	0.50	22	0.19	0.15	-	1.0	28	68	260
MW-5	9/22/2020		94.7	<1.69	<1.69	94.7	605	7.4	<0.0665	62.5	16	0.25	22.2	0.16	<0.018	0.169	<0.66	26.6	45.2	250
Dup-1	9/22/2020		93.4	<1.69	<1.69	93.4	645	7.4	<0.0665	63.6	16	0.26	22.4	0.16	<0.018	0.181	<0.66	26.9	45.7	250
MW-5	12/22/2020		6.25	<1.69	<1.69	6.25	540	**5.9**	<0.0665	34.2	16	0.38	21.3	0.18	<0.018	0.181	<0.91	26.3	42.3	230
MW-5	3/9/2021		50.9	<1.69	<1.69	50.9	488	7.0	0.168	46.4	<180	<23	19.0	<12	<9.0	0.203	<0.91	25.6	55.7	**260 J**
MW-5	6/29/2021		66.6	<1.69	<1.69	66.6	505	7.6	<0.0512	56.2	16	0.62	22.1	0.16	<0.018	1.83	<0.91	26.1	41.8	**270**
MW-5	9/29/2021		44.1	<2.18	<2.18	44.1	505	7.1	0.0840 J	39.9	16	0.25	22.1	0.26	<0.018	0.230	<0.91	27.3	47.4	250
MW-5	12/22/2021		51.8	<4.00	<4.00	51.8	530	6.2	0.129	43.9	15	0.25	21.7	0.16	<0.018	0.175	4.6	26.8	43.5	**300**
MW-5	12/5/2022		47.2	<2.18	<2.18	47.2	545	7.0	<0.0626	45.3	16	0.11	20.2	0.19	<0.043	0.182	<0.91	25.4	41.9	240
MW-5	11/28/2023		42.9	<2.18	<2.18	42.9	579	6.6	<0.105	46.1	16	0.13	21.8	0.19	<0.043	0.153 H	<0.91	25.9	46.1	230
MW-5	11/19/2024		33.6	<2.18	<2.18	33.6	527	6.0	<0.105	44.4	16	0.078 J	23.1	0.16	<0.043	0.182	<0.91	28.9	46.4	**270**

MW-6

			GENERAL CHEMISTRY						GENERAL MINERALS (ANIONS AND CATIONS)											
Sample ID	Date Sampled	Parameter	Bicarbonate Alkalinity (as $CaCO_3$)	Carbonate Alkalinity (as $CaCO_3$)	Hydroxide Alkalinity (as $CaCO_3$)	Total Alkalinity (as $CaCO_3$)	Total Dissolved Solids	pH	Ammonia (as N)	Calcium	Chloride	Fluoride	Magnesium	Nitrate (as N)	Nitrite (as N)	Nitrate + Nitrite (as N)	Perchlorate	Potassium	Sodium	Sulfate
		Unit	mg/L	mg/L	mg/L	mg/L	mg/L	S.U.	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L
		MCL/WQG	-	-	-	-	1,000	6.0 < pH < 9.0	-	-	-	2	-	10	1	10	6	-	-	250
		Prediction Limit[1]	730	4.0	-	-	1,200	5.77 < pH < 7.90	0.21	130	28	0.80	43	0.11	0.15	-	1.0	21	150	330
MW-6	9/22/2020		593	<1.69	<1.69	593	700	8.2	0.0672 J	85.4	25	0.79	34.1	<0.024	<0.018	<0.0292	<0.66	20.6	136	7.4
MW-6	12/22/2020		426	<1.69	<1.69	426	765	7.5	<0.0665	75.9	21	0.74	27.5	0.70	<0.018	<0.0292	<0.021	25.2	106	91
MW-6	3/9/2021		Insufficient Water Volume to Collect a Sample																	
MW-6	6/29/2021		Insufficient Water Volume to Collect a Sample																	
MW-6	9/28/2021		Insufficient Water Volume to Collect a Sample																	
MW-6	12/21/2021		Insufficient Water Volume to Collect a Sample																	
MW-6	12/5/2022		353	<2.18	<2.18	353	**1,060**	8.2	0.168	133	17	0.17 J	41.6	0.066 J	<0.086	0.0255 J	**23**	34.1	110	**340**
MW-6	11/29/2023		300	<2.18	<2.18	300	**1,010**	8.0	<0.105	128	17	0.56	42.2	<0.039	<0.086	1.24 H	<0.91	33.0	113	**450**
MW-6	11/20/2024		352	<2.18	<2.18	352	**1,260**	6.5	<0.105	221	15	0.33	62.4	<0.039	<0.086	<0.0580	<0.91	54.6	107	**600**

Notes:
[1] The prediction limit is a statistical indicator that the background concentration at that location may have been exceeded. Prediction limits for each well were calculated in the Sampling and Analysis Plan.
Colored cell indicates a prediction limit was exceeded.
Bold values indicate exceedance of a California groundwater maximum concentration limit (MCL) or water quality goal (WQG).
J = Value is below reporting limit and is therefore estimated H = Analysis was performed by laboratory after the prescribed hold time for the analyte
NS = Analyte not sampled
N/A = Trip Blank is only intended to test for volatile organic compounds (i.e. benzene, toluene, ethylbenzene, xylene, and naphthalene) that are being sampled during that particular sampling event

TABLE 10
Blue Eagle Lode Mining Company
Groundwater Quality Sampling Results

MW-4

Well ID	Date Sampled	Parameter	TRACE METALS																				
			Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Cyanide, Total	Iron	Lead	Manganese	Mercury	Molybdenum	Nickel	Selenium	Silver	Sulfur	Thallium	Vanadium	Zinc
		Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
		MCL/WQG	0.2	0.006	0.01	1	0.004	0.005	0.05	-	1.3	0.15	0.3	0.015	-	0.002	-	0.1	0.05	-	-	0.002	-	5
		Prediction Limit[1]	200	0.0094	180	0.043	0.033	0.26	0.0020	2.2	1.4	0.025	460	0.0070	8.6	0.00037	0.10	0.58	0.0093	0.0010	860	0.012	0.070	17
MW-4	9/21/2020		**152**	**0.00697**	**92.8**	0.0333	**0.0277**	**0.226**	<0.00290	1.88	0.0493	<0.000692	**348**	0.00602	7.43	<0.000124	0.00325 J	**0.486**	0.0145	<0.00140	901	**0.00559**	0.0479	**14.8**
MW-4	12/21/2020		**147**	<0.00500	**89.4**	0.0247	**0.0280**	**0.258**	<0.00580	1.68	0.0260	0.000858 J	**312**	0.00444 J	5.49	<0.000124	<0.00590	**0.479**	0.0114	<0.00280	792	**0.00721 J**	0.0647	**14.9**
MW-4	3/9/2021		**137**	0.00441	**86.1**	0.0253	**0.0220**	**0.228**	0.00186	1.49	0.0114	<0.000692	**297**	0.00535 J	5.49	<0.000124	0.00124	**0.421**	0.00684	<0.000280	831	**0.00825 J**	0.0578	**9.99**
MW-4	6/29/2021		**161**	0.00708	**90.1**	0.0256	**0.0295**	**0.255**	<0.00290	1.65	0.0165	<0.000692	**303**	0.00532	5.47	<0.000124	<0.00295	**0.468**	0.0116	<0.00140	881	**0.00625**	0.0643	**14.2**
MW-4	9/28/2021		**147**	0.00556	**85.3**	0.0338	**0.0298**	**0.239**	<0.00500	1.50	0.0632	<0.000692	**259**	0.00635	4.73	<0.000124	0.00532	**0.422**	0.0285	<0.00140	724	**0.00688**	0.0671	**10.9**
MW-4	12/21/2021		**150**	<0.0100	**82.3**	0.0240	**0.0342**	**0.267**	<0.0116	1.79	0.0256	<0.00135	**298**	0.00600 J	5.50	<0.000124	<0.0118	**0.480**	0.0284	<0.00560	554	**0.00973 J**	0.0758	**15.3**
Dup	12/21/2021		**153**	<0.0100	**83.4**	0.0247	**0.0331**	**0.266**	<0.0116	1.69	0.0255	<0.00135	**288**	0.00645 J	5.40	<0.000124	<0.0118	**0.479**	0.0230	<0.00560	715	**0.00990 J**	0.0747	**14.6**
MW-4	12/6/2022		**113**	**0.00650 J**	**76.7**	0.0139	**0.0192**	**0.111**	0.00616 J B	0.991	1.26	<0.00250	**173 B**	0.01380	3.78	<0.000124	0.00674 J	**0.272**	0.0312	<0.00228	527	**0.0135**	0.0469	**7.63**
MW-4	11/29/2023		**44.5**	0.00258	**12.8**	0.00828	**0.00642**	**0.0257**	0.00145 J	0.428	2.18	<0.00250 H	**22.0**	0.000927 J	1.37 B	<0.000124	0.00202	**0.113**	0.0112	<0.000228	347	**0.00235**	0.00522	2.76
MW-4	11/20/2024		**31.3**	<0.00357	**21.0**	0.00949 J	**0.00606**	**0.0192**	<0.00136	0.367	1.33	<0.00250	**18.0**	<0.00118	1.6	<0.000124	<0.00250	**0.101**	0.0123 J	<0.00228	404	0.00121 J	0.00312 J	2.34
Dup	11/20/2024		**32.4**	<0.0200	**21.1**	0.00920 J	**0.00468 J**	**0.0189**	<0.00136	0.374	1.36	<0.00250	**18.4**	<0.00118	1.62	<0.000124	<0.00250	**0.104**	0.0131 J	<0.00228	414	0.00115 J	0.00307 J	2.36

MW-5

Well ID	Date Sampled	Parameter	TRACE METALS																				
			Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Cyanide, Total	Iron	Lead	Manganese	Mercury	Molybdenum	Nickel	Selenium	Silver	Sulfur	Thallium	Vanadium	Zinc
		Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
		MCL/WQG	0.2	0.006	0.01	1	0.004	0.005	0.05	-	1.3	0.15	0.3	0.015	-	0.002	-	0.1	0.05	-	-	0.002	-	5
		Prediction Limit[1]	1.0	0.22	1.1	0.23	0.21	0.20	0.21	0.20	0.20	0.025	1.1	0.20	0.43	0.0011	0.22	0.20	0.22	0.049	100	0.050	0.21	0.29
MW-5	9/22/2020		**2.54**	<0.000500	**1.77**	0.0289	0.00135	<0.000980	<0.000580	0.00579	0.0610	<0.000692	**0.567**	0.000995 J	0.168	0.000146 J	<0.000590	0.00616	0.00794	0.00164	79.4	<0.000180	0.00183	0.0672
Dup-1	9/22/2020		**1.90**	<0.000500	**1.59**	0.0261	0.00110	<0.000980	<0.000580	0.00456	0.0474	<0.000692	**0.450**	0.000732 J	0.140	0.000240 J	<0.000590	0.00523	0.00750	0.00111	79.0	<0.000180	0.00185	0.0643
MW-5	12/22/2020		**0.526**	<0.00500	**1.25**	0.0109	<0.00210	<0.00980	<0.00580	0.0116	0.107	<0.000692	<0.222	<0.00190	0.401	0.000884	<0.00590	0.0166	0.0101	<0.00280	81.0	<0.00180	<0.00200	0.258
MW-5	3/9/2021		**1.16**	0.00638 J	**1.22**	0.0245	0.000882 J	0.00116	0.00980 J	0.00706	0.0426	0.00433	**0.901**	0.00117	0.252	0.00114	0.00254	0.0107	0.00695	0.00122	85.6	<0.000180	0.00217	0.104
MW-5	6/29/2021		**1.71**	<0.00250	**1.65**	0.0190	0.00105 J	<0.00490	<0.00290	0.00373 J	0.0550	<0.000692	0.265	<0.000950	0.126	0.000762	<0.00295	0.00715	0.00822	<0.00140	82.8	<0.000900	0.00133 J	0.0986
MW-5	9/29/2021		**0.243**	<0.000500	**0.939**	0.0150	0.000408 J	0.00106	<0.000580	0.00445	0.0250	<0.000692	**0.386**	0.000340 J	0.217	0.000166 J	<0.000590	0.0110	0.00769	<0.000280	81.2	<0.000180	0.00124	0.111
MW-5	12/22/2021		**0.229**	<0.000500	**1.02**	0.0158	0.000354 J	0.00117	<0.000580	0.00524	0.0223	0.00420	0.165	<0.000190	0.263	0.000134 J H	<0.000590	0.0116	0.00904	<0.000280	87.2	<0.000180	0.00125	0.125
MW-5	12/5/2022		**0.345**	<0.00357	**1.02**	0.0145	<0.00263	0.00169 J	0.00560 J B	0.00334 J	0.0223	<0.00250	0.218 B	<0.00118	0.122	0.000535	<0.00250	0.00815 J	0.00600 J	0.00286 J	72.9	<0.00110	0.00214 J	0.0869 J
MW-5	11/28/2023		0.172	<0.000357	**1.06**	0.0156	0.000370 J	0.000985 J	0.000357 J	0.00353	0.0227	<0.00250 H	0.0351	<0.000118	0.142 B	0.000398	0.000559 J	0.00849	0.00780	0.000609 J	84.7	0.000121 J	0.00122 J	0.106
MW-5	11/19/2024		**0.289**	<0.000357	**1.11**	0.0169	0.000580	0.00116	0.000573 J	0.00504	0.0336	<0.00250	0.0467	<0.000118	0.178	0.000834	0.000321 J	0.0115	0.00747	0.000894 J	89.4	0.000121 J	0.00122 J	0.135

MW-6

Well ID	Date Sampled	Parameter	TRACE METALS																				
			Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Cyanide, Total	Iron	Lead	Manganese	Mercury	Molybdenum	Nickel	Selenium	Silver	Sulfur	Thallium	Vanadium	Zinc
		Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
		MCL/WQG	0.2	0.006	0.01	1	0.004	0.005	0.05	-	1.3	0.15	0.3	0.015	-	0.002	-	0.1	0.05	-	-	0.002	-	5
		Prediction Limit[1]	0.940	0.21	2.4	0.23	0.21	0.20	0.20	0.20	0.19	0.025	2.0	0.20	6.7	0.00023	0.22	0.19	0.19	0.050	130	0.050	0.20	0.20
MW-6	9/22/2020		<0.0106	<0.000500	**0.846**	0.0276	<0.000210	<0.000980	<0.000580	<0.000170	0.00468	0.00150	0.299	<0.000190	0.739	<0.000124	0.00109	0.000601 J	<0.000780	<0.000280	2.62	<0.000180	<0.000200	<0.00347
MW-6	12/22/2020		<0.106	<0.00500	**3.34**	0.0568	<0.00210	<0.00980	<0.00580	<0.00170	<0.00610	0.00616	**4.64**	<0.00190	3.55	<0.000124	<0.00590	<0.00540	<0.00780	<0.00280	30.6	<0.00180	<0.00200	<0.0347
MW-6	3/9/2021		Insufficient Water Volume to Collect a Sample																					
MW-6	6/29/2021		Insufficient Water Volume to Collect a Sample																					
MW-6	9/28/2021		Insufficient Water Volume to Collect a Sample																					
MW-6	12/21/2021		Insufficient Water Volume to Collect a Sample																					
MW-6	12/5/2022		<0.0860	<0.00357	**4.86**	0.0936	<0.00263	<0.00133	<0.00136	0.00159 J	0.00318	<0.00250	**8.01 B**	<0.00118	5.52	<0.000124	0.00329 J	<0.00165	<0.00516	<0.00228	132	<0.00110	<0.00173	<0.0277
MW-6	11/29/2023		<0.00860	<0.000357	**0.802**	0.0420	<0.000263	<0.000133	<0.000136	0.000429 J	0.000358 J	<0.00250 H	**0.0129 J**	<0.000118	0.881 B	<0.000124	0.00369	0.000177 J	<0.000516	<0.000228	147	<0.000110	<0.000173	<0.00277
MW-6	11/20/2024		<0.0860	<0.00357	**15.1**	0.0724	<0.00263	<0.00133	<0.00136	0.00644 J	<0.00318	<0.00250	**24.8**	<0.00118	7.26	<0.000124	0.00421 J	<0.00165	<0.00516	<0.00228	218	<0.00110	<0.00173	<0.0277

Notes:

[1] The prediction limit is a statistical indicator that the background concentration at that location may have been exceeded. Prediction limits for each well were calculated in the Sampling and Analysis Plan.

Colored cell indicates a prediction limit was exceeded.

Bold values indicate exceedance of a California groundwater maximum concentration limit (MCL) or water quality goal (WQG).

J = Value is below reporting limit and is therefore estimated H = Analysis was performed by laboratory after the prescribed hold time for the analyte

B = Compound was found in the laboratory's blank and in the sample

TABLE 10
Blue Eagle Lode Mining Company
Groundwater Quality Sampling Results

MW-4

Sample ID	Date Sampled	Parameter	ENERGETICS													
			1,3,5-Trinitrobenzene	1,3-Dinitrobenzene	2,4,6-Trinitrotoluene	2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Nitrotoluene	3-Nitrotoluene	4-Nitrotoluene	HMX	Nitrobenzene	Nitrocellulose	Nitroglycerin	PETN	RDX
		Unit	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L
		MCL/WQG	210	0.7	1	14	0.05	80	80	80	350	14	-	5	-	0.3
		Prediction Limit[1]	0.11	0.10	0.10	0.10	0.10	0.50	0.50	0.50	0.10	0.53	2.0	0.65	0.65	0.10
MW-4	9/21/2020		<0.20	<0.11	<0.14	<0.24	<0.15	<0.31	<0.32	<0.26	<0.20	<0.20	NS	<8.5	<11	<0.35
MW-4	12/21/2020		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.475	NS	NS	NS
MW-4	9/28/2021		<0.20	<0.11	<0.14	<0.24	<0.15	<0.31	1.6	2.5	<0.20	<0.20	NS	<8.5	<11	<0.35
MW-4	12/21/2021		NS	NS	NS	NS	NS	NS	<0.32	<0.26	NS	NS	<0.475	NS	NS	NS
Dup	12/21/2021		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.475	NS	NS	NS
MW-4	12/6/2022		<0.46	<0.40	<1.8	<0.33	<0.35	<0.43	<0.38	<0.44	<0.70	<0.42	<0.475	<7.5	<10	**0.85 J**
MW-4	11/29/2023		<0.46	<0.40	<1.8	<0.33	<0.35	<0.43	<0.38	<0.44	<0.70	<0.42	<0.110	<7.5	<10	<0.64
MW-4	11/20/2024		<0.46	<0.40	<1.8	<0.33	<0.35	<0.43	<0.38	<0.44	<0.70	<0.42	0.238	<7.5	<10	<0.64
Dup	11/20/2024		<0.46	<0.40	<1.8	<0.33	<0.35	<0.43	<0.38	<0.44	<0.70	<0.42	0.175	<7.5	<10	<0.64

MW-5

Sample ID	Date Sampled	Parameter	ENERGETICS													
			1,3,5-Trinitrobenzene	1,3-Dinitrobenzene	2,4,6-Trinitrotoluene	2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Nitrotoluene	3-Nitrotoluene	4-Nitrotoluene	HMX	Nitrobenzene	Nitrocellulose	Nitroglycerin	PETN	RDX
		Unit	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L
		MCL/WQG	210	0.7	1	14	0.05	80	80	80	350	14	-	5	-	0.3
		Prediction Limit[1]	0.10	0.10	0.10	0.10	0.10	0.50	0.50	0.50	0.10	0.10	5.5	0.65	0.65	0.10
MW-5	9/22/2020		<0.20	<0.11	<0.14	<0.24	<0.15	<0.31	<0.32	<0.26	<0.20	<0.20	NS	<8.5	<11	<0.35
Dup-1	9/22/2020		<0.20	<0.11	<0.14	<0.24	<0.15	<0.31	<0.32	<0.26	<0.20	<0.20	NS	<8.5	<11	<0.35
MW-5	12/22/2020		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.475	NS	NS	NS
MW-5	9/29/2021		<0.20	<0.11	<0.14	<0.24	<0.15	<0.31	<0.32	<0.26	<0.20	<0.20	NS	<8.5	<11	<0.35
MW-5	12/22/2021		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.475	NS	NS	NS
MW-5	12/5/2022		<0.46	<0.40	<1.8	<0.33	<0.35	<0.43	<0.38	<0.44	<0.70	<0.42	<0.475	<7.5	<10	<0.64
MW-5	11/28/2023		<0.46	<0.40	<1.8	<0.33	<0.35	<0.43	<0.38	<0.44	<0.70	<0.42	<0.110 H	<7.5	<10	<0.64
MW-5	11/19/2024		<0.46	<0.40	<1.8	<0.33	<0.35	<0.43	<0.38	<0.44	<0.70	<0.42	<0.110	<7.5	<10	<0.64

MW-6

Sample ID	Date Sampled	Parameter	ENERGETICS													
			1,3,5-Trinitrobenzene	1,3-Dinitrobenzene	2,4,6-Trinitrotoluene	2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Nitrotoluene	3-Nitrotoluene	4-Nitrotoluene	HMX	Nitrobenzene	Nitrocellulose	Nitroglycerin	PETN	RDX
		Unit	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L
		MCL/WQG	210	0.7	1	14	0.05	80	80	80	350	14	-	5	-	0.3
		Prediction Limit[1]	0.22	0.10	0.10	0.12	0.12	0.14	0.50	0.29	0.46	5.6	4.4	0.72	0.65	0.10
MW-6	9/22/2020		<0.20	<0.11	<0.14	<0.24	<0.15	<0.31	0.95	<0.26	<0.20	<0.20	NS	<8.5	<11	<0.35
MW-6	12/22/2020		NS	NS	NS	NS	NS	NS	<0.32	NS	NS	NS	<0.475	NS	NS	NS
MW-6	9/28/2021		Insufficient Water Volume to Collect a Sample													
MW-6	12/5/2022		<0.46	<0.40	<1.8	<0.33	<0.35	<0.43	<0.38	<0.44	<0.70	<0.42	<0.475	<7.5	<10	**2.2**
MW-6	11/29/2023		<0.46	<0.40	<1.8	<0.33	<0.35	<0.43	<0.38	<0.44	<0.70	<0.42	<0.110	<7.5	<10	<0.64
MW-6	11/20/2024		<0.46	<0.40	<1.8	<0.33	<0.35	<0.43	<0.38	<0.44	<0.70	<0.42	0.202	<7.5	<10	<0.64

Notes:
[1] The prediction limit is a statistical indicator that the background concentration at that location may have been exceeded. Prediction limits for each well were calculated in the Sampling and Analysis Plan.
Colored cell indicates a prediction limit was exceeded.
Bold values indicate exceedance of a California groundwater maximum concentration limit (MCL) or water quality goal (WQG).
J = Value is below reporting limit and is therefore estimated H = Analysis was performed by laboratory after the prescribed hold time for the analyte

TABLE 10
Blue Eagle Lode Mining Company
Groundwater Quality Sampling Results

MW-4

Sample ID	Date Sampled	Parameter	ORGANIC COMPOUNDS								
			Benzene	Diesel Range Organics (C10-C24)	Ethylbenzene	Ethylene Glycol	Motor Oil Range Organics (C25-C36)	Naphthalene	Toluene	Volatile Fuel Hydrocarbons (C4-C12)	Xylenes, Total
		Unit	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L
		MCL/WQG	1	100	29	14	100	17	42	50	17
		Prediction Limit[1]	1.3	90	0.50	10	470	1.3	20	130	1.0
MW-4	9/21/2020		1.5	65	0.14 J	<5.0	<16	<5.1	0.27 J	<30	<0.46
MW-4	12/21/2020		1.2	NS	NS	NS	NS	NS	NS	NS	NS
MW-4	9/28/2021		1.2	<34	<0.33	<500	<34	<5.0	<0.34	36 J H	<0.48
MW-4	12/6/2022		1.2	<36	<0.30	<100	<36	<4.9	<0.30	<30	<0.49
MW-4	11/29/2023		<0.24	<34	<0.30	<1,200	<34	<4.9	<0.30	<30	<0.49
MW-4	11/20/2024		<0.24	<42	<0.30	<120	<42	<4.9	<0.30	<29	<0.49
Dup	11/20/2024		<0.24	<42	<0.30	<120	<42	<4.9	<0.30	<29	<0.49

MW-5

Sample ID	Date Sampled	Parameter	ORGANIC COMPOUNDS								
			Benzene	Diesel Range Organics (C10-C24)	Ethylbenzene	Ethylene Glycol	Motor Oil Range Organics (C25-C36)	Naphthalene	Toluene	Volatile Fuel Hydrocarbons (C4-C12)	Xylenes, Total
		Unit	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L
		MCL/WQG	1	100	29	14	100	17	42	50	17
		Prediction Limit[1]	0.50	26	0.50	10	170	1.2	0.50	50	1.0
MW-5	9/22/2020		<0.14	57	<0.14	<5.0	<17	<5.1	<0.13	<30	<0.46
Dup-1	9/22/2020		<0.14	57	<0.14	<5.0	<17	<5.1	<0.13	<30	<0.46
MW-5	12/22/2020		NS	87	NS	NS	NS	NS	NS	NS	NS
MW-5	9/29/2021		<0.20	<35	<0.33	<5.0	<35	<5.0	<0.34	<30	<0.48
MW-5	12/5/2022		<0.24	<37	<0.30	<5.0	<37	<4.9	<0.30	<30	<0.49
MW-5	11/28/2023		<0.24	<36	<0.30	<12	<36	<4.9	<0.30	<30	<0.49
MW-5	11/19/2024		<0.24	<43	<0.30	<12	<43	<4.9	<0.30	<29	<0.49

MW-6

Sample ID	Date Sampled	Parameter	ORGANIC COMPOUNDS								
			Benzene	Diesel Range Organics (C10-C24)	Ethylbenzene	Ethylene Glycol	Motor Oil Range Organics (C25-C36)	Naphthalene	Toluene	Volatile Fuel Hydrocarbons (C4-C12)	Xylenes, Total
		Unit	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L
		MCL/WQG	1	100	29	14	100	17	42	50	17
		Prediction Limit[1]	0.50	10,000	0.50	10	2,800	5.4	0.50	140	1.0
MW-6	9/22/2020		<0.56	**280**	<0.55	<5.0	46 J	<20	<0.51	<30	<1.8
MW-6	9/28/2021		Insufficient Water Volume to Collect a Sample								
MW-6	12/5/2022		<0.24	**160**	<0.30	<50	45 J	<4.9	<0.30	<30	<0.49
MW-6	11/29/2023		<0.24	**550**	<0.30	<12	33 J	<4.9	<0.30	<30	<0.49
MW-6	11/20/2024		<0.24	**290**	<0.30	<12	<42	<4.9	<0.30	<29	<0.49

Notes:
[1] The prediction limit is a statistical indicator that the background concentration at that location may have been exceeded. Prediction limits for each well were calculated in the Sampling and Analysis Plan.
Colored cell indicates a prediction limit was exceeded.
Bold values indicate exceedance of a California groundwater maximum concentration limit (MCL) or water quality goal (WQG).
J = Value is below reporting limit and is therefore estimated H = Analysis was performed by laboratory after the prescribed hold time for the analyte

TABLE 10
Blue Eagle Lode Mining Company
Groundwater Quality Sampling Results

Other QA/QC Samples

			GENERAL CHEMISTRY						GENERAL MINERALS (ANIONS AND CATIONS)											
Sample ID	Date Sampled	Parameter	Bicarbonate Alkalinity (as $CaCO_3$)	Carbonate Alkalinity (as $CaCO_3$)	Hydroxide Alkalinity (as $CaCO_3$)	Total Alkalinity (as $CaCO_3$)	Total Dissolved Solids	pH	Ammonia (as N)	Calcium	Chloride	Fluoride	Magnesium	Nitrate (as N)	Nitrite (as N)	Nitrate + Nitrite (as N)	Perchlorate	Potassium	Sodium	Sulfate
		Unit	mg/L	mg/L	mg/L	mg/L	mg/L	S.U.	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L
Rinse Blank	12/21/2020		<1.69	<1.69	<1.69	<1.69	15.0	5.0	<0.0665	0.574	<0.36	0.52	0.106	<0.024	<0.018	<0.0292	<0.91	0.135	0.204	29
Rinse Blank	6/29/2021		<1.69	<1.69	<1.69	<1.69	<0.435	5.0	<0.0512	<0.0366	<0.36	<0.046	<0.0170	<0.024	<0.018	<0.0172	<0.91	<0.0257	<0.0397	4.4
Rinse Blank	9/28/2021		<2.18	<2.18	<2.18	<2.18	7.50	5.1	<0.0512	0.0512 J	<0.36	0.054 J	0.0220 J	<0.024	<0.018	0.0542 J	<0.91	0.0302 J	0.0612 J	14
Equip Blank	11/29/2023		<2.18	<2.18	<2.18	<2.18	<8.70	6.0	<0.105	<0.0364	<0.36	<0.046	<0.00982	<0.020	<0.043	<0.0120	<0.91	<0.0200	<0.0947	<0.18
Equip Blank	11/19/2024		<2.18	<2.18	<2.18	<2.18	<8.35	7.6	<0.105	<0.0364	<0.36	<0.046	<0.00982	<0.020	<0.043	<0.0580	<0.91	<0.0200	<0.0947	<0.18

Notes:

˄ The prediction limit is a statistical indicator that the background concentration at that location may have been exceeded. Prediction limits for each well were calculated in the Sampling and Analysis Plan.

Colored cell indicates a prediction limit was exceeded.

Bold values indicate exceedance of a California groundwater maximum concentration limit (MCL) or water quality goal (WQG).

J = Value is below reporting limit and is therefore estimated H = Analysis was performed by laboratory after the prescribed hold time for the analyte

NS = Analyte not sampled

N/A = Trip Blank is only intended to test for volatile organic compounds (i.e. benzene, toluene, ethylbenzene, xylene, and naphthalene) that are being sampled during that particular sampling event

TABLE 10
Blue Eagle Lode Mining Company
Groundwater Quality Sampling Results

Other QA/QC Samples

Sample ID	Date Sampled	Parameter	TRACE METALS																				
		Unit	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Cyanide, Total	Iron	Lead	Manganese	Mercury	Molybdenum	Nickel	Selenium	Silver	Sulfur	Thallium	Vanadium	Zinc
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Rinse Blank	12/21/2020		0.273	<0.000500	0.156	0.000377 J	<0.000210	<0.000980	<0.000580	0.00293	<0.000610	<0.000692	0.595	<0.000190	0.0104	<0.000124	<0.000590	0.000809 J	<0.000780	<0.000280	1.23	<0.000180	0.000260 J	0.0284
Rinse Blank	6/29/2021		<0.0106	<0.000500	<0.000630	<0.000160	<0.000210	<0.000980	<0.000580	<0.000170	<0.000610	<0.000692	<0.0222	<0.000190	<0.000440	<0.000124	<0.000590	<0.000540	<0.000780	<0.000280	<0.0701	<0.000180	<0.000200	<0.00347
Rinse Blank	9/28/2021		0.0129 J	<0.000500	0.00371	0.000265 J	<0.000210	<0.000980	<0.000580	<0.000170	<0.000610	<0.000692	0.0398 J	0.000289 J	0.0120	<0.000124	<0.000590	<0.000540	<0.000780	<0.000280	<0.0701	<0.000180	<0.000200	0.0250
Equip Blank	11/29/2023		<0.00860	<0.000357	0.00163	<0.000166	<0.000263	<0.000133	<0.000136	<0.000136	<0.000318	<0.00250 H	<0.00371	<0.000118	0.000689 J B	<0.000124	<0.000250	<0.000165	<0.000516	<0.000228	<0.320	<0.000110	<0.000173	<0.00277
Equip Blank	11/19/2024		<0.00860	<0.000357	0.000759 J	<0.000166	<0.000263	<0.000133	0.000236 J	<0.000136	<0.000318	<0.00250	0.00464 J	<0.000118	<0.000412	<0.000124	<0.000250	<0.000165	<0.000516	<0.000228	<0.320	<0.000110	<0.000173	<0.00277

Notes:
[a] The prediction limit is a statistical indicator that the background concentration at that location may have been exceeded. Prediction limits for each well were calculated in the Sampling and Analysis Plan.

Colored cell indicates a prediction limit was exceeded.

Bold values indicate exceedance of a California groundwater maximum concentration limit (MCL) or water quality goal (WQG).

J = Value is below reporting limit and is therefore estimated H = Analysis was performed by laboratory after the prescribed hold time for the analyte

TABLE 10
Blue Eagle Lode Mining Company
Groundwater Quality Sampling Results

Other QA/QC Samples

Sample ID	Date Sampled	Parameter	ENERGETICS													
			1,3,5-Trinitrobenzene	1,3-Dinitrobenzene	2,4,6-Trinitrotoluene	2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Nitrotoluene	3-Nitrotoluene	4-Nitrotoluene	HMX	Nitrobenzene	Nitrocellulose	Nitroglycerin	PETN	RDX
		Unit	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L
Rinse Blank	9/28/2021		<0.20	<0.11	<0.14	<0.24	<0.15	<0.31	<0.32	<0.26	<0.20	<0.20	NS	<8.5	<11	<0.35
Equip Blank	11/29/2023		<0.46	<0.40	<1.8	<0.33	<0.35	<0.43	<0.38	<0.44	<0.70	<0.42	<0.110	<7.5	<10	<0.64
Equip Blank	11/19/2024		<0.46	<0.40	<1.8	<0.33	<0.35	<0.43	<0.38	<0.44	<0.70	<0.42	<0.110	<7.5	<10	<0.64

Notes:
[1] The prediction limit is a statistical indicator that the background concentration at that location may have been exceeded. Prediction limits for each well were calculated in the Sampling and Analysis Plan.
Colored cell indicates a prediction limit was exceeded.
Bold values indicate exceedance of a California groundwater maximum concentration limit (MCL) or water quality goal (WQG).
J = Value is below reporting limit and is therefore estimated H = Analysis was performed by laboratory after the prescribed hold time for the analyte

TABLE 10
Blue Eagle Lode Mining Company
Groundwater Quality Sampling Results

Other QA/QC Samples

			ORGANIC COMPOUNDS									
Sample ID	Date Sampled	Parameter	Benzene	Diesel Range Organics (C10-C24)	Ethylbenzene	Ethylene Glycol	Motor Oil Range Organics (C25-C36)	Naphthalene	Toluene	Volatile Fuel Hydrocarbons (C4-C12)	Xylenes, Total
		Unit	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Trip Blank	9/22/2020		<0.14	N/A	<0.14	N/A	N/A	NS	<0.13	N/A	<0.46
Trip Blank	12/21/2020		<0.20	N/A	NS	N/A	N/A	NS	NS	N/A	NS
Trip Blank	9/28/2021		<0.20	N/A	<0.33	N/A	N/A	<5.0	<0.34	N/A	<0.48
Rinse Blank	9/28/2021		<0.20	<35	<0.33	<5.0	<35	<5.0	<0.34	<30 H	<0.48
Trip Blank	12/5/2022		1.2	N/A	<0.30	N/A	N/A	<4.9	<0.30	N/A	<0.49
Equip Blank	11/29/2023		<0.24	<37	<0.30	<12	<37	<4.9	<0.30	<30	<0.49
Trip Blank	11/19/2024		<0.24	N/A	<0.30	N/A	N/A	<4.9	<0.30	N/A	<0.49
Equip Blank	11/19/2024		<0.24	<43	<0.30	<12	<43	<4.9	<0.30	<29	<0.49

Notes:
[1] The prediction limit is a statistical indicator that the background concentration at that location may have been exceeded. Prediction limits for each well were calculated in the Sampling and Analysis Plan.
Colored cell indicates a prediction limit was exceeded.
Bold values indicate exceedance of a California groundwater maximum concentration limit (MCL) or water quality goal (WQG).
J = Value is below reporting limit and is therefore estimated H = Analysis was performed by laboratory after the prescribed hold time for the analyte

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FIGURES

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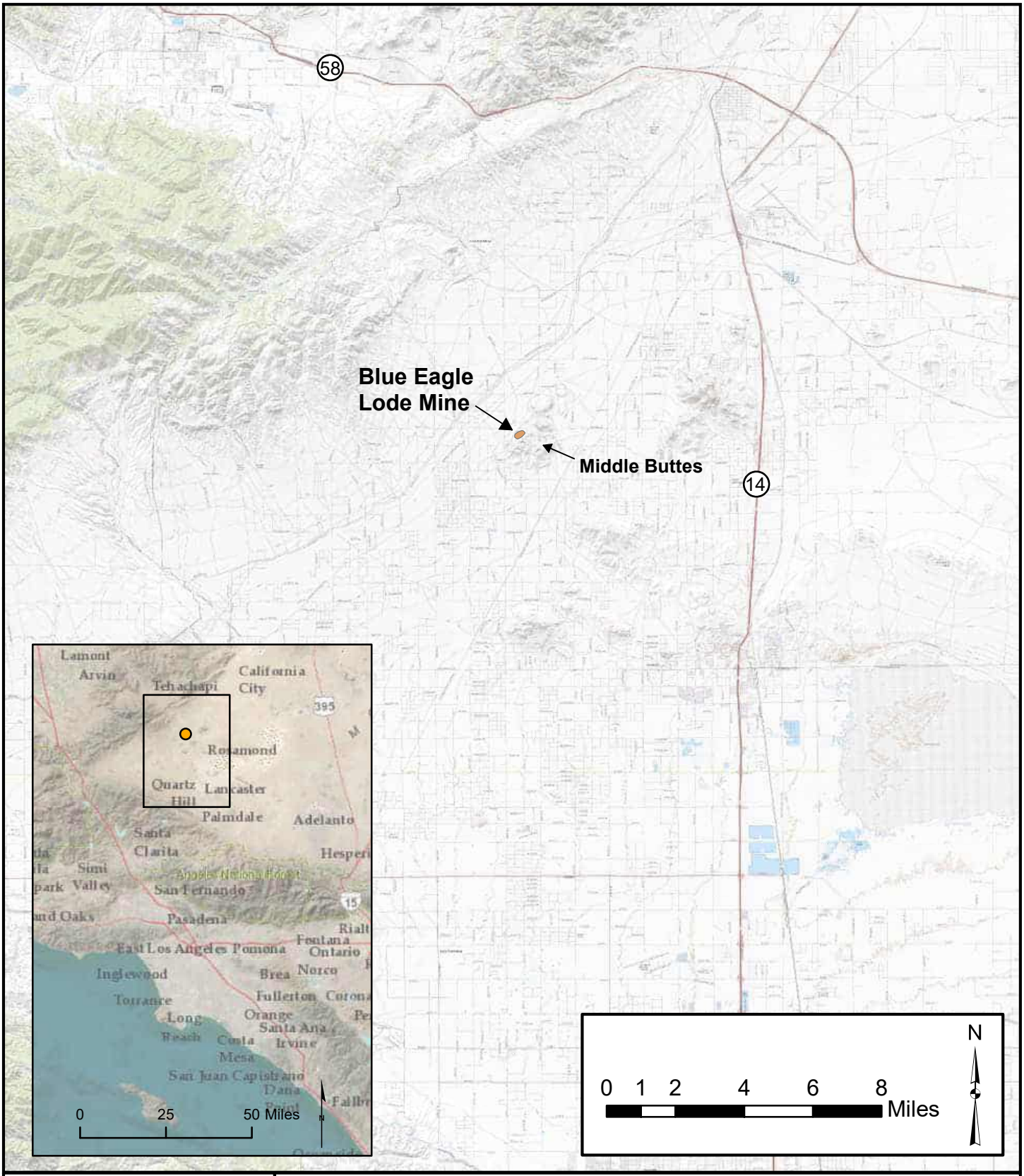
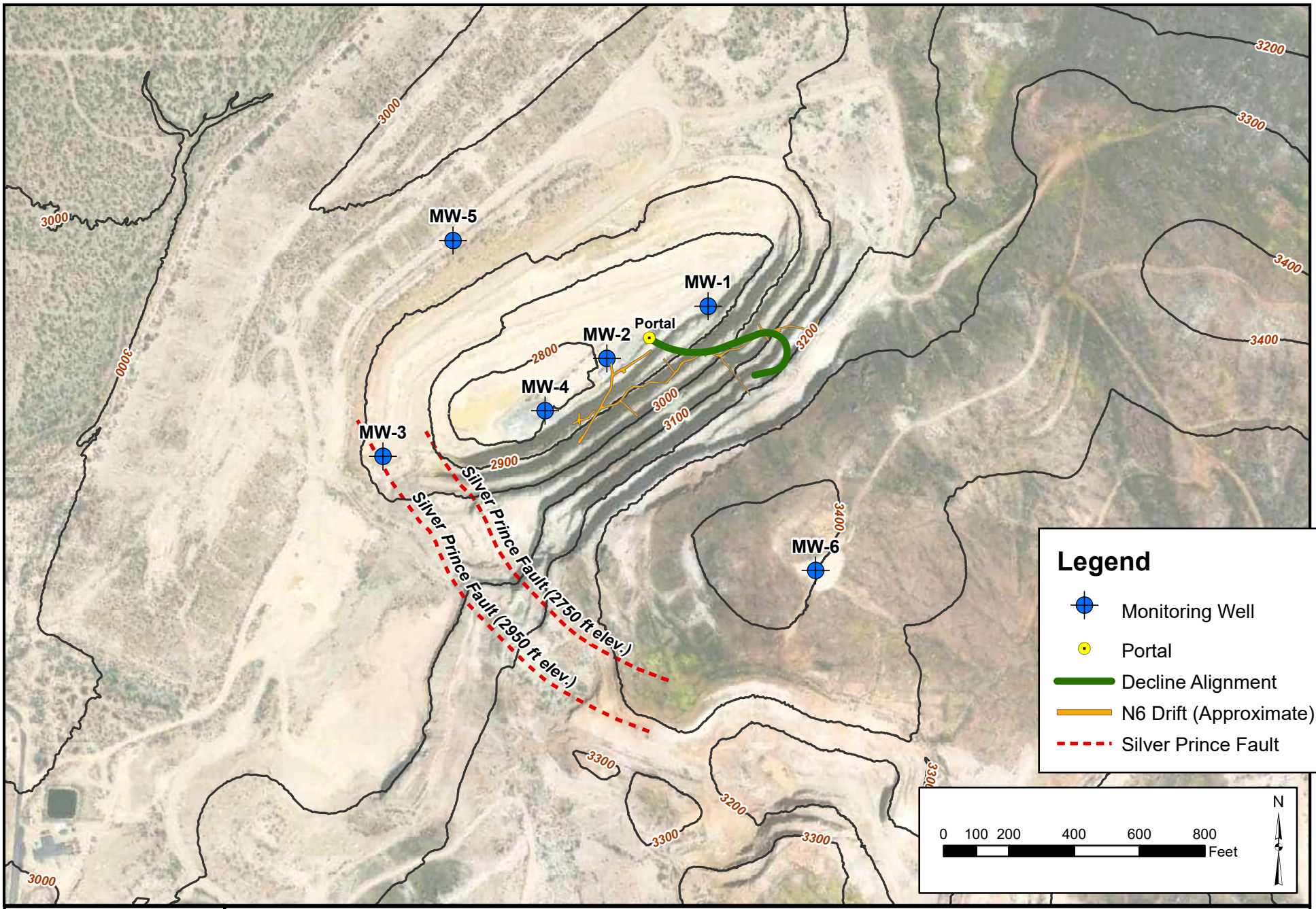


GeoPentech

LOCATION MAP

PROJECT: BLUE EAGLE LODE MINE

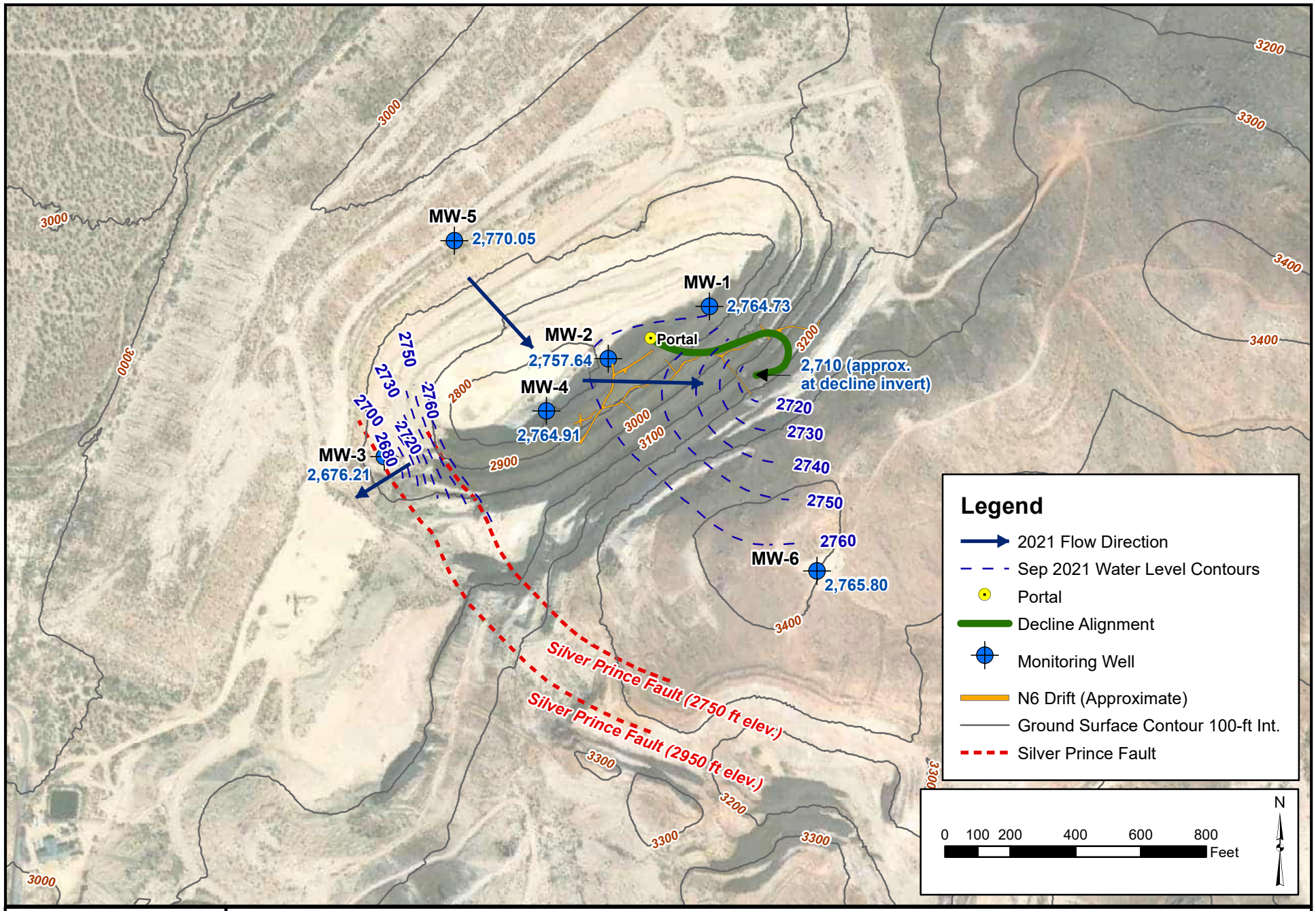
PROJECT #: 20049A	DATE: JAN 2025	FIGURE: 1



GeoPentech

MONITORING WELL LOCATION MAP

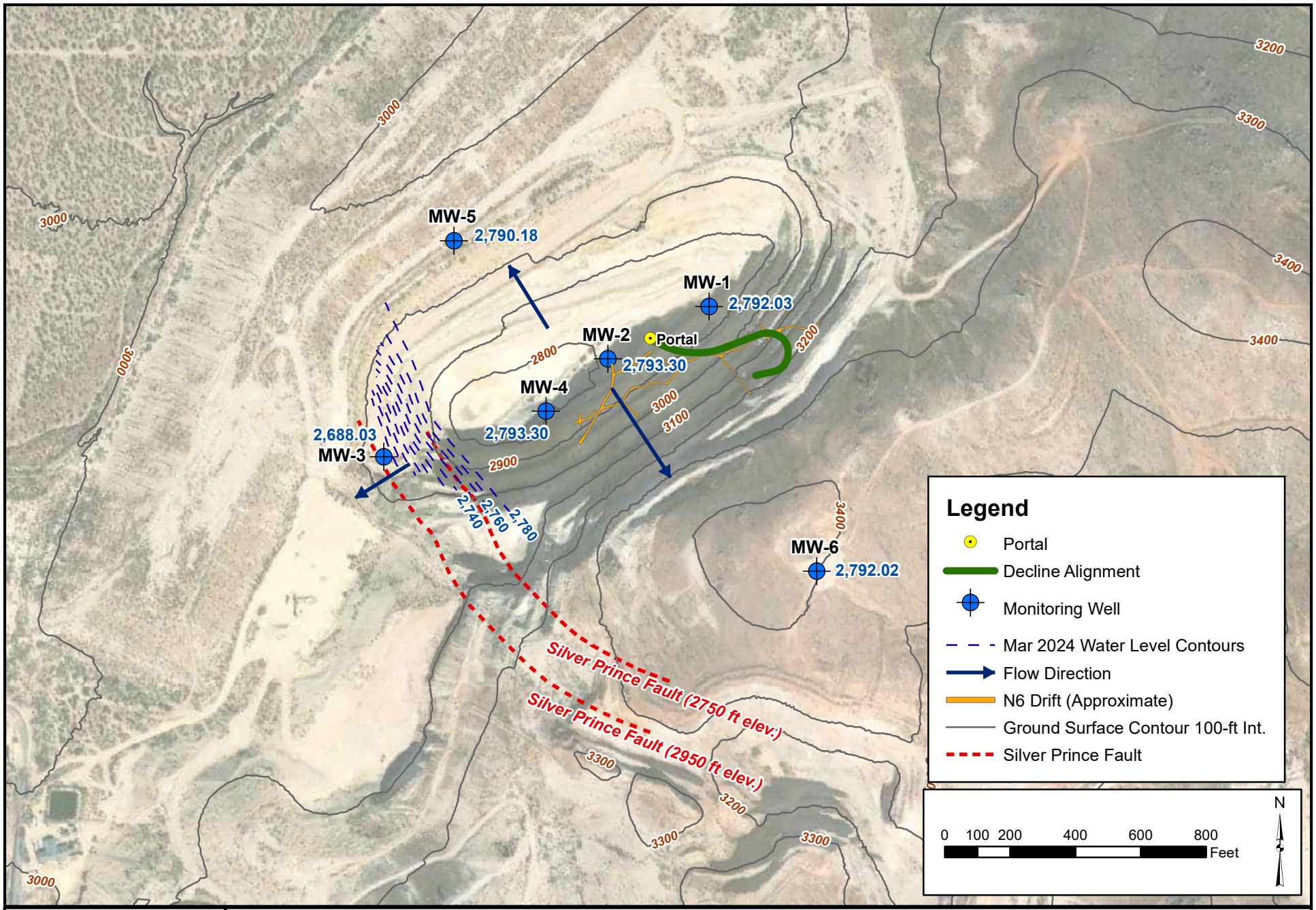
DATE: JAN 2025	PROJECT #: 20049A	PROJECT: BLUE EAGLE LODE MINE	FIGURE: 2



GeoPentech

September 2021 Groundwater Elevations (End of Dewatering)

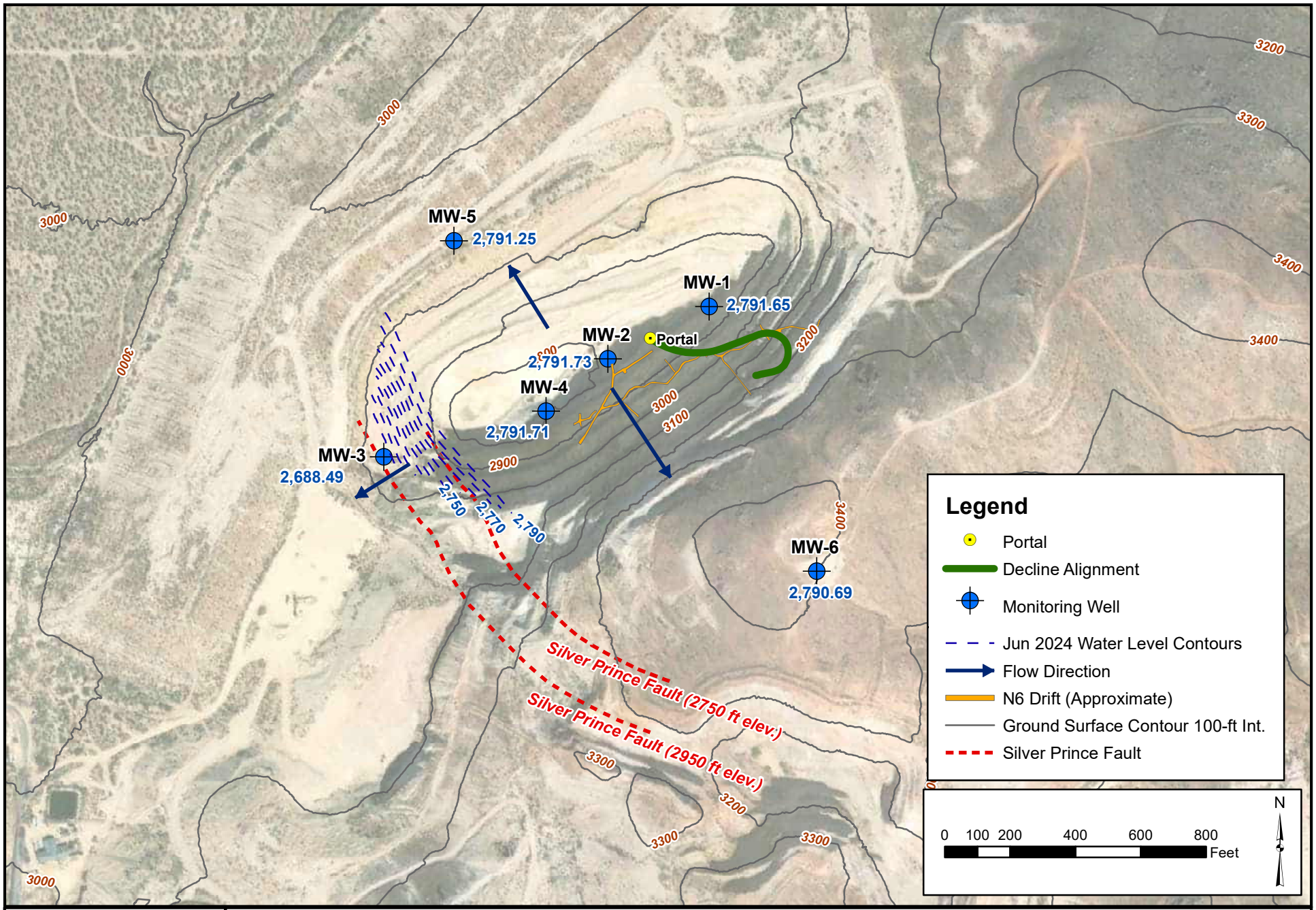
DATE: JAN 2025	PROJECT #: 20049A	PROJECT: BLUE EAGLE LODE MINE	FIGURE: 3



GeoPentech

March 2024 Groundwater Elevations

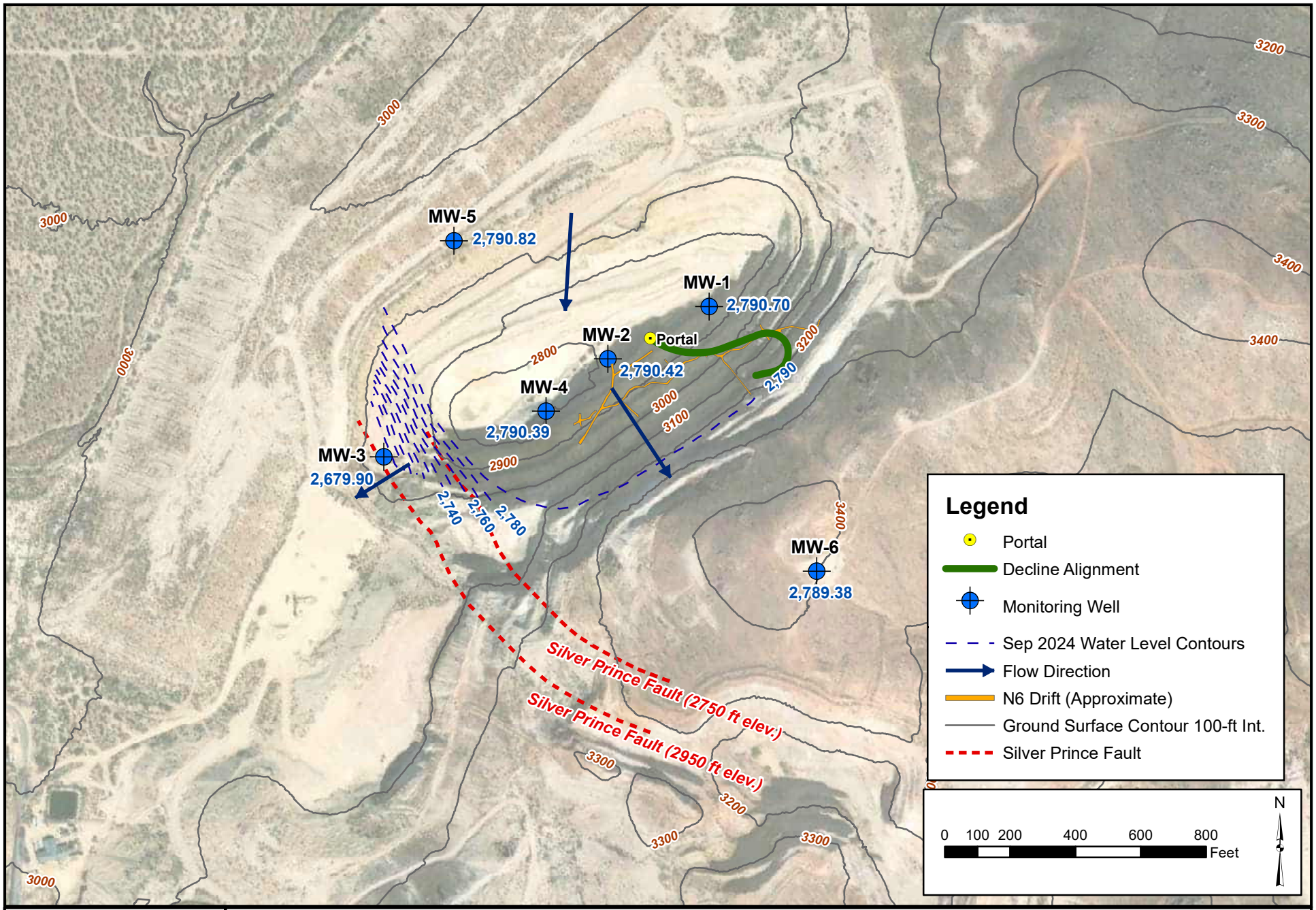
DATE: JAN 2025	PROJECT #: 20049A	PROJECT: BLUE EAGLE LODE MINE	FIGURE: 4



GeoPentech

June 2024 Groundwater Elevations

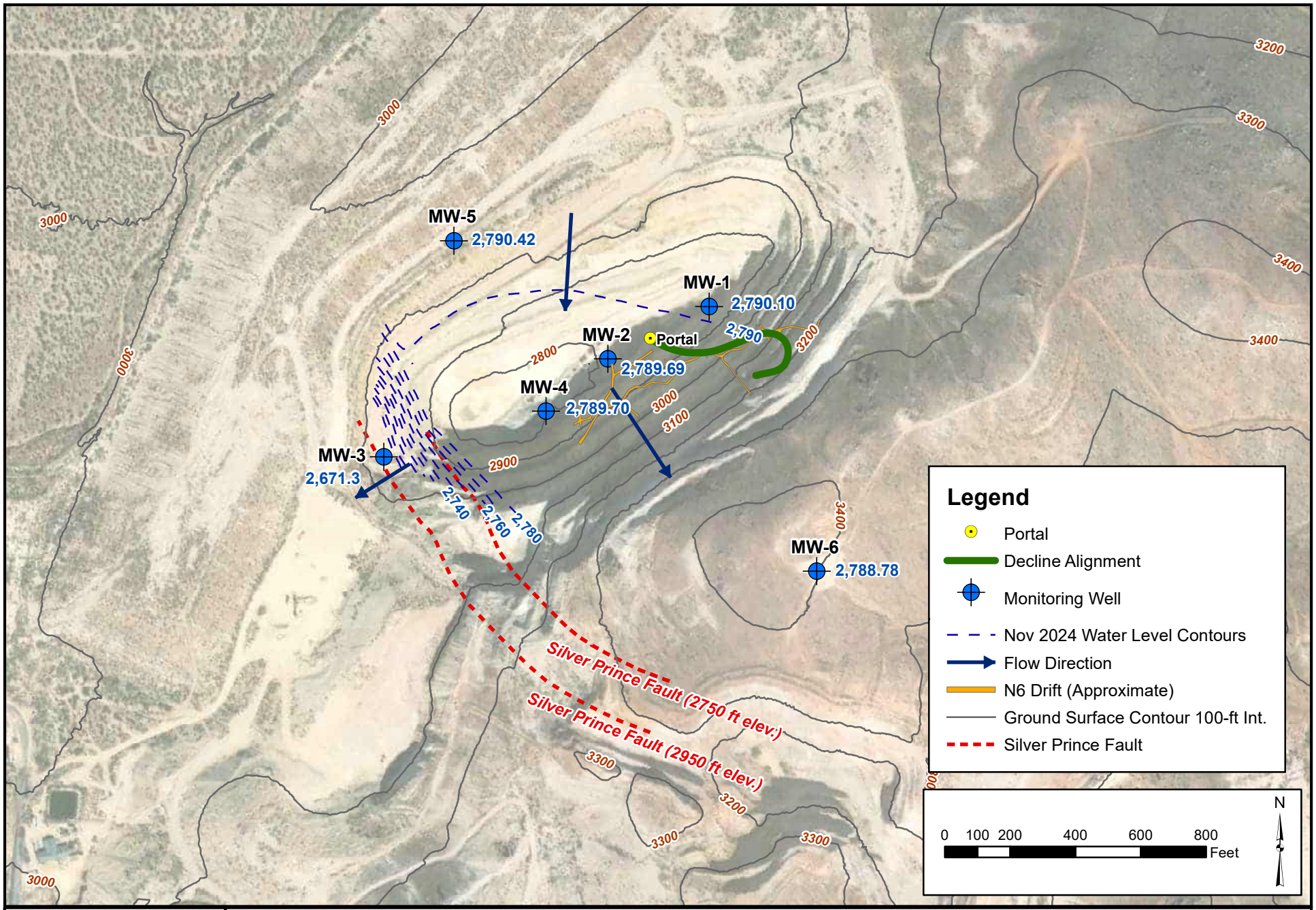
DATE: JAN 2025	PROJECT #: 20049A	PROJECT: BLUE EAGLE LODE MINE	FIGURE: 5



GeoPentech

September 2024 Groundwater Elevations

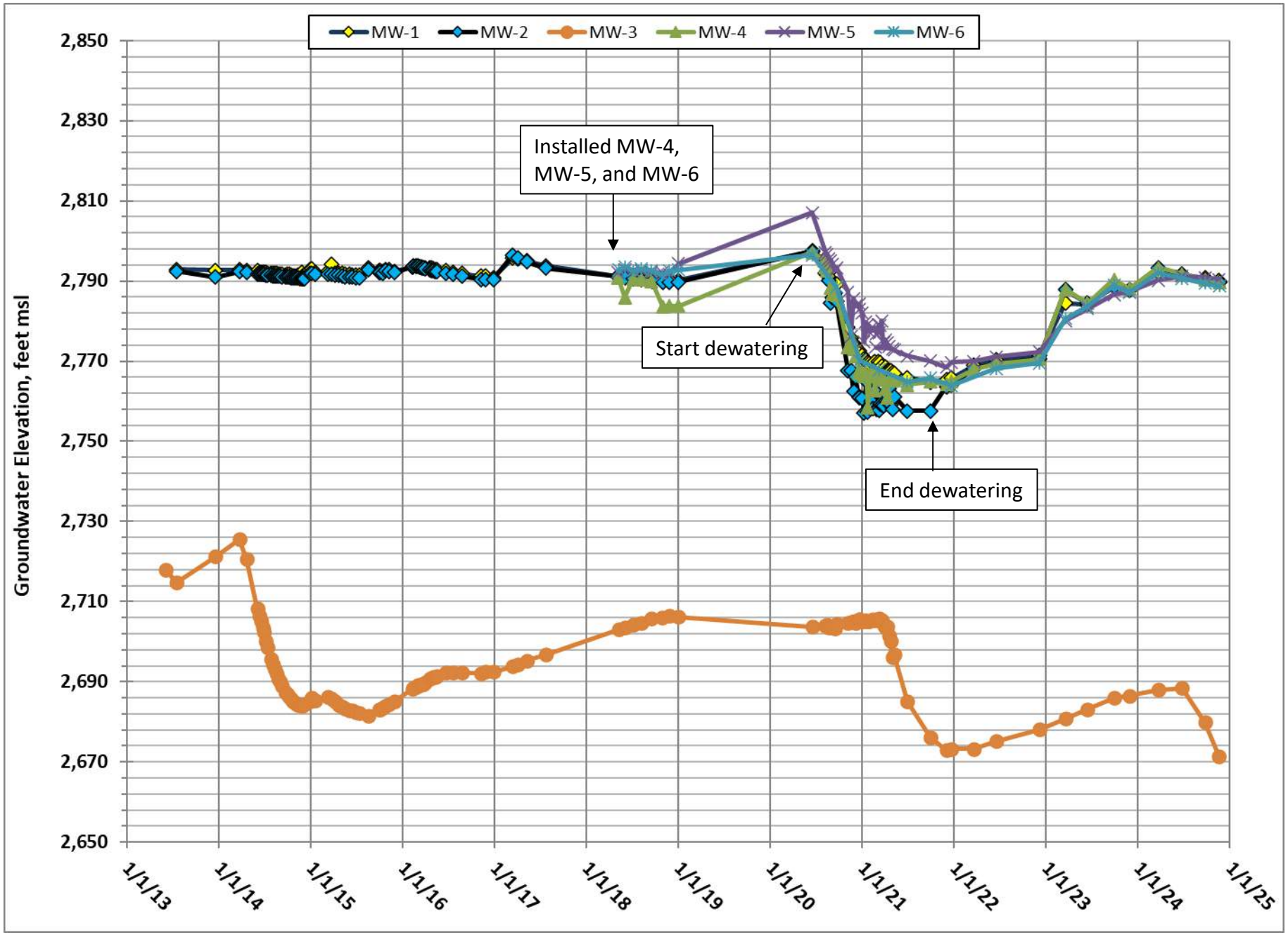
DATE: JAN 2025	PROJECT #: 20049A	PROJECT: BLUE EAGLE LODE MINE	FIGURE: 6



GeoPentech

November 2024 Groundwater Elevations

DATE: JAN 2025	PROJECT #: 20049A	PROJECT: BLUE EAGLE LODE MINE	FIGURE: 7



MONITORING WELL HYDROGRAPHS

GeoPentech	Project No.: **20049A**	Project: **BLUE EAGLE LODE MINE**	Date: **JAN 2025**	Figure: **8**

ATTACHMENTS

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Attachment A

Site Photographs

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Overhead view of mine pit area. Area in bottom left of image is at a lower elevation than the rest of the pit and collects water during rainfall (Dec 2021).







Drainage is routed along the high wall around the water storage tanks and around the waste rock pad to the water collection area during rain events.



Decline portal



Interior of the decline



Water being pumped out of the decline (June 2021)



Well MW-2, used for dewatering and groundwater quality monitoring. Water storage tanks with water truck are in the background.



Piping bringing dewatering effluent to storage tanks from the decline and MW-2 prior to shutdown.

Attachment B

Blaine Tech Services Field Sheets

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WELL GAUGING DATA

Project # 241119-EB1 Date 11/19/24 Client GEOPENTECH

Site 8901 BACKUS RD, MOJAVE

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	Notes
MW-5	0744	4					260.45	337.03		
MW-3	0927	4					277.33	321.48		
MW-1	1117	4					49.84	82.91		
MW-2	0720	4					16.85	52.60		
MW-4	0844	4					17.96	75.42		
MW-6	1035	4					64.87	QED	↓	

LOW FLOW WELL MONITORING DATA SHEET 1 OF 2

Project #: 241119-EB1	Client: GEOPENTECH
Sampler: EB	Gauging Date: 11/19/24
Well I.D.: MW-1	Well Diameter (in.): 2 3 (4) 6 8 ____
Total Well Depth (ft.): 82.91	Depth to Water (ft.): 49.84
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI PRO QUATRO

Purge Method: 2" Grundfos Pump Peristaltic Pump ~~Bladder Pump~~
Sampling Method: Dedicated Tubing ~~New Tubing~~ Other ____

Start Purge Time: 1134 Flow Rate: 300 ML/MIN Pump Depth: 74'

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or (µS/cm))	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or (mL))	Depth to Water (ft.)
1137	18.3	2.82	1612	81	0.41	323.0	900	49.94
1140	18.0	2.81	1633	84	0.32	319.9	1800	49.95
1143	17.7	2.81	1637	79	0.27	316.5	2700	49.96
1146	17.5	2.81	1634	72	0.27	314.4	3600	49.97
1149	17.1	2.81	1637	71	0.28	312.0	4500	49.97
1152	16.9	2.81	1636	68	0.28	309.7	5400	49.97
1155	16.9	2.81	1636	95	0.26	307.3	6300	49.98
1158	16.6	2.81	1640	100	0.26	305.6	7200	49.99
1201	16.5	2.81	1641	97	0.26	304.1	8100	50.00
1204	16.4	2.81	1635	93	0.24	302.3	9000	50.00
1207	16.5	2.81	1630	92	0.23	300.8	9900	50.00
1210	16.5	2.81	1640	89	0.22	299.2	10800	50.00

Did well dewater? Yes (No) Amount actually evacuated: 18900

Sampling Time: 1300 Sampling Date: 11/19/24

Sample I.D.: MW-1 Laboratory: EUROFINS

Analyzed for: TPH-G BTEX MTBE TPH-D (Other: SEE C.O.C.)

Equipment Blank I.D.: @ Time Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET 2 OF 2

Project #: 241119-EB1	Client: GEOTECH
Sampler: EB	Gauging Date: 11/19/24
Well I.D.: MW-1	Well Diameter (in.): 2 3 (4) 6 8 ___
Total Well Depth (ft.): 82.91	Depth to Water (ft.): 49.84
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (TOC) Grade	Flow Cell Type: YSI PRO QUATRO

Purge Method: 2" Grundfos Pump | Peristaltic Pump | ~~Bladder Pump~~
Sampling Method: Dedicated Tubing | ~~New Tubing~~ | Other ___

Start Purge Time: 1134 Flow Rate: 300 mL/MIN Pump Depth: 74'

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or (mL))	Depth to Water (ft.)
1215	16.4	2.81	1631	85	0.22	297.0	11700	50.01
1220	16.2	2.82	1632	84	0.20	295.0	12600	50.01
1225	16.3	2.81	1631	80	0.20	293.3	13500	50.01
1230	16.4	2.81	1639	78	0.23	293.2	14400	50.01
1235	16.3	2.81	1639	74	0.20	291.9	15300	50.01
1240	16.3	2.81	1636	75	0.19	290.8	16200	50.01
1245	16.3	2.81	1641	74	0.18	290.4	17100	50.01
1250	16.3	2.81	1636	72	0.18	289.9	18000	50.01
1255	16.4	2.81	1637	71	0.18	289.5	18900	50.01

Did well dewater? Yes (No) Amount actually evacuated: 18900

Sampling Time: 1300 Sampling Date: 11/19/24

Sample I.D.: MW-1 Laboratory: EUROFINS

Analyzed for: TPH-G BTEX MTBE TPH-D (Other) SEE C.O.C.

Equipment Blank I.D.: EQUIPMENT BLANK @ Time 1340 Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 241119-EB1	Client: GEOPENTECH
Sampler: EB	Gauging Date: 11/20/24
Well I.D.: MW-2	Well Diameter (in.): 2 3 (4) 6 8 ____
Total Well Depth (ft.): 52.30	Depth to Water (ft.): 16.35
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI PRO QUATRO

Purge Method: 2" Grundfos Pump | Peristaltic Pump | ~~Bladder Pump~~

Sampling Method: Dedicated Tubing | ~~New Tubing~~ | Other ____

Start Purge Time: 0740 | Flow Rate: 200ML/MIN | Pump Depth: 46'

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
0743	15.3	2.92	1786	35	0.54	289.1	600	16.87
0746	16.9	2.94	1778	30	0.43	290.2	1200	16.87
0749	17.1	2.94	1786	29	0.39	291.5	1800	16.87
0752	17.2	2.95	1793	28	0.35	291.8	2400	16.87
0755	17.1	2.95	1796	27	0.36	291.9	3000	16.87
0758	17.1	2.95	1799	25	0.36	291.8	3600	16.87
0801	17.2	2.95	1799	24	0.36	291.8	4200	16.87
0804	17.2	2.95	1500	23	0.34	291.7	4800	16.87

Did well dewater? Yes (No)	Amount actually evacuated: 4800
Sampling Time: 0805	Sampling Date: 11/20/24
Sample I.D.: MW-2	Laboratory: EUROFINS
Analyzed for: TPH-G BTEX MTBE TPH-D	(Other): SEE C.O.C.
Equipment Blank I.D.: @ Time	Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 241119-EB1	Client: GEO PENTECH
Sampler: EB	Gauging Date: 11/19/24
Well I.D.: MW-3	Well Diameter (in.): 2 3 (4) 6 8 ____
Total Well Depth (ft.): 321.48	Depth to Water (ft.): 277.33
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI PRO QUATRO

Purge Method: 2" Grundfos Pump | Peristaltic Pump | ~~Bladder Pump~~

Sampling Method: Dedicated Tubing | ~~New Tubing~~ | Other ____

Start Purge Time: 0956 Flow Rate: 200 ml/min Pump Depth: 285'

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or ~~µS/cm~~)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or ~~mL~~)	Depth to Water (ft.)
0959	19.3	6.32	576	12	1.71	221.4	600	277.49
1002	19.6	6.29	577	3	1.20	221.9	1200	277.50
1005	19.6	6.28	574	2	1.11	222.1	1800	277.51
1008	19.8	6.28	575	2	1.06	222.0	2400	277.52
1011	19.9	6.27	576	2	1.04	222.0	3000	277.52
1014	19.9	6.27	574	2	1.01	221.8	3600	277.52
1017	19.8	6.27	575	2	0.99	221.7	4200	277.52

Did well dewater? Yes (No) Amount actually evacuated: 4200

Sampling Time: 1020 Sampling Date: 11/19/24

Sample I.D.: MW-3 Laboratory: EUROFINS

Analyzed for: TPH-G BTEX MTBE TPH-D (Other: SEE C.O.C.)

Equipment Blank I.D.: @ Time Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 341119-EB1	Client: GEOPENTECH
Sampler: EB	Gauging Date: 11/20/24
Well I.D.: MW-4	Well Diameter (in.): 2 3 (4) 6 8
Total Well Depth (ft.): 75.42	Depth to Water (ft.): 17.96
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (RVC) Grade	Flow Cell Type: YSI PRO QUATRO

Purge Method: 2" Grundfos Pump | Peristaltic Pump | ~~Bladder Pump~~
Sampling Method: Dedicated Tubing | ~~New Tubing~~ | Other

Start Purge Time: 0857 | Flow Rate: 200 ML/MIN | Pump Depth: 410'

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
0900	16.6	3.64	1991	82	0.36	250.9	600	17.97
0903	16.7	3.66	2009	62	0.32	251.1	1200	17.98
0906	16.6	3.70	2026	49	0.35	251.4	1800	17.98
0909	16.7	3.70	2034	39	0.31	251.6	2400	17.98
0912	16.8	3.70	2034	32	0.40	252.1	3000	17.98
0915	16.8	3.71	2037	31	0.32	252.3	3600	17.98
0918	16.6	3.72	2044	29	0.29	252.2	4200	17.98
0921	16.8	3.81	2126	24	0.25	250.0	4800	17.98
0924	16.7	3.82	2176	21	0.26	248.5	5400	17.98

Did well dewater? Yes (No) | Amount actually evacuated: 5400

Sampling Time: ~~DUP~~ 0925 | Sampling Date: 11/20/24

Sample I.D.: MW-4 | Laboratory: EUROFINS

Analyzed for: TPH-G BTEX MTBE TPH-D (Other) SEE C.O.C.

Equipment Blank I.D.: @ Time | Duplicate I.D.: DUP @ 0925

LOW FLOW WELL MONITORING DATA SHEET

Project #: 241119-EB1	Client: GEOPENTECH
Sampler: EB	Gauging Date: 11/19/24
Well I.D.: MW-5	Well Diameter (in.): 2 3 (4) 6 8 ____
Total Well Depth (ft.): 357.03	Depth to Water (ft.): 260.45
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI PRO QUATRO

Purge Method: 2" Grundfos Pump | Peristaltic Pump | ~~Bladder Pump~~

Sampling Method: Dedicated Tubing | ~~New Tubing~~ | Other ____

Start Purge Time: 0800 | Flow Rate: 200 mL/min | Pump Depth: 305'

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or ~~µS/cm~~)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
0803	18.2	5.96	682	5	4.95	230.4	600	260.49
0806	18.5	5.94	681	4	3.69	230.3	1200	260.49
0809	19.1	5.94	680	4	4.09	230.1	1800	260.49
0812	19.2	5.92	680	4	3.97	230.4	2400	260.49
0815	19.3	5.92	679	4	3.98	230.3	3000	260.49
0816	19.3	5.91	682	4	3.98	230.2	3600	260.49

Did well dewater? Yes (No)	Amount actually evacuated: 3600
Sampling Time: 0820	Sampling Date: 11/19/24
Sample I.D.: MW-5	Laboratory: EUROFINS
Analyzed for: TPH-G BTEX MTBE TPH-D	Other: SEE C.O.C.
Equipment Blank I.D.: @ Time	Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 241191-EB1	Client: GEOPENTECH
Sampler: EB	Gauging Date: 11/20/24
Well I.D.: MW-6	Well Diameter (in.): 2 3 ④ 6 8 ___
Total Well Depth (ft.): QED	Depth to Water (ft.): 614.57
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: ~~TOC~~ Grade	Flow Cell Type: YSI PRO QUATRO

Purge Method: 2" Grundfos Pump | Peristaltic Pump | ~~Bladder Pump~~

Sampling Method: ~~Dedicated Tubing~~ | New Tubing | Other ___

Start Purge Time: 1052 | Flow Rate: 150ML/MIN | Pump Depth: QED

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or ~~µS/cm~~)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or ~~mL~~)	Depth to Water (ft.)
1055	18.5	7.61	1514	2	5.02	158.9	450	614.98
1058	18.6	7.66	1522	1	5.04	155.4	900	614.99
1101	18.5	7.66	1533	1	5.02	154.6	1350	614.99
1104	18.6	7.67	1541	1	5.00	153.5	1800	615.00
1107	18.6	7.67	1555	1	5.01	153.2	2250	615.01
1110	18.5	7.66	1569	0	5.02	153.6	2700	615.01
1113	18.5	7.66	1572	0	5.01	153.6	3150	615.02
1116	19.2	7.65	1566	0	5.01	154.3	3600	615.03

Did well dewater? Yes ~~No~~ | Amount actually evacuated: 3600

Sampling Time: 1120 | Sampling Date: 11/20/24

Sample I.D.: MW-6 | Laboratory: EUROFINS

Analyzed for: TPH-G BTEX MTBE TPH-D | ~~Other~~: SEE C.O.C.

Equipment Blank I.D.: @ Time | Duplicate I.D.:

* NEED MP-10 4H FITTING FOR DEDICATED PUMP

WELLHEAD INSPECTION CHECKLIST

Client GEOPENTECH Date 11/19/24

Site Address 5901 BACKUS RD, MOJAVE

Job Number 24119-EB1 Technician EB

Well ID	Well Inspected - No Corrective Action Required	WELL IS SECURABLE BY DESIGN (12"or less)	WELL IS CLEARLY MARKED WITH THE WORDS "MONITORING WELL" (12"or less)	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)	Repair Order Submitted
MW-5	✓									
MW-3	✓									
MW-1	✓									
MW-2	✓									
MW-4	✓									
MW-6	✓									

NOTES:

TEST EQUIPMENT CALIBRATION LOG

PROJECT NAME GEOPENTECH @ BLUE EAGLE LODE MINE				PROJECT NUMBER 241119-EB			
EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT READING	CALIBRATED TO: OR WITHIN 10%:	TEMP.	INITIALS
YSI PRO QUATRO	24H103093	11/19/24 0718	4.00, 7.00, 10.00 3900, 100%, 240.0	4.00, 7.01, 10.02 3900, 90.3%, 250.5	✓, ✓, ✓ ✓, ✓, ✓	5°C	EB
YSI PRO QUATRO	24H103093	11/20/24 0710	4.00, 7.00, 10.00 3900, 100%, 240.0	4.00, 7.00, 10.01 3900, 90.5%, 250.5	✓, ✓, ✓ ✓, ✓, ✓	5°C	EB

Attachment C

Water Ponding Observation Log

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Blue Eagle Lode Mine
Water Ponding Log

Year: **2024**

Date	Ponding Present (yes/no)	General Location(s) of Ponding	Reason for Ponding (e.g. rain, dewatering effluent evaporation)	Approximate Volume of Ponded Water (gallons)
3/21/2024	No	Pit pond area was wet from prior rain, but no standing water present	Rain	0
6/25/2024	No	Dry		0
9/23/2024	No	Dry		0
11/19/2024	No	Dry		0
11/20/2024	No	Dry		0

The flood map for the selected area is number **06029C3650E**, effective on **9/26/2008**

DYNAMIC MAP

PRINT MAP / FIRMette

MAP IMAGE

DOWNLOAD FIRM PANEL

Changes to this FIRM

- Revisions (0)
- Amendments (0)
- Revalidations (0)

You can choose a new flood map or move the location pin by selecting a different location on the locator map below or by entering a new location in the search field above. It may take a minute or more during peak hours to generate a dynamic FIRMette.

Go To NFHL Viewer »



PIN — Approximate location based on user input and does not represent an authoritative property location

SPECIAL FLOOD HAZARD AREAS — Without Base Flood Elevation (BFE); With BFE or Depth; Regulatory Floodway

Cross Sections with 1% Annual Chance; Water Surface Elevation; Coastal Transect; Base Flood Elevation Line (BFE)

NOTES TO USERS

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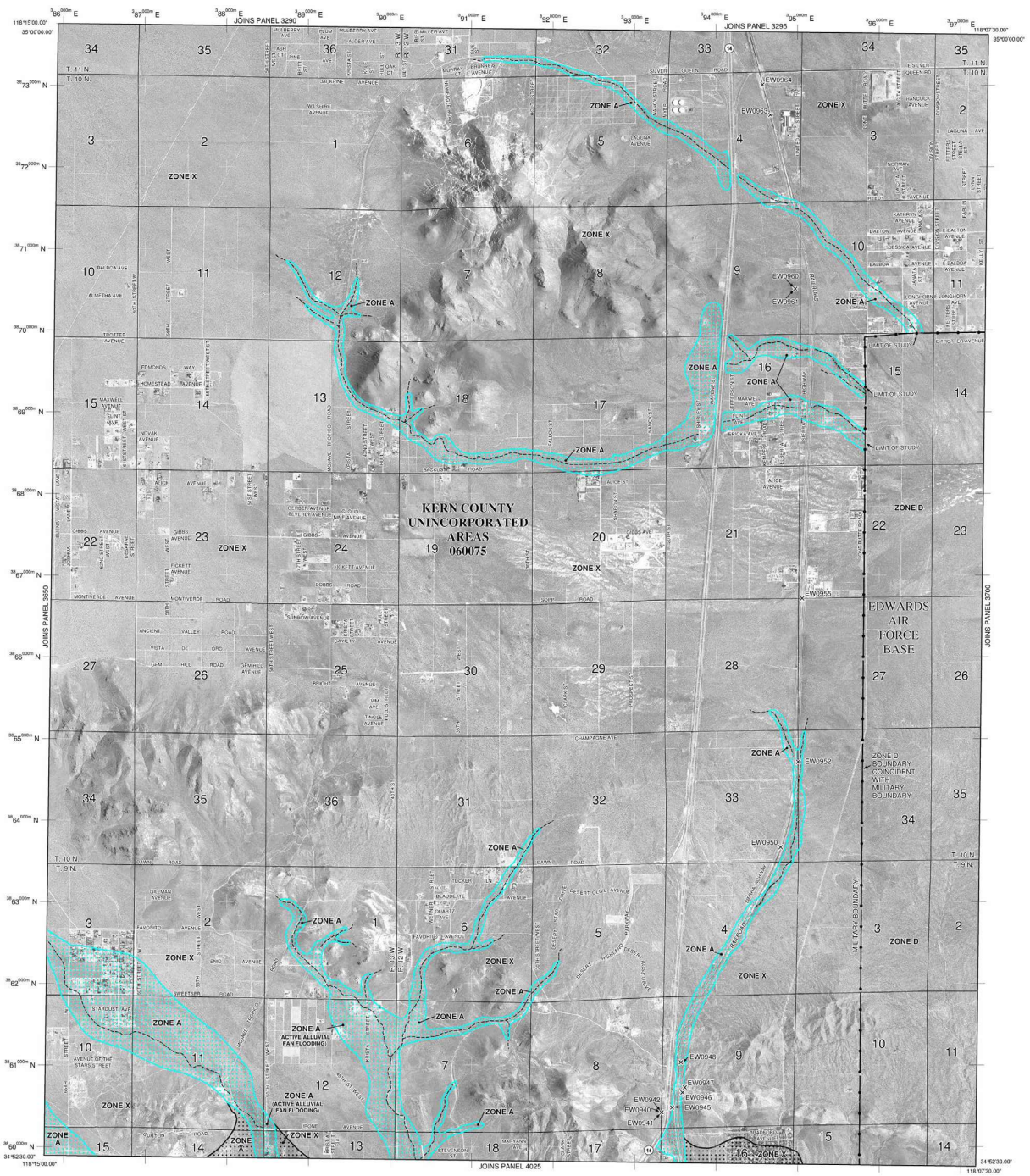

LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

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ZONE A No Base Flood Elevations determined.

ZONE AE Base Flood Elevations determined.

ZONE AH Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.

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ZONE A99 Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.

ZONE V Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.

ZONE VE Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X Areas determined to be outside the 0.2% annual chance floodplain.

ZONE D Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

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- 0.2% annual chance floodplain boundary
- Floodway boundary
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- Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
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- DX5510 — Bench mark (see explanation in Notes to Users section of this FIRM panel)
- M1.5 — River Mile

MAP REPOSITORIES
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
September 26, 2008
EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

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To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 2000'
1000 0 2000 4000 FEET
600 0 600 1200 METERS

NFIP
NATIONAL FLOOD INSURANCE PROGRAM

PANEL 3675E

FIRM
FLOOD INSURANCE RATE MAP
KERN COUNTY, CALIFORNIA
AND INCORPORATED AREAS

PANEL 3675 OF 4125
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
KERN COUNTY	060075	3675	E

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
06029C3675E
EFFECTIVE DATE
SEPTEMBER 26, 2008

Federal Emergency Management Agency

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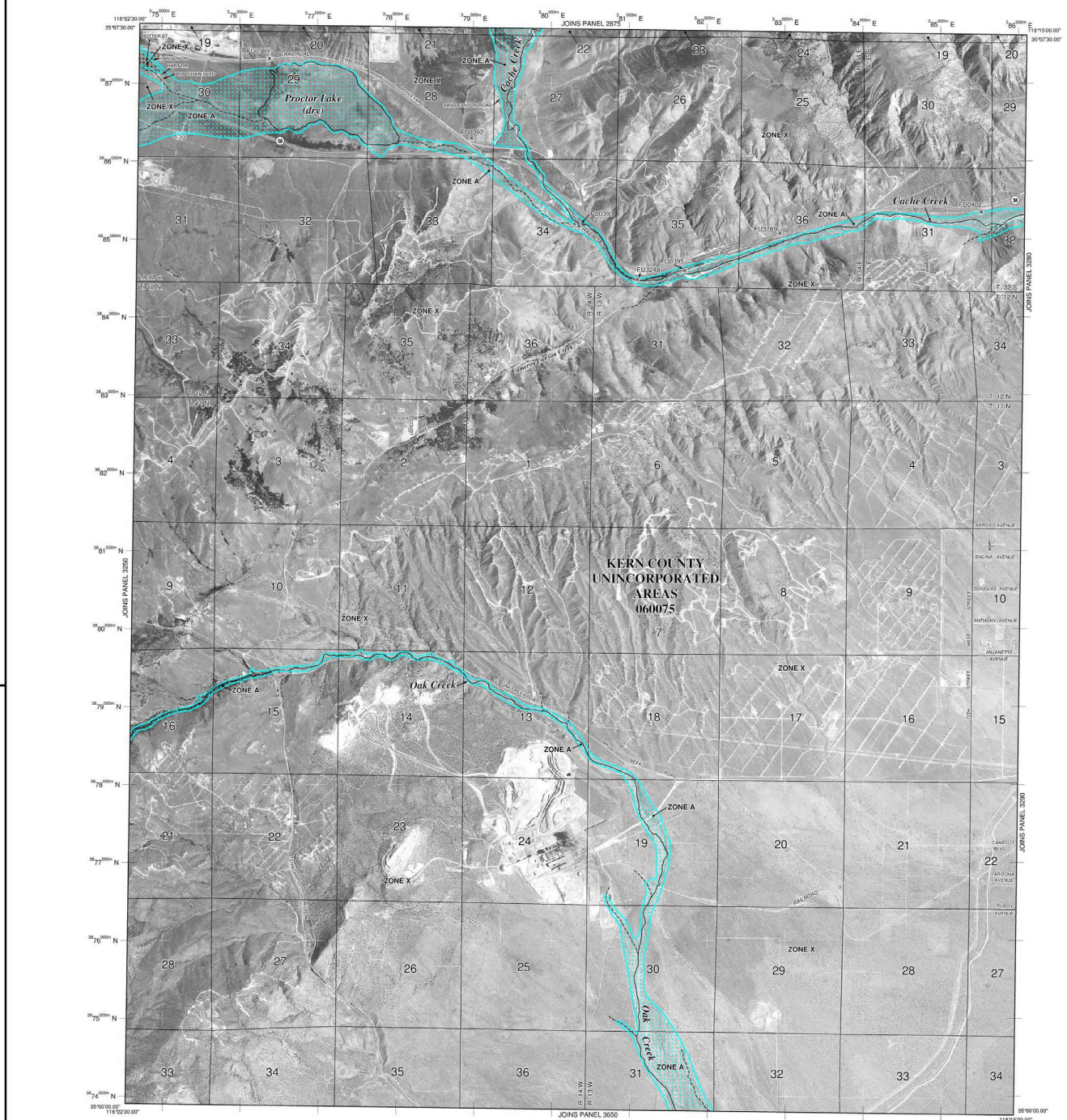

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NFIP
NATIONAL FLOOD INSURANCE PROGRAM

PANEL 3275E

FIRM
FLOOD INSURANCE RATE MAP
KERN COUNTY, CALIFORNIA
AND INCORPORATED AREAS

PANEL 3275 OF 4125
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
KERN COUNTY	060075	3275	E

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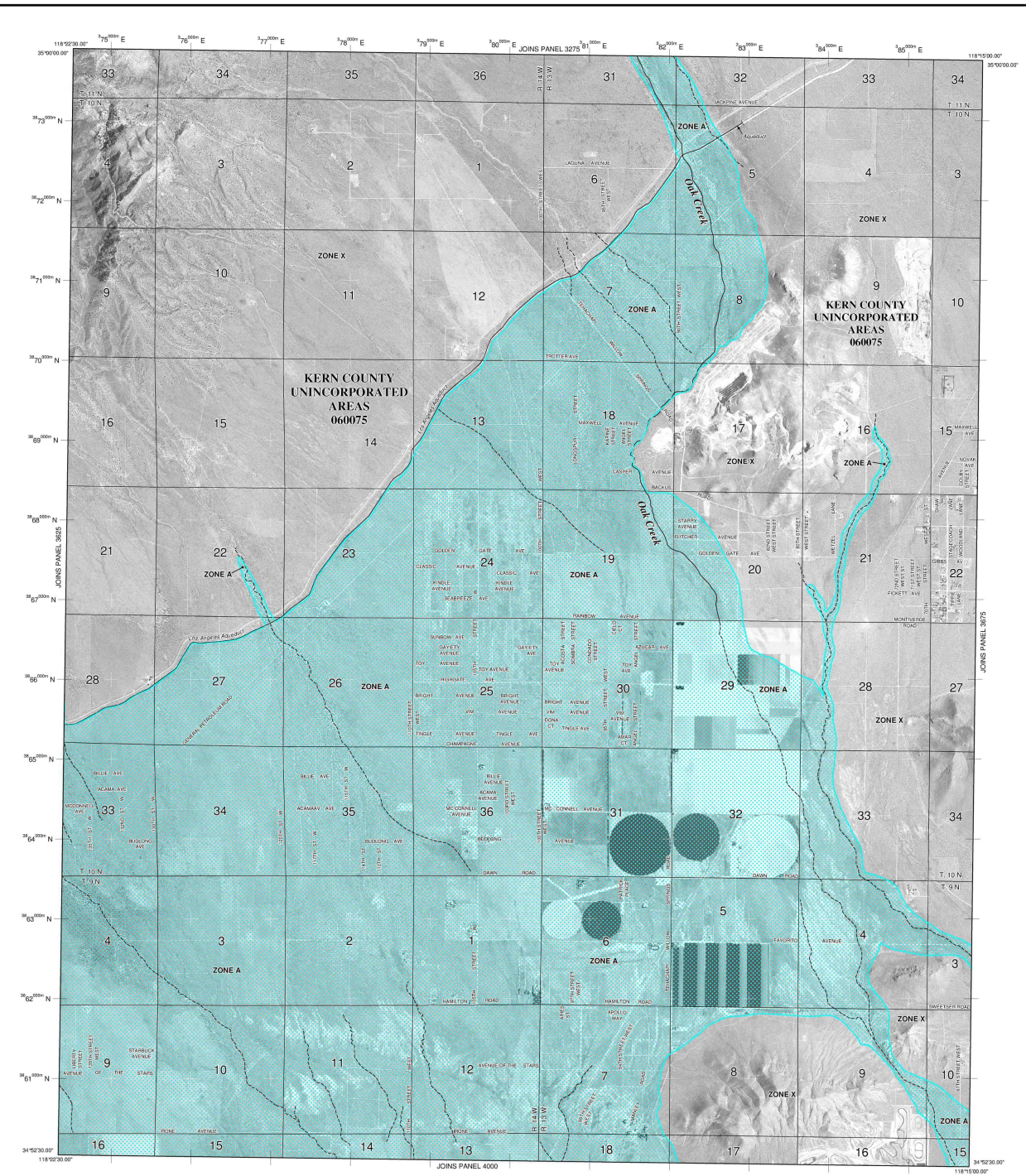

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ZONE AR Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.

ZONE A99 Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.

ZONE V Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.

ZONE VE Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X Areas determined to be outside the 0.2% annual chance floodplain.

ZONE D Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- 1% annual chance floodplain boundary
- 0.2% annual chance floodplain boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
- 513 — Base Flood Elevation line and value; elevation in feet*
- (EL 987) — Base Flood Elevation value where uniform within zone; elevation in feet*

* Referenced to the North American Vertical Datum of 1988 (NAVD 88)

- A — A — Cross section line
- 23 — 23 — Transect line
- 97°07'30", 32°22'30" — Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
- 4275000mN — 1000-meter Universal Transverse Mercator grid ticks, zone 11
- 6000000 M — 5000-foot grid ticks: California State Plane coordinate system, V zone (FIPSZONE 0405), Lambert Conformal Conic
- DX5510 — Bench mark (see explanation in Notes to Users section of this FIRM panel)
- M1.5 — River Mile

MAP REPOSITORIES
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
September 26, 2008
EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 2000'
1000 0 2000 4000 FEET
300 0 600 1200 METERS

NFIP

PANEL 3650E

NATIONAL FLOOD INSURANCE PROGRAM

FIRM

FLOOD INSURANCE RATE MAP

KERN COUNTY, CALIFORNIA AND INCORPORATED AREAS

PANEL 3650 OF 4125
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

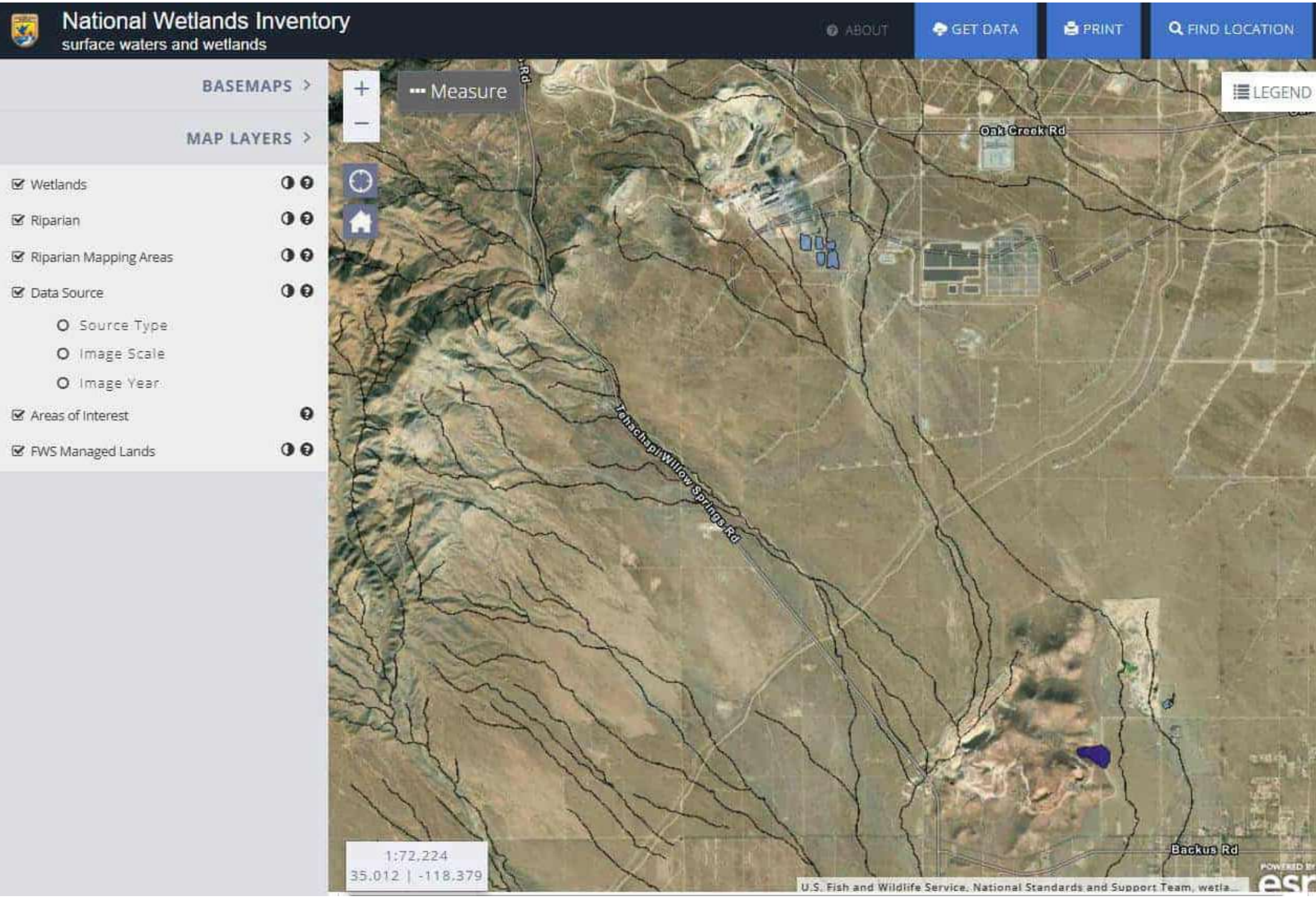
COMMUNITY	NUMBER	PANEL	SUFFIX
KERN COUNTY	060075	3650	E

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
06029C3650E

EFFECTIVE DATE
SEPTEMBER 26, 2008

Federal Emergency Management Agency


National Wetlands Inventory
surface waters and wetlands
ABOUT
GET DATA
PRINT
FIND LOCATION
BASEMAPS
MAP LAYERS
Wetlands
Riparian
Riparian Mapping Areas
Data Source
Source Type
Image Scale
Image Year
Areas of Interest
FWS Managed Lands
Measure
LEGEND
Oak Creek Rd
Tehachapi Willow Springs Rd
Backus Rd
1:72,224
35.012 | -118.379
U.S. Fish and Wildlife Service, National Standards and Support Team, wetla...

WATER QUALITY IN MOJAVE

Consumer Confidence Report

by
Mojave Public Utility District

July 1, 2024

Consumer Confidence Report for Calendar Year 2023

MOJAVE PUBLIC UTILITY DISTRICT

"We're very pleased to provide you with this year's Annual Water Quality Report. We want to keep you informed about the excellent water and service we have delivered to you over the past year. Our goal is and always has been, to provide to you a safe and dependable supply of water. We have six wells. Wells 21 & 22 are located in the Chaffee Subunit, and wells 6, 7, 8 and 9 are in the Cameron Flat area. We also purchase water from Antelope Valley-East Kern Water Agency which is treated surface water from the State Water Project, California Aqueduct. We are pleased to report that our drinking water is safe and meets all Federal and State requirements.

This report shows our water quality and what it means. If you have any questions about this report or concerning your water utility, please contact Damian Rickman, Mojave Public Utility District General Manager or Daryl Frye Chief Operator at (661) 824-4161. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the second and fourth Thursday of each month, at 5:00 PM. Meetings are held at the District office, located at 15844 K Street, Mojave, California.

Mojave Public Utility District routinely monitors for contaminants in your drinking water according to Federal and State regulations. This table shows the results of our monitoring for the period of January 1st to December 31st, 2023. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily pose a health risk.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- *Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.*
- *Inorganic contaminants, such as salts and metals, that can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.*
- *Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.*
- *Organic chemical contaminants, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.*
- *Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.*

In order to ensure that tap water is safe to drink, USEPA and the State Water Resources Control Board Division of Drinking Water prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

The following are definitions of some of the terms used in this report:

Maximum Contaminant Level (MCL): *The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.*

Primary Drinking Water Standards (PDWS): *MCLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.*

Secondary Drinking Water Standards (SDWS): *MCLs for contaminants that affect the taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect health at the MCL levels.*

Public Health Goal (PHG): *The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.*

Maximum Contaminant Level Goal (MCLG): *The level of contaminant in drinking waler below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency (USEPA).*

Regulatory Action Level (AL): *The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.*

ND: *Not detectable at testing limit.* ***ppm****: Parts per million or milligrams per liter (mg/L).* ***ppb****: parts per billion or micrograms per liter (ug/L).* ***ppt****: parts per trillion or nanograms per liter (ng/L).* ***pCi/L****: Picocuries per liter (a measure of radiation)* **<** *Less than* **>** *Greater than*

This first table lists all constituents detected in our drinking water with MCLGs, and/or PHGs established by the EPA. The results are reported in the required "CCRUnits" according to the EPA regulation for Consumer Confidence Reports. At the conclusion of this table, another table entitled "Annual Water Quality Report" includes all regulated and unregulated constituents analyzed for and the results. Finally, copies of the actual analytical reports are also presented for your records.

Upon receipt of notification from a person operating a public water system, the following notification must be given within 10-days [Health and Safety Code Section 116450(g)].:

- **SCHOOLS: Must notify school employees, students, and parents (if the students are minors).**
- **RESIDENTIAL RENTAL PROPERTY OWNERS OR MANAGERS (including nursing homes and care facilities): Must notify tenants.**
- **BUSINESS PROPERTY OWNERS, MANAGERS, OR OPERATORS: Must notify employees of businesses located on the property.**

This notice is being sent to you by Mojave Public Utility District.

State Water System ID#: 1510014. Date distributed: July 1. 2024.

****** Arsenic **-** District Wells No. 7, 8, & 9 in the Cameron Flat well field contained a running annual average concentration of 12.9, 10.7, and 8.6 ug/L, respectively, in the last quarter of 2023. The maximum contaminant level (MCL) for arsenic is 10 ug/L.

The Arsenic Treatment Plant at Well No. 9 is in service to remove arsenic from well water (Wells No. 7, 8, and 9) to below the MCL and meet the arsenic drinking water standard before delivery to customers.

TEST RESULTS

Contaminant	Violation YIN	Level Detected	Range	Unit	MCL	PHG	MCLG	Likely Source of Contamination
Microbiological Contaminants								
Turbidity	N	1.1	<0.1-1.1	NT Units	5TT	N/A	N/A	Soil Runoff
Radioactive Contaminants								
Gross Alpha	N	8.06	7.05-8.06	pCilL	15	N/A	N/A	Erosion of natural deposits
Inorganic Contaminants								
Aluminum	N	<0.05	0.0-0.05	mg/L	1	N/A	N/A	Erosion of natural deposits, residue from some surface water treatment process
Antimony	N	<6	<6	ug/L	6	20	N/A	Discharge from petroleum refineries; fire retardants, ceramics, electronics; solder
**Arsenic	N	12.9	<2-12.9	ug/L	10	N/A	N/A	Erosion of natural deposits; runoff from orchards, glass wastes
Barium	N	<100	<100	ug/L	1000	N/A	2	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Beryllium	N	<1	<1	ug/L	4	N/A	4	Discharge from metal refineries, coal-burning factories. and electrical, aerospace, and defense industries.
Cadmium	N	<1	<1	ug/L	5	.07	N/A	Internal Corrosion of galvanized pipes; erosion of natural deposits; discharge from electroplating and industrial chemical factories & metal refineries; runoff from waste batteries and paints.
Total Chromium	N	16	<10-16	ug/L	50	2.5	N/A	Discharge from steel and pulp mills and chrome plating, erosion of natural deposits
Cyanide	N	<20	<20	ug/L	200	150	N/A	Discharge from steel/metal plastic and fertilizer factories
Fluoride	N	0.89	0.21-0.89	mg/L	2	1	N/A	Erosion of natural deposits; water additive which promotes strong teeth, discharge from fertilizer, and aluminum factories.
Mercury (Inorganic)	N	<0.2	<0.2	ug/L	2	1.2	N/A	Erosion of natural deposits discharge from refineries & factories, runoff from landfills, runoff from cropland
Nickel	N	<10	<10	ug/L	100	N/A	100	Erosion of natural deposits; discharge from metal factories
Nitrate (As N)	N	3	3	mg/L	10	10	N/A	Runoff from leaching from fertilizer use; leaching from septic tanks, sewage erosion of natural deposits
Nitrite (As N)	N	<50	<50	ug/L	1000	1000	N/A	Runoff from leaching from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	N	<5	<5	ug/L	50	N/A	50	Discharge from petroleum glass and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturer; runoff from livestock lots (feed additive)
Synthetic Organic Contaminants including Pesticides and Herbicides								
Atrazine	N	<0.5	<0.5	ug/L	1	0.15	N/A	Herbacide; runoff from cropland
Simazine	N	<1	<1	ug/L	4	4	N/A	Herbacide; runoff from cropland
Thallium	N	<1	<1	ug/L	2	0.1	N/A	Leaching from ore-processing sites; discharge from electronics. glass and drug factories
Volatile Organic Contaminants								
TTHM Total Trihalomethanes	N	13.6	12.5-13.6	ug/L	80	N/A	N/A	By-product of drinking water chlorination
HAA5 Total Haloacetic Acids	N	6	6	ug/L	60	N/A	N/A	By-product of drinking water chlorination

Lead and Copper	No. of Samples Collected	90th percentile level detected	No. Sites exceeding AL	AL	MCL	
Lead (mg/L)	25	0.0018	0	0.015	2	Internal Corrosion ·Of household waler plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (mg/L)	25	0.19	0	1.3	1	Internal Corrosion of household water plumbing systems; erosion of natural deposits.

ANNUAL WATER QUALITY REPORT - MOJAVE PUBLIC UTILITY DISTRICT

Primary Standards - Mandatory Health-Related Standards Established by the State of California, Department of Health Services

PARAMETER	UNITS	MAXIMUM CONTAMINANT LEVEL	MOJAVE P.U.D. WELLS AVG.
INORGANIC CHEMICALS			
Aluminum	ug/L	1000	<50
Antimony	ug/L	6	<6
Arsenic	ug/L	10	6.9
Asbestos	MFL	7	ND
Barium	ug/L	1000	17
Beryllium	ug/L	4	< 1.0
Total Chromium	ug/L	50	< 10
Cadmium	ug/L	5	<1
Cyanide	ug/L	200	< 20
Fluoride	mg/L	2	0.47
Lead	mg/L	2	<1
Mercury	ug/L	2	<0.2
Nickel	ug/L	100	<10
Nitrate (As No3)	mg/L	10	2.32
Nitrite(As N)	ug/L	1000	<50
Selenium	ug/L	50	<5
Silver	ug/L	100	<10
Thallium	ug/L	2	<1
RADIOACTIVITY			
Gross Alpha Activity	pCi/L	15	7.65
Gross Beta Activity	pCi/L	50	NR
Radium 226 & 228 Combined	pCi/L		NR
Strontium-90	pCi/L	8	NR
Tritium	pCi/L	20,000	NR
Uranium	pCi/L	20	8.1
Color	Units	15	<3
Odor-Threshold @ 60 C	Units	3	ND
Chloride	mg/L	500	40.33
Copper	ug/L	1000	<50
MBAS	mg/L	0.5	<0.2
Iron	ug/L	300	<50
Manganese	ug/L	50	<20
Sulfate	mg/L	500	198
Zinc	ug/L	5000	<50
Total Dissolved Solids	mg/L	1000	617
Additional Constituents Analyzed			
pH		No Standard	7.82
Hardness ($CaCO_3$)	mg/L	No Standard	292
Sodium	mg/L	No Standard	106
Calcium	mg/L	No Standard	75
Potassium	mg/L	No Standard	3.2
Magnesium	mg/L	No Standard	25
MTBE	ug/L	13	<0.5
Chromium, Hexavalent	ug/L	No Standard	3.4
Boron	ug/L		0.34
Vanadium	mg/L		3.52
Perchlorate	ug/L	6	<4.0
1,2,3-Trichloropropane	ug/L	.005	ND

There is currently no MCL for hexavalent chromium. The previous MCL of 0.010 mg/L was withdrawn on September 11, 2017.

The Antelope Valley-East Kern Water Agency provides treated surface water and treated groundwater as our sources of drinking water.
Treatment technique: Conventional
EPA Turbidity Performance Standards: Turbidity of the filtered water must:

1. Be less than or equal to 0.30 NTU in 95% of measurements in a month.
2. Not exceed 1 NTU at any time.

Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1: **100%**
Highest single turbidity measurement during the year: **0.17 NTU**
Percentage of samples <0.30 NTU: **100%**
The number of violations of any surface water treatment requirements: **NONE**
Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

The Antelope Valley-East Kern Water Agency also provides chlorinated groundwater as an alternative source of drinking water.
Treatment technique: Chlorination
EPA Groundwater Rule: AVEK meets the requirements of the Groundwater Rule by providing a minimum of 4-log reduction of viruses by continuously providing a minimum free chlorine residual of 0.5 mg/L leaving the clearwell.
Lowest single free chlorine residual measurement during the year: **0.78**
Number of violations of the Groundwater Rule: **NONE**

MICROBIOLOGICAL CONTAMINANTS

Type of Samples	Parameter	Sampling Frequency	MCL	No. of Months in Violation	System Results	
					Range	Average
Distribution	Total Coliform Bacteria	52 - 70 / mo	5% positive	None	0%	0%
Distribution	E. coli	52 - 70 / mo	1 pos. with 2 TC pos	None	0%	0%

INORGANIC CONTAMINANTS

RESULTS

					Rosamond Plant				Water Bank			
					Plant Effluent (CWR)		Raw Influent (Sources)		Effluent (CWR)		Wells	
Parameter	Units	MCL	DLR	PHG	Range	Average	Range	Average	Range	Average	Range	Average
Aluminum	ug/L	1000	50	600	ND-74	32	ND	ND				
Antimony	ug/L	6	6	1		ND	ND	ND				
Arsenic	ug/L	10	2	0.004	1.7-8.2	5.0	2.1-10	5.0	3.7-7.6	5.7	2.4-17	4.6
Barium	ug/L	1000	100	2000		ND	ND	ND				
Beryllium	ug/L	4	1	1		ND	ND	ND				
Cadmium	ug/L	5	1	0.04		ND	ND	ND				
Chromium (Total)	ug/L	50	10			ND	ND-16	7.5				
Chromium (Hexavalent)	ug/L	*	1	0.02	ND-4.7	2.4		ND				
Cyanide	ug/L	150	100	150		ND	ND	ND				
Fluoride	mg/L	2	0.1	1		ND	ND-0.39	0.21				
Mercury	ug/L	2	1	1.2		ND	ND	ND				
Nickel	ug/L	100	10	12		ND	ND	ND				
Nitrate (as N)	mg/L	10	0.4	10		0.59	ND-2.1	1.2			2.6-2.9	2.8
Nitrite (as N)	mg/L	1	0.4	1		ND	ND	ND			ND	ND
Nitrate+Nitrite (as N)	mg/L	10		10		0.59	ND-2.1	1.2			1.5-3.4	2.2
Perchlorate	ug/L	6	2	1		ND	ND	ND			ND	ND
Selenium	ug/L	50	5	30		ND	ND	ND				
Thallium	ug/L	2	1	0.1		ND	ND	ND				

There is currently no MCL for hexavalent chromium. The previous MCL of 0.010 mg/L was withdrawn on September 11, 2017.

GENERAL PHYSICAL AND SECONDARY STANDARDS

RESULTS

				Rosamond Plant				Water Bank			
				Plant Effluent (CWR)		Raw Influent (Sources)		Effluent (CWR)		Wells	
Parameter	Units	MCL	DLR	Range	Aver-age	Range	Aver-age	Range	Average	Range	Average
Aluminum	ug/L	1000	50	ND-74	32	ND	ND				
Calcium	mg/L	no standard			31	15-44	26				
Chloride	mg/L	250			46	36-68	47				
Color	Units	15		<5	<5	<5-15	5			<5	>5
Copper	ug/L	1000	50		ND	ND	ND				
Foaming Agents (MBAS)	mg/L	0.5			ND	ND	ND				
Hardness (Total) as CaCO3	mg/L	no standard			110	64-160	110				
Iron	ug/L	300	100		ND	ND	ND				
Magnesium	mg/L	no standard			8.0	3.7-12	7.8				
Manganese	ug/L	50	20		ND	ND	ND				
Odor @60 C	Units	3	1	<1	<1	<1-1	1			<1	<1
pH	Units	no standard		6.5-8.1	7.3	7.4-9.4	8.2			7.7	7.7
Silver	ug/L	100	10		ND	ND	ND				
Sodium	mg/L	no standard			34	26-50	40				
Specific Conductance	umhos	900		390-460	420	280-580	390			460	460
Sulfate	mg/L	250	0.5		42	16-75	44				
Thiobencarb (Bolero)	ug/L	1	1		ND	ND	ND				
Methyl tert-Butyl Ether (MTBE)	ug/L	5	RAR		ND	ND	ND				
Total Dissolved Solids	mg/L	500			210	150-360	250				
Turbidity	Units	5		0.01-0.17	0.06	0.02-11.7	2.40			0.15-0.25	0.20
Zinc	ug/L	5000	50		360	ND	ND				
Total Alkalinity (as CaCO3)	mg/L	no standard			72	65	65-99				
Bicarbonate Alkalinity (as HCO3)	mg/L	no standard			72		65				
Carbonate (as CO3)	mg/L	no standard			ND		ND				
Hydroxide (as OH)	mg/L	no standard			ND		ND				

RADIOLOGICAL CONTAMINANTS

RESULTS

					Rosamond Plant Raw Influent (Sources)		Water Bank Wells	
Parameter	**Units**	**MCL**	**DLR**	**PHG**	**Range**	**Average**	**Range**	**Average**
Gross Alpha	pCi/L	15	3			ND		
Gross Beta	pCi/L	50	4			ND		
Strontium 90	pCiL	8	2	0.35				
Tritium	pCi/L	20,000	1,000	400				
Uranium	pCi/L	20	1	0.43				
Radium 228	pCi/L		1	0.019				
Radium 226	pCi/L		1	0.05				

VOLATILE ORGANIC CONTAMINANTS

RESULTS

Parameter	Units	MCL	DLR	PHG	Rosamond Plant Raw Influent (Sources) Range	Rosamond Plant Raw Influent (Sources) Average	Water Bank Wells Range	Water Bank Wells Average
1,1,1-Trichlorethane (1,1,1-TCA)	ug/L	200	0.5	1000	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ug/L	1	0.5	0.1	ND	ND	ND	ND
1,1,2-Trichlorethane (1,1,2-TCA)	ug/L	5	0.5	0.3	ND	ND	ND	ND
1,1-Dichloroethane (1,1-DCA)	ug/L	5	0.5	3	ND	ND	ND	ND
1,1-Dichloroethylene (1,1-DCE)	ug/L	6	0.5	10	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ug/L	5	0.5	5	ND	ND	ND	ND
1,2-Dichlorobenzene (o-DCB)	ug/L	600	0.5	600	ND	ND	ND	ND
1,2-Dichloroethane (1,2-DCA)	ug/L	0.5	0.5	0.4	ND	ND	ND	ND
1,2-Dichloropropane	ug/L	5	0.5	0.5	ND	ND	ND	ND
1,3-Dichloropropene (Total)	ug/L	0.5	0.5	0.2	ND	ND	ND	ND
1,4-Dichlorobenzene (p-DCB)	ug/L	5	0.5	6	ND	ND	ND	ND
Benzene	ug/L	1	0.5	0.15	ND	ND	ND	ND
Carbon tetrachloride	ug/L	0.5	0.5	0.1	ND	ND	ND	ND
cis-1,2-Dichloroethylene (c-1,2-DCE)	ug/L	6	0.5	100	ND	ND	ND	ND
cis-1,3-Dichloropropene	ug/L				ND	ND	ND	ND
Dichloromethane (Methylene Chloride)	ug/L	5	0.5	4	ND	ND	ND	ND
Ethylbenzene	ug/L	300	0.5	300	ND	ND	ND	ND
Methyl-tert-butyl-ether (MTBE)	ug/L	13	3	13	ND	ND	ND	ND
Monochlorobenzene (Chlorobenzene)	ug/L	70	0.5	70	ND	ND	ND	ND
Styrene	ug/L	100	0.5	0.5	ND	ND	ND	ND
Tetrachloroethylene (PCE)	ug/L	5	0.5	0.06	ND	ND	ND	ND
Toluene	ug/L	150	0.5	150	ND	ND	ND	ND
trans-1,2-Dichloroethylene (t-1,2-DCE)	ug/L	10	0.5	60	ND	ND	ND	ND
trans-1.3-Dichloropropene	ug/L				ND	ND	ND	ND
Trichloroethylene (TCE)	ug/L	5	0.5	1.7	ND	ND	ND	ND
Trichlorotrifluromethane (Freon 11)	ug/L	150	5	1300	ND	ND	ND	ND
Trichlorotrifluorethane (Freon 113)	ug/L	1200	10	4000	ND	ND	ND	ND
Vinyl Chloride (VC)	ug/L	0.5	0.5	0.05	ND	ND	ND	ND
Xylenes (Total)	ug/L	1750	0.5	1800	ND	ND	ND	ND

SYNTHETIC ORGANIC CONTAMINANTS

RESULTS

Parameter	Units	MCL	DLR (D[1])	PHG	Rosamond Plant Raw Influent (Sources) Range	Rosamond Plant Raw Influent (Sources) Average	Water Bank Wells Range	Water Bank Wells Average
Alachor	ug/L	2	1	4			ND	ND
Atrazine	ug/L	1	0.5	0.15			ND	ND
Bentazon	ug/L	18	2	200			ND	ND
Benzo(a)pyrene	ug/L	0.2	0.1	0.007			ND	ND
Carbofuran	ug/L	18	5	0.7			ND	ND
Chlordane	ug/L	0.1	0.1	0.03			ND	ND
2,4-D	ug/L	70	10	20			ND	ND
Dalapon	ug/L	200	10	790			ND	ND
Dibromochloropropane (DBCP)	ug/L	0.2	0.01	0.0017			ND	ND
Di(2-ethylhexyl)adipate	ug/L	400	5	200			ND	ND
Di(2-ethylhexyl)phthalate	ug/L	4	3	12			ND	ND
Dinoseb	ug/L	7	2	14			ND	ND
Diquat	ug/L	20	4	6			ND	ND
Endothall	ug/L	100	45	94			ND	ND
Endrin	ug/L	2	0.1	0.3			ND	ND
Ethylene Dibromide (EDB)	ug/L	0.05	0.02	0.01			ND	ND
Glyphosate	ug/L	700	25	900			ND	ND
Heptachlor	ug/L	0.01	0.01	0.008			ND	ND
Heptachlor Epoxide	ug/L	0.01	0.01	0.006			ND	ND
Hexachlorobenzene	ug/L	1	0.5	0.03			ND	ND
Hexachlorocyclopentadiene	ug/L	50	1	2			ND	ND
Lindane	ug/L	0.2	0.2	0.032			ND	ND
Methoxychlor	ug/L	30	10	0.09			ND	ND
Molinate	ug/L	20	2	1			ND	ND
Oxamyl	ug/L	50	20	26			ND	ND
Pentachlorophenol	ug/L	1	0.2	0.3			ND	ND
Picloram	ug/L	500	1	166			ND	ND
Polychlorinated Biphenyls	ug/L	0.5	0.5	0.09			ND	ND
Simazine	ug/L	4	1	4			ND	ND
Thiobencarb (Bolero)	ug/L	70	1	42			ND	ND
Toxaphene	ug/L	3	1	0.03			ND	ND
2,3,7,8-TCDD (Dioxin)	ug/L	30	5	0.05			ND	ND
2,4,5-TP (Silvex)	ug/L	50	1	3			ND	ND
1,2,3-Trichloropropane	ug/L	0.005	0.005	0.0007			ND	ND

DISINFECTION RESIDUAL, PRECURSORS, and BYPRODUCTS

Type of Samples	Parameter	Units	MCL/MRDL	DLR	MRDLG	RESULTS Range	RESULTS Average
Distribution	Chlorine (as total Cl2)	mg/L	4.0**		4	0.01-1.52	1.01
Treated Water	Total Organic Carbon (TOC)	mg/L	Treatment Required	0.3		0.7-4.2	2.0
Source Water	Total Organic Carbon (TOC)	mg/L	Treatment Required	0.3		0.8-4.7	2.9
Distribution	Stage 2 D/DBP Rule Total Trihalomethanes	ug/L	80**			14-99	46#
Distribution	Stage 2 D/DBP Rule Total Haloacetic Acids	ug/L	60**			ND-30	11#
Treated Water	Bromate	ug/L	10*	1.0		ND-4.2	0.4

** Running annual Average of distribution system samples. The MCLs are based upon Running Annual Averages.
Stage 2 D/DBP Rule Total THMs and Total HAAs compliance is based upon Locational Running Annual Averages.
Location with the highest TTHM average

* Compliance is based on the running annual average computed quarterly, of monthly samples, collected at the entrance to the distribution system.

DEFINITIONS AND FOOTNOTES

Plant Effluent, CWR, is finished, treated drinking water.
Raw Water is the source Water, the California Aqueduct or wells, prior to treatment.

Units: *mg*/ = milligrams per liter, parts per million (ppm)
ug/L = micrograms per liter, parts per billion (ppb)
pg/L = picograms per liter, parts per quadrillion (ppq)
umhos = micromhos, a measure of specific conductance
MFL = million fibers per liter
pCi/L = pico curies per liter
< = less than
> = greater than
ND = none detected above the DLR
NTU = nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

MCL: Maximum Contaminant Level. The highest level of a contaminant that is allowed in drinking water. MCLs are set by the US Environmental Protection Agency or the State Water Resources Control Board as close to the PHGs and MCLGs as is economically or technologically feasible.

MRDL: Maximum Residual Disinfectant Level. The level of a disinfectant added for water treatment that may not be exceed at the consumer's tap.

DLR: Detection Limit for purposes of Reporting.

(DL): Detection limit determined by the laboratory when no DLR has been established.

MCLG: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency.

MRDLG: Maximum Residual disinfectant Level Goal. The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLG are set by the US Environmental Protection Agency.

PHG: Public Health Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Office of Environmental Health Hazard Assessment.

Primary Drinking Water Standard: Primary MCLs, specific treatment techniques adopted in lieu of primary MCLs, and monitoring and reporting requirements for MCLs that are specified in regulations.

Secondary Standards: Aesthetic standards established by the State Water Resources Control Board.

All analyses performed by ELAP certified laboratories: AVEK Water Agency, Eurofins Eaton Analytical Laboratories, or Eurofins subcontract lab.

As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned throughout monitoring and testing that some contaminants have been detected. The EPA has determined that your water IS SAFE at these levels.

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Hotline (800)-426-4791.

To ensure that the high-quality water we deliver is not compromised in the distribution system, Mojave Public Utility District has a robust cross-connection control program in place. Cross-connection control is critical to ensuring that activities on customers' properties do not affect the public water supply. Our cross-connection control specialists ensure that all of the existing backflow prevention assemblies are tested annually, assess all non-residential connections, and enforce and manage the installation of new commercial and residential assemblies.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/Aids or other immune system disorders, some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA / CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the EPAs Safe Drinking Water Hotline (800) 426-4791.

We at Mojave Public Utility District work around the clock to provide top quality water to every tap. We ask that all our customers help us protect and conserve our water resources, which are the heart of our community, our way of life, and our children's future.

New permit requirements passed in 2017 for public water systems require lead testing of drinking water in California schools. Mojave Elementary, Mojave Junior/Senior High, and East Kern Community, were sampled during 2018 in order to proactively meet permit requirements for public water systems. Up to eight samples were collected at each school with no exceedances. No schools submitted requests to be sampled for lead in 2023.

For more information visit:

https://www.waterboards.ca.gov/drinking_water/cerlic/drinkingwater/leadsamplinginschools.html

or contact:

Mojave Public Utility District
15844 K Street
Mojave, CA
(661) 824-4161
https://mojavepud.specialdistrict.org/

MOJAVE PUBLIC UTILITY DISTRICT
15844 “K” Street
Mojave CA 93501

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93501

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APPENDIX C: REGULATORY DATABASE REPORT

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DATABASE REPORT

Project Property:	*Discovery Project Area - Combined Phase I* *n/a* *MOJAVE CA*
Project No:	*25-507061.1*
Report Type:	*Database Report*
Order No:	*25071400346*
Requested by:	*Partner Engineering and Science, Inc.*
Date Completed:	*July 15, 2025*

Environmental Risk Information Services
A division of Glacier Media Inc.
1.866.517.5204 | info@erisinfo.com | erisinfo.com

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Notice: IMPORTANT LIMITATIONS and YOUR LIABILITY

Reliance on information in Report: This report DOES NOT replace a full Phase I Environmental Site Assessment but is solely intended to be used as database review of environmental records.

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Executive Summary

Property Information:

Project Property:		*Discovery Project Area - Combined Phase I* *n/a MOJAVE CA*
Project No:		*25-507061.1*
Coordinates:		
	Latitude:	*35.0524699*
	Longitude:	*-118.1739645*
	UTM Northing:	*3,872,001.01*
	UTM Easting:	*381,076.33*
	UTM Zone:	*UTM Zone 11S*
Elevation:		*3,194 FT*

Order Information:

Order No:	*25071400346*
Date Requested:	*July 14, 2025*
Requested by:	*Partner Engineering and Science, Inc.*
Report Type:	*Database Report*

Historicals/Products:

Aerial Photographs	*Historical Aerials (with Project Boundaries)*
City Directory Search	*Smart CD Search*
ERIS Xplorer	*ERIS Xplorer*
Excel Add-On	*Excel Add-On*
Fire Insurance Maps	*US Fire Insurance Maps*
Physical Setting Report (PSR)	*Physical Setting Report (PSR)*
Topographic Map	*Topographic Maps*
Vapor Screening Tool	*Vapor Screening Tool*

Executive Summary: Report Summary

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
Standard Environmental Records								
Federal								
NPL	Y	1	0	0	0	0	0	0
PROPOSED NPL	Y	1	0	0	0	0	0	0
DELETED NPL	Y	0.5	0	0	0	0	-	0
SEMS	Y	0.5	0	0	0	0	-	0
SEMS ARCHIVE	Y	0.5	0	**1**	0	0	-	**1**
ODI	Y	0.5	0	0	0	0	-	0
IODI	Y	0.5	0	0	0	0	-	0
CERCLIS	Y	0.5	0	**1**	0	0	-	**1**
CERCLIS NFRAP	Y	0.5	0	**1**	0	0	-	**1**
CERCLIS LIENS	Y	PO	0	-	-	-	-	0
RCRA CORRACTS	Y	1	0	0	0	0	0	0
RCRA TSD	Y	0.5	0	0	0	0	-	0
RCRA LQG	Y	0.25	0	0	0	-	-	0
RCRA SQG	Y	0.25	0	0	0	-	-	0
RCRA VSQG	Y	0.25	0	0	0	-	-	0
RCRA NON GEN	Y	0.25	0	**14**	**6**	-	-	**20**
RCRA CONTROLS	Y	0.5	0	0	0	0	-	0
FED ENG	Y	0.5	0	0	0	0	-	0
FED INST	Y	0.5	0	0	0	0	-	0
LUCIS	Y	0.5	0	0	0	0	-	0
NPL IC	Y	0.5	0	0	0	0	-	0
ERNS 1982 TO 1986	Y	PO	0	-	-	-	-	0
ERNS 1987 TO 1989	Y	PO	0	-	-	-	-	0
ERNS	Y	PO	**1**	-	-	-	-	**1**
FED BROWNFIELDS	Y	0.5	0	0	0	0	-	0
FEMA UST	Y	0.25	0	0	0	-	-	0
FRP	Y	0.25	0	0	0	-	-	0

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
DELISTED FRP	Y	0.25	0	0	0	-	-	0
HIST GAS STATIONS	Y	0.25	0	0	0	-	-	0
REFN	Y	0.25	0	0	0	-	-	0
BULK TERMINAL	Y	0.25	0	0	0	-	-	0
SEMS LIEN	Y	PO	0	-	-	-	-	0
SUPERFUND ROD	Y	1	0	0	0	0	0	0
State								
RESPONSE	Y	1	0	0	0	0	0	0
ENVIROSTOR	Y	1	0	0	0	0	**1**	**1**
DELISTED ENVS	Y	1	0	0	0	0	0	0
SWF/LF	Y	0.5	0	0	0	0	-	0
SWRCB SWF	Y	0.5	0	0	0	0	-	0
WMUD	Y	0.5	0	0	**2**	0	-	**2**
HWP	Y	1	0	0	0	0	0	0
SWAT	Y	0.5	0	0	0	0	-	0
C&D DEBRIS RECY	Y	0.5	0	0	0	0	-	0
RECYCLING	Y	0.5	0	0	0	0	-	0
PROCESSORS	Y	0.5	0	0	0	0	-	0
CONTAINER RECY	Y	0.5	0	0	0	0	-	0
LDS	Y	0.5	0	0	**2**	**1**	-	**3**
LUST	Y	0.5	0	0	0	0	-	0
DELISTED LST	Y	0.5	0	0	0	0	-	0
UST	Y	0.25	0	0	0	-	-	0
UST CLOSURE	Y	0.5	0	0	0	0	-	0
HHSS	Y	0.25	0	0	0	-	-	0
UST SWEEPS	Y	0.25	0	**1**	0	-	-	**1**
AST	Y	0.25	0	0	0	-	-	0
AST SWRCB	Y	0.25	0	0	0	-	-	0
TANK OIL GAS	Y	0.25	0	0	0	-	-	0
DELISTED TNK	Y	0.25	0	0	0	-	-	0
CERS TANK	Y	0.25	0	**5**	**1**	-	-	**6**
DELISTED CTNK	Y	0.25	0	**3**	0	-	-	**3**
HIST TANK	Y	0.25	0	0	0	-	-	0
LUR	Y	0.5	0	0	0	0	-	0

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
CALSITES	Y	0.5	0	0	0	0	-	0
HLUR	Y	0.5	0	0	0	0	-	0
DEED	Y	0.5	0	0	0	0	-	0
VCP	Y	0.5	0	0	0	0	-	0
CLEANUP SITES	Y	0.5	0	0	0	0	-	0
DELISTED CLEANUP	Y	0.5	0	0	0	0	-	0
DELISTED COUNTY	Y	0.25	0	0	**1**	-	-	**1**
DELISTED COUNTY TANK	Y	0.25	0	0	0	-	-	0
DELISTED COUNTY LTANK	Y	0.5	0	0	0	0	-	0
Tribal								
INDIAN LUST	Y	0.5	0	0	0	0	-	0
INDIAN UST	Y	0.25	0	0	0	-	-	0
DELISTED INDIAN LST	Y	0.5	0	0	0	0	-	0
DELISTED INDIAN UST	Y	0.25	0	0	0	-	-	0
County								
UST KERN	Y	0.25	0	**1**	0	-	-	**1**
AST KERN	Y	0.25	0	**3**	**2**	-	-	**5**
CUPA KERN	Y	0.25	0	**6**	**3**	-	-	**9**
CUPA BAKERSFIELD	Y	0.25	0	0	0	-	-	0
Additional Environmental Records								
Federal								
PFAS GHG	Y	0.5	0	0	0	0	-	0
OSC RESPONSE	Y	0.125	0	0	-	-	-	0
FINDS/FRS	Y	PO	**1**	**22**	-	-	-	**23**
TRIS	Y	PO	0	-	-	-	-	0
PFAS NPL	Y	0.5	0	0	0	0	-	0
PFAS FED SITES	Y	0.5	0	0	0	0	-	0
PFAS SSEHRI	Y	0.5	0	0	0	0	-	0
PFAS ERNS	Y	0.5	0	0	0	0	-	0
PFAS NPDES	Y	0.5	0	0	0	0	-	0
PFAS TRI	Y	0.5	0	0	0	0	-	0
PFAS WATER	Y	0.5	0	0	0	0	-	0
PFAS TSCA	Y	0.5	0	0	0	0	-	0
PFAS E-MANIFEST	Y	0.5	0	0	0	0	-	0

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
PFAS IND	Y	0.5	0	0	0	0	-	0
HMIRS	Y	0.125	0	0	-	-	-	0
NCDL	Y	0.125	0	0	-	-	-	0
TSCA	Y	0.125	0	0	-	-	-	0
HIST TSCA	Y	0.125	0	0	-	-	-	0
FTTS ADMIN	Y	PO	0	-	-	-	-	0
FTTS INSP	Y	PO	0	-	-	-	-	0
PRP	Y	PO	0	-	-	-	-	0
SCRD DRYCLEANER	Y	0.5	0	0	0	0	-	0
ICIS	Y	PO	0	-	-	-	-	0
FED DRYCLEANERS	Y	0.25	0	0	0	-	-	0
DELISTED FED DRY	Y	0.25	0	0	0	-	-	0
FUDS	Y	1	0	0	0	0	0	0
FUDS MRS	Y	1	0	0	0	0	0	0
FORMER NIKE	Y	1	0	0	0	0	0	0
PIPELINE INCIDENT	Y	PO	0	-	-	-	-	0
MLTS	Y	PO	0	-	-	-	-	0
HIST MLTS	Y	PO	0	-	-	-	-	0
MINES	Y	0.25	0	0	0	-	-	0
SMCRA	Y	1	0	0	0	0	0	0
MRDS	Y	1	0	**2**	**4**	**5**	**5**	**16**
LM SITES	Y	1	0	0	0	0	0	0
ALT FUELS	Y	0.25	0	0	0	-	-	0
CONSENT DECREES	Y	0.25	0	0	0	-	-	0
AFS	Y	PO	0	-	-	-	-	0
SSTS	Y	0.25	0	0	0	-	-	0
PCBT	Y	0.5	0	0	0	0	-	0
PCB	Y	0.5	0	0	0	0	-	0
POWER PLANTS	Y	0.125	0	**1**	-	-	-	**1**
HIST RISK	Y	0.125	0	0	-	-	-	0
State								
PFAS SAMPLING	Y	0.5	0	0	0	0	-	0
DRYCLEANERS	Y	0.25	0	0	0	-	-	0
DELISTED DRYCLEANERS	Y	0.25	0	0	0	-	-	0
DRYC GRANT	Y	0.25	0	0	0	-	-	0

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
PFAS GT CLEANUPS	Y	0.5	0	0	0	0	-	0
PFAS GW	Y	0.5	0	0	0	0	-	0
PFAS INVEST	Y	0.5	0	0	0	0	-	0
HWSS CLEANUP	Y	0.5	0	0	0	0	-	0
TOXIC PITS	Y	1	0	0	0	0	0	0
DTSC HWF	Y	0.5	0	0	0	0	-	0
INSP COMP ENF	Y	1	0	0	0	0	0	0
SCH	Y	1	0	0	0	0	0	0
CHMIRS	Y	PO	0	**1**	-	-	-	**1**
HIST CHMIRS	Y	PO	0	-	-	-	-	0
HAZNET	Y	PO	**1**	**3**	-	-	-	**4**
HAZ GEN	Y	PO	0	**7**	-	-	-	**7**
HAZ TSD	Y	0.5	0	0	0	0	-	0
HIST MANIFEST	Y	PO	0	-	-	-	-	0
HW TRANSPORT	Y	0.125	0	0	-	-	-	0
WASTE TIRE	Y	PO	0	-	-	-	-	0
MEDICAL WASTE	Y	0.25	0	0	0	-	-	0
HIST CORTESE	Y	0.5	0	0	0	0	-	0
CDO/CAO	Y	0.5	0	0	0	0	-	0
CERS HAZ	Y	0.125	0	**9**	-	-	-	**9**
DELISTED HAZ	Y	0.5	0	**1**	0	0	-	**1**
GEOTRACKER	Y	0.125	0	0	-	-	-	0
MINE	Y	1	0	**1**	**1**	**2**	**1**	**5**
LIEN	Y	PO	0	-	-	-	-	0
WASTE DISCHG	Y	0.25	0	0	0	-	-	0
EMISSIONS	Y	0.25	0	**6**	**3**	-	-	**9**
CDL	Y	0.125	0	0	-	-	-	0

Tribal ***No Tribal additional environmental record sources available for this State.***

County

Total:	***3***	***89***	***25***	***8***	***7***	***132***

**** PO – Property Only***
**** 'Property and adjoining properties' database search radii are set at 0.25 miles.***

Executive Summary: Site Report Summary - Project Property

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
1	ERNS		BLM ADMINISTERED LANDS MOJAVE CA ***NRC Report No:*** *861612*	SSE	0.00 / 0.00	-144	40
2	FINDS/FRS	REED MINE	CA ***Registry ID:*** *110066036649*	N	0.00 / 0.00	44	42
3	HAZNET	KR WIND INC	10100 TEHACHAPI WILLOWS SPRING RD MOJAVE CA 93501	S	0.00 / 0.00	-147	43

Executive Summary: Site Report Summary - Surrounding Properties

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
4	FINDS/FRS	LEVEL 3 COMMUNICATIONS - TEHACHAPI - MOJVCACX	11253 WILLOW SPRINGS RD TEHACHAPI CA 93561 ***Registry ID:*** 110057064448	W	0.01 / 50.72	80	43
4	CUPA KERN	CENTURYLINK - TEHACHAPI - MOJVCACX	11253 WILLOW SPRINGS RD TEHACHAPI CA	W	0.01 / 50.72	80	43
4	HAZNET	WILLIAMS COMMUNICATIONS	11253 TEHACHIPI WILLOW SPRINGS RD MOJAVE CA 93501	W	0.01 / 50.72	80	44
4	HAZNET	WILTEL COMMUNICATIONS LLC, MOJAVE, THCHCA1W	11253 TEHACHAPI WILLOW SPRINGS RD MOJAVE CA 93501	W	0.01 / 50.72	80	44
4	FINDS/FRS	LEVEL 3 COMMUNICATIONS	11253 TEHACHAPI-WILLOW SPRINGS ROAD TEHACHAPI CA 93561 ***Registry ID:*** 110070521267	W	0.01 / 50.72	80	44
4	EMISSIONS	LEVEL 3 COMMUNICATIONS	11253 TEHACHAPI-WILLOW SPRINGS ROAD TEHACHAPI CA 93561	W	0.01 / 50.72	80	45
5	FINDS/FRS	WINDSTAR ENERGY	12490 90TH STREET MOJAVE CA 93501 ***Registry ID:*** 110071763422	NNE	0.01 / 53.65	27	46
6	FINDS/FRS	ALTA WIND LLC (PHASE VII)	13505 90TH STREET MOJAVE CA 93501 ***Registry ID:*** 110070521216	NNW	0.01 / 60.00	147	46
6	FINDS/FRS	ALTA WIND LLC (PHASE VII)	13505 90TH STREET MOJAVE CA 93501 ***Registry ID:*** 110071763310	NNW	0.01 / 60.00	147	47
7	FINDS/FRS	WINDHUB SOLAR B, LLC	MOJAVE CA 93501 ***Registry ID:*** 110070397105	NE	0.01 / 62.48	2	48
7	FINDS/FRS	WINDHUB SOLAR B, LLC	CA ***Registry ID:*** 110070700497	NE	0.01 / 62.48	2	48

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
8	RCRA NON GEN	VOYAGER WIND II/III/IV 852	8009 OAK CREEK RD MOJAVE CA 93501	NNE	0.01 / 65.21	284	49
			Handler ID **|** ***Recycler Activity?:*** CAL000436961	NO			
8	FINDS/FRS	VOYAGER WIND II/III/IV 852	8009 OAK CREEK RD MOJAVE CA 93501	NNE	0.01 / 65.21	284	51
			Registry ID: 110070484930				
8	RCRA NON GEN	BLATTNER ENERGY INC.	8009 OAK CREEK ROAD MOJAVE CA 93501	NNE	0.01 / 65.21	284	52
			Handler ID **|** ***Recycler Activity?:*** CAC003062134	NO			
8	CERS HAZ	Tehachapi Energy Storage System I	8009 OAK CREEK RD MOJAVE CA 93501	NNE	0.01 / 65.21	284	54
8	FINDS/FRS	BLATTNER ENERGY INC.	8009 OAK CREEK ROAD MOJAVE CA 93501	NNE	0.01 / 65.21	284	55
			Registry ID: 110070803275				
8	RCRA NON GEN	MORTENSON CONSTRUCTION	8009 OAK CREEK RD MOJAVE CA 95301	NNE	0.01 / 65.21	284	56
			Handler ID **|** ***Recycler Activity?:*** CAL000461570	NO			
8	RCRA NON GEN	CLARK BROS.	8009 OAK CREEK RD. MOJAVE CA 93501	NNE	0.01 / 65.21	284	58
			Handler ID **|** ***Recycler Activity?:*** CAC003113897	NO			
8	CERS TANK	Mortenson Oasis Wind Farm	8009B OAK CREEK RD MOJAVE CA 93501	NNE	0.01 / 65.21	284	60
			Site ID: 575741				
8	RCRA NON GEN	BRIAN TRAMONTE	8009 OAK CREEK RD MOJAVE CA 93501	NNE	0.01 / 65.21	284	61
			Handler ID **|** ***Recycler Activity?:*** CAC003134268	NO			
8	RCRA NON GEN	VESTAS	8009 OAK CREEK ROAD MOJAVE CA 93501	NNE	0.01 / 65.21	284	63
			Handler ID **|** ***Recycler Activity?:*** CAC003133340	NO			
8	RCRA NON GEN	CLARK BROS., INC.	8009 OAK CREEK RD MOJAVE CA 93501	NNE	0.01 / 65.21	284	65
			Handler ID **|** ***Recycler Activity?:*** CAC003137704	NO			
8	RCRA NON GEN	CLARK BROS., INC.	8009 OAK CREEK RD MOJAVE CA 93501	NNE	0.01 / 65.21	284	68
			Handler ID **|** ***Recycler Activity?:*** CAC003153242	NO			
8	RCRA NON GEN	CLARK BROS., INC.	8009 OAK CREEK RD MOJAVE CA 93501	NNE	0.01 / 65.21	284	70
			Handler ID **|** ***Recycler Activity?:*** CAC003150959	NO			

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
8	FINDS/FRS	VESTAS	8009 OAK CREEK ROAD MOJAVE CA 93501 ***Registry ID:*** 110071113500	NNE	0.01 / 65.21	284	72
8	FINDS/FRS	BRIAN TRAMONTE	8009 OAK CREEK RD MOJAVE CA 93501 ***Registry ID:*** 110071116926	NNE	0.01 / 65.21	284	73
8	FINDS/FRS	CLARK BROS., INC.	8009 OAK CREEK RD MOJAVE CA 93501 ***Registry ID:*** 110071121198	NNE	0.01 / 65.21	284	73
8	FINDS/FRS	MORTENSON CONSTRUCTION	8009 OAK CREEK RD MOJAVE CA 95301 ***Registry ID:*** 110071136546	NNE	0.01 / 65.21	284	74
8	RCRA NON GEN	MORTENSON CONSTRUCTION	8009 OAK CREEK RD MOJAVE CA 93501 ***Handler ID | Recycler Activity?:*** CAC003211946 | NO	NNE	0.01 / 65.21	284	74
8	CERS HAZ	Sagebrush BESS	8009 OAK CREEK RD MOJAVE CA 93501	NNE	0.01 / 65.21	284	77
8	RCRA NON GEN	SAGEBRUSH B ENERGY STORAGE PROJECT	8009 OAK CREEK RD MOJAVE CA 93501 ***Handler ID | Recycler Activity?:*** CAL000480967 | NO	NNE	0.01 / 65.21	284	78
8	CERS TANK	Sagebrush B	8009 OAK CREEK RD MOJAVE CA 93501 ***Site ID:*** 702518	NNE	0.01 / 65.21	284	81
8	FINDS/FRS	SAGEBRUSH B ENERGY STORAGE PROJECT	8009 OAK CREEK RD MOJAVE CA 93501 ***Registry ID:*** 110071535899	NNE	0.01 / 65.21	284	83
8	HAZ GEN	SAGEBRUSH B ENERGY STORAGE PROJECT	8009 OAK CREEK RD MOJAVE CA 93501	NNE	0.01 / 65.21	284	83
8	HAZ GEN	CLARK BROS. INC.	8009 OAK CREEK RD MOJAVE CA 93501	NNE	0.01 / 65.21	284	84
8	HAZ GEN	MORTENSON CONSTRUCTION	8009 OAK CREEK RD MOJAVE CA 95301	NNE	0.01 / 65.21	284	84
8	HAZ GEN	VOYAGER WIND II/III/IV 852	8009 OAK CREEK RD MOJAVE CA 93501	NNE	0.01 / 65.21	284	85

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
8	CERS TANK	Sagebrush ESS, LLC	8009 OAK CREEK RD MOJAVE CA 93501 ***Site ID:*** 701546	NNE	0.01 / 65.21	284	86
9	EMISSIONS	VOYAGER WIND II, LLC	8015 OAK CREEK RD. MOJAVE CA 93501	NNE	0.01 / 65.68	274	87
9	FINDS/FRS	VOYAGER WIND II, LLC	8015 OAK CREEK RD. MOJAVE CA 93501 ***Registry ID:*** 110071175287	NNE	0.01 / 65.68	274	88
9	FINDS/FRS	VOYAGER WIND II, LLC	8015 OAK CREEK RD. MOJAVE CA 93501 ***Registry ID:*** 110071763398	NNE	0.01 / 65.68	274	89
10	CERCLIS	ASPHALT CONSTRUCTION CO, INC.	7037 TROTTER AVE. MOJAVE CA 93501 ***Site EPA ID:*** CAD983650029	ESE	0.01 / 66.37	-209	89
10	CERCLIS NFRAP	ASPHALT CONSTRUCTION CO, INC.	7037 TROTTER AVE. MOJAVE CA 93501 ***Site EPA ID:*** CAD983650029	ESE	0.01 / 66.37	-209	91
10	FINDS/FRS	ASPHALT CONSTRUCTION CO., INC.	7037 TROTTER AVENUE MOJAVE CA 93501-7014 ***Registry ID:*** 110017403086	ESE	0.01 / 66.37	-209	92
10	CUPA KERN	Holliday Rock - Mojave	7037 Trotter Ave Mojave CA	ESE	0.01 / 66.37	-209	92
10	HAZNET	1X ASPHALT CONSTRUCTION CO	7037 TROTTER AVE MOJAVE CA 935010000	ESE	0.01 / 66.37	-209	93
10	SEMS ARCHIVE	ASPHALT CONSTRUCTION CO, INC.	7037 TROTTER AVE. MOJAVE CA 93501 ***EPA ID:*** CAD983650029	ESE	0.01 / 66.37	-209	93
10	UST KERN	Holliday Rock - Mojave	7037 Trotter Ave Mojave CA 93501 ***Facility ID:*** FA0002805 ***Tank No | Billing Status:*** 550071 | Inactive, non-billable	ESE	0.01 / 66.37	-209	93
10	CHMIRS	Holliday Rock	7037 Trotter Ave Mojave CA 93501 ***Control No | Notified Date:*** 16-1881 |	ESE	0.01 / 66.37	-209	94
10	EMISSIONS	ASPHALT CONSTRUCTION	7037 TROTTER AVE MOJAVE CA 93501	ESE	0.01 / 66.37	-209	95

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
10	FINDS/FRS	HOLLIDAY ROCK MOJAVE 12	7037 TROTTER AVE MOJAVE CA 93501 ***Registry ID:*** 110070090566	ESE	0.01 / 66.37	-209	98
10	CERS TANK	Holliday Rock - Mojave	7037 TROTTER AVE. MOJAVE CA 93501 ***Site ID:*** 394792	ESE	0.01 / 66.37	-209	98
10	AST KERN	Holliday Rock - Mojave	7037 Trotter Ave Mojave CA 93501 ***Facility ID:*** FA0002805 ***Billing Status:*** Active, billable	ESE	0.01 / 66.37	-209	103
10	RCRA NON GEN	HOLLIDAY ROCK - MOJAVE	7037 TROTTER AVE MOJAVE CA 93501-7014 ***Handler ID | Recycler Activity?:*** CAL000324303 | NO	ESE	0.01 / 66.37	-209	103
10	EMISSIONS	HOLLIDAY ROCK MOJAVE	7037 TROTTER AVE MOJAVE CA 93501	ESE	0.01 / 66.37	-209	106
10	UST SWEEPS	ASPHALT CONSTRUCTION CO	7037 TROTTER AVE MOJAVE CA ***C C | Status:*** A15-000-550071 | ACTIVE ***Tank ID:*** 000001	ESE	0.01 / 66.37	-209	106
10	HAZ GEN	HOLLIDAY ROCK-MOJAVE	7037 TROTTER AVE MOJAVE CA 935017014	ESE	0.01 / 66.37	-209	107
10	HAZ GEN	FISHER SAND & GRAVEL CO	7037 TROTTER AVE MOJAVE CA 935017014	ESE	0.01 / 66.37	-209	107
10	HAZ GEN	ASPHALT CONSTRUCTION CO. INC.	7037 TROTTER AVE MOJAVE CA 935010000	ESE	0.01 / 66.37	-209	107
10	FINDS/FRS	HOLLIDAY ROCK MOJAVE	7037 TROTTER AVE MOJAVE CA 93501 ***Registry ID:*** 110071764365	ESE	0.01 / 66.37	-209	107
10	FINDS/FRS	ASPHALT CONSTRUCTION	7037 TROTTER AVE MOJAVE CA 93501 ***Registry ID:*** 110071764366	ESE	0.01 / 66.37	-209	108
11	POWER PLANTS	Mojave 16/17/18 BESS	CA	NNE	0.01 / 76.39	269	109
12	CUPA KERN	Windstar 1 Substation	No physcial address - 35.001075°, -118.291575°	NNE	0.01 / 78.08	28	109

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
			35.001075°, -118.291575° Mojave CA				
12	FINDS/FRS	WINDSTAR 1 SUBSTATION	NO PHYSCIAL ADDRESS - 35.001075 NA -118.291575 MOJAVE CA 93501 ***Registry ID:*** 110065940717	NNE	0.01 / 78.08	28	109
12	CERS HAZ	Windstar 1 Substation	NO PHYSCIAL ADDRESS - 35.001075°, -118.291575° MOJAVE CA 93501	NNE	0.01 / 78.08	28	110
12	FINDS/FRS	WINDSTAR ENERGY	12490 90TH STREET MOJAVE CA 93501 ***Registry ID:*** 110070521399	NNE	0.01 / 78.08	28	112
12	EMISSIONS	WINDSTAR ENERGY	12490 90TH STREET MOJAVE CA 93501	NNE	0.01 / 78.08	28	113
13	MRDS	LEONA TUNGSTEN MINE	KERN COUNTY MOJAVE CA 93501 ***Dep ID:*** 10260978	NW	0.02 / 95.38	590	114
14	MINE	MOJAVE QUARRY	CA	ESE	0.04 / 217.82	-218	114
15	CERS HAZ	Daylight III TLine	7935 OAK CREEK RD MOJAVE CA 93501	NNE	0.05 / 284.64	211	115
16	MRDS	WESTERN PROSPECT	KERN COUNTY MOJAVE CA 93501 ***Dep ID:*** 10187871	ESE	0.08 / 397.62	-49	116
17	CUPA KERN	SCE Windhub Substation	8500 Oak Creek Rd Mojave CA	NNE	0.08 / 440.87	252	117
17	CERS HAZ	SCE Windhub Substation	8500 OAK CREEK RD MOJAVE CA 93501	NNE	0.08 / 440.87	252	117
17	AST KERN	SCE Windhub Substation	8500 Oak Creek Rd Mojave CA 93501 ***Facility ID:*** FA0034742 ***Billing Status:*** Inactive, non-billable	NNE	0.08 / 440.87	252	120
17	EMISSIONS	SOUTHERN CALIFORNIA EDISON	8500 OAK CREEK ROAD MOJAVE CA 93501	NNE	0.08 / 440.87	252	120
17	CERS HAZ	AT&T ENTERPRISES: EXPANDED NATIONAL	8500 OAK CREEK RD MOJAVE CA 93501	NNE	0.08 / 440.87	252	121

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
		MGMT CORP - SAXCN					
17	RCRA NON GEN	WINDHUB SUBSTATION	8000 OAK CREEK RD. MOJAVE CA 93501 ***Handler ID | Recycler Activity?:*** CAC003057612 | NO	NNE	0.08 / 440.87	252	122
17	CUPA KERN	AT&T Corp. - SAXCN	8500 OAK CREEK RD Mojave CA	NNE	0.08 / 440.87	252	125
18	CUPA KERN	Pacific Wind / Mojave O&M	11585 Tehachapi Willow Springs Rd Rosamond CA	WNW	0.09 / 488.13	196	125
18	DELISTED HAZ	Pacific Wind / Mojave O&M	11585 TEHACHAPI WILLOW SPRINGS RD ROSAMOND CA 93560	WNW	0.09 / 488.13	196	125
18	CERS TANK	Pacific Wind - 125	11585 TEHACHAPI WILLOW SPRINGS RD ROSAMOND CA 93560 ***Site ID:*** 141145	WNW	0.09 / 488.13	196	126
18	AST KERN	Pacific Wind / Mojave O&M	11585 Tehachapi Willow Springs Rd Rosamond CA 93560 ***Facility ID:*** FA0039852 ***Billing Status:*** Active, billable	WNW	0.09 / 488.13	196	130
18	RCRA NON GEN	EDF RENEWABLE SERVICES DBA PACIFIC WINDS LLC	11585 TEHACHAPI WILLOW SPRINGS RD ROSAMOND CA 93560 ***Handler ID | Recycler Activity?:*** CAL000380949 | NO	WNW	0.09 / 488.13	196	130
18	DELISTED CTNK	Catalina Solar 1	11585 TEHACHAPI WILLOW SPRINGS RD ROSAMOND CA 93560	WNW	0.09 / 488.13	196	132
18	DELISTED CTNK	Big Beau Solar, LLC	11585 TEHACHAPI WILLOW SPRINGS RD ROSAMOND CA 93560	WNW	0.09 / 488.13	196	132
18	DELISTED CTNK	Valentine Solar LLC	11585 TEHACHAPI WILLOW SPRINGS RD ROSAMOND CA 93560	WNW	0.09 / 488.13	196	133
18	CERS HAZ	Valentine Solar LLC - 492	11585 TEHACHAPI WILLOW SPRINGS RD ROSAMOND CA 93560	WNW	0.09 / 488.13	196	133
18	CERS HAZ	Catalina Solar I - 633	11585 TEHACHAPI WILLOW SPRINGS RD ROSAMOND CA 93560	WNW	0.09 / 488.13	196	135

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
19	CERS HAZ	Darkstar I LLC	8413 OAK CREEK R MOJAVE CA 93501	NNE	0.12 / 653.96	272	137
20	RCRA NON GEN	EAGLE WATER TRUCK SERVICE INC	9421 TEHACHAPI WILLOW SPRINGS RD ROSAMOND CA 93560 ***Handler ID* | *Recycler Activity?:*** CAL000441795 | NO	SSE	0.13 / 696.56	-215	138
21	MINE	CACTUS QUEEN	CA	SSE	0.20 / 1,043.75	-223	140
22	MRDS	MIDDLE BUTTES (CACTUS) DEPOSIT	KERN COUNTY MOJAVE CA 93501 ***Dep ID:*** 10310650	SSE	0.20 / 1,058.52	-139	141
23	LDS	SHUMAKE PROJECT	8941 W BACKUS RD MOJAVE CA 93501	SSE	0.21 / 1,134.51	-121	144
23	LDS	MIDDLE BUTTES PROJECT	8941 W BACKUS RD MOJAVE CA 93501	SSE	0.21 / 1,134.51	-121	146
23	EMISSIONS	CACTUS GOLD MINES COMPANY	8941 WEST BACKUS ROAD MOJAVE CA 93501	SSE	0.21 / 1,134.51	-121	148
23	WMUD	MIDDLE BUTTES PROJECT	8941 W BACKUS RD MOJAVE CA 93501	SSE	0.21 / 1,134.51	-121	148
23	WMUD	SHUMAKE PROJECT	8941 W BACKUS RD MOJAVE CA 93501	SSE	0.21 / 1,134.51	-121	152
24	RCRA NON GEN	CATALINA RENEWABLE ENERGY PROJ	11054 BACKUS RD MOJAVE CA 93501 ***Handler ID* | *Recycler Activity?:*** CAR000225615 | NO	SW	0.24 / 1,248.76	745	155
24	CUPA KERN	BECHTEL POWER CORPORATION	11054 Backus Rd MOJAVE CA	SW	0.24 / 1,248.76	745	158
24	AST KERN	BECHTEL POWER CORPORATION	11054 Backus Rd MOJAVE CA 93501 ***Facility ID:*** FA0036927 ***Billing Status:*** Inactive, non-billable	SW	0.24 / 1,248.76	745	158
24	RCRA NON GEN	CATALINA SOLAR EDF RENEWABLE SERVICES	11054 BACKUS RD MOJAVE CA 93501	SW	0.24 / 1,248.76	745	158

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
			Handler ID* | *Recycler Activity?: CAL000393349 | NO				
25	MRDS	QUIEN SABE	KERN COUNTY MOJAVE CA 93501 ***Dep ID:*** 10076758	ESE	0.24 / 1,262.30	123	160
25	MRDS	QUIEN SABE PROSPECT-?	KERN COUNTY MOJAVE CA 93501 ***Dep ID:*** 10236179	ESE	0.24 / 1,262.30	123	161
26	MRDS	BLUETT PROSPECT	KERN COUNTY MOJAVE CA 93501 ***Dep ID:*** 10284926	ESE	0.24 / 1,262.47	96	161
27	DELISTED COUNTY	Vestas	8560 Oak Creek Rd Mojave CA	NNE	0.25 / 1,299.91	288	162
27	CUPA KERN	Alta Wind II, LLC	8560 A OAK CREEK RD 8560 A OAK CREEK RD MOJAVE CA	NNE	0.25 / 1,299.91	288	162
27	CUPA KERN	Vestas	8560 OAK CREEK RD Mojave CA	NNE	0.25 / 1,299.91	288	162
27	CERS TANK	Alta Wind II, LLC	8560 A OAK CREEK RD MOJAVE CA 93501 ***Site ID:*** 403639	NNE	0.25 / 1,299.91	288	163
27	AST KERN	Alta Wind II, LLC	8560 A OAK CREEK RD 8560 A OAK CREEK RD MOJAVE CA 93501 ***Facility ID:*** FA0035874 ***Billing Status:*** Active, billable	NNE	0.25 / 1,299.91	288	166
27	RCRA NON GEN	ALTA WIND II LLC	8560 OAK CREEK RD MOJAVE CA 93501 ***Handler ID* | *Recycler Activity?:*** CAL000422286 | NO	NNE	0.25 / 1,299.91	288	166
27	RCRA NON GEN	VESTAS AMERICAN WIND TECHNOLOGY INC	8560 OAK CREEK RD MOJAVE CA 93501 ***Handler ID* | *Recycler Activity?:*** CAL000374969 | NO	NNE	0.25 / 1,299.91	288	169
27	RCRA NON GEN	ALTA WIND II LLC	8560 OAK CREEK RD MOJAVE CA 93501-7758 ***Handler ID* | *Recycler Activity?:*** CAL000362249 | NO	NNE	0.25 / 1,299.91	288	171
27	EMISSIONS	ALTA WIND II	8560 OAK CREEK ROAD MOJAVE CA 93501	NNE	0.25 / 1,299.91	288	174
27	EMISSIONS	PINYON PINES WIND I	8560 OAK CREEK RD MOJAVE CA 93501	NNE	0.25 / 1,299.91	288	175

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
28	MRDS	CACTUS GOLD MINE	KERN COUNTY MOJAVE CA 93501 ***Dep ID:*** 10115314	SSE	0.28 / 1,456.49	-57	175
28	MRDS	CACTUS QUEEN MINE	KERN COUNTY MOJAVE CA 93501 ***Dep ID:*** 10110711	SSE	0.28 / 1,456.49	-57	177
29	MRDS	SILVER PRINCE DEPOSIT	KERN COUNTY MOJAVE CA 93501 ***Dep ID:*** 10211848	SE	0.29 / 1,508.74	-153	177
30	MINE	SHUMAKE OPERATION	CA	SSE	0.29 / 1,512.27	-63	178
31	LDS	BLUE EAGLE LODE MINE	TEHACHAPI-WILLOW SPRINGS ROAD AND BACKUS ROAD MIDDLE BUTTES CA	SE	0.32 / 1,682.90	-116	178
32	MINE	BLUE EAGLE LODE MINE	CA	SE	0.33 / 1,716.96	-43	186
33	MRDS	ESPERANZA	KERN COUNTY MOJAVE CA 93501 ***Dep ID:*** 10035219	NW	0.41 / 2,169.71	699	187
34	MRDS	WINKLER DEPOSIT	KERN COUNTY MOJAVE CA 93501 ***Dep ID:*** 10138892	SE	0.42 / 2,219.90	31	187
35	MRDS	ESPERANZA PROSPECT	KERN COUNTY MOJAVE CA 93501 ***Dep ID:*** 10285255	NW	0.54 / 2,876.29	1034	188
36	ENVIROSTOR	CACTUS GOLD MINE	BACKUS TEHACHAPI-WILLOW SPRINGS ROADS MOJAVE CA 93504 ***Envirostor ID:*** 15100010 ***Cleanup Status:*** REFER: RWQCB AS OF 1/16/1996	SE	0.61 / 3,198.40	30	188
37	MRDS	CRESCENT PROSPECT	KERN COUNTY MOJAVE CA 93501 ***Dep ID:*** 10212394	SE	0.85 / 4,479.97	-289	190
38	MRDS	ROSAMOND-MOJAVE	KERN COUNTY MOJAVE CA 93501 ***Dep ID:*** 10072429	ESE	0.87 / 4,575.40	-283	190
39	MRDS	CALIFORNIA PORTLAND CEMENT CO.	KERN COUNTY MOJAVE CA 93501	NW	0.88 / 4,648.21	947	191

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
			Dep ID: 10236526				
40	MINE	MIDDLE BUTTES OPERATION	CA	SE	0.91 / 4,789.93	111	191
41	MRDS	CRESCENT DEPOSIT	KERN COUNTY MOJAVE CA 93501 ***Dep ID:*** 10284873	SE	0.94 / 4,952.91	-98	192

Executive Summary: Summary by Data Source

Standard

Federal

SEMS ARCHIVE - SEMS List 8R Archive Sites

A search of the SEMS ARCHIVE database, dated Apr 25, 2025 has found that there are 1 SEMS ARCHIVE site(s) within approximately 0.50miles of the project property.

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
ASPHALT CONSTRUCTION CO, INC.	7037 TROTTER AVE. MOJAVE CA 93501	ESE	0.01 / 66.37	10
	***EPA ID**: CAD983650029*			

CERCLIS - Comprehensive Environmental Response, Compensation and Liability Information System - CERCLIS

A search of the CERCLIS database, dated Oct 25, 2013 has found that there are 1 CERCLIS site(s) within approximately 0.50miles of the project property.

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
ASPHALT CONSTRUCTION CO, INC.	7037 TROTTER AVE. MOJAVE CA 93501	ESE	0.01 / 66.37	10
	***Site EPA ID**: CAD983650029*			

CERCLIS NFRAP - CERCLIS - No Further Remedial Action Planned

A search of the CERCLIS NFRAP database, dated Oct 25, 2013 has found that there are 1 CERCLIS NFRAP site(s) within approximately 0.50miles of the project property.

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
ASPHALT CONSTRUCTION CO, INC.	7037 TROTTER AVE. MOJAVE CA 93501	ESE	0.01 / 66.37	10
	***Site EPA ID**: CAD983650029*			

RCRA NON GEN - RCRA Non-Generators

A search of the RCRA NON GEN database, dated Jan 6, 2025 has found that there are 20 RCRA NON GEN site(s) within approximately 0.25miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
VOYAGER WIND II/III/IV 852	8009 OAK CREEK RD MOJAVE CA 93501	NNE	0.01 / 65.21	8
	***Handler ID** | **Recycler Activity?**: CAL000436961 | NO*			
SAGEBRUSH B ENERGY STORAGE PROJECT	8009 OAK CREEK RD MOJAVE CA 93501	NNE	0.01 / 65.21	8
	***Handler ID** | **Recycler Activity?**: CAL000480967 | NO*			

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
MORTENSON CONSTRUCTION	8009 OAK CREEK RD MOJAVE CA 93501	NNE	0.01 / 65.21	8
	Handler ID* | *Recycler Activity?: *CAC003211946* | *NO*			
BLATTNER ENERGY INC.	8009 OAK CREEK ROAD MOJAVE CA 93501	NNE	0.01 / 65.21	8
	Handler ID* | *Recycler Activity?: *CAC003062134* | *NO*			
MORTENSON CONSTRUCTION	8009 OAK CREEK RD MOJAVE CA 95301	NNE	0.01 / 65.21	8
	Handler ID* | *Recycler Activity?: *CAL000461570* | *NO*			
CLARK BROS.	8009 OAK CREEK RD. MOJAVE CA 93501	NNE	0.01 / 65.21	8
	Handler ID* | *Recycler Activity?: *CAC003113897* | *NO*			
BRIAN TRAMONTE	8009 OAK CREEK RD MOJAVE CA 93501	NNE	0.01 / 65.21	8
	Handler ID* | *Recycler Activity?: *CAC003134268* | *NO*			
VESTAS	8009 OAK CREEK ROAD MOJAVE CA 93501	NNE	0.01 / 65.21	8
	Handler ID* | *Recycler Activity?: *CAC003133340* | *NO*			
CLARK BROS., INC.	8009 OAK CREEK RD MOJAVE CA 93501	NNE	0.01 / 65.21	8
	Handler ID* | *Recycler Activity?: *CAC003137704* | *NO*			
CLARK BROS., INC.	8009 OAK CREEK RD MOJAVE CA 93501	NNE	0.01 / 65.21	8
	Handler ID* | *Recycler Activity?: *CAC003153242* | *NO*			
CLARK BROS., INC.	8009 OAK CREEK RD MOJAVE CA 93501	NNE	0.01 / 65.21	8
	Handler ID* | *Recycler Activity?: *CAC003150959* | *NO*			
WINDHUB SUBSTATION	8000 OAK CREEK RD. MOJAVE CA 93501	NNE	0.08 / 440.87	17
	Handler ID* | *Recycler Activity?: *CAC003057612* | *NO*			
EDF RENEWABLE SERVICES DBA PACIFIC WINDS LLC	11585 TEHACHAPI WILLOW SPRINGS RD ROSAMOND CA 93560 ***Handler ID* | *Recycler Activity?***: *CAL000380949* | *NO*	WNW	0.09 / 488.13	18
CATALINA SOLAR EDF RENEWABLE SERVICES	11054 BACKUS RD MOJAVE CA 93501	SW	0.24 / 1,248.76	24
	Handler ID* | *Recycler Activity?: *CAL000393349* | *NO*			
CATALINA RENEWABLE ENERGY PROJ	11054 BACKUS RD MOJAVE CA 93501	SW	0.24 / 1,248.76	24
	Handler ID* | *Recycler Activity?: *CAR000225615* | *NO*			

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
ALTA WIND II LLC	8560 OAK CREEK RD MOJAVE CA 93501-7758	NNE	0.25 / 1,299.91	27
	Handler ID **|** ***Recycler Activity?****: CAL000362249* | *NO*			
VESTAS AMERICAN WIND TECHNOLOGY INC	8560 OAK CREEK RD MOJAVE CA 93501	NNE	0.25 / 1,299.91	27
	Handler ID **|** ***Recycler Activity?****: CAL000374969* | *NO*			
ALTA WIND II LLC	8560 OAK CREEK RD MOJAVE CA 93501	NNE	0.25 / 1,299.91	27
	Handler ID **|** ***Recycler Activity?****: CAL000422286* | *NO*			

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
HOLLIDAY ROCK - MOJAVE	7037 TROTTER AVE MOJAVE CA 93501-7014	ESE	0.01 / 66.37	10
	Handler ID **|** ***Recycler Activity?****: CAL000324303* | *NO*			
EAGLE WATER TRUCK SERVICE INC	9421 TEHACHAPI WILLOW SPRINGS RD ROSAMOND CA 93560	SSE	0.13 / 696.56	20
	Handler ID **|** ***Recycler Activity?****: CAL000441795* | *NO*			

ERNS - Emergency Response Notification System

A search of the ERNS database, dated Apr 6, 2025 has found that there are 1 ERNS site(s) within approximately 0.02miles of the project property.

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
	BLM ADMINISTERED LANDS MOJAVE CA	SSE	0.00 / 0.00	1
	NRC Report No*: 861612*			

State

ENVIROSTOR - EnviroStor Database

A search of the ENVIROSTOR database, dated Jun 1, 2025 has found that there are 1 ENVIROSTOR site(s) within approximately 1.00 miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
CACTUS GOLD MINE	BACKUS TEHACHAPI-WILLOW SPRINGS ROADS MOJAVE CA 93504 ***Envirostor ID****: 15100010* ***Cleanup Status****: REFER: RWQCB AS OF 1/16/1996*	SE	0.61 / 3,198.40	36

WMUD - Waste Management Unit Database

A search of the WMUD database, dated Jan 1, 2000 has found that there are 2 WMUD site(s) within approximately 0.50miles of the project property.

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
SHUMAKE PROJECT	8941 W BACKUS RD MOJAVE CA 93501	SSE	0.21 / 1,134.51	23
MIDDLE BUTTES PROJECT	8941 W BACKUS RD MOJAVE CA 93501	SSE	0.21 / 1,134.51	23

LDS - Land Disposal Sites

A search of the LDS database, dated Apr 4, 2025 has found that there are 3 LDS site(s) within approximately 0.50miles of the project property.

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
MIDDLE BUTTES PROJECT	8941 W BACKUS RD MOJAVE CA 93501	SSE	0.21 / 1,134.51	23
SHUMAKE PROJECT	8941 W BACKUS RD MOJAVE CA 93501	SSE	0.21 / 1,134.51	23
BLUE EAGLE LODE MINE	TEHACHAPI-WILLOW SPRINGS ROAD AND BACKUS ROAD MIDDLE BUTTES CA	SE	0.32 / 1,682.90	31

UST SWEEPS - Statewide Environmental Evaluation and Planning System

A search of the UST SWEEPS database, dated Oct 1, 1994 has found that there are 1 UST SWEEPS site(s) within approximately 0.25 miles of the project property.

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
ASPHALT CONSTRUCTION CO	7037 TROTTER AVE MOJAVE CA ***C C*** **|** ***Status****: A15-000-550071* | *ACTIVE* ***Tank ID****: 000001*	ESE	0.01 / 66.37	10

CERS TANK - California Environmental Reporting System (CERS) Tanks

A search of the CERS TANK database, dated May 28, 2025 has found that there are 6 CERS TANK site(s) within approximately 0.25 miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
Sagebrush ESS, LLC	8009 OAK CREEK RD MOJAVE CA 93501 ***Site ID****: 701546*	NNE	0.01 / 65.21	8
Mortenson Oasis Wind Farm	8009B OAK CREEK RD MOJAVE CA 93501 ***Site ID****: 575741*	NNE	0.01 / 65.21	8
Sagebrush B	8009 OAK CREEK RD MOJAVE CA 93501	NNE	0.01 / 65.21	8

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
	***Site ID**: 702518*			
Pacific Wind - 125	11585 TEHACHAPI WILLOW SPRINGS RD ROSAMOND CA 93560 ***Site ID**: 141145*	WNW	0.09 / 488.13	18
Alta Wind II, LLC	8560 A OAK CREEK RD MOJAVE CA 93501 ***Site ID**: 403639*	NNE	0.25 / 1,299.91	27

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
Holliday Rock - Mojave	7037 TROTTER AVE. MOJAVE CA 93501 ***Site ID**: 394792*	ESE	0.01 / 66.37	10

DELISTED CTNK - Delisted California Environmental Reporting System (CERS) Tanks

A search of the DELISTED CTNK database, dated May 28, 2025 has found that there are 3 DELISTED CTNK site(s) within approximately 0.25miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
Catalina Solar 1	11585 TEHACHAPI WILLOW SPRINGS RD ROSAMOND CA 93560	WNW	0.09 / 488.13	18
Big Beau Solar, LLC	11585 TEHACHAPI WILLOW SPRINGS RD ROSAMOND CA 93560	WNW	0.09 / 488.13	18
Valentine Solar LLC	11585 TEHACHAPI WILLOW SPRINGS RD ROSAMOND CA 93560	WNW	0.09 / 488.13	18

DELISTED COUNTY - Delisted County Records

A search of the DELISTED COUNTY database, dated Jun 24, 2025 has found that there are 1 DELISTED COUNTY site(s) within approximately 0.25miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
Vestas	8560 Oak Creek Rd Mojave CA	NNE	0.25 / 1,299.91	27

County

UST KERN - Kern County - UST List

A search of the UST KERN database, dated Nov 30, 2021 has found that there are 1 UST KERN site(s) within approximately 0.25miles of the project property.

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
Holliday Rock - Mojave	7037 Trotter Ave Mojave CA 93501 ***Facility ID**: FA0002805* ***Tank No | Billing Status**: 550071 | Inactive, non-billable*	ESE	0.01 / 66.37	10

AST KERN - Kern County - AST List

A search of the AST KERN database, dated Nov 30, 2021 has found that there are 5 AST KERN site(s) within approximately 0.25miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
SCE Windhub Substation	8500 Oak Creek Rd Mojave CA 93501 ***Facility ID**: FA0034742* ***Billing Status**: Inactive, non-billable*	NNE	0.08 / 440.87	17
Pacific Wind / Mojave O&M	11585 Tehachapi Willow Springs Rd Rosamond CA 93560 ***Facility ID**: FA0039852* ***Billing Status**: Active, billable*	WNW	0.09 / 488.13	18
BECHTEL POWER CORPORATION	11054 Backus Rd MOJAVE CA 93501 ***Facility ID**: FA0036927* ***Billing Status**: Inactive, non-billable*	SW	0.24 / 1,248.76	24
Alta Wind II, LLC	8560 A OAK CREEK RD 8560 A OAK CREEK RD MOJAVE CA 93501 ***Facility ID**: FA0035874* ***Billing Status**: Active, billable*	NNE	0.25 / 1,299.91	27

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
Holliday Rock - Mojave	7037 Trotter Ave Mojave CA 93501 ***Facility ID**: FA0002805* ***Billing Status**: Active, billable*	ESE	0.01 / 66.37	10

CUPA KERN - Kern County - CUPA List

A search of the CUPA KERN database, dated Nov 30, 2021 has found that there are 9 CUPA KERN site(s) within approximately 0.25 miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
CENTURYLINK - TEHACHAPI - MOJVCACX	11253 WILLOW SPRINGS RD TEHACHAPI CA	W	0.01 / 50.72	4
Windstar 1 Substation	No physcial address - 35.001075ï¿½, -118.291575ï¿½ 35.001075ï¿½, -118.291575ï¿½ Mojave CA	NNE	0.01 / 78.08	12
AT&T Corp. - SAXCN	8500 OAK CREEK RD Mojave CA	NNE	0.08 / 440.87	17

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
SCE Windhub Substation	8500 Oak Creek Rd Mojave CA	NNE	0.08 / 440.87	17
Pacific Wind / Mojave O&M	11585 Tehachapi Willow Springs Rd Rosamond CA	WNW	0.09 / 488.13	18
BECHTEL POWER CORPORATION	11054 Backus Rd MOJAVE CA	SW	0.24 / 1,248.76	24
Alta Wind II, LLC	8560 A OAK CREEK RD 8560 A OAK CREEK RD MOJAVE CA	NNE	0.25 / 1,299.91	27
Vestas	8560 OAK CREEK RD Mojave CA	NNE	0.25 / 1,299.91	27

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
Holliday Rock - Mojave	7037 Trotter Ave Mojave CA	ESE	0.01 / 66.37	10

Non Standard

Federal

FINDS/FRS - Facility Registry Service/Facility Index

A search of the FINDS/FRS database, dated Apr 23, 2025 has found that there are 23 FINDS/FRS site(s) within approximately 0.02 miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
REED MINE	CA ***Registry ID**: 110066036649*	N	0.00 / 0.00	2
LEVEL 3 COMMUNICATIONS - TEHACHAPI - MOJVCACX	11253 WILLOW SPRINGS RD TEHACHAPI CA 93561 ***Registry ID**: 110057064448*	W	0.01 / 50.72	4
LEVEL 3 COMMUNICATIONS	11253 TEHACHAPI-WILLOW SPRINGS ROAD TEHACHAPI CA 93561 ***Registry ID**: 110070521267*	W	0.01 / 50.72	4
WINDSTAR ENERGY	12490 90TH STREET MOJAVE CA 93501	NNE	0.01 / 53.65	5

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
	***Registry ID**: 110071763422*			
ALTA WIND LLC (PHASE VII)	13505 90TH STREET MOJAVE CA 93501	NNW	0.01 / 60.00	6
	***Registry ID**: 110070521216*			
ALTA WIND LLC (PHASE VII)	13505 90TH STREET MOJAVE CA 93501	NNW	0.01 / 60.00	6
	***Registry ID**: 110071763310*			
WINDHUB SOLAR B, LLC	MOJAVE CA 93501	NE	0.01 / 62.48	7
	***Registry ID**: 110070397105*			
WINDHUB SOLAR B, LLC	CA	NE	0.01 / 62.48	7
	***Registry ID**: 110070700497*			
VOYAGER WIND II/III/IV 852	8009 OAK CREEK RD MOJAVE CA 93501	NNE	0.01 / 65.21	8
	***Registry ID**: 110070484930*			
BLATTNER ENERGY INC.	8009 OAK CREEK ROAD MOJAVE CA 93501	NNE	0.01 / 65.21	8
	***Registry ID**: 110070803275*			
VESTAS	8009 OAK CREEK ROAD MOJAVE CA 93501	NNE	0.01 / 65.21	8
	***Registry ID**: 110071113500*			
BRIAN TRAMONTE	8009 OAK CREEK RD MOJAVE CA 93501	NNE	0.01 / 65.21	8
	***Registry ID**: 110071116926*			
CLARK BROS., INC.	8009 OAK CREEK RD MOJAVE CA 93501	NNE	0.01 / 65.21	8
	***Registry ID**: 110071121198*			
MORTENSON CONSTRUCTION	8009 OAK CREEK RD MOJAVE CA 95301	NNE	0.01 / 65.21	8
	***Registry ID**: 110071136546*			
SAGEBRUSH B ENERGY STORAGE PROJECT	8009 OAK CREEK RD MOJAVE CA 93501	NNE	0.01 / 65.21	8
	***Registry ID**: 110071535899*			
VOYAGER WIND II, LLC	8015 OAK CREEK RD. MOJAVE CA 93501	NNE	0.01 / 65.68	9
	***Registry ID**: 110071175287*			
VOYAGER WIND II, LLC	8015 OAK CREEK RD. MOJAVE CA 93501	NNE	0.01 / 65.68	9

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
	***Registry ID**: 110071763398*			
WINDSTAR ENERGY	12490 90TH STREET MOJAVE CA 93501	NNE	0.01 / 78.08	12
	***Registry ID**: 110070521399*			
WINDSTAR 1 SUBSTATION	NO PHYSCIAL ADDRESS - 35.001075 NA -118.291575 MOJAVE CA 93501 ***Registry ID**: 110065940717*	NNE	0.01 / 78.08	12

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
ASPHALT CONSTRUCTION CO., INC.	7037 TROTTER AVENUE MOJAVE CA 93501-7014	ESE	0.01 / 66.37	10
	***Registry ID**: 110017403086*			
HOLLIDAY ROCK MOJAVE 12	7037 TROTTER AVE MOJAVE CA 93501	ESE	0.01 / 66.37	10
	***Registry ID**: 110070090566*			
HOLLIDAY ROCK MOJAVE	7037 TROTTER AVE MOJAVE CA 93501	ESE	0.01 / 66.37	10
	***Registry ID**: 110071764365*			
ASPHALT CONSTRUCTION	7037 TROTTER AVE MOJAVE CA 93501	ESE	0.01 / 66.37	10
	***Registry ID**: 110071764366*			

MRDS - Mineral Resource Data System

A search of the MRDS database, dated Mar 15, 2016 has found that there are 16 MRDS site(s) within approximately 1.00miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
LEONA TUNGSTEN MINE	KERN COUNTY MOJAVE CA 93501	NW	0.02 / 95.38	13
	***Dep ID**: 10260978*			
QUIEN SABE	KERN COUNTY MOJAVE CA 93501	ESE	0.24 / 1,262.30	25
	***Dep ID**: 10076758*			
QUIEN SABE PROSPECT-?	KERN COUNTY MOJAVE CA 93501	ESE	0.24 / 1,262.30	25
	***Dep ID**: 10236179*			
BLUETT PROSPECT	KERN COUNTY MOJAVE CA 93501	ESE	0.24 / 1,262.47	26
	***Dep ID**: 10284926*			
ESPERANZA	KERN COUNTY MOJAVE CA 93501	NW	0.41 / 2,169.71	33

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
	***Dep ID**: 10035219*			
WINKLER DEPOSIT	KERN COUNTY MOJAVE CA 93501	SE	0.42 / 2,219.90	34
	***Dep ID**: 10138892*			
ESPERANZA PROSPECT	KERN COUNTY MOJAVE CA 93501	NW	0.54 / 2,876.29	35
	***Dep ID**: 10285255*			
CALIFORNIA PORTLAND CEMENT CO.	KERN COUNTY MOJAVE CA 93501	NW	0.88 / 4,648.21	39
	***Dep ID**: 10236526*			

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
WESTERN PROSPECT	KERN COUNTY MOJAVE CA 93501	ESE	0.08 / 397.62	16
	***Dep ID**: 10187871*			
MIDDLE BUTTES (CACTUS) DEPOSIT	KERN COUNTY MOJAVE CA 93501	SSE	0.20 / 1,058.52	22
	***Dep ID**: 10310650*			
CACTUS GOLD MINE	KERN COUNTY MOJAVE CA 93501	SSE	0.28 / 1,456.49	28
	***Dep ID**: 10115314*			
CACTUS QUEEN MINE	KERN COUNTY MOJAVE CA 93501	SSE	0.28 / 1,456.49	28
	***Dep ID**: 10110711*			
SILVER PRINCE DEPOSIT	KERN COUNTY MOJAVE CA 93501	SE	0.29 / 1,508.74	29
	***Dep ID**: 10211848*			
CRESCENT PROSPECT	KERN COUNTY MOJAVE CA 93501	SE	0.85 / 4,479.97	37
	***Dep ID**: 10212394*			
ROSAMOND-MOJAVE	KERN COUNTY MOJAVE CA 93501	ESE	0.87 / 4,575.40	38
	***Dep ID**: 10072429*			
CRESCENT DEPOSIT	KERN COUNTY MOJAVE CA 93501	SE	0.94 / 4,952.91	41
	***Dep ID**: 10284873*			

POWER PLANTS - Power Plants

A search of the POWER PLANTS database, dated Apr 15, 2024 has found that there are 1 POWER PLANTS site(s) within approximately 0.12miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
Mojave 16/17/18 BESS	CA	NNE	0.01 / 76.39	11

State

CHMIRS - California Hazardous Material Incident Report System (CHMIRS)

A search of the CHMIRS database, dated Apr 2, 2025 has found that there are 1 CHMIRS site(s) within approximately 0.02miles of the project property.

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
Holliday Rock	7037 Trotter Ave Mojave CA 93501	ESE	0.01 / 66.37	10
	Control No* | *Notified Date: *16-1881* |			

HAZNET - Handlers from Hazardous Waste Manifest Data

A search of the HAZNET database, dated Feb 20, 2025 has found that there are 4 HAZNET site(s) within approximately 0.02miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
WILLIAMS COMMUNICATIONS	11253 TEHACHIPI WILLOW SPRINGS RD MOJAVE CA 93501	W	0.01 / 50.72	4
WILTEL COMMUNICATIONS LLC, MOJAVE, THCHCA1W	11253 TEHACHAPI WILLOW SPRINGS RD MOJAVE CA 93501	W	0.01 / 50.72	4

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
KR WIND INC	10100 TEHACHAPI WILLOWS SPRING RD MOJAVE CA 93501	S	0.00 / 0.00	3
1X ASPHALT CONSTRUCTION CO	7037 TROTTER AVE MOJAVE CA 935010000	ESE	0.01 / 66.37	10

HAZ GEN - Generators from Hazardous Waste Manifest Data

A search of the HAZ GEN database, dated Feb 20, 2025 has found that there are 7 HAZ GEN site(s) within approximately 0.02miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
MORTENSON CONSTRUCTION	8009 OAK CREEK RD MOJAVE CA 95301	NNE	0.01 / 65.21	8

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
VOYAGER WIND II/III/IV 852	8009 OAK CREEK RD MOJAVE CA 93501	NNE	0.01 / 65.21	8
CLARK BROS. INC.	8009 OAK CREEK RD MOJAVE CA 93501	NNE	0.01 / 65.21	8
SAGEBRUSH B ENERGY STORAGE PROJECT	8009 OAK CREEK RD MOJAVE CA 93501	NNE	0.01 / 65.21	8

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
ASPHALT CONSTRUCTION CO. INC.	7037 TROTTER AVE MOJAVE CA 935010000	ESE	0.01 / 66.37	10
FISHER SAND & GRAVEL CO	7037 TROTTER AVE MOJAVE CA 935017014	ESE	0.01 / 66.37	10
HOLLIDAY ROCK-MOJAVE	7037 TROTTER AVE MOJAVE CA 935017014	ESE	0.01 / 66.37	10

CERS HAZ - California Environmental Reporting System (CERS) Hazardous Waste Sites

A search of the CERS HAZ database, dated May 28, 2025 has found that there are 9 CERS HAZ site(s) within approximately 0.12miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
Tehachapi Energy Storage System I	8009 OAK CREEK RD MOJAVE CA 93501	NNE	0.01 / 65.21	8
Sagebrush BESS	8009 OAK CREEK RD MOJAVE CA 93501	NNE	0.01 / 65.21	8
Windstar 1 Substation	NO PHYSCIAL ADDRESS - 35.001075ï¿½, -118.291575ï¿½ MOJAVE CA 93501	NNE	0.01 / 78.08	12
Daylight III TLine	7935 OAK CREEK RD MOJAVE CA 93501	NNE	0.05 / 284.64	15
AT&T ENTERPRISES: EXPANDED NATIONAL MGMT CORP - SAXCN	8500 OAK CREEK RD MOJAVE CA 93501	NNE	0.08 / 440.87	17

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
SCE Windhub Substation	8500 OAK CREEK RD MOJAVE CA 93501	NNE	0.08 / 440.87	17
Catalina Solar I - 633	11585 TEHACHAPI WILLOW SPRINGS RD ROSAMOND CA 93560	WNW	0.09 / 488.13	18
Valentine Solar LLC - 492	11585 TEHACHAPI WILLOW SPRINGS RD ROSAMOND CA 93560	WNW	0.09 / 488.13	18
Darkstar I LLC	8413 OAK CREEK R MOJAVE CA 93501	NNE	0.12 / 653.96	19

DELISTED HAZ - Delisted Environmental Reporting System (CERS) Hazardous Waste Sites

A search of the DELISTED HAZ database, dated Nov 29, 2018 has found that there are 1 DELISTED HAZ site(s) within approximately 0.50miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
Pacific Wind / Mojave O&M	11585 TEHACHAPI WILLOW SPRINGS RD ROSAMOND CA 93560	WNW	0.09 / 488.13	18

MINE - Mines Listing

A search of the MINE database, dated Apr 10, 2025 has found that there are 5 MINE site(s) within approximately 1.00miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
MIDDLE BUTTES OPERATION	CA	SE	0.91 / 4,789.93	40

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
MOJAVE QUARRY	CA	ESE	0.04 / 217.82	14
CACTUS QUEEN	CA	SSE	0.20 / 1,043.75	21
SHUMAKE OPERATION	CA	SSE	0.29 / 1,512.27	30

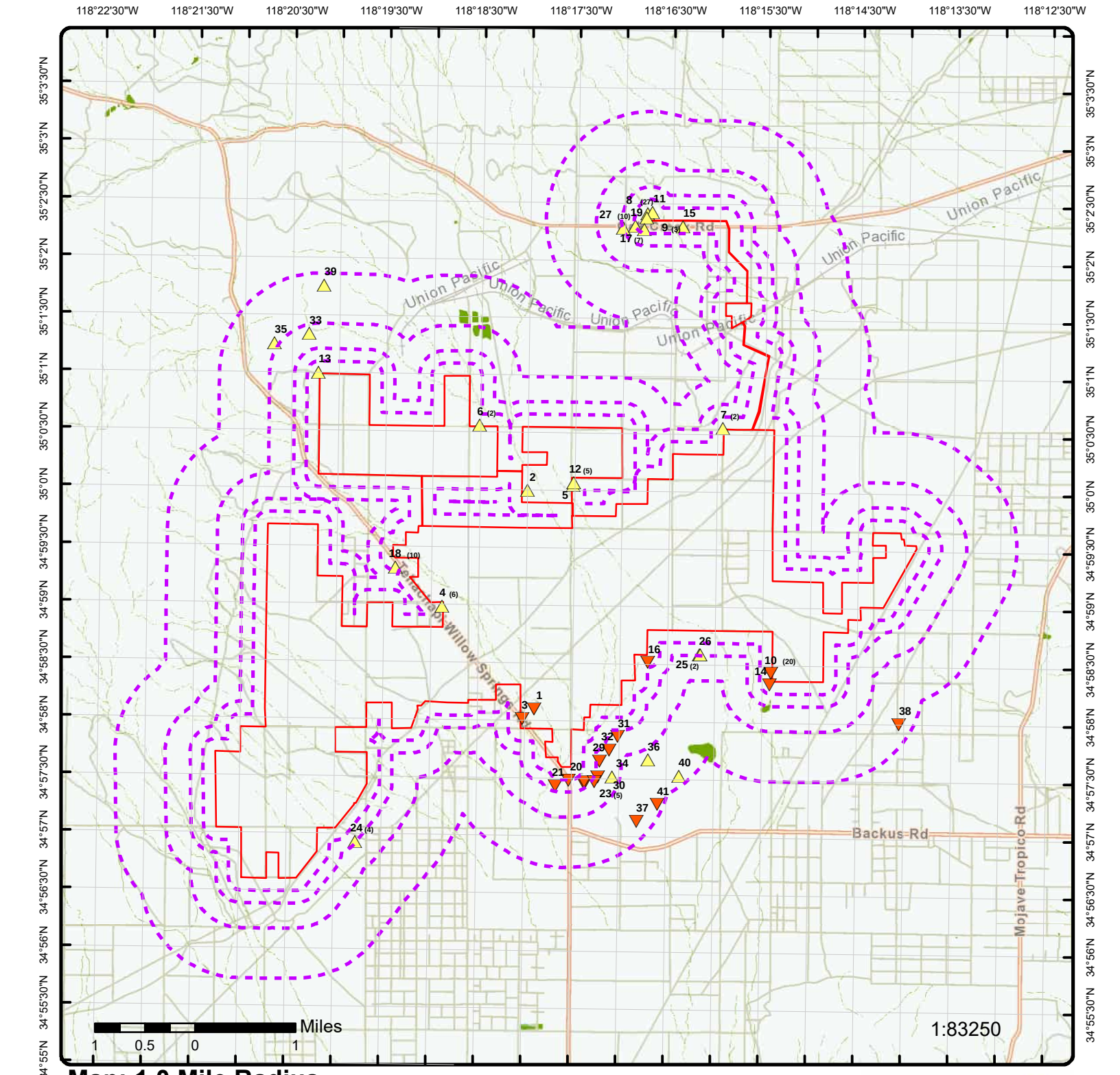
Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
BLUE EAGLE LODE MINE	CA	SE	0.33 / 1,716.96	32

EMISSIONS - Toxic Pollutant Emissions Facilities

A search of the EMISSIONS database, dated Dec 31, 2021 has found that there are 9 EMISSIONS site(s) within approximately 0.25 miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
LEVEL 3 COMMUNICATIONS	11253 TEHACHAPI-WILLOW SPRINGS ROAD TEHACHAPI CA 93561	W	0.01 / 50.72	4
VOYAGER WIND II, LLC	8015 OAK CREEK RD. MOJAVE CA 93501	NNE	0.01 / 65.68	9
WINDSTAR ENERGY	12490 90TH STREET MOJAVE CA 93501	NNE	0.01 / 78.08	12
SOUTHERN CALIFORNIA EDISON	8500 OAK CREEK ROAD MOJAVE CA 93501	NNE	0.08 / 440.87	17
PINYON PINES WIND I	8560 OAK CREEK RD MOJAVE CA 93501	NNE	0.25 / 1,299.91	27
ALTA WIND II	8560 OAK CREEK ROAD MOJAVE CA 93501	NNE	0.25 / 1,299.91	27

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
ASPHALT CONSTRUCTION	7037 TROTTER AVE MOJAVE CA 93501	ESE	0.01 / 66.37	10
HOLLIDAY ROCK MOJAVE	7037 TROTTER AVE MOJAVE CA 93501	ESE	0.01 / 66.37	10
CACTUS GOLD MINES COMPANY	8941 WEST BACKUS ROAD MOJAVE CA 93501	SSE	0.21 / 1,134.51	23



Map: 1.0 Mile Radius

Order Number: 25071400346

Address: n/a, MOJAVE, CA

- Project Property
- Buffer Outline
- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- Areas with Higher Elevation
- Areas with Same Elevation
- Areas with Lower Elevation
- Areas with Unknown Elevation
- Freeways; Highways
- Traffic Circle; Ramp
- Major & Minor Arterial
- Traffic Circle; Ramp
- Local Road
- Rail
- State
- Country
- National Wetland
- Indian Reserve Land
- 100 Year Flood Zone
- 500 Year Flood Zone
- FWS Special Designation Areas
- National Priorities List (Active, Delisted, Proposed, Institutional Control)

Source: © 2021 ESRI StreetMap Premium

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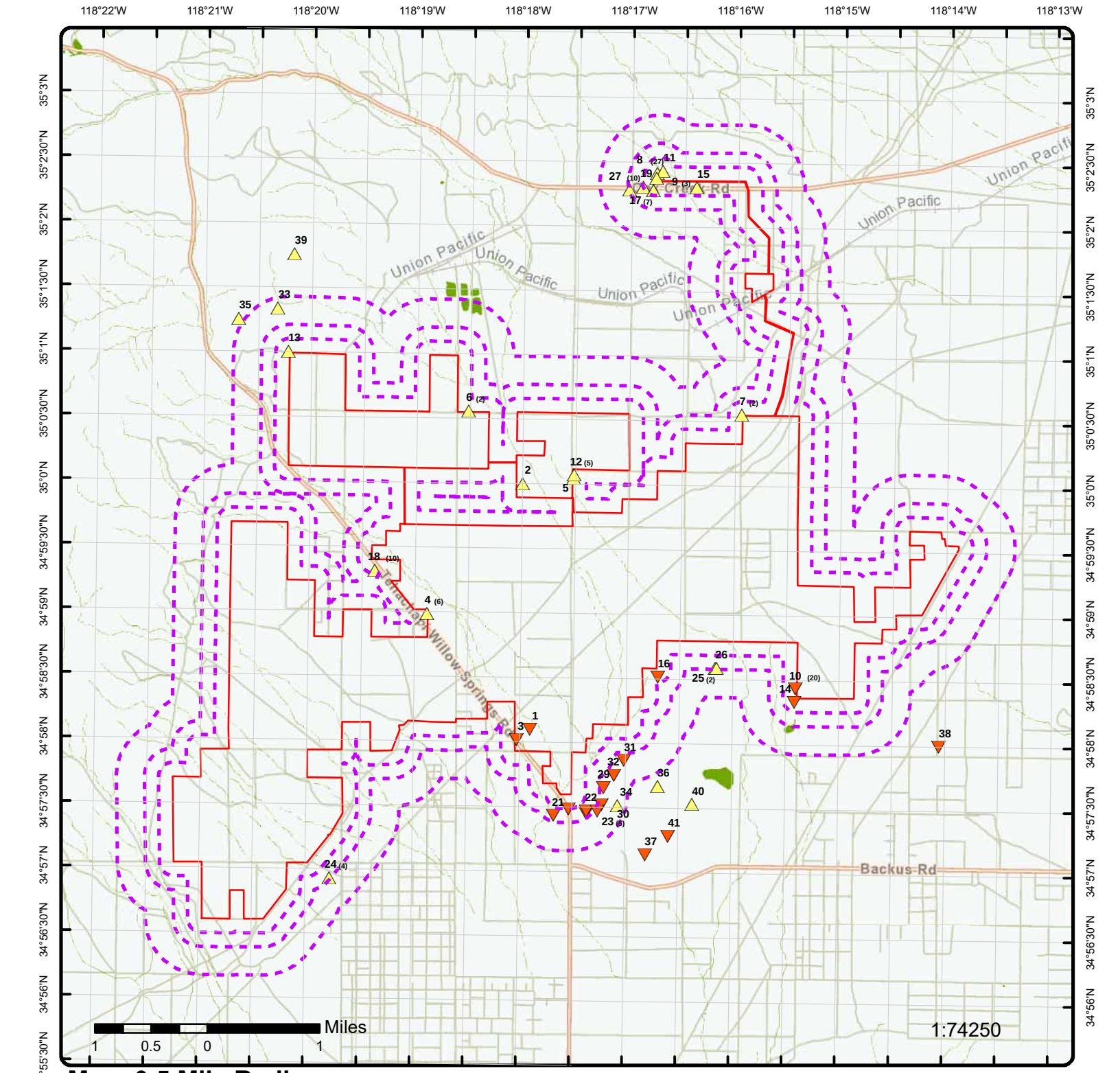

Map: 0.5 Mile Radius

Order Number: 25071400346

Address: n/a, MOJAVE, CA

- Project Property
- Buffer Outline
- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- Areas with Higher Elevation
- Areas with Same Elevation
- Areas with Lower Elevation
- Areas with Unknown Elevation
- Freeways; Highways
- Traffic Circle; Ramp
- Major & Minor Arterial
- Traffic Circle; Ramp
- Local Road
- Rail
- State
- Country
- National Wetland
- Indian Reserve Land
- 100 Year Flood Zone
- 500 Year Flood Zone
- FWS Special Designation Areas
- National Priorities List (Active, Delisted, Proposed, Institutional Control)

Source: © 2021 ESRI StreetMap Premium

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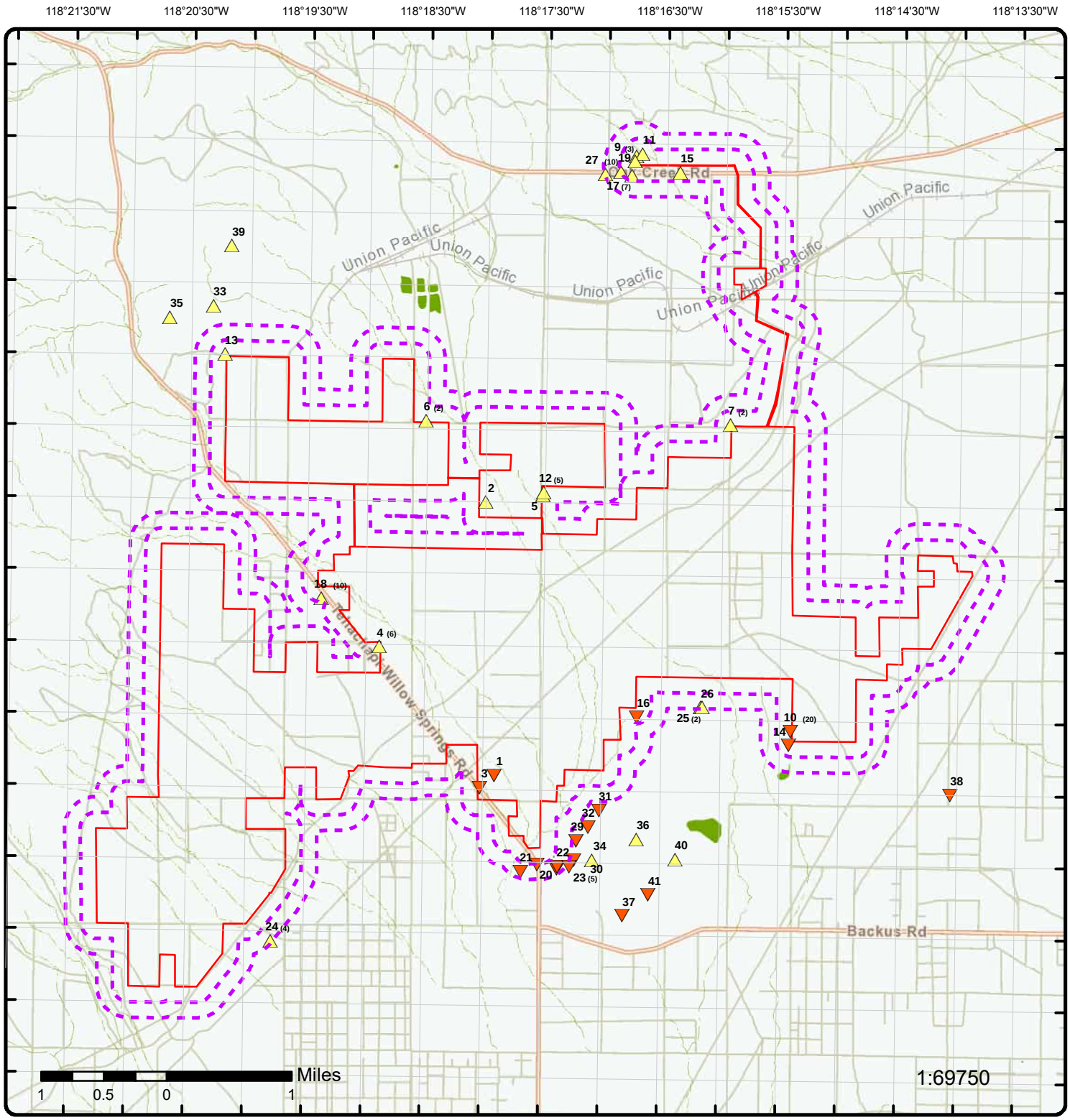

Map: 0.25 Mile Radius

Order Number: 25071400346

Address: n/a, MOJAVE, CA

- Project Property
- Buffer Outline
- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- Areas with Higher Elevation
- Areas with Same Elevation
- Areas with Lower Elevation
- Areas with Unknown Elevation
- Freeways; Highways
- Traffic Circle; Ramp
- Major & Minor Arterial
- Traffic Circle; Ramp
- Local Road
- Rail
- State
- Country
- National Wetland
- Indian Reserve Land
- 100 Year Flood Zone
- 500 Year Flood Zone
- FWS Special Designation Areas
- National Priorities List (Active, Delisted, Proposed, Institutional Control)

Source: © 2021 ESRI StreetMap Premium

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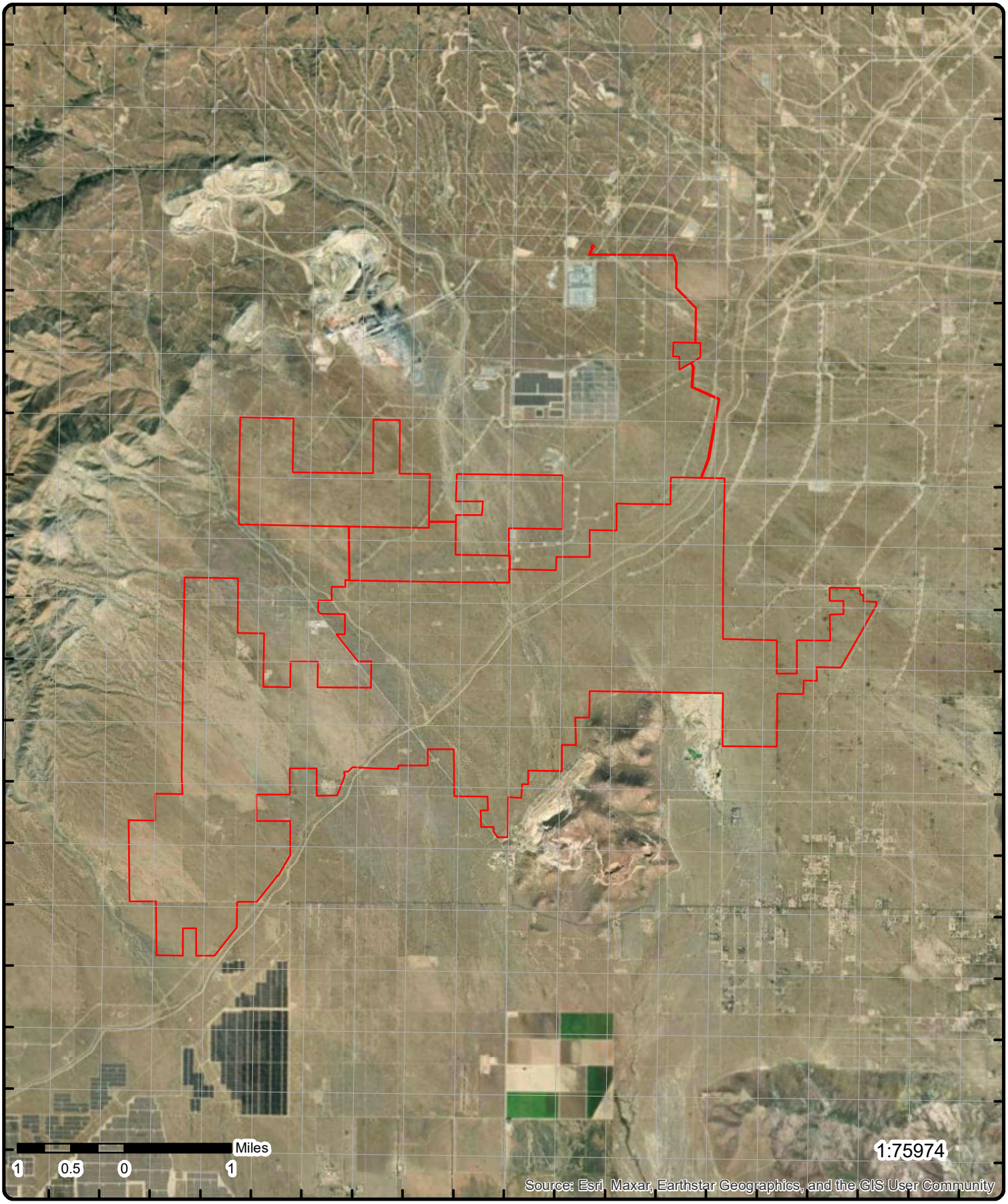


Aerial **Year: 2023**

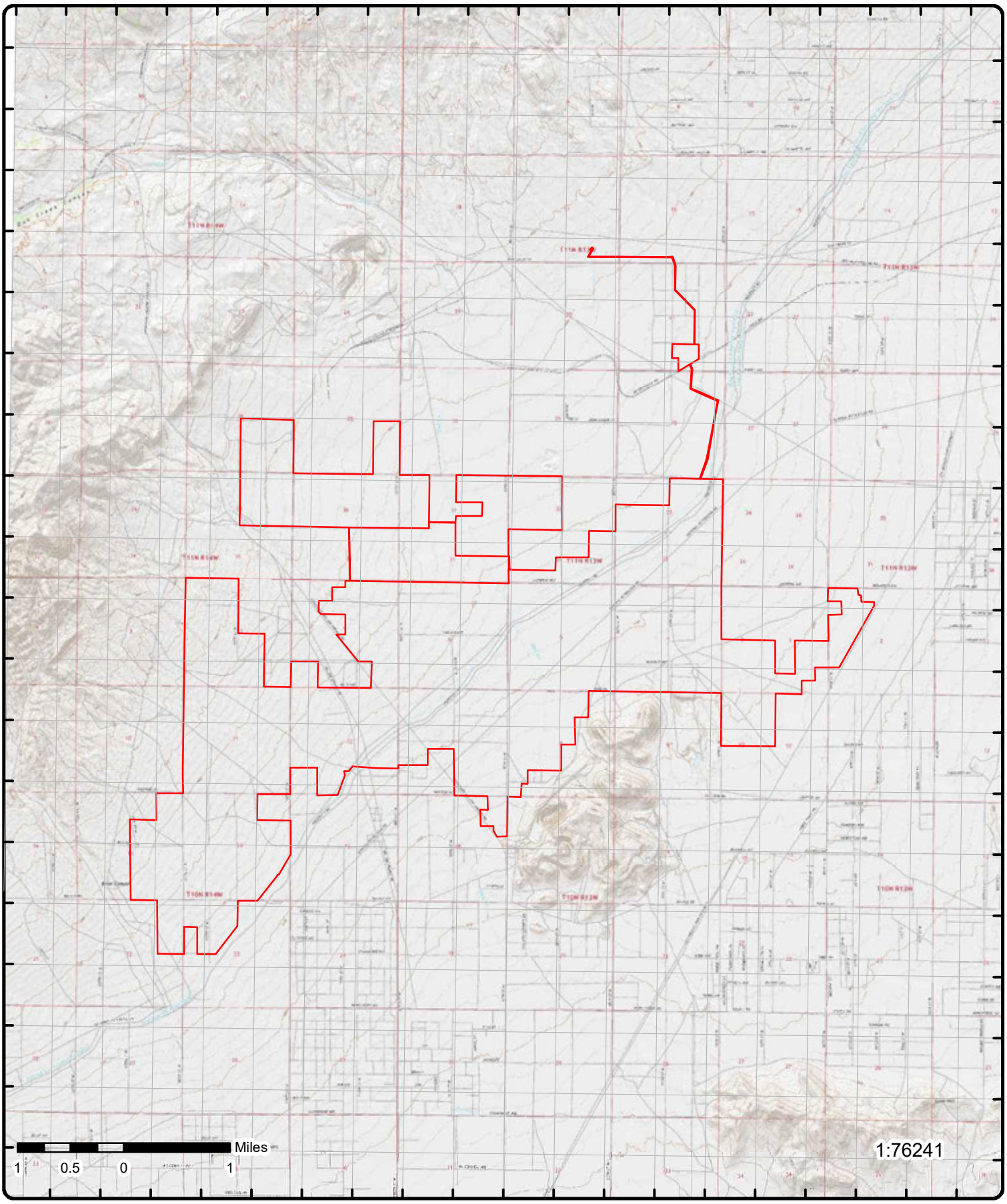
Address: n/a, MOJAVE, CA

Source: ESRI World Imagery

Order Number: 25071400346

ERIS

© ERIS Information Inc.



Topographic Map

Year: 2022

Order Number: 25071400346

Address: n/a, CA

Quadrangle(s): Monolith CA, Tylerhorse Canyon CA, Willow Springs CA, Soledad Mountain CA, Mojave CA, Tehachapi South CA

© ERIS Information Inc.

Source: USGS Topographic Map

Detail Report

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
1	1 of 1	SSE	0.00 / 0.00	3,050.44 / -144	BLM ADMINISTERED LANDS MOJAVE CA	ERNS

NRC Report No:	861612	**Latitude Degrees:**	34
Type of Incident:	FIXED	**Latitude Minutes:**	58
Incident Cause:	OTHER	**Latitude Seconds:**	6
Incident Date:	30-Jan-2008 15:30:00	**Longitude Degrees:**	118
Incident Location:	WEST SIDE OF GOLD MINE HEAP LEACH TAILINGS	**Longitude Minutes:**	17
Incident Dtg:	DISCOVERED	**Longitude Seconds:**	54
Distance from City:		**Lat Quad:**	N
Distance Units:		**Long Quad:**	W
Direction from City:		**Location Section:**	8
Location County:	KERN	**Location Township:**	10N
Potential Flag:	No	**Location Range:**	13W
Year:	Year 2008 Reports		

Description of Incident: REPORT OF THE RELEASE OF REPORTABLE QUANTITY OF ARSENIC FROM THE INACTIVE CACTUS GOLD MINE - HEAP LEACH TAILINGS INTO THE OAK CREEK DRAINAGE. THE CREEK DRAINAGE FLOWS DOWNSTREAM INTO RESIDENTIAL AREAS AND AREAS ADJACENT TO COUNTY ROAD TRANSPORTATION ROUTES.

Material Spill Information

Chris Code:	ARX	**Unit of Measure:**	POUND(S)
CAS No:	007440-38-2	**If Reached Water:**	UNKNOWN
UN No:		**Amount in Water:**	0
Name of Material:	ARSENIC	**Unit Reach Water:**	UNKNOWN AMOUNT
Amount of Material:	500		

Calls Information

Date Time Received:	05-Feb-2008 22:25:34	**Responsible City:**	
Date Time Complete:	05-Feb-2008 22:36:10	**Responsible State:**	XX
Call Type:	INC	**Responsible Zip:**	
Resp Company:		**Source:**	WEB REPORT
Resp Org Type:	UNKNOWN		

Incident Information

Tank ID:		**Building ID:**	
Tank Regulated:	U	**Location Area ID:**	
Tank Regulated By:		**Location Block ID:**	
Capacity of Tank:		**OCSG No:**	
Capacity Tank Units:		**OCSP No:**	
Description of Tank:		**State Lease No:**	
Actual Amount:		**Pier Dock No:**	
Actual Amount Units:		**Berth Slip No:**	
Tank Above Ground:	ABOVE	**Brake Failure:**	U
NPDES:		**Airbag Deployed:**	U
NPDES Compliance:	U	**Transport Contain:**	U
Init Contin Rel No:		**Location Subdiv:**	
Contin Rel Permit:		**Platform Rig Name:**	
Contin Release Type:		**Platform Letter:**	
Aircraft ID:		**Allision:**	U
Aircraft Runway No:		**Type of Structure:**	
Aircraft Spot No:		**Structure Name:**	

Aircraft Type:		***Structure Oper:***	U
Aircraft Model:		***Transit Bus Flag:***	
Aircraft Fuel Cap:		***Date Time Norm Serv:***	
Aircraft Fuel Cap U:		***Serv Disrupt Time:***	
Aircraft Fuel on Brd:		***Serv Disrupt Units:***	
Aircraft Fuel OB U:		***CR Begin Date:***	
Aircraft Hanger:		***CR End Date:***	
Road Mile Marker:		***CR Change Date:***	
Power Gen Facility:	U	***FBI Contact:***	
Generating Capacity:		***FBI Contact Dt Tm:***	
Type of Fixed Obj:	OTHER	***Passenger Handling:***	
Type of Fuel:		***Passenger Route:***	XXX
DOT Crossing No:		***Passenger Delay:***	XXX
DOT Regulated:	U	***Sub Part C Test Req:***	XXX
Pipeline Type:		***No of Conductor Tested:***	
Pipeline Abv Ground:	ABOVE	***No of Engineer Tested:***	
Pipeline Covered:	U	***No of Trainman Tested:***	
Exposed Underwater:	N	***No of Yard Foreman Tested:***	
Railroad Hotline:		***No of RCL Operator Tested:***	
Railroad Milepost:		***No of Brakeman Tested:***	
Grade Crossing:	U	***No of Train Dispat Tested:***	
Crossing Device Ty:		***No of Signalman Tested:***	
Ty Vehicle Involved:		***No of Other Emp Tested:***	
Device Operational:	Y	***No of Unknown Emp Tested:***	

Incident Details Information

Release Secured:	U	***State Agen Report No:***	
Release Rate:		***State Agen on Scene:***	
Release Rate Unit:		***State Agen Notified:***	
Release Rate Rate:		***Fed Agency Notified:***	
Est Duration of Rel:		***Oth Agency Notified:***	
Desc Remedial Act:		***Body of Water:***	OAK CREEK
Fire Involved:	N	***Tributary of:***	
Fire Extinguished:	U	***Near River Mile Make:***	
Any Evacuations:	N	***Near River Mile Mark:***	
No Evacuated:		***Offshore:***	N
Who Evacuated:		***Weather Conditions:***	CLEAR
Radius of Evac:		***Air Temperature:***	40
Any Injuries:	N	***Wind Direction:***	N
No. Injured:		***Wind Speed:***	40
No. Hospitalized:		***Wind Speed Unit:***	KNTS
No. Fatalities:		***Water Supp Contam:***	U
Any Fatalities:	N	***Water Temperature:***	
Any Damages:	N	***Wave Condition:***	
Damage Amount:		***Current Speed:***	
Air Corridor Closed:	N	***Current Direction:***	
Air Corridor Desc:		***Current Speed Unit:***	
Air Closure Time:		***EMPL Fatality:***	
Waterway Closed:	N	***Pass Fatality:***	
Waterway Desc:		***Community Impact:***	
Waterway Close Time:		***Passengers Transfer:***	NO
Road Closed:	N	***Passenger Injuries:***	
Road Desc:		***Employee Injuries:***	
Road Closure Time:		***Occupant Fatality:***	
Road Closure Units:		***Sheen Size:***	
Closure Direction:		***Sheen Size Units:***	
Major Artery:	No	***Sheen Size Length:***	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Track Closed:	N	**Sheen Size Length U:**	
Track Desc:		**Sheen Size Width:**	
Track Closure Time:		**Sheen Size Width U:**	
Track Closure Units:		**Sheen Color:**	
Track Close Dir:		**Dir of Sheen Travel:**	
Media Interest:	NONE	**Sheen Odor Desc:**	
Medium Desc:	WATER	**Duration Unit:**	
Addl Medium Info:	LAND AND OAK CREEK DRAINAGE	**Additional Info:**	INTERMITTENT RELEASE (MINIMUM) - CALCULATED AT 31.0 TONS OF ARSENIC OVER THE LAST 18-YEAR PERIOD.EXACT ANNUAL RELEASE RATE - UNKNOWN AT PRESENT HOWEVER, ESTIMATED MINIMUM ARSENIC ANNUAL RELEASE RATE = 1.7 TONS/YR). PERIOD OF INDUSTRIAL OPERATIONS BY HECKLA MINING CORP DURING 1980'S TO 1990'S. PRIMARY HEAP LEACH OPERATIONS CEASED IN 1992, WITH HEAP RINSING OPERATIONS COMPLETED BY 1996. HEAP LEACH CYANIDATION PROCESSING OF GOLD ORES - GENERATED +30 MILLION TONS OF MILL TAILINGS SEVERAL TRIBUTARIES OF THE OAK CREEK EPHERMAL DRAINAGE ARE LOCATED IMMEDIATELY ADJACENT TO HEAP LEACH MILL TAILINGS DISCHARGE SITES.

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
2	1 of 1	N	0.00 / 0.00	3,237.80 / 44	REED MINE CA	FINDS/FRS

Registry ID:	110066036649
FIPS Code:	
HUC Code:	18090206
Site Type Name:	STATIONARY
Location Description:	
Supplemental Location:	
Create Date:	14-OCT-15
Update Date:	
Interest Types:	STATE MASTER
SIC Codes:	
SIC Code Descriptions:	
NAICS Codes:	
NAICS Code Descriptions:	
Conveyor:	CALEPA
Federal Facility Code:	
Federal Agency Name:	
Tribal Land Code:	
Tribal Land Name:	
Congressional Dist No:	22
Census Block Code:	060290060073073
EPA Region Code:	09
County Name:	KERN
US/Mexico Border Ind:	
Latitude:	34.99999
Longitude:	-118.29999
Reference Point:	
Coord Collection Method:	UNKNOWN
Accuracy Value:	
Datum:	NAD83
Source:	
Facility Detail Rprt URL:	https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110066036649
Program Acronyms:	

CA-ENVIROVIEW:147258

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
3	1 of 1	S	0.00 / 0.00	3,047.56 / -147	KR WIND INC 10100 TEHACHAPI WILLOWS SPRING RD MOJAVE CA 93501	HAZNET

EPA ID:	CAC002658473	**Mailing City:**	DALLAS
NAICS Code:		**Mailing State:**	TX
SIC Code:		**Mailing Zip:**	752433729
Create Date:	10/5/2010	**Region Code:**	1
Fac Act Ind:	No	**Owner Name:**	KR WIND INC
Inact Date:	4/4/2011	**Owner Addr 1:**	12001 N CENTRAL EXPY STE 325
County:	15	**Owner Addr 2:**	
County Name:	Kern	**Owner City:**	DALLAS
County:		**Owner State:**	TX
Mail Name:		**Owner Zip:**	752433729
Mailing Addr 1:	12001 N CENTRAL EXPY STE 325	**Owner Phone:**	9723867272
Mailing Addr 2:		**Owner Fax:**	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
4	1 of6	W	0.01 / 50.72	3,274.01 / 80	LEVEL 3 COMMUNICATIONS - TEHACHAPI - MOJVCACX 11253 WILLOW SPRINGS RD TEHACHAPI CA 93561	FINDS/FRS

Registry ID:	110057064448
FIPS Code:	15
HUC Code:	
Site Type Name:	STATIONARY
Location Description:	
Supplemental Location:	
Create Date:	24-FEB-14
Update Date:	10-OCT-15
Interest Types:	STATE MASTER
SIC Codes:	4813
SIC Code Descriptions:	TELEPHONE COMMUNICATIONS, EXCEPT RADIOTELEPHONE
NAICS Codes:	517110
NAICS Code Descriptions:	WIRED TELECOMMUNICATIONS CARRIERS.
Conveyor:	
Federal Facility Code:	
Federal Agency Name:	
Tribal Land Code:	
Tribal Land Name:	
Congressional Dist No:	
Census Block Code:	
EPA Region Code:	09
County Name:	KERN
US/Mexico Border Ind:	
Latitude:	
Longitude:	
Reference Point:	
Coord Collection Method:	
Accuracy Value:	
Datum:	NAD83
Source:	
Facility Detail Rprt URL:	https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110057064448
Program Acronyms:	

CA-CERS:10235317, CA-ENVIROVIEW:44243

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
4	2 of6	W	0.01 / 50.72	3,274.01 / 80	CENTURYLINK - TEHACHAPI - MOJVCACX 11253 WILLOW SPRINGS RD TEHACHAPI CA	CUPA KERN

Facility ID:	FA0004079	**CERS ID:**	10235317

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Mailing Address:	700 W Mineral Avenue, UT D25.09	**Mailing State:**	CO
Mailing Address 2:	2	**Mailing Zip:**	80120
Mailing City:	Littleton		
Data Source:	CUPA - Hazardous Material Business Plan (HMBP) Inventory		

Detail(s)

Billing Status:	Active, billable	**Prog Element Code:**	CB1T
Current Inspection Dt:	4/1/2023	**Program Element:**	BUS PLAN SMALL LOW RISK 1 UNIT
HMIRRP Due Date:	2/28/2013	**Employee:**	COGLEY
Report Source:	CUPA - Hazardous Material Business Plan (HMBP) Inventory		

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
4	3 of6	W	0.01 / 50.72	3,274.01 / 80	**WILLIAMS COMMUNICATIONS** **11253 TEHACHIPI WILLOW SPRINGS RD** **MOJAVE CA 93501**	HAZNET

EPA ID:	CAL000259800	**Mailing City:**	BOISE
NAICS Code:	23332	**Mailing State:**	ID
SIC Code:	8741	**Mailing Zip:**	83705
Create Date:	9/25/2002 3:21:12 PM	**Region Code:**	1
Fac Act Ind:	No	**Owner Name:**	WILLIAMS COMMUNICATIONS
Inact Date:	6/30/2006	**Owner Addr 1:**	ONE TECHNOLOGY CENTER TC-LLZ
County:	15	**Owner Addr 2:**	
County Name:	Kern	**Owner City:**	TULSA
County:		**Owner State:**	OK
Mail Name:	EC POWER SYSTEMS	**Owner Zip:**	74102
Mailing Addr 1:	4499 MARKET ST	**Owner Phone:**	9185475878
Mailing Addr 2:		**Owner Fax:**	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
4	4 of6	W	0.01 / 50.72	3,274.01 / 80	**WILTEL COMMUNICATIONS LLC, MOJAVE, THCHCA1W** **11253 TEHACHAPI WILLOW SPRINGS RD** **MOJAVE CA 93501**	HAZNET

EPA ID:	CAC002590102	**Mailing City:**	TULSA
NAICS Code:		**Mailing State:**	OK
SIC Code:		**Mailing Zip:**	74103
Create Date:	5/3/2005	**Region Code:**	1
Fac Act Ind:	No	**Owner Name:**	WILTEL COMMUNICATIONS LLC
Inact Date:	10/31/2005	**Owner Addr 1:**	1 TECHNOLOGY CENTER
County:	15	**Owner Addr 2:**	AHN HSE DEPT TC 115
County Name:	Kern	**Owner City:**	TULSA
County:		**Owner State:**	OK
Mail Name:	JOHN DANCHERTSEN, HSE SPECIALIST	**Owner Zip:**	74103
Mailing Addr 1:	1 TECHNOLOGY CENTER	**Owner Phone:**	9185475991
Mailing Addr 2:	AHN HSE DEPT TC 115	**Owner Fax:**	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
4	5 of6	W	0.01 / 50.72	3,274.01 / 80	**LEVEL 3 COMMUNICATIONS** **11253 TEHACHAPI-WILLOW SPRINGS ROAD** **TEHACHAPI CA 93561**	FINDS/FRS

Registry ID:	110070521267
FIPS Code:	06029
HUC Code:	18090206
Site Type Name:	STATIONARY
Location Description:	
Supplemental Location:	
Create Date:	04-MAR-19
Update Date:	
Interest Types:	AIR EMISSIONS CLASSIFICATION UNKNOWN
SIC Codes:	
SIC Code Descriptions:	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

NAICS Codes:	517121
NAICS Code Descriptions:	
Conveyor:	EIS
Federal Facility Code:	
Federal Agency Name:	
Tribal Land Code:	
Tribal Land Name:	
Congressional Dist No:	22
Census Block Code:	060290060073607
EPA Region Code:	09
County Name:	KERN
US/Mexico Border Ind:	
Latitude:	34.98315
Longitude:	-118.317
Reference Point:	
Coord Collection Method:	
Accuracy Value:	
Datum:	NAD83
Source:	
Facility Detail Rprt URL:	https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110070521267
Program Acronyms:	

EIS:18323911

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
4	6 of6	W	0.01 / 50.72	3,274.01 / 80	LEVEL 3 COMMUNICATIONS 11253 TEHACHAPI-WILLOW SPRINGS ROAD TEHACHAPI CA 93561	EMISSIONS

2017 Criteria Data

Facility ID:	29002	**CERR Code:**	
Facility SIC Code:	4812	**TOGT:**	.00118393234672304439746300211416490486 2579
CO:	15	**ROGT:**	.00112
Air Basin:	MD	**COT:**	.01462
District:	KER	**NOXT:**	.01574
COID:	KER	**SOXT:**	.00003
DISN:	EASTERN KERN APCD	**PMT:**	.00084
CHAPIS:		**PM10T:**	.00084

2017 Toxic Data

Facility ID:	29002	**COID:**	KER
Facility SIC Code:	4812	**DISN:**	EASTERN KERN APCD
CO:	15	**CHAPIS:**	
Air Basin:	MD	**CERR Code:**	
District:	KER		
TS:			
Health Risk Asmt:			
Non-Cancer Chronic Haz Ind:			
Non-Cancer Acute Haz Ind:			

2020 Criteria Data

CO:	15	**CHAPIS:**	
Air Basin:	MD	**CERR Code:**	
Facility ID:	29002	**ROGT:**	.0293
District:	KER	**COT:**	.0578
Facility SIC Code:	4812	**NOXT:**	.275
CO ID:	KER	**SOXT:**	.009

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

DISN: EASTERN KERN APCD
TOGT: .030972515856236786469344608879492600422 8
PMT: .010060362173038229376257545271629778672
PM10T: .01

2020 Toxic Data

CO: 15
Air Basin: MD
Facility ID: 29002
District: KER
Facility SIC Code: 4812
COID: KER
Non-Cancer Chronic Haz Ind:
Non-Cancer Acute Haz Ind:
DISN: EASTERN KERN APCD
CHAPIS:
CHERR Code:
TS:
Health Risk Asmt:

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5 | **1 of1** | **NNE** | **0.01 / 53.65** | **3,221.05 / 27** | **WINDSTAR ENERGY**
12490 90TH STREET
MOJAVE CA 93501 | **FINDS/FRS**

Registry ID: 110071763422
FIPS Code: 06029
HUC Code:
Site Type Name: STATIONARY
Location Description:
Supplemental Location:
Create Date: 15-JUL-24
Update Date: 27-AUG-24
Interest Types:
SIC Codes:
SIC Code Descriptions:
NAICS Codes:
NAICS Code Descriptions:
Conveyor:
Federal Facility Code:
Federal Agency Name:
Tribal Land Code:
Tribal Land Name:
Congressional Dist No:
Census Block Code:
EPA Region Code: 09
County Name: UNITED STATES
US/Mexico Border Ind:
Latitude:
Longitude:
Reference Point:
Coord Collection Method:
Accuracy Value:
Datum: NAD83
Source:
Facility Detail Rprt URL: https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110071763422
Program Acronyms:

CARB-TCH:15MDKER444001

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6 | **1 of2** | **NNW** | **0.01 / 60.00** | **3,341.39 / 147** | **ALTA WIND LLC (PHASE VII)**
13505 90TH STREET
MOJAVE CA 93501 | **FINDS/FRS**

Registry ID: 110070521216
FIPS Code: 06029
HUC Code: 18090206
Site Type Name: STATIONARY
Location Description:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Supplemental Location:
Create Date: 04-MAR-19
Update Date:
Interest Types: AIR EMISSIONS CLASSIFICATION UNKNOWN
SIC Codes:
SIC Code Descriptions:
NAICS Codes: 221112
NAICS Code Descriptions: FOSSIL FUEL ELECTRIC POWER GENERATION.
Conveyor: EIS
Federal Facility Code:
Federal Agency Name:
Tribal Land Code:
Tribal Land Name:
Congressional Dist No: 22
Census Block Code: 060290060073073
EPA Region Code: 09
County Name: KERN
US/Mexico Border Ind:
Latitude: 35.02151
Longitude: -118.29667
Reference Point:
Coord Collection Method:
Accuracy Value:
Datum: NAD83
Source:
Facility Detail Rprt URL: https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110070521216
Program Acronyms:

EIS:18317511

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
6	2 of2	NNW	0.01 / 60.00	3,341.39 / 147	ALTA WIND LLC (PHASE VII) 13505 90TH STREET MOJAVE CA 93501	FINDS/FRS

Registry ID: 110071763310
FIPS Code: 06029
HUC Code:
Site Type Name: STATIONARY
Location Description:
Supplemental Location:
Create Date: 15-JUL-24
Update Date: 27-AUG-24
Interest Types:
SIC Codes:
SIC Code Descriptions:
NAICS Codes:
NAICS Code Descriptions:
Conveyor:
Federal Facility Code:
Federal Agency Name:
Tribal Land Code:
Tribal Land Name:
Congressional Dist No:
Census Block Code:
EPA Region Code: 09
County Name: UNITED STATES
US/Mexico Border Ind:
Latitude:
Longitude:
Reference Point:
Coord Collection Method:
Accuracy Value:
Datum: NAD83
Source:
Facility Detail Rprt URL: https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110071763310
Program Acronyms:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

CARB-TCH:15MDKER438

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7 *1 of2* *NE* *0.01 / 62.48* *3,195.81 / 2* ***WINDHUB SOLAR B, LLC*** ***FINDS/FRS***

MOJAVE CA 93501

Registry ID:	110070397105
FIPS Code:	
HUC Code:	18090206
Site Type Name:	STATIONARY
Location Description:	
Supplemental Location:	
Create Date:	26-DEC-18
Update Date:	
Interest Types:	ELECTRIC GENERATOR
SIC Codes:	
SIC Code Descriptions:	
NAICS Codes:	
NAICS Code Descriptions:	
Conveyor:	EIA-860
Federal Facility Code:	
Federal Agency Name:	
Tribal Land Code:	
Tribal Land Name:	
Congressional Dist No:	22
Census Block Code:	060290060073972
EPA Region Code:	09
County Name:	KERN
US/Mexico Border Ind:	
Latitude:	35.0133
Longitude:	-118.2698
Reference Point:	
Coord Collection Method:	
Accuracy Value:	
Datum:	NAD83
Source:	
Facility Detail Rprt URL:	https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110070397105
Program Acronyms:	

EIA-860:59969

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7 *2 of2* *NE* *0.01 / 62.48* *3,195.81 / 2* ***WINDHUB SOLAR B, LLC*** ***FINDS/FRS***

CA

Registry ID:	110070700497
FIPS Code:	6029
HUC Code:	18090206
Site Type Name:	
Location Description:	
Supplemental Location:	
Create Date:	02-APR-20
Update Date:	04-APR-22
Interest Types:	ELECTRIC POWER GENERATOR (SOLAR BASED)
SIC Codes:	
SIC Code Descriptions:	
NAICS Codes:	
NAICS Code Descriptions:	
Conveyor:	EGRID
Federal Facility Code:	
Federal Agency Name:	
Tribal Land Code:	
Tribal Land Name:	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Congressional Dist No: 22
Census Block Code: 060290060073972
EPA Region Code: 09
County Name: KERN
US/Mexico Border Ind:
Latitude: 35.0133
Longitude: -118.2698
Reference Point:
Coord Collection Method:
Accuracy Value:
Datum: NAD83
Source:
Facility Detail Rprt URL: https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110070700497
Program Acronyms:

EGRID:59969

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
8	1 of27	NNE	0.01 / 65.21	3,478.20 / 284	VOYAGER WIND II/III/IV 852 8009 OAK CREEK RD MOJAVE CA 93501	RCRA NON GEN

Handler ID: CAL000436961
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	**Used Oil Transpor:**	No
Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	I	**NAIC 1:**	238910
Seq No:	1	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	20180615	**NAIC 4:**	
Active Site:	H----	**State:**	CA
Land Type:		**Location Latitude:**	35.038417
In Handler Univ:	Y	**Location Longitude:**	-118.283201
In A Universe:	Y	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	AG
Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		
Fed Waste Gen Owner:	HQ		
State Waste Generator Owner:	CA		
State Waste Generator:	2		
Short Term Generator:	N		

Uni Waste:	Y
Universal Waste Dest Facility:	Y
Federal Universal Waste:	N
As Federally Regulated Tsdf:	------
As Converter Tsdf:	------
As State Regulated Tsdf:	------
As State Regulated Handler:	---
Federal Indicator:	---
Hsm:	N
Subpart K:	----
GPRA Permit:	N
GPRA Renewal:	N
Permit Renewal Wrkld:	------
Permwrk ID:	------
Perm Prog:	------
Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20180907
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	VOYAGER WIND II/III/IV 852
Location Street No:	
Location Street1:	8009 OAK CREEK RD
Location Street2:	
Location City:	MOJAVE
Location State:	CA
Location Zip:	93501
Location County Code:	CA029
Location County Name:	KERN
Location Country:	US
Contact Name:	CHARLES TATUM
Contact Street No:	
Contact Street1:	8009 OAK CREEK RD
Contact Street2:	
Contact City:	MOJAVE
Contact State:	CA
Contact Zip:	93501
Contact Country:	
Contact Phone And Ext:	320-333-7073
Contact Fax:	
Contact Email Address:	CTATUM@BLATTNERENERGY.COM
Contact Title:	
Owner Name:	BLATTNER ENERGY INC
Owner Type:	O
Owner Seq:	1
Operator Name:	CHARLES TATUM
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20180615
Handler Name:	VOYAGER WIND II/III/IV 852
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Implementer

Owner/Operator Details

Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Other	***Street1:***	8009 OAK CREEK RD
Name:	CHARLES TATUM	***Street2:***	
Dt Became Current:		***City:***	MOJAVE
Dt Ended Current:		***State:***	CA
Phone:	320-333-7073	***Country:***	
Source Type:	Implementer	***Zip:***	93501
Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street1:***	392 CO RD 50
Name:	BLATTNER ENERGY INC	***Street2:***	
Dt Became Current:		***City:***	AVON
Dt Ended Current:		***State:***	MN
Phone:	320-356-7351	***Country:***	
Source Type:	Implementer	***Zip:***	56310

8	***2 of27***	***NNE***	***0.01 / 65.21***	***3,478.20 / 284***	***VOYAGER WIND II/III/IV 852 8009 OAK CREEK RD MOJAVE CA 93501***	***FINDS/FRS***

Registry ID:	110070484930
FIPS Code:	06029
HUC Code:	18090206
Site Type Name:	STATIONARY
Location Description:	
Supplemental Location:	
Create Date:	03-JAN-19
Update Date:	
Interest Types:	OTHER HAZARDOUS WASTE ACTIVITIES
SIC Codes:	
SIC Code Descriptions:	
NAICS Codes:	238910
NAICS Code Descriptions:	SITE PREPARATION CONTRACTORS.
Conveyor:	RCRAINFO
Federal Facility Code:	
Federal Agency Name:	
Tribal Land Code:	
Tribal Land Name:	
Congressional Dist No:	22
Census Block Code:	060290060073061
EPA Region Code:	09
County Name:	KERN
US/Mexico Border Ind:	
Latitude:	35.038417
Longitude:	-118.283201
Reference Point:	ENTRANCE POINT OF A FACILITY OR STATION
Coord Collection Method:	GDT-ADDRESS MATCHING (GEOCODING)
Accuracy Value:	
Datum:	NAD83
Source:	
Facility Detail Rprt URL:	https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110070484930
Program Acronyms:	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

RCRAINFO:CAL000436961

8	3 of27	NNE	0.01 / 65.21	3,478.20 / 284	BLATTNER ENERGY INC. 8009 OAK CREEK ROAD MOJAVE CA 93501	RCRA NON GEN

Handler ID: CAC003062134
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	**Used Oil Transpor:**	No
Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		

Used Oil Market Burner: No
Used Oil Spec Marketer: No

Additional Handler Summary Details

Source Type:	I	**NAIC 1:**	236210
Seq No:	1	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	20200402	**NAIC 4:**	
Active Site:	-----	**State:**	CA
Land Type:		**Location Latitude:**	
In Handler Univ:	N	**Location Longitude:**	
In A Universe:	N	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	
Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		

Fed Waste Gen Owner: HQ
State Waste Generator Owner: CA
State Waste Generator: 2
Short Term Generator: N
Uni Waste: N
Universal Waste Dest Facility: N
Federal Universal Waste: N
As Federally Regulated Tsdf: ------
As Converter Tsdf: ------
As State Regulated Tsdf: ------
As State Regulated Handler: ---
Federal Indicator: ---
Hsm: N
Subpart K: ----
GPRA Permit: N
GPRA Renewal: N
Permit Renewal Wrkld: ------
Permwrk ID: ------

Perm Prog:	------
Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20200408
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	BLATTNER ENERGY INC.
Location Street No:	
Location Street1:	8009 OAK CREEK ROAD
Location Street2:	
Location City:	MOJAVE
Location State:	CA
Location Zip:	93501
Location County Code:	CA029
Location County Name:	KERN
Location Country:	US
Contact Name:	CHARLIE SIMONS
Contact Street No:	
Contact Street1:	8009 OAK CREEK ROAD
Contact Street2:	
Contact City:	MOJAVE
Contact State:	CA
Contact Zip:	93501
Contact Country:	
Contact Phone And Ext:	320-371-1743
Contact Fax:	
Contact Email Address:	DOUGO@BLATTNERENERGY.COM
Contact Title:	
Owner Name:	BLATTNER ENERGY INC.
Owner Type:	O
Owner Seq:	1
Operator Name:	CHARLIE SIMONS
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20200402
Handler Name:	BLATTNER ENERGY INC.
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Implementer

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Owner/Operator Details

Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street1:***	392 CTY ROAD 50
Name:	BLATTNER ENERGY INC.	***Street2:***	
Dt Became Current:		***City:***	AVON
Dt Ended Current:		***State:***	MN
Phone:	320-356-7351	***Country:***	
Source Type:	Implementer	***Zip:***	56310
Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Other	***Street1:***	8009 OAK CREEK ROAD
Name:	CHARLIE SIMONS	***Street2:***	
Dt Became Current:		***City:***	MOJAVE
Dt Ended Current:		***State:***	CA
Phone:	320-371-1743	***Country:***	
Source Type:	Implementer	***Zip:***	93501

8	***4 of27***	***NNE***	***0.01 / 65.21***	***3,478.20 / 284***	***Tehachapi Energy Storage System I 8009 OAK CREEK RD MOJAVE CA 93501***	***CERS HAZ***

Site ID:	568590
Latitude:	35.045720
Longitude:	-118.283170

Regulated Programs

EI ID:	10852522	***EI Description:***	Chemical Storage Facilities

Evaluations

Eval Date:	05/24/2023
Violations Found:	No
Eval General Type:	Compliance Evaluation Inspection
Eval Type:	Routine done by local agency
Eval Division:	Kern County Env Health Services Department
Eval Program:	HMRRP
Eval Source:	CERS
Eval Notes:	

Affiliations

Affil Type Desc:	Document Preparer
Entity Name:	Whitney Goller
Entity Title:	
Address:	
City:	
State:	
Country:	
Zip Code:	
Phone:	

Affil Type Desc:	Environmental Contact
Entity Name:	WHITNEY GOLLER
Entity Title:	
Address:	9480 Gateway Drive, Suite 201
City:	Reno
State:	NV
Country:	
Zip Code:	89521
Phone:	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Affil Type Desc: Identification Signer
Entity Name: Whitney Goller
Entity Title: Environmental Compliance Specialist
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Parent Corporation
Entity Name: TERRA-GEN OPERATING CO, LLC Kern County
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title:
Address: 7021 Oak Creek Road
City: Mojave
State: CA
Country:
Zip Code: 93501
Phone:

Affil Type Desc: Legal Owner
Entity Name: Mojave 3/4/5, LLC.
Entity Title:
Address: 7021 Oak Creek Road
City: Mojave
State: CA
Country: United States
Zip Code: 93501
Phone: (661) 822-2400

Affil Type Desc: Operator
Entity Name: Tehachapi Energy Storage System 1
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone: (661) 822-2400

Affil Type Desc: CUPA District
Entity Name: Kern County Environmental Health Services Departme
Entity Title:
Address: 2700 M Street, Suite 300
City: Bakersfield
State: CA
Country:
Zip Code: 93301-2370
Phone: (661) 862-8740

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
8	5 of27	NNE	0.01 / 65.21	3,478.20 / 284	BLATTNER ENERGY INC. 8009 OAK CREEK ROAD MOJAVE CA 93501	FINDS/FRS

Registry ID: 110070803275
FIPS Code: 06029
HUC Code:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Site Type Name: STATIONARY
Location Description:
Supplemental Location:
Create Date: 10-JUN-20
Update Date:
Interest Types: UNSPECIFIED UNIVERSE
SIC Codes:
SIC Code Descriptions:
NAICS Codes: 236210
NAICS Code Descriptions: INDUSTRIAL BUILDING CONSTRUCTION.
Conveyor:
Federal Facility Code:
Federal Agency Name:
Tribal Land Code:
Tribal Land Name:
Congressional Dist No:
Census Block Code:
EPA Region Code: 09
County Name: KERN
US/Mexico Border Ind:
Latitude:
Longitude:
Reference Point:
Coord Collection Method:
Accuracy Value:
Datum: NAD83
Source:
Facility Detail Rprt URL: https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110070803275
Program Acronyms:

RCRAINFO:CAC003062134

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
8	6 of27	NNE	0.01 / 65.21	3,478.20 / 284	MORTENSON CONSTRUCTION 8009 OAK CREEK RD MOJAVE CA 95301	RCRA NON GEN

Handler ID: CAL000461570
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	**Used Oil Transpor:**	No
Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		

Used Oil Market Burner: No
Used Oil Spec Marketer: No

Additional Handler Summary Details

Source Type: I **NAIC 1:** 56299

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Seq No:	1	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	20210405	**NAIC 4:**	
Active Site:	-----	**State:**	CA
Land Type:		**Location Latitude:**	
In Handler Univ:	N	**Location Longitude:**	
In A Universe:	N	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	
Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		

Fed Waste Gen Owner:	HQ
State Waste Generator Owner:	CA
State Waste Generator:	2
Short Term Generator:	N
Uni Waste:	N
Universal Waste Dest Facility:	N
Federal Universal Waste:	N
As Federally Regulated Tsdf:	------
As Converter Tsdf:	------
As State Regulated Tsdf:	------
As State Regulated Handler:	---
Federal Indicator:	---
Hsm:	N
Subpart K:	----
GPRA Permit:	N
GPRA Renewal:	N
Permit Renewal Wrkld:	------
Permwrk ID:	------
Perm Prog:	------
Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20210415
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	MORTENSON CONSTRUCTION
Location Street No:	
Location Street1:	8009 OAK CREEK RD
Location Street2:	
Location City:	MOJAVE
Location State:	CA
Location Zip:	95301
Location County Code:	CA029
Location County Name:	KERN
Location Country:	US
Contact Name:	BRIAN TRAMONTE
Contact Street No:	
Contact Street1:	8009 OAK CREEK RD
Contact Street2:	
Contact City:	MOJAVE

Contact State:	CA
Contact Zip:	95301
Contact Country:	
Contact Phone And Ext:	651-274-6803
Contact Fax:	
Contact Email Address:	BRIAN.TRAMONTE@MORTENSON.COM
Contact Title:	
Owner Name:	TERRA-GEN MPE INC
Owner Type:	O
Owner Seq:	1
Operator Name:	BRIAN TRAMONTE
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20210405
Handler Name:	MORTENSON CONSTRUCTION
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Implementer

Owner/Operator Details

Owner/Operator Ind:	Current Owner	**Street No:**	
Type:	Other	**Street1:**	8009 OAK CREEK RD
Name:	TERRA-GEN MPE INC	**Street2:**	
Dt Became Current:		**City:**	MOJAVE
Dt Ended Current:		**State:**	CA
Phone:	651-274-6803	**Country:**	
Source Type:	Implementer	**Zip:**	95301
Owner/Operator Ind:	Current Operator	**Street No:**	
Type:	Other	**Street1:**	8009 OAK CREEK RD
Name:	BRIAN TRAMONTE	**Street2:**	
Dt Became Current:		**City:**	MOJAVE
Dt Ended Current:		**State:**	CA
Phone:	651-274-6803	**Country:**	
Source Type:	Implementer	**Zip:**	95301

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
8	7 of27	NNE	0.01 / 65.21	3,478.20 / 284	CLARK BROS. 8009 OAK CREEK RD. MOJAVE CA 93501	RCRA NON GEN

Handler ID:	CAC003113897
Generator Status:	N
Recycler Activity?:	NO
Recycler Activity Note:	This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note:	NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	**Used Oil Transpor:**	No
Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No

Transporter:	No	***Used Oil Processor:***	No
Transfer Facility:	No	***Used Oil Refiner:***	No
Recycler:	No	***Used Oil Burner:***	No
Onsite Burner Exem:	No	***Commercial TSD:***	No
Furnace Exemption:	No	***Recycl Nonstorage:***	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	I	***NAIC 1:***	237110
Seq No:	1	***NAIC 2:***	
Non Notifier:		***NAIC 3:***	
Receive Date:	20210408	***NAIC 4:***	
Active Site:	-----	***State:***	CA
Land Type:		***Location Latitude:***	
In Handler Univ:	N	***Location Longitude:***	
In A Universe:	N	***Loc GIS Primary:***	N
Gen Status:	N	***Loc GIS Origin:***	
Report Cycle:		***State District Owner:***	
Accessibility:		***State District:***	
Region:	09		
Fed Waste Gen Owner:	HQ		
State Waste Generator Owner:	CA		
State Waste Generator:	2		
Short Term Generator:	N		
Uni Waste:	N		
Universal Waste Dest Facility:	N		
Federal Universal Waste:	N		
As Federally Regulated Tsdf:	------		
As Converter Tsdf:	------		
As State Regulated Tsdf:	------		
As State Regulated Handler:	---		
Federal Indicator:	---		
Hsm:	N		
Subpart K:	----		
GPRA Permit:	N		
GPRA Renewal:	N		
Permit Renewal Wrkld:	------		
Permwrk ID:	------		
Perm Prog:	------		
Pcwrkld:	------		
Closwrkld:	------		
GPRA Ca:	N		
Cawrkld:	N		
Subjca Tsd Discretion:	N		
NCAPS:	N		
EC Indicator:	N		
Ca725 Indicator:	N		
Ca750 Indicator:	N		
Operating Tsdf:	------		
Full Enforcement:	------		
Snc:	N		
Unaddressed Snc:	N		
Addressed Snc:	N		
Snc With Comp Sched:	N		
Fa Required:	-----		
Hhandler Last Change:	20210415		
Recognized Trader Importer:	N		
Recognized Trader Exporter:	N		
Slab Importer:	N		
Slab Exporter:	N		
Manifest Broker:	N		
Subpart P:	N		
Contact Language:	EN		
Handler Name:	CLARK BROS.		
Location Street No:			

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Location Street1:	8009 OAK CREEK RD.
Location Street2:	
Location City:	MOJAVE
Location State:	CA
Location Zip:	93501
Location County Code:	CA029
Location County Name:	KERN
Location Country:	US
Contact Name:	ADAM KIRK
Contact Street No:	
Contact Street1:	8009 OAK CREEK RD.
Contact Street2:	
Contact City:	MOJAVE
Contact State:	CA
Contact Zip:	93501
Contact Country:	
Contact Phone And Ext:	559-930-2743
Contact Fax:	
Contact Email Address:	SUSAN@CRANESWASTEOIL.COM
Contact Title:	
Owner Name:	ADAM CLARK
Owner Type:	O
Owner Seq:	1
Operator Name:	ADAM KIRK
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20210408
Handler Name:	CLARK BROS.
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Implementer

Owner/Operator Details

Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street1:***	745 BROADWAY
Name:	ADAM CLARK	***Street2:***	
Dt Became Current:		***City:***	FRESNO
Dt Ended Current:		***State:***	CA
Phone:	559-930-2743	***Country:***	
Source Type:	Implementer	***Zip:***	93721
Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Other	***Street1:***	8009 OAK CREEK RD.
Name:	ADAM KIRK	***Street2:***	
Dt Became Current:		***City:***	MOJAVE
Dt Ended Current:		***State:***	CA
Phone:	559-930-2743	***Country:***	
Source Type:	Implementer	***Zip:***	93501

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
8	8 of27	NNE	0.01 / 65.21	3,478.20 / 284	***Mortenson Oasis Wind Farm*** ***8009B OAK CREEK RD*** ***MOJAVE CA 93501***	***CERS TANK***

Site ID:	575741
Latitude:	35.045720
Longitude:	-118.283170

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Regulated Programs

EI ID: 10872631
EI Description: Aboveground Petroleum Storage

Affiliations

Affil Type Desc: CUPA District
Entity Name: Kern County Environmental Health Services Departme
Entity Title:
Address: 2700 M Street, Suite 300
City: Bakersfield
State: CA
Country:
Zip Code: 93301-2370
Phone: (661) 862-8740

Affil Type Desc: Parent Corporation
Entity Name: Mortenson Oasis Wind Farm
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
8	9 of27	NNE	0.01 / 65.21	3,478.20 / 284	BRIAN TRAMONTE 8009 OAK CREEK RD MOJAVE CA 93501	RCRA NON GEN

Handler ID: CAC003134268
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	***Used Oil Transpor:***	No
Mixed Waste Gen:	No	***Used Oil Trans Fac:***	No
Transporter:	No	***Used Oil Processor:***	No
Transfer Facility:	No	***Used Oil Refiner:***	No
Recycler:	No	***Used Oil Burner:***	No
Onsite Burner Exem:	No	***Commercial TSD:***	No
Furnace Exemption:	No	***Recycl Nonstorage:***	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	I	***NAIC 1:***	237130
Seq No:	1	***NAIC 2:***	
Non Notifier:		***NAIC 3:***	
Receive Date:	20210813	***NAIC 4:***	
Active Site:	-----	***State:***	CA

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Land Type:
In Handler Univ: N
In A Universe: N
Gen Status: N
Report Cycle:
Accessibility:
Region: 09
Location Latitude:
Location Longitude:
Loc GIS Primary: N
Loc GIS Origin:
State District Owner:
State District:

Fed Waste Gen Owner: HQ
State Waste Generator Owner: CA
State Waste Generator: 2
Short Term Generator: N
Uni Waste: N
Universal Waste Dest Facility: N
Federal Universal Waste: N
As Federally Regulated Tsdf: ------
As Converter Tsdf: ------
As State Regulated Tsdf: ------
As State Regulated Handler: ---
Federal Indicator: ---
Hsm: N
Subpart K: ----
GPRA Permit: N
GPRA Renewal: N
Permit Renewal Wrkld: ------
Permwrk ID: ------
Perm Prog: ------
Pcwrkld: ------
Closwrkld: ------
GPRA Ca: N
Cawrkld: N
Subjca Tsd Discretion: N
NCAPS: N
EC Indicator: N
Ca725 Indicator: N
Ca750 Indicator: N
Operating Tsdf: ------
Full Enforcement: ------
Snc: N
Unaddressed Snc: N
Addressed Snc: N
Snc With Comp Sched: N
Fa Required: -----
Hhandler Last Change: 20210816
Recognized Trader Importer: N
Recognized Trader Exporter: N
Slab Importer: N
Slab Exporter: N
Manifest Broker: N
Subpart P: N
Contact Language: EN
Handler Name: BRIAN TRAMONTE
Location Street No:
Location Street1: 8009 OAK CREEK RD
Location Street2:
Location City: MOJAVE
Location State: CA
Location Zip: 93501
Location County Code: CA029
Location County Name: KERN
Location Country: US
Contact Name: BRIAN TRAMONTE
Contact Street No:
Contact Street1: 8009 OAK CREEK RD
Contact Street2:
Contact City: MOJAVE
Contact State: CA
Contact Zip: 93501
Contact Country:
Contact Phone And Ext: 651-274-6803

Contact Fax:
Contact Email Address: BRIAN.TRAMONTE@MORTENSON.COM
Contact Title:
Owner Name: MORTENSON NARAYANAN
Owner Type: O
Owner Seq: 1
Operator Name: BRIAN TRAMONTE
Operator Type: O
Operator Seq: 2
Public Notes:

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No: 1
Receive Date: 20210813
Handler Name: BRIAN TRAMONTE
Fed Waste Generator: N
Generator Code Description: Not a Generator, Verified
Source Type: Implementer

Owner/Operator Details

Owner/Operator Ind: Current Owner
Type: Other
Name: MORTENSON NARAYANAN
Dt Became Current:
Dt Ended Current:
Phone: 651-274-6803
Source Type: Implementer
Street No:
Street1: 8009 OAK CREEK RD
Street2:
City: MOJAVE
State: CA
Country:
Zip: 93501

Owner/Operator Ind: Current Operator
Type: Other
Name: BRIAN TRAMONTE
Dt Became Current:
Dt Ended Current:
Phone: 651-274-6803
Source Type: Implementer
Street No:
Street1: 8009 OAK CREEK RD
Street2:
City: MOJAVE
State: CA
Country:
Zip: 93501

8	***10 of27***	***NNE***	***0.01 / 65.21***	***3,478.20 / 284***	***VESTAS 8009 OAK CREEK ROAD MOJAVE CA 93501***	***RCRA NON GEN***

Handler ID: CAC003133340
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer: No
Mixed Waste Gen: No
Transporter: No
Transfer Facility: No
Recycler: No
Onsite Burner Exem: No
Used Oil Transpor: No
Used Oil Trans Fac: No
Used Oil Processor: No
Used Oil Refiner: No
Used Oil Burner: No
Commercial TSD: No

Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	I	**NAIC 1:**	333611
Seq No:	1	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	20210809	**NAIC 4:**	
Active Site:	-----	**State:**	CA
Land Type:		**Location Latitude:**	
In Handler Univ:	N	**Location Longitude:**	
In A Universe:	N	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	
Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		

Fed Waste Gen Owner:	HQ
State Waste Generator Owner:	CA
State Waste Generator:	2
Short Term Generator:	N
Uni Waste:	N
Universal Waste Dest Facility:	N
Federal Universal Waste:	N
As Federally Regulated Tsdf:	------
As Converter Tsdf:	------
As State Regulated Tsdf:	------
As State Regulated Handler:	---
Federal Indicator:	---
Hsm:	N
Subpart K:	----
GPRA Permit:	N
GPRA Renewal:	N
Permit Renewal Wrkld:	------
Permwrk ID:	------
Perm Prog:	------
Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20210809
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	VESTAS
Location Street No:	
Location Street1:	8009 OAK CREEK ROAD
Location Street2:	
Location City:	MOJAVE
Location State:	CA

Location Zip:	93501
Location County Code:	CA029
Location County Name:	KERN
Location Country:	US
Contact Name:	VICTOR PEREZ
Contact Street No:	
Contact Street1:	8009 OAK CREEK ROAD
Contact Street2:	
Contact City:	MOJAVE
Contact State:	CA
Contact Zip:	93501
Contact Country:	
Contact Phone And Ext:	619-857-2636
Contact Fax:	
Contact Email Address:	JSFRD@VESTAS.COM
Contact Title:	
Owner Name:	VESTAS VIALY
Owner Type:	O
Owner Seq:	1
Operator Name:	VICTOR PEREZ
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20210809
Handler Name:	VESTAS
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Implementer

Owner/Operator Details

Owner/Operator Ind:	Current Owner	**Street No:**	
Type:	Other	**Street1:**	8009 OAK CREEK ROAD
Name:	VESTAS VIALY	**Street2:**	
Dt Became Current:		**City:**	MOJAVE
Dt Ended Current:		**State:**	CA
Phone:	619-857-2636	**Country:**	
Source Type:	Implementer	**Zip:**	93501

Owner/Operator Ind:	Current Operator	**Street No:**	
Type:	Other	**Street1:**	8009 OAK CREEK ROAD
Name:	VICTOR PEREZ	**Street2:**	
Dt Became Current:		**City:**	MOJAVE
Dt Ended Current:		**State:**	CA
Phone:	619-857-2636	**Country:**	
Source Type:	Implementer	**Zip:**	93501

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
8	11 of27	NNE	0.01 / 65.21	3,478.20 / 284	CLARK BROS., INC. 8009 OAK CREEK RD MOJAVE CA 93501	RCRA NON GEN

Handler ID:	CAC003137704
Generator Status:	N
Recycler Activity?:	NO
Recycler Activity Note:	This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	**Used Oil Transpor:**	No
Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	I	**NAIC 1:**	236220
Seq No:	1	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	20210907	**NAIC 4:**	
Active Site:	-----	**State:**	CA
Land Type:		**Location Latitude:**	
In Handler Univ:	N	**Location Longitude:**	
In A Universe:	N	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	
Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		
Fed Waste Gen Owner:	HQ		
State Waste Generator Owner:	CA		
State Waste Generator:	2		
Short Term Generator:	N		
Uni Waste:	N		
Universal Waste Dest Facility:	N		
Federal Universal Waste:	N		
As Federally Regulated Tsdf:	------		
As Converter Tsdf:	------		
As State Regulated Tsdf:	------		
As State Regulated Handler:	---		
Federal Indicator:	---		
Hsm:	N		
Subpart K:	----		
GPRA Permit:	N		
GPRA Renewal:	N		
Permit Renewal Wrkld:	------		
Permwrk ID:	------		
Perm Prog:	------		
Pcwrkld:	------		
Closwrkld:	------		
GPRA Ca:	N		
Cawrkld:	N		
Subjca Tsd Discretion:	N		
NCAPS:	N		
EC Indicator:	N		
Ca725 Indicator:	N		
Ca750 Indicator:	N		
Operating Tsdf:	------		
Full Enforcement:	------		
Snc:	N		
Unaddressed Snc:	N		
Addressed Snc:	N		
Snc With Comp Sched:	N		
Fa Required:	-----		
Hhandler Last Change:	20210913		

Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	CLARK BROS., INC.
Location Street No:	
Location Street1:	8009 OAK CREEK RD
Location Street2:	
Location City:	MOJAVE
Location State:	CA
Location Zip:	93501
Location County Code:	CA029
Location County Name:	KERN
Location Country:	US
Contact Name:	CLARK BROS INC - ADAM KIRK
Contact Street No:	
Contact Street1:	745 BROADWAY
Contact Street2:	
Contact City:	FRESNO
Contact State:	CA
Contact Zip:	93721
Contact Country:	
Contact Phone And Ext:	559-272-8168
Contact Fax:	
Contact Email Address:	AKIRK@CLARKBROSINC.COM
Contact Title:	
Owner Name:	TERRA-GEN WALT DISNEY COMPANY
Owner Type:	O
Owner Seq:	1
Operator Name:	CLARK BROS INC - ADAM KIRK
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20210907
Handler Name:	CLARK BROS., INC.
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Implementer

Owner/Operator Details

Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Other	***Street1:***	745 BROADWAY
Name:	CLARK BROS INC - ADAM KIRK	***Street2:***	
Dt Became Current:		***City:***	FRESNO
Dt Ended Current:		***State:***	CA
Phone:	559-272-8168	***Country:***	
Source Type:	Implementer	***Zip:***	93721
Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street1:***	8009 OAK CREEK RD
Name:	TERRA-GEN WALT DISNEY COMPANY	***Street2:***	
Dt Became Current:		***City:***	MOJAVE
Dt Ended Current:		***State:***	CA
Phone:	559-930-2743	***Country:***	
Source Type:	Implementer	***Zip:***	93501

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
8	12 of27	NNE	0.01 / 65.21	3,478.20 / 284	CLARK BROS., INC. 8009 OAK CREEK RD MOJAVE CA 93501	RCRA NON GEN

Handler ID: CAC003153242
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	**Used Oil Transpor:**	No
Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		

Used Oil Market Burner: No
Used Oil Spec Marketer: No

Additional Handler Summary Details

Source Type:	I	**NAIC 1:**	237110
Seq No:	1	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	20211217	**NAIC 4:**	
Active Site:	-----	**State:**	CA
Land Type:		**Location Latitude:**	
In Handler Univ:	N	**Location Longitude:**	
In A Universe:	N	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	
Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		

Fed Waste Gen Owner: HQ
State Waste Generator Owner: CA
State Waste Generator: 2
Short Term Generator: N
Uni Waste: N
Universal Waste Dest Facility: N
Federal Universal Waste: N
As Federally Regulated Tsdf: ------
As Converter Tsdf: ------
As State Regulated Tsdf: ------
As State Regulated Handler: ---
Federal Indicator: ---
Hsm: N
Subpart K: ----
GPRA Permit: N
GPRA Renewal: N
Permit Renewal Wrkld: ------
Permwrk ID: ------
Perm Prog: ------
Pcwrkld: ------
Closwrkld: ------
GPRA Ca: N
Cawrkld: N

Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20211220
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	CLARK BROS., INC.
Location Street No:	
Location Street1:	8009 OAK CREEK RD
Location Street2:	
Location City:	MOJAVE
Location State:	CA
Location Zip:	93501
Location County Code:	CA029
Location County Name:	KERN
Location Country:	US
Contact Name:	ADAM KIRK
Contact Street No:	
Contact Street1:	745 BROADWAY
Contact Street2:	
Contact City:	FRESNO
Contact State:	CA
Contact Zip:	93721
Contact Country:	
Contact Phone And Ext:	559-930-2743
Contact Fax:	
Contact Email Address:	AKIRK@CLARKBROSINC.COM
Contact Title:	
Owner Name:	CLARK BROS., INC.
Owner Type:	O
Owner Seq:	1
Operator Name:	ADAM KIRK
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20211217
Handler Name:	CLARK BROS., INC.
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Implementer

Owner/Operator Details

Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Other	***Street1:***	745 BROADWAY
Name:	ADAM KIRK	***Street2:***	

Dt Became Current:		**City:**	FRESNO
Dt Ended Current:		**State:**	CA
Phone:	559-930-2743	**Country:**	
Source Type:	Implementer	**Zip:**	93721
Owner/Operator Ind:	Current Owner	**Street No:**	
Type:	Other	**Street1:**	745 BROADWAY
Name:	CLARK BROS., INC.	**Street2:**	
Dt Became Current:		**City:**	FRESNO
Dt Ended Current:		**State:**	CA
Phone:	559-272-8168	**Country:**	
Source Type:	Implementer	**Zip:**	93721

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
8	13 of27	NNE	0.01 / 65.21	3,478.20 / 284	CLARK BROS., INC. 8009 OAK CREEK RD MOJAVE CA 93501	RCRA NON GEN

Handler ID: CAC003150959
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	**Used Oil Transpor:**	No
Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		

Used Oil Market Burner: No
Used Oil Spec Marketer: No

Additional Handler Summary Details

Source Type:	I	**NAIC 1:**	423810
Seq No:	1	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	20211202	**NAIC 4:**	
Active Site:	-----	**State:**	CA
Land Type:		**Location Latitude:**	
In Handler Univ:	N	**Location Longitude:**	
In A Universe:	N	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	
Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		

Fed Waste Gen Owner: HQ
State Waste Generator Owner: CA
State Waste Generator: 2
Short Term Generator: N
Uni Waste: N
Universal Waste Dest Facility: N
Federal Universal Waste: N
As Federally Regulated Tsdf: ------
As Converter Tsdf: ------
As State Regulated Tsdf: ------

As State Regulated Handler:	---
Federal Indicator:	---
Hsm:	N
Subpart K:	----
GPRA Permit:	N
GPRA Renewal:	N
Permit Renewal Wrkld:	------
Permwrk ID:	------
Perm Prog:	------
Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20211203
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	CLARK BROS., INC.
Location Street No:	
Location Street1:	8009 OAK CREEK RD
Location Street2:	
Location City:	MOJAVE
Location State:	CA
Location Zip:	93501
Location County Code:	CA029
Location County Name:	KERN
Location Country:	US
Contact Name:	LARRY BRAND
Contact Street No:	
Contact Street1:	8009 OAK CREEK RD
Contact Street2:	
Contact City:	MOJAVE
Contact State:	CA
Contact Zip:	93501
Contact Country:	
Contact Phone And Ext:	209-401-2117
Contact Fax:	
Contact Email Address:	LBRAND@PGMPOWER.COM
Contact Title:	
Owner Name:	LARRY BRAND
Owner Type:	O
Owner Seq:	1
Operator Name:	LARRY BRAND
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Hazardous Waste Handler Details

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Seq No: 1
Receive Date: 20211202
Handler Name: CLARK BROS., INC.
Fed Waste Generator: N
Generator Code Description: Not a Generator, Verified
Source Type: Implementer

Owner/Operator Details

Owner/Operator Ind: Current Operator
Type: Other
Name: LARRY BRAND
Dt Became Current:
Dt Ended Current:
Phone: 209-401-2117
Source Type: Implementer
Street No:
Street1: 8009 OAK CREEK RD
Street2:
City: MOJAVE
State: CA
Country:
Zip: 93501

Owner/Operator Ind: Current Owner
Type: Other
Name: LARRY BRAND
Dt Became Current:
Dt Ended Current:
Phone: 209-401-2117
Source Type: Implementer
Street No:
Street1: 745 BROADWAY
Street2:
City: FRESNO
State: CA
Country:
Zip: 93721

8	14 of27	NNE	0.01 / 65.21	3,478.20 / 284	VESTAS 8009 OAK CREEK ROAD MOJAVE CA 93501	FINDS/FRS

Registry ID: 110071113500
FIPS Code: 06029
HUC Code:
Site Type Name: STATIONARY
Location Description:
Supplemental Location:
Create Date: 28-OCT-21
Update Date:
Interest Types: UNSPECIFIED UNIVERSE
SIC Codes:
SIC Code Descriptions:
NAICS Codes: 333611
NAICS Code Descriptions: TURBINE AND TURBINE GENERATOR SET UNITS MANUFACTURING.
Conveyor:
Federal Facility Code:
Federal Agency Name:
Tribal Land Code:
Tribal Land Name:
Congressional Dist No:
Census Block Code:
EPA Region Code: 09
County Name: KERN
US/Mexico Border Ind:
Latitude:
Longitude:
Reference Point:
Coord Collection Method:
Accuracy Value:
Datum: NAD83
Source:
Facility Detail Rprt URL: https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110071113500
Program Acronyms:

RCRAINFO:CAC003133340

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
8	15 of27	NNE	0.01 / 65.21	3,478.20 / 284	BRIAN TRAMONTE 8009 OAK CREEK RD MOJAVE CA 93501	FINDS/FRS

Registry ID: 110071116926
FIPS Code: 06029
HUC Code:
Site Type Name: STATIONARY
Location Description:
Supplemental Location:
Create Date: 28-OCT-21
Update Date:
Interest Types: UNSPECIFIED UNIVERSE
SIC Codes:
SIC Code Descriptions:
NAICS Codes: 237130
NAICS Code Descriptions: POWER AND COMMUNICATION LINE AND RELATED STRUCTURES CONSTRUCTION.
Conveyor:
Federal Facility Code:
Federal Agency Name:
Tribal Land Code:
Tribal Land Name:
Congressional Dist No:
Census Block Code:
EPA Region Code: 09
County Name: KERN
US/Mexico Border Ind:
Latitude:
Longitude:
Reference Point:
Coord Collection Method:
Accuracy Value:
Datum: NAD83
Source:
Facility Detail Rprt URL: https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110071116926
Program Acronyms:

RCRAINFO:CAC003134268

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
8	16 of27	NNE	0.01 / 65.21	3,478.20 / 284	CLARK BROS., INC. 8009 OAK CREEK RD MOJAVE CA 93501	FINDS/FRS

Registry ID: 110071121198
FIPS Code: 06029
HUC Code:
Site Type Name: STATIONARY
Location Description:
Supplemental Location:
Create Date: 28-OCT-21
Update Date:
Interest Types: UNSPECIFIED UNIVERSE
SIC Codes:
SIC Code Descriptions:
NAICS Codes: 236220, 237110, 423810
NAICS Code Descriptions: COMMERCIAL AND INSTITUTIONAL BUILDING CONSTRUCTION., CONSTRUCTION AND MINING (EXCEPT OIL WELL) MACHINERY AND EQUIPMENT MERCHANT WHOLESALERS., WATER AND SEWER LINE AND RELATED STRUCTURES CONSTRUCTION.
Conveyor:
Federal Facility Code:
Federal Agency Name:
Tribal Land Code:
Tribal Land Name:
Congressional Dist No:
Census Block Code:
EPA Region Code: 09
County Name: KERN

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

US/Mexico Border Ind:
Latitude:
Longitude:
Reference Point:
Coord Collection Method:
Accuracy Value:
Datum: NAD83
Source:
Facility Detail Rprt URL: https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110071121198
Program Acronyms:

RCRAINFO:CAC003113897, RCRAINFO:CAC003137704, RCRAINFO:CAC003150959, RCRAINFO:CAC003153242

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
8	17 of27	NNE	0.01 / 65.21	3,478.20 / 284	MORTENSON CONSTRUCTION 8009 OAK CREEK RD MOJAVE CA 95301	FINDS/FRS

Registry ID: 110071136546
FIPS Code: 06029
HUC Code:
Site Type Name: STATIONARY
Location Description:
Supplemental Location:
Create Date: 28-OCT-21
Update Date:
Interest Types: UNSPECIFIED UNIVERSE
SIC Codes:
SIC Code Descriptions:
NAICS Codes: 236220
NAICS Code Descriptions: COMMERCIAL AND INSTITUTIONAL BUILDING CONSTRUCTION.
Conveyor:
Federal Facility Code:
Federal Agency Name:
Tribal Land Code:
Tribal Land Name:
Congressional Dist No:
Census Block Code:
EPA Region Code: 09
County Name: KERN
US/Mexico Border Ind:
Latitude:
Longitude:
Reference Point:
Coord Collection Method:
Accuracy Value:
Datum: NAD83
Source:
Facility Detail Rprt URL: https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110071136546
Program Acronyms:

RCRAINFO:CAC003211946, RCRAINFO:CAL000461570

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
8	18 of27	NNE	0.01 / 65.21	3,478.20 / 284	MORTENSON CONSTRUCTION 8009 OAK CREEK RD MOJAVE CA 93501	RCRA NON GEN

Handler ID: CAC003211946
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	**Used Oil Transpor:**	No
Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	I	**NAIC 1:**	236220
Seq No:	1	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	20230111	**NAIC 4:**	
Active Site:	-----	**State:**	CA
Land Type:		**Location Latitude:**	
In Handler Univ:	N	**Location Longitude:**	
In A Universe:	N	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	
Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		
Fed Waste Gen Owner:	HQ		
State Waste Generator Owner:	CA		
State Waste Generator:	2		
Short Term Generator:	N		
Uni Waste:	N		
Universal Waste Dest Facility:	N		
Federal Universal Waste:	N		
As Federally Regulated Tsdf:	------		
As Converter Tsdf:	------		
As State Regulated Tsdf:	------		
As State Regulated Handler:	---		
Federal Indicator:	---		
Hsm:	N		
Subpart K:	----		
GPRA Permit:	N		
GPRA Renewal:	N		
Permit Renewal Wrkld:	------		
Permwrk ID:	------		
Perm Prog:	------		
Pcwrkld:	------		
Closwrkld:	------		
GPRA Ca:	N		
Cawrkld:	N		
Subjca Tsd Discretion:	N		
NCAPS:	N		
EC Indicator:	N		
Ca725 Indicator:	N		
Ca750 Indicator:	N		
Operating Tsdf:	------		
Full Enforcement:	------		
Snc:	N		
Unaddressed Snc:	N		
Addressed Snc:	N		
Snc With Comp Sched:	N		
Fa Required:	-----		
Hhandler Last Change:	20230111		

Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	MORTENSON CONSTRUCTION
Location Street No:	
Location Street1:	8009 OAK CREEK RD
Location Street2:	
Location City:	MOJAVE
Location State:	CA
Location Zip:	93501
Location County Code:	CA029
Location County Name:	KERN
Location Country:	US
Contact Name:	TAYLOR CARRINGTON
Contact Street No:	
Contact Street1:	8009 OAK CREEK RD
Contact Street2:	
Contact City:	MOJAVE
Contact State:	CA
Contact Zip:	93501
Contact Country:	
Contact Phone And Ext:	504-473-8105
Contact Fax:	
Contact Email Address:	TAYLOR.CARRINGTON@MORTENSON.COM
Contact Title:	
Owner Name:	MORTENSON CONSTRUCTION
Owner Type:	O
Owner Seq:	1
Operator Name:	TAYLOR CARRINGTON
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20230111
Handler Name:	MORTENSON CONSTRUCTION
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Implementer

Owner/Operator Details

Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street1:***	700 MEADOW LANE NORTH
Name:	MORTENSON CONSTRUCTION	***Street2:***	
Dt Became Current:		***City:***	MINNEAPOLIS
Dt Ended Current:		***State:***	MN
Phone:	612-260-2045	***Country:***	
Source Type:	Implementer	***Zip:***	55402

Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Other	***Street1:***	8009 OAK CREEK RD
Name:	TAYLOR CARRINGTON	***Street2:***	
Dt Became Current:		***City:***	MOJAVE
Dt Ended Current:		***State:***	CA
Phone:	504-473-8105	***Country:***	
Source Type:	Implementer	***Zip:***	93501

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
8	19 of27	NNE	0.01 / 65.21	3,478.20 / 284	Sagebrush BESS 8009 OAK CREEK RD MOJAVE CA 93501	CERS HAZ

Site ID: 626473
Latitude: 35.045720
Longitude: -118.283170

Regulated Programs

EI ID: 10916998 **EI Description:** Chemical Storage Facilities

EI ID: 10916998 **EI Description:** Hazardous Waste Generator

Evaluations

Eval Date: 05/24/2023
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Eval Date: 05/24/2023
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: HW
Eval Source: CERS
Eval Notes:

Affiliations

Affil Type Desc: Document Preparer
Entity Name: Taylor Carrington
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Environmental Contact
Entity Name: Drew Maraglia
Entity Title:
Address: 1621 18th Street Suite 400
City: Denver
State: CO
Country:
Zip Code: 80202
Phone:

Affil Type Desc: Operator
Entity Name: Mortenson Construction
Entity Title:
Address:
City:
State:
Country:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Zip Code:
Phone: (612) 260-2045

Affil Type Desc: Identification Signer
Entity Name: Taylor Carrington
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title:
Address: 8009 Oak Creek Rd
City: Mojave
State: CA
Country:
Zip Code: 93501
Phone:

Affil Type Desc: Legal Owner
Entity Name: Terra-Gen
Entity Title:
Address: 9480 Gateway Dr Suite 201
City: Reno
State: NV
Country: United States
Zip Code: 89521
Phone: (858) 764-3748

Affil Type Desc: Parent Corporation
Entity Name: Sagebrush BESS
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: CUPA District
Entity Name: Kern County Environmental Health Services Departme
Entity Title:
Address: 2700 M Street, Suite 300
City: Bakersfield
State: CA
Country:
Zip Code: 93301-2370
Phone: (661) 862-8740

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
8	20 of27	NNE	0.01 / 65.21	3,478.20 / 284	SAGEBRUSH B ENERGY STORAGE PROJECT 8009 OAK CREEK RD MOJAVE CA 93501	RCRA NON GEN

Handler ID: CAL000480967
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records

associated with this facility (EPA ID).

Handler Summary

Importer:	No	***Used Oil Transpor:***	No
Mixed Waste Gen:	No	***Used Oil Trans Fac:***	No
Transporter:	No	***Used Oil Processor:***	No
Transfer Facility:	No	***Used Oil Refiner:***	No
Recycler:	No	***Used Oil Burner:***	No
Onsite Burner Exem:	No	***Commercial TSD:***	No
Furnace Exemption:	No	***Recycl Nonstorage:***	No
Underground Injec:	No		

Used Oil Market Burner: No
Used Oil Spec Marketer: No

Additional Handler Summary Details

Source Type:	I	***NAIC 1:***	238910
Seq No:	1	***NAIC 2:***	
Non Notifier:		***NAIC 3:***	
Receive Date:	20231009	***NAIC 4:***	
Active Site:	-----	***State:***	CA
Land Type:		***Location Latitude:***	
In Handler Univ:	N	***Location Longitude:***	
In A Universe:	N	***Loc GIS Primary:***	N
Gen Status:	N	***Loc GIS Origin:***	
Report Cycle:		***State District Owner:***	
Accessibility:		***State District:***	
Region:	09		

Fed Waste Gen Owner: HQ
State Waste Generator Owner: CA
State Waste Generator: 2
Short Term Generator: N
Uni Waste: N
Universal Waste Dest Facility: N
Federal Universal Waste: N
As Federally Regulated Tsdf: ------
As Converter Tsdf: ------
As State Regulated Tsdf: ------
As State Regulated Handler: ---
Federal Indicator: ---
Hsm: N
Subpart K: ----
GPRA Permit: N
GPRA Renewal: N
Permit Renewal Wrkld: ------
Permwrk ID: ------
Perm Prog: ------
Pcwrkld: ------
Closwrkld: ------
GPRA Ca: N
Cawrkld: N
Subjca Tsd Discretion: N
NCAPS: N
EC Indicator: N
Ca725 Indicator: N
Ca750 Indicator: N
Operating Tsdf: ------
Full Enforcement: ------
Snc: N
Unaddressed Snc: N
Addressed Snc: N
Snc With Comp Sched: N
Fa Required: -----
Hhandler Last Change: 20231013
Recognized Trader Importer: N
Recognized Trader Exporter: N

Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	SAGEBRUSH B ENERGY STORAGE PROJECT
Location Street No:	
Location Street1:	8009 OAK CREEK RD
Location Street2:	
Location City:	MOJAVE
Location State:	CA
Location Zip:	93501
Location County Code:	CA029
Location County Name:	KERN
Location Country:	US
Contact Name:	DREW MARAGLIA
Contact Street No:	
Contact Street1:	1621 18TH ST STE 400
Contact Street2:	
Contact City:	DENVER
Contact State:	CO
Contact Zip:	80202
Contact Country:	
Contact Phone And Ext:	720-955-6868
Contact Fax:	
Contact Email Address:	DREW.MARAGLIA@MORTENSON.COM
Contact Title:	
Owner Name:	M. A. MORTENSON COMPANY
Owner Type:	O
Owner Seq:	1
Operator Name:	DREW MARAGLIA
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20231009
Handler Name:	SAGEBRUSH B ENERGY STORAGE PROJECT
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Implementer

Owner/Operator Details

Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Other	***Street1:***	1621 18TH ST STE 400
Name:	DREW MARAGLIA	***Street2:***	
Dt Became Current:		***City:***	DENVER
Dt Ended Current:		***State:***	CO
Phone:	720-955-6868	***Country:***	
Source Type:	Implementer	***Zip:***	80202
Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street1:***	700 MEADOW LANE
Name:	M. A. MORTENSON COMPANY	***Street2:***	
Dt Became Current:		***City:***	MINNEAPOLIS
Dt Ended Current:		***State:***	MN
Phone:	763-522-2100	***Country:***	
Source Type:	Implementer	***Zip:***	55422

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
8	21 of27	NNE	0.01 / 65.21	3,478.20 / 284	Sagebrush B 8009 OAK CREEK RD MOJAVE CA 93501	CERS TANK

Site ID: 702518
Latitude: 35.045720
Longitude: -118.283170

Regulated Programs

EI ID: 10930942
EI Description: Aboveground Petroleum Storage

Evaluations

Eval Date: 05/22/2024
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: APSA
Eval Source: CERS
Eval Notes:

Eval Date: 05/22/2024
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Eval Date: 05/22/2024
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: HW
Eval Source: CERS
Eval Notes:

Affiliations

Affil Type Desc: Operator
Entity Name: Mortenson Construction
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone: (815) 219-6110

Affil Type Desc: Parent Corporation
Entity Name: Mortenson Construction
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Property Owner
Entity Name: Terra-Gen, LLC
Entity Title:
Address: 11455 El Camino Real, Suite 160
City: San Diego
State: CA
Country: United States
Zip Code: 92130
Phone: (858) 764-3748

Affil Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title:
Address: 8009 Oak Creek Rd
City: Mojave
State: CA
Country:
Zip Code: 93501
Phone:

Affil Type Desc: Identification Signer
Entity Name: Ashtynn Trauth
Entity Title: Field Engineer
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Document Preparer
Entity Name: Ashtynn Trauth
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: CUPA District
Entity Name: Kern County Environmental Health Services Departme
Entity Title:
Address: 2700 M Street, Suite 300
City: Bakersfield
State: CA
Country:
Zip Code: 93301-2370
Phone: (661) 862-8740

Affil Type Desc: Legal Owner
Entity Name: M.A. Mortenson Company
Entity Title:
Address: 700 Meadow Lane North
City: Minneapolis
State: MN
Country: United States
Zip Code: 55422
Phone: (763) 522-2100

Affil Type Desc: Environmental Contact
Entity Name: Gladston Taylor
Entity Title:
Address: 700 Meadow Lane N
City: Minneapolis
State: MN
Country:
Zip Code: 55422

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Phone:						
8	22 of27	NNE	0.01 / 65.21	3,478.20 / 284	SAGEBRUSH B ENERGY STORAGE PROJECT 8009 OAK CREEK RD MOJAVE CA 93501	FINDS/FRS

Registry ID: 110071535899
FIPS Code: 06029
HUC Code:
Site Type Name: STATIONARY
Location Description:
Supplemental Location:
Create Date: 30-NOV-23
Update Date:
Interest Types: UNSPECIFIED UNIVERSE
SIC Codes:
SIC Code Descriptions:
NAICS Codes: 238910
NAICS Code Descriptions: SITE PREPARATION CONTRACTORS.
Conveyor:
Federal Facility Code:
Federal Agency Name:
Tribal Land Code:
Tribal Land Name:
Congressional Dist No:
Census Block Code:
EPA Region Code: 09
County Name: KERN
US/Mexico Border Ind:
Latitude:
Longitude:
Reference Point:
Coord Collection Method:
Accuracy Value:
Datum: NAD83
Source:
Facility Detail Rprt URL: https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110071535899
Program Acronyms:

RCRAINFO:CAL000480967

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
8	23 of27	NNE	0.01 / 65.21	3,478.20 / 284	SAGEBRUSH B ENERGY STORAGE PROJECT 8009 OAK CREEK RD MOJAVE CA 93501	HAZ GEN

EPA ID: CAL000480967
Facility County: KERN
Address 2:
County:
Details DTSC HWTS:
Handler Profile URL: https://hwts.dtsc.ca.gov/facility/CAL000480967

Tanner Details

Waste Category Code: 221
Waste Category: Waste oil and mixed oil
Yearly Totals:

2024: 0.05

Waste Category Code: 352
Waste Category: Other organic solids
Yearly Totals:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

2024: 0.225

Contact Details

Contact Name: DREW MARAGLIA
Mailing Street: 700 MEADOW LANE
Mailing City: 700 MEADOW LANE
Mailing Zip: 55422
Contact Phone: 7209556868
Year: 2024

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
8	24 of27	NNE	0.01 / 65.21	3,478.20 / 284	CLARK BROS. INC. 8009 OAK CREEK RD MOJAVE CA 93501	HAZ GEN

EPA ID: CAC003137704 ***Facility County:*** KERN
Address 2: ***County:***
Details DTSC HWTS:
Handler Profile URL: https://hwts.dtsc.ca.gov/facility/CAC003137704

Tanner Details

Waste Category Code: 352
Waste Category: Other organic solids
Yearly Totals:

2021: 0.1

Contact Details

Contact Name: CLARK BROS INC - ADAM KIRK
Mailing Street: 745 BROADWAY
Mailing City: 745 BROADWAY
Mailing Zip: 93721
Contact Phone: 5592728168
Year: 2021

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
8	25 of27	NNE	0.01 / 65.21	3,478.20 / 284	MORTENSON CONSTRUCTION 8009 OAK CREEK RD MOJAVE CA 95301	HAZ GEN

EPA ID: CAL000461570 ***Facility County:*** KERN
Address 2: ***County:***
Details DTSC HWTS:
Handler Profile URL: https://hwts.dtsc.ca.gov/facility/CAL000461570

Tanner Details

Waste Category Code: 352
Waste Category: Other organic solids
Yearly Totals:

2024: 0.4

Waste Category Code: 221
Waste Category: Waste oil and mixed oil
Yearly Totals:

2024: 0.1
2021: 0.2

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Contact Details

Contact Name: BRIAN TRAMONTE
Mailing Street: 700 MEADOW LANE N
Mailing City: 700 MEADOW LANE N
Mailing Zip: 55422
Contact Phone: 6512746803
Year: 2024

Contact Details

Contact Name: BRIAN TRAMONTE
Mailing Street: 700 MEADOW LANE N
Mailing City: 700 MEADOW LANE N
Mailing Zip: 55422
Contact Phone: 6512746803
Year: 2021

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
8	26 of27	NNE	0.01 / 65.21	3,478.20 / 284	VOYAGER WIND II/III/IV 852 8009 OAK CREEK RD MOJAVE CA 93501	HAZ GEN

EPA ID: CAL000436961 ***Facility County:*** KERN
Address 2: ***County:***
Details DTSC HWTS:
Handler Profile URL: https://hwts.dtsc.ca.gov/facility/CAL000436961

Tanner Details

Waste Category Code: 352
Waste Category: Other organic solids
Yearly Totals:

2020: 1.88936
2019: 1.88936
2018: 2.84

Waste Category Code: 135
Waste Category: Unspecified aqueous solution
Yearly Totals:

2020: 2.31
2019: 2.31

Waste Category Code: 223
Waste Category: Unspecified oil-containing waste
Yearly Totals:

2020: 3.21101
2019: 3.21101
2018: 2.52294

Contact Details

Contact Name: CHARLES TATUM
Mailing Street: 8009 OAK CREEK RD
Mailing City: 8009 OAK CREEK RD
Mailing Zip: 93501
Contact Phone: 3203337073

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Year: 2018

Contact Details

Contact Name: CHARLES TATUM
Mailing Street: 8009 OAK CREEK RD
Mailing City: 8009 OAK CREEK RD
Mailing Zip: 93501
Contact Phone: 3203337073
Year: 2019

Contact Details

Contact Name: CHARLES TATUM
Mailing Street: 8009 OAK CREEK RD
Mailing City: 8009 OAK CREEK RD
Mailing Zip: 93501
Contact Phone: 3203337073
Year: 2020

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
8	27 of27	NNE	0.01 / 65.21	3,478.20 / 284	Sagebrush ESS, LLC 8009 OAK CREEK RD MOJAVE CA 93501	CERS TANK

Site ID: 701546
Latitude: 35.045720
Longitude: -118.283170

Regulated Programs

EI ID: 10928734
EI Description: Aboveground Petroleum Storage

Evaluations

Eval Date: 05/24/2023
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Affiliations

Affil Type Desc: Identification Signer
Entity Name: Mike Tran
Entity Title: Environmental Compliance Specialist
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Operator
Entity Name: Terra-Gen Operating Company, LLC
Entity Title:
Address:
City:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

State:
Country:
Zip Code:
Phone: (661) 886-9233

Affil Type Desc: Legal Owner
Entity Name: Sagebrush ESS, LLC
Entity Title:
Address: 437 Madison Avenue, 22nd Floor, Suite A
City: New York
State: NY
Country: United States
Zip Code: 10022
Phone: (775) 850-2221

Affil Type Desc: Parent Corporation
Entity Name: TERRA-GEN OPERATING CO, LLC Kern County
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title:
Address: 9480 Gateway Drive, Suite 201
City: Reno
State: NV
Country:
Zip Code: 89521
Phone:

Affil Type Desc: CUPA District
Entity Name: Kern County Environmental Health Services Departme
Entity Title:
Address: 2700 M Street, Suite 300
City: Bakersfield
State: CA
Country:
Zip Code: 93301-2370
Phone: (661) 862-8740

Affil Type Desc: Environmental Contact
Entity Name: WHITNEY GOLLER
Entity Title:
Address: 9480 Gateway Drive, Suite 201
City: Reno
State: NV
Country:
Zip Code: 89521
Phone:

Affil Type Desc: Document Preparer
Entity Name: Mike Tran
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

9	1 of3	NNE	0.01 / 65.68	3,468.22 / 274	VOYAGER WIND II, LLC 8015 OAK CREEK RD. MOJAVE CA 93501	EMISSIONS

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

2020 Criteria Data

CO:	15	***CHAPIS:***	
Air Basin:	MD	***CERR Code:***	
Facility ID:	278001	***ROGT:***	.00073
District:	KER	***COT:***	.01346
Facility SIC Code:	4911	***NOXT:***	.01019
CO ID:	KER	***SOXT:***	.00001
DISN:	EASTERN KERN APCD		
TOGT:	.000771670190274841437632135306553911205074		
PMT:	.000553319919517102615694164989939637826962		
PM10T:	.00055		

2020 Toxic Data

CO:	15	***DISN:***	EASTERN KERN APCD
Air Basin:	MD	***CHAPIS:***	
Facility ID:	278001	***CHERR Code:***	
District:	KER	***TS:***	
Facility SIC Code:	4911	***Health Risk Asmt:***	
COID:	KER		
Non-Cancer Chronic Haz Ind:			
Non-Cancer Acute Haz Ind:			

9	*2 of3*	***NNE***	***0.01 / 65.68***	***3,468.22 / 274***	***VOYAGER WIND II, LLC 8015 OAK CREEK RD. MOJAVE CA 93501***	***FINDS/FRS***

Registry ID:	110071175287
FIPS Code:	06029
HUC Code:	
Site Type Name:	STATIONARY
Location Description:	
Supplemental Location:	
Create Date:	11-JAN-22
Update Date:	
Interest Types:	AIR EMISSIONS CLASSIFICATION UNKNOWN
SIC Codes:	
SIC Code Descriptions:	
NAICS Codes:	221112
NAICS Code Descriptions:	FOSSIL FUEL ELECTRIC POWER GENERATION.
Conveyor:	
Federal Facility Code:	
Federal Agency Name:	
Tribal Land Code:	
Tribal Land Name:	
Congressional Dist No:	
Census Block Code:	
EPA Region Code:	09
County Name:	KERN
US/Mexico Border Ind:	
Latitude:	
Longitude:	
Reference Point:	
Coord Collection Method:	
Accuracy Value:	
Datum:	NAD83
Source:	
Facility Detail Rprt URL:	https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110071175287
Program Acronyms:	

EIS:19168511

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
9	3 of3	NNE	0.01 / 65.68	3,468.22 / 274	VOYAGER WIND II, LLC 8015 OAK CREEK RD. MOJAVE CA 93501	FINDS/FRS

Registry ID: 110071763398
FIPS Code: 06029
HUC Code:
Site Type Name: STATIONARY
Location Description:
Supplemental Location:
Create Date: 15-JUL-24
Update Date: 27-AUG-24
Interest Types:
SIC Codes:
SIC Code Descriptions:
NAICS Codes:
NAICS Code Descriptions:
Conveyor:
Federal Facility Code:
Federal Agency Name:
Tribal Land Code:
Tribal Land Name:
Congressional Dist No:
Census Block Code:
EPA Region Code: 09
County Name: UNITED STATES
US/Mexico Border Ind:
Latitude:
Longitude:
Reference Point:
Coord Collection Method:
Accuracy Value:
Datum: NAD83
Source:
Facility Detail Rprt URL: https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110071763398
Program Acronyms:

CARB-TCH:15MDKER278001

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
10	1 of20	ESE	0.01 / 66.37	2,984.75 / -209	ASPHALT CONSTRUCTION CO, INC. 7037 TROTTER AVE. MOJAVE CA 93501	CERCLIS

Site ID: 0904597
Site EPA ID: CAD983650029
Site Street Address 2:
Site County Name: KERN
Site FIPS Code: 06029
Region Code: 09
Site SMSA No.: 0680
Site Prim. Latitude: 34D57M56S
Site Prim. Longitude: 118D15M20S
Lat Long Source:
RNON NPL Status Desc: NFRAP-Site does not qualify for the NPL based on existing information

RNPL Status Code: N
NPL Status: Not on the NPL
RFED Facility Code: N
RFED Facility Desc: Not a Federal Facility
USGS Hydro Unit No.: 18090206
Site Cong. Dist. Code: 20
ROT Desc: Private
FR NPL Update No.:
RFRA Code:

CERCLIS Assess History

OU ID: 00
Act Code ID: 001
RAT Code: DS
RAT Short Name: DISCVRY
RAT Name: DISCOVERY

RALT Short Name: EPA Fund
Act Start Date:
Act Complete Date: 10/19/1992 00:00:00
AGT Order No.: 10
SH OU:

RAT Hist. Only Flag:		***SH Code:***	
RAT NSI Indicator:	B	***SH Seq:***	
RAT Level:	1	***SH Start Date:***	
RAT DEF OU:	00	***SH Complete Date:***	
RFBS Code:		***SH Lead:***	
SPA Code:	13		

RAT Def: The process by which a potential hazardous waste site is brought to the attention of the EPA. The process can occur through the use of several mechanisms such as a phone call or referral by another government agency.

Site Desc:
Site Alias:

CERCLIS Assess History

OU ID:	00	***RALT Short Name:***	EPA Fund
Act Code ID:	001	***Act Start Date:***	
RAT Code:	PA	***Act Complete Date:***	12/21/1993 00:00:00
RAT Short Name:	PA	***AGT Order No.:***	130
RAT Name:	PRELIMINARY ASSESSMENT	***SH OU:***	
RAT Hist. Only Flag:		***SH Code:***	
RAT NSI Indicator:	B	***SH Seq:***	
RAT Level:	1	***SH Start Date:***	
RAT DEF OU:	00	***SH Complete Date:***	
RFBS Code:	P	***SH Lead:***	
SPA Code:	13		

RAT Def: Collection of diverse existing information about the source and nature of the site hazard. It is EPA policy to complete the preliminary assessment within one year of site discovery.

Site Desc:
Site Alias:

CERCLIS Assess History

OU ID:	00	***RALT Short Name:***	EPA In-House
Act Code ID:	001	***Act Start Date:***	
RAT Code:	VS	***Act Complete Date:***	12/21/1993 00:00:00
RAT Short Name:	ARCH SITE	***AGT Order No.:***	1500
RAT Name:	ARCHIVE SITE	***SH OU:***	
RAT Hist. Only Flag:		***SH Code:***	
RAT NSI Indicator:	B	***SH Seq:***	
RAT Level:	1	***SH Start Date:***	
RAT DEF OU:	00	***SH Complete Date:***	
RFBS Code:		***SH Lead:***	
SPA Code:	13		

RAT Def: The decision is made that no further activity is planned at the site.

Site Desc:
Site Alias:

CERCLIS Assess History

OU ID:	00	***RALT Short Name:***	
Act Code ID:		***Act Start Date:***	
RAT Code:		***Act Complete Date:***	
RAT Short Name:		***AGT Order No.:***	0
RAT Name:		***SH OU:***	
RAT Hist. Only Flag:		***SH Code:***	
RAT NSI Indicator:		***SH Seq:***	
RAT Level:		***SH Start Date:***	
RAT DEF OU:		***SH Complete Date:***	
RFBS Code:		***SH Lead:***	
SPA Code:			
RAT Def:			
Site Desc:	No description available .		
Site Alias:	No alias data available		

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
10	2 of20	ESE	0.01 / 66.37	2,984.75 / -209	ASPHALT CONSTRUCTION CO, INC. 7037 TROTTER AVE. MOJAVE CA 93501	CERCLIS NFRAP

Site ID: 904597
Site EPA ID: CAD983650029
Site Parent ID:
Site County Name: KERN
Parent Site Name:
Site FIPS Code: 6029
Region Code: 9
Site Cong. Dist. Code: 20
Federal Facility:

CERCLIS-NFRAP Assess History

OU ID: 0
Act Code ID: 1
RAT Code: DS
RAT Short Name: DISCVRY
RAT Name: DISCOVERY
RAT Hist. Only Flag:
RAT NSI Indicator: B
RAT Level: 1
RAT DEF OU: 00
RFBS Code:
SPA Code: 13
RALT Short Name: EPA Fund
Act Start Date:
Act Complete Date: 10/19/1992
AGT Order No.: 10
SH OU:
SH Code:
SH Seq:
SH Start Date:
SH Complete Date:
SH Lead:
SH Qual:
RAQ Act. Qual Short:
RNPL Status Code: N
RAT Def: The process by which a potential hazardous waste site is brought to the attention of the EPA. The process can occur through the use of several mechanisms such as a phone call or referral by another government agency.
RNON NPL Status Desc: NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Assess History

OU ID: 0
Act Code ID: 1
RAT Code: VS
RAT Short Name: ARCH SITE
RAT Name: ARCHIVE SITE
RAT Hist. Only Flag:
RAT NSI Indicator: B
RAT Level: 1
RAT DEF OU: 00
RFBS Code:
SPA Code: 13
RALT Short Name: EPA In-House
Act Start Date:
Act Complete Date: 12/21/1993
AGT Order No.: 1500
SH OU:
SH Code:
SH Seq:
SH Start Date:
SH Complete Date:
SH Lead:
SH Qual:
RAQ Act. Qual Short:
RNPL Status Code: N
RAT Def: The decision is made that no further activity is planned at the site.
RNON NPL Status Desc: NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Assess History

OU ID: 0
Act Code ID: 1
RAT Code: PA
RAT Short Name: PA
RAT Name: PRELIMINARY ASSESSMENT
RAT Hist. Only Flag:
RAT NSI Indicator: B
RAT Level: 1
RAT DEF OU: 00
RFBS Code: P
SPA Code: 13
RALT Short Name: EPA Fund
Act Start Date:
Act Complete Date: 12/21/1993
AGT Order No.: 130
SH OU:
SH Code:
SH Seq:
SH Start Date:
SH Complete Date:
SH Lead:
SH Qual:
RAQ Act. Qual Short: NFRAP
RNPL Status Code: N
RAT Def: Collection of diverse existing information about the source and nature of the site hazard. It is EPA policy to complete the preliminary assessment within one year of site discovery.
RNON NPL Status Desc: NFRAP-Site does not qualify for the NPL based on existing information

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
10	3 of20	ESE	0.01 / 66.37	2,984.75 / -209	ASPHALT CONSTRUCTION CO., INC. 7037 TROTTER AVENUE MOJAVE CA 93501-7014	FINDS/FRS

Registry ID: 110017403086
FIPS Code: 06029
HUC Code: 18090206
Site Type Name: STATIONARY
Location Description:
Supplemental Location:
Create Date: 12-APR-04
Update Date: 01-JUN-17
Interest Types: AIR MAJOR, TRI REPORTER
SIC Codes:
SIC Code Descriptions:
NAICS Codes:
NAICS Code Descriptions:
Conveyor: FRS-GEOCODE
Federal Facility Code:
Federal Agency Name:
Tribal Land Code:
Tribal Land Name:
Congressional Dist No: 22
Census Block Code: 060290065003734
EPA Region Code: 09
County Name: KERN
US/Mexico Border Ind:
Latitude: 34.96543
Longitude: -118.26081
Reference Point: CENTER OF A FACILITY OR STATION
Coord Collection Method: ADDRESS MATCHING-HOUSE NUMBER
Accuracy Value: 30
Datum: NAD83
Source:
Facility Detail Rprt URL: https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110017403086
Program Acronyms:

RBLC:470, TRIS:9350WSPHLT737TR

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
10	4 of20	ESE	0.01 / 66.37	2,984.75 / -209	Holliday Rock - Mojave 7037 Trotter Ave Mojave CA	CUPA KERN

Facility ID: FA0002805
CERS ID: 10233922
Mailing Address: 1401 N. Benson Ave
Mailing State: CA
Mailing Address 2:
Mailing Zip: 91786
Mailing City: Upland
Data Source: CUPA - Hazardous Material Business Plan (HMBP) Inventory; CUPA - Hazardous Waste (HW) Facilities

Detail(s)

Billing Status: Active, billable
Prog Element Code: CB2T
Current Inspection Dt: 4/1/2022
Program Element: BUS PLAN MED LOW RISK 1 UNIT
HMIRRP Due Date: 2/28/2013
Employee: COGLEY
Report Source: CUPA - Hazardous Material Business Plan (HMBP) Inventory

Detail(s)

Billing Status: Active, billable
Prog Element Code: CG07
Current Inspection Dt: 4/1/2022
Program Element: SMALL QUANTITY HAZARDOUS WASTE GENERATOR
HMIRRP Due Date:
Employee: COGLEY
Report Source: CUPA - Hazardous Waste (HW) Facilities

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
10	5 of20	ESE	0.01 / 66.37	2,984.75 / -209	1X ASPHALT CONSTRUCTION CO 7037 TROTTER AVE MOJAVE CA 935010000	HAZNET

EPA ID:	CAC000583872	**Mailing City:**	LANCASTER
NAICS Code:		**Mailing State:**	CA
SIC Code:		**Mailing Zip:**	935340000
Create Date:	4/15/1991	**Region Code:**	1
Fac Act Ind:	No	**Owner Name:**	MIKE HEMPERLY
Inact Date:	10/25/2000	**Owner Addr 1:**	--
County:	15	**Owner Addr 2:**	
County Name:	Kern	**Owner City:**	--
County:		**Owner State:**	99
Mail Name:		**Owner Zip:**	--
Mailing Addr 1:	--	**Owner Phone:**	0000000000
Mailing Addr 2:		**Owner Fax:**	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
10	6 of20	ESE	0.01 / 66.37	2,984.75 / -209	ASPHALT CONSTRUCTION CO, INC. 7037 TROTTER AVE. MOJAVE CA 93501	SEMS ARCHIVE

Site ID:	0904597	**FIPS Code:**	06029
EPA ID:	CAD983650029	**Cong District:**	20
Superfund Alte Agr:	No	**Region:**	09
Federal Facility:	No	**County:**	KERN
FF Docket:	No		
NPL:	Not on the NPL		
Non NPL Status:	NFRAP-Site does not qualify for the NPL based on existing information		

Action Information

Operable Units:	00	**Qual:**	
Action Code:	VS	**SEQ:**	1
Action Name:	ARCH SITE	**FF:**	No
Start Actual:		**FF Docket:**	No
Finish Actual:	12/21/1993 5:00:00 AM	**Region:**	09
Curr Action Lead:	EPA Perf In-Hse		
NPL:	N		

Operable Units:	00	**Qual:**	N
Action Code:	PA	**SEQ:**	1
Action Name:	PA	**FF:**	No
Start Actual:		**FF Docket:**	No
Finish Actual:	12/21/1993 5:00:00 AM	**Region:**	09
Curr Action Lead:	EPA Perf		
NPL:	N		

Operable Units:	00	**Qual:**	
Action Code:	DS	**SEQ:**	1
Action Name:	DISCVRY	**FF:**	No
Start Actual:	10/19/1992 4:00:00 AM	**FF Docket:**	No
Finish Actual:	10/19/1992 4:00:00 AM	**Region:**	09
Curr Action Lead:	EPA Perf		
NPL:	N		

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
10	7 of20	ESE	0.01 / 66.37	2,984.75 / -209	Holliday Rock - Mojave 7037 Trotter Ave Mojave CA 93501	UST KERN

Facility ID:	FA0002805	**CERS ID:**	10233922
Care of:	George Smith	**Mailing State:**	CA
Mailing Address:	1401 N. Benson Ave	**Mailing Zip:**	93501
Mailing City:	Upland		

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Details

Tank No:	550071	***Product Type:***	DIESEL
Date of Closure:	12/10/1998	***No of Compartments:***	
Billing Status:	Inactive, non-billable	***Prog Element Code:***	CS00
Install Date:	1/1/1969	***Program Element:***	UNDERGROUND STORAGE TANK
Capacity:	9000		

10	*8 of20*	*ESE*	*0.01 / 66.37*	*2,984.75 / -209*	***Holliday Rock*** ***7037 Trotter Ave*** ***Mojave CA 93501***	***CHMIRS***

Control No:	16-1881	***Notified Date:***	
Year:	2016	***Notified Date Time:***	
County:	Kern County		
URL:	https://w3.calema.ca.gov/operational/malhaz.nsf/f1841a103c102734882563e200760c4a/cd2ed9be41fba6e788257f84005b5ece?OpenDocument		

Spill Report View

Water:		***Creation Date:***	03/28/2016 09:38 AM
Document Title:	SPILL Report		
Spill Site:	Merchant/Business		
Type:	PETROLEUM		

Hazardous Materials Spill Report

Date :	03/28/2016	***Name:***	
Time:	0938	***Phone:***	
Incident Date:	03/26/2016	***Ext:***	
Incident Time:	1200	***Pag Cell:***	
Control Cal OES:	16-1881	***Prs Name:***	
Control NRC:		***Prs Phone:***	
Water Involved:	No	***Prs Ext:***	
Drink Wtr Impact:		***Prs Pag Cell:***	
Detail for Other:		***Incident Desc:***	
UPRR Rim No:		***Notification Info:***	
DOG Unit:		***Notification List:***	
RWQCB Unit:	6B		
Contained:	Yes		
Waterway:			
Received By:			
Cleanup By:	Reporting Party		
Incident Location:	7037 Trotter Ave		
Additional County:			
1 Substance:	Diesel Fuel		
1 Qty:	=		
1 Amount :	350		
1 Measure:	Gal(s)		
1 Type:	PETROLEUM		
1 Other:			
1 Pipeline:	No		
1 Ves >= 300 Tons:	No		
2 Substance:	Hydraulic Fluid		
2 Qty:	=		
2 Amount:	250		
2 Measure:	Gal(s)		
2 Type:	PETROLEUM		
2 Other:			
2 Pipeline:	No		
2 Ves >= 300 Tns:	No		
3 Substance:			
3 Qty:	=		
3 Amount:			

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

3 Measure:	
3 Type:	
3 Other:	
3 Pipeline:	No
3 Ves >= 300 Tons:	No
Injuries:	No
Fatality:	No
Evacuation:	No
Known Impact:	None
Agency:	Holliday Rock
PRS Agency:	
Sec Agency:	
Admin Agency:	Kern Co. Environmental Health Services Department
Admin Agency 2:	
On Scene:	Co Health, Fire Dept.
Other on Scene:	
Other Notified:	
Header Unknown:	KERN COUNTY APCD
Site:	Merchant/Business
Reported Cause:	Unknown
R R Crssing < 50 Ft:	
Description:	RP states that for unknown reasons, seven concrete mixer trucks caught on fire, causing the release. Release remained on property and contained. Cleanup has been completed. Cause is either arson or accidental, investigation is in progress.

10	***9 of20***	***ESE***	***0.01 / 66.37***	***2,984.75 / -209***	***ASPHALT CONSTRUCTION 7037 TROTTER AVE MOJAVE CA 93501***	***EMISSIONS***

1996 Criteria Data

Facility ID:	3	**CERR Code:**	
Facility SIC Code:	2951	**TOGT:**	.41
CO:	15	**ROGT:**	.41
Air Basin:	MD	**COT:**	.54
District:	KER	**NOXT:**	.54
COID:	KER	**SOXT:**	.95
DISN:	KERN COUNTY APCD	**PMT:**	.54
CHAPIS:		**PM10T:**	.216

1996 Toxic Data

Facility ID:	3	**COID:**	KER
Facility SIC Code:	2951	**DISN:**	KERN COUNTY APCD
CO:	15	**CHAPIS:**	
Air Basin:	MD	**CERR Code:**	
District:	KER		
TS:			
Health Risk Asmt:	.95		
Non-Cancer Chronic Haz Ind:	.03		
Non-Cancer Acute Haz Ind:	.5		

1997 Criteria Data

Facility ID:	3	**CERR Code:**	
Facility SIC Code:	2951	**TOGT:**	.41
CO:	15	**ROGT:**	.41
Air Basin:	MD	**COT:**	.54
District:	KER	**NOXT:**	.54
COID:	KER	**SOXT:**	.95
DISN:	KERN COUNTY APCD	**PMT:**	.54
CHAPIS:		**PM10T:**	.216

1997 Toxic Data

Facility ID:	3	***COID:***	KER
Facility SIC Code:	2951	***DISN:***	KERN COUNTY APCD
CO:	15	***CHAPIS:***	
Air Basin:	MD	***CERR Code:***	
District:	KER		
TS:			
Health Risk Asmt:	.95		
Non-Cancer Chronic Haz Ind:	.03		
Non-Cancer Acute Haz Ind:	.5		

1998 Criteria Data

Facility ID:	3	***CERR Code:***	
Facility SIC Code:	2951	***TOGT:***	.41
CO:	15	***ROGT:***	.41
Air Basin:	MD	***COT:***	.54
District:	KER	***NOXT:***	.54
COID:	KER	***SOXT:***	.95
DISN:	KERN COUNTY APCD	***PMT:***	.54
CHAPIS:		***PM10T:***	.216

1998 Toxic Data

Facility ID:	3	***COID:***	KER
Facility SIC Code:	2951	***DISN:***	KERN COUNTY APCD
CO:	15	***CHAPIS:***	
Air Basin:	MD	***CERR Code:***	
District:	KER		
TS:			
Health Risk Asmt:	.95		
Non-Cancer Chronic Haz Ind:	.03		
Non-Cancer Acute Haz Ind:	.5		

1999 Criteria Data

Facility ID:	3	***CERR Code:***	
Facility SIC Code:	2951	***TOGT:***	.41
CO:	15	***ROGT:***	.41
Air Basin:	MD	***COT:***	.54
District:	KER	***NOXT:***	.54
COID:	KER	***SOXT:***	.95
DISN:	KERN COUNTY APCD	***PMT:***	.54
CHAPIS:		***PM10T:***	.216

1999 Toxic Data

Facility ID:	3	***COID:***	KER
Facility SIC Code:	2951	***DISN:***	KERN COUNTY APCD
CO:	15	***CHAPIS:***	
Air Basin:	MD	***CERR Code:***	
District:	KER		
TS:			
Health Risk Asmt:			
Non-Cancer Chronic Haz Ind:			
Non-Cancer Acute Haz Ind:			

2000 Toxic Data

Facility ID:	3	***COID:***	KER
Facility SIC Code:	2951	***DISN:***	KERN COUNTY APCD
CO:	15	***CHAPIS:***	

Air Basin: MD
District: KER
TS:
Health Risk Asmt:
Non-Cancer Chronic Haz Ind:
Non-Cancer Acute Haz Ind:
CERR Code:

2001 Toxic Data

Facility ID: 3
Facility SIC Code: 2951
CO: 15
Air Basin: MD
District: KER
TS:
Health Risk Asmt: 1
Non-Cancer Chronic Haz Ind: 0
Non-Cancer Acute Haz Ind: .5
COID: KER
DISN: KERN COUNTY APCD
CHAPIS: Y
CERR Code:

2003 Toxic Data

Facility ID: 3
Facility SIC Code: 2951
CO: 15
Air Basin: MD
District: KER
TS:
Health Risk Asmt:
Non-Cancer Chronic Haz Ind:
Non-Cancer Acute Haz Ind:
COID: KER
DISN: KERN COUNTY APCD
CHAPIS: Y
CERR Code:

2004 Toxic Data

Facility ID: 3
Facility SIC Code: 2951
CO: 15
Air Basin: MD
District: KER
TS:
Health Risk Asmt:
Non-Cancer Chronic Haz Ind:
Non-Cancer Acute Haz Ind:
COID: KER
DISN: KERN COUNTY APCD
CHAPIS: Y
CERR Code:

2005 Toxic Data

Facility ID: 3
Facility SIC Code: 2951
CO: 15
Air Basin: MD
District: KER
TS:
Health Risk Asmt:
Non-Cancer Chronic Haz Ind:
Non-Cancer Acute Haz Ind:
COID: KER
DISN: KERN COUNTY APCD
CHAPIS:
CERR Code:

2006 Toxic Data

Facility ID: 3
Facility SIC Code: 2951
CO: 15
Air Basin: MD
District: KER
TS:
COID: KER
DISN: KERN COUNTY APCD
CHAPIS:
CERR Code:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Health Risk Asmt:
Non-Cancer Chronic Haz Ind:
Non-Cancer Acute Haz Ind:

2007 Toxic Data

Facility ID:	3	**COID:**	KER
Facility SIC Code:	2951	**DISN:**	KERN COUNTY APCD
CO:	15	**CHAPIS:**	Y
Air Basin:	MD	**CERR Code:**	
District:	KER		

TS:
Health Risk Asmt:
Non-Cancer Chronic Haz Ind:
Non-Cancer Acute Haz Ind:

10	10 of20	ESE	0.01 / 66.37	2,984.75 / -209	**HOLLIDAY ROCK MOJAVE 12** **7037 TROTTER AVE** **MOJAVE CA 93501**	FINDS/FRS

Registry ID:	110070090566
FIPS Code:	06029
HUC Code:	18090206
Site Type Name:	STATIONARY
Location Description:	
Supplemental Location:	
Create Date:	07-AUG-17
Update Date:	01-JUN-18
Interest Types:	ICIS-NPDES NON-MAJOR, OSHA ESTABLISHMENT, OTHER HAZARDOUS WASTE ACTIVITIES, STATE MASTER, STORM WATER INDUSTRIAL, TRI REPORTER
SIC Codes:	1442, 3273
SIC Code Descriptions:	CONSTRUCTION SAND AND GRAVEL, READY-MIXED CONCRETE
NAICS Codes:	212321, 324121
NAICS Code Descriptions:	ASPHALT PAVING MIXTURE AND BLOCK MANUFACTURING., CONSTRUCTION SAND AND GRAVEL MINING.
Conveyor:	FRS-TRIS
Federal Facility Code:	
Federal Agency Name:	
Tribal Land Code:	
Tribal Land Name:	
Congressional Dist No:	22
Census Block Code:	060290065003734
EPA Region Code:	09
County Name:	KERN
US/Mexico Border Ind:	
Latitude:	34.96543
Longitude:	-118.26081
Reference Point:	CENTER OF A FACILITY OR STATION
Coord Collection Method:	ADDRESS MATCHING-HOUSE NUMBER
Accuracy Value:	30
Datum:	NAD83
Source:	
Facility Detail Rprt URL:	https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110070090566
Program Acronyms:	

CA-ENVIROVIEW:122924, NPDES:CAZ339136, OSHA-OIS:316695410, OSHA-OIS:317446136, OSHA-OIS:341042133, OSHA-OIS:341873412, OSHA-OIS:342589637, RCRAINFO:CAL000324303, TRIS:9035WHLLDY737TR

10	11 of20	ESE	0.01 / 66.37	2,984.75 / -209	**Holliday Rock - Mojave** **7037 TROTTER AVE.** **MOJAVE CA 93501**	CERS TANK

Site ID:	394792
Latitude:	34.972710

Longitude: -118.260920

Regulated Programs

EI ID: 10233922
EI Description: Aboveground Petroleum Storage

Violations

Violation Date: 05/11/2022 ***Violation Source:*** CERS
Violation Program: HMRRP ***Violation Division:*** Kern County Env Health Services Department
Citation: HSC 6.95 25508(a)(3) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(3)
Violation Notes:

Returned to compliance on 02/17/2023. Observed at the time of inspection the California Environmental Reporting System (CERS) indicates inaccurate Hazardous Materials Business Plan (HMBP) Inventory information submitted such as the two 500 gallon propane tanks are not included in the HMBP Inventory. Please log into CERS to update the HMBP Inventory to include the inventory identified above within 30 days of this Inspection Report. Submit the HMBP in CERS for further review.

Violation Description:

Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.

Violations

Violation Date: 05/11/2022 ***Violation Source:*** CERS
Violation Program: APSA ***Violation Division:*** Kern County Env Health Services Department
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)
Violation Notes:

Returned to compliance on 02/20/2023. At the time of inspection observed in one of the sea trains, the 550 gallon plastic storing MasterSet Delvo is leaking from the band around the base of the tank. At this time, based upon examination of the liquid in front of the tank this appears to be a minor and a relatively recent release because it is currently contained within the sea train and has maintained position on the concrete within the sea train. Corrective Action: The MasterSet Delvo leak must be stopped and the tank replaced in order to prevent any further releases. Utilize the procedures in the SPCC Plan to mitigate any and all liquid around the tank. Please send pictures of the replacement tank to Melissa McCormick with the Kern County Environmental Health Division at mccormick@kerncounty.com within 30 days of this inspection report.

Violation Description:

Failure to test or inspect each aboveground container for integrity based on industry standards as discussed in the SPCC Plan:
1. On a regular schedule.
2. After making material repairs.
3. Use non-destructive testing.
4. Inspect each container's supports, foundations, and outside for signs of deterioration, discharges, or accumulation of oil inside diked areas.

Violations

Violation Date: 04/19/2016 ***Violation Source:*** CERS
Violation Program: HMRRP ***Violation Division:*** Kern County Env Health Services Department
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Notes:

Returned to compliance on 05/02/2016. The hazardous materials inventory submitted in the California Environmental Reporting System (CERS) is not accurate. Add the following items: 1,000 gallons of Master Set AC 534, 1,000 gallons of Master Glenium 3030, 1,000 gallons of Master Life SRA 20 and 1,400 lbs of Drained USed Oil Filters. Remove the 20,000 tons of Asphalt Oil. It is no longer on site. Make the revisions to the inventory and submit in CERS.

Violation Description:

Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.

Violations

Violation Date: 05/11/2022 ***Violation Source:*** CERS
Violation Program: HW ***Violation Division:*** Kern County Env Health Services Department
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Notes:

Returned to compliance on 02/21/2023. Observed at the time of inspection containers storing hazardous waste were not properly labeled with the required information. All containers storing hazardous waste must be labeled as hazardous waste and include the Business Name & Business Address, CalEPA ID #, an Accumulation Date (Start Date), and the physical and chemical characteristics of the contents. Corrective Action: Affix the hazardous waste label to the containers storing hazardous waste and include the required information. Please email pictures to Melissa McCormick with the Kern County Environmental Health Division at mccormick@kerncounty.com within 30 days of this inspection report.

Violation Description:

Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.

Violations

Violation Date: 05/11/2022 ***Violation Source:*** CERS
Violation Program: HW ***Violation Division:*** Kern County Env Health Services Department
Citation: HSC 6.5 25123.3(h)(1) - California Health and Safety Code, Chapter 6.5, Section(s) 25123.3(h)(1)
Violation Notes:

Returned to compliance on 02/21/2023. Observed the used oil had not been picked up within the 180 days from the accumulation date. Corrective Action: Please contact the licensed hazardous waste hauler to remove the used oil and used oil filters. Email the manifest/bills of laden to Melissa McCormick with Kern County Environmental Health at mccormick@kerncounty.com within 30 of this inspection report in order to return this facility to compliance.

Violation Description:

Failure to send hazardous waste offsite for treatment, storage, or disposal within 180 days (or 270 days if waste is transported over 200 miles) for a generator who generates less than 1000 kilogram per month if all of the following conditions are met:
(1) The quantity of hazardous waste accumulated onsite never exceeds 6,000 kilograms.

(2) The generator complies with the requirements of 40 Code of Federal Regulations section 262.34(d), (e) and (f).

(3) The generator does not hold acutely hazardous waste or extremely hazardous waste in an amount greater than one kilogram for more than 90 days.

Violations

Violation Date: 05/11/2022 ***Violation Source:*** CERS
Violation Program: APSA ***Violation Division:*** Kern County Env Health Services Department
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)
Violation Notes:

Returned to compliance on 02/20/2023. Observed at the time of inspection the 1,000 gallon used oil tank is not included in the Spill Prevention, Control, and Countermeasure Plan (SPCC Plan). Corrective Action: Prepare a technical amendment including the tank identified above and obtain certification by Professional Engineer. Once completed, please email the SPCC Plan, including the Technical Amendment, to Melissa McCormick with Kern County Environmental Health Division at mccormick@kerncounty.com within 90 days of this Inspection Report.

Violation Description:

Failure to adequately discuss in the SPCC Plan all applicable bulk storage containers, including compatibility with material stored and conditions of storage, and description of sized secondary containment capable of containing the largest single container and sufficient freeboard to contain precipitation.

Evaluations

Eval Date: 05/11/2022
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection

Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: HW
Eval Source: CERS
Eval Notes:

Eval Date: 04/19/2016
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: APSA
Eval Source: CERS
Eval Notes:

Eval Date: 04/19/2016
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: HW
Eval Source: CERS
Eval Notes:

Eval Date: 05/11/2022
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: APSA
Eval Source: CERS
Eval Notes:

Eval Date: 06/17/2019
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: HW
Eval Source: CERS
Eval Notes:

Eval Date: 05/11/2022
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Eval Date: 06/17/2019
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: APSA
Eval Source: CERS
Eval Notes:

Eval Date: 04/19/2016
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection

Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Eval Date: 06/17/2019
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Affiliations

Affil Type Desc: Property Owner
Entity Name: 1401 N. Benson Ave
Entity Title:
Address: 1401 N. Benson Ave.
City: Upland
State: CA
Country: United States
Zip Code: 91786
Phone: (661) 533-1012

Affil Type Desc: Identification Signer
Entity Name: Juan Miguel Sunga
Entity Title: Environmental Manager
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Parent Corporation
Entity Name: Holliday Rock Co., Inc.
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title:
Address: 1401 N. Benson Ave
City: Upland
State: CA
Country:
Zip Code: 91786
Phone:

Affil Type Desc: Legal Owner
Entity Name: Holliday Rock Co., Inc.
Entity Title:
Address: 1401 N. Benson Ave.
City: Upland
State: CA
Country: United States
Zip Code: 91786
Phone: (909) 982-1553

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Affil Type Desc: Environmental Contact
Entity Name: Juan Miguel Sunga
Entity Title:
Address: 1401 N. Benson Ave.
City: Upland
State: CA
Country:
Zip Code: 91786
Phone:

Affil Type Desc: Document Preparer
Entity Name: Juan Miguel Sunga
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: CUPA District
Entity Name: Kern County Environmental Health Services Departme
Entity Title:
Address: 2700 M Street, Suite 300
City: Bakersfield
State: CA
Country:
Zip Code: 93301-2370
Phone: (661) 862-8740

Affil Type Desc: Operator
Entity Name: George Smith
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone: (909) 985-1553

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10 | ***12 of20*** | ***ESE*** | ***0.01 / 66.37*** | ***2,984.75 / -209*** | ***Holliday Rock - Mojave 7037 Trotter Ave Mojave CA 93501*** | ***AST KERN***

Facility ID: FA0002805
Mailing Address: 1401 N. Benson Ave
Mailing Address 2:
Mailing City: Upland
Cers ID: 10233922
Mailing States: CA
Mailing Zip: 91786

Kern County - AST Details

Billing Status: Active, billable
Current Inspection Dt: 4/1/2022
Program Element Code: CD02
Program Element: APSA 10,000-99,999 GALLON CAPACITY
Desig Employee: COGLEY
HMIRRP Due Date:

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10 | ***13 of20*** | ***ESE*** | ***0.01 / 66.37*** | ***2,984.75 / -209*** | ***HOLLIDAY ROCK - MOJAVE 7037 TROTTER AVE MOJAVE CA 93501-7014*** | ***RCRA NON GEN***

Handler ID: CAL000324303
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	***Used Oil Transpor:***	No
Mixed Waste Gen:	No	***Used Oil Trans Fac:***	No
Transporter:	No	***Used Oil Processor:***	No
Transfer Facility:	No	***Used Oil Refiner:***	No
Recycler:	No	***Used Oil Burner:***	No
Onsite Burner Exem:	No	***Commercial TSD:***	No
Furnace Exemption:	No	***Recycl Nonstorage:***	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	I	***NAIC 1:***	324121
Seq No:	1	***NAIC 2:***	
Non Notifier:		***NAIC 3:***	
Receive Date:	20070828	***NAIC 4:***	
Active Site:	H----	***State:***	CA
Land Type:		***Location Latitude:***	34.96546
In Handler Univ:	Y	***Location Longitude:***	-118.260811
In A Universe:	Y	***Loc GIS Primary:***	N
Gen Status:	N	***Loc GIS Origin:***	AG
Report Cycle:		***State District Owner:***	
Accessibility:		***State District:***	
Region:	09		
Fed Waste Gen Owner:	HQ		
State Waste Generator Owner:	CA		
State Waste Generator:	2		
Short Term Generator:	N		
Uni Waste:	Y		
Universal Waste Dest Facility:	Y		
Federal Universal Waste:	N		
As Federally Regulated Tsdf:	------		
As Converter Tsdf:	------		
As State Regulated Tsdf:	------		
As State Regulated Handler:	---		
Federal Indicator:	---		
Hsm:	N		
Subpart K:	----		
GPRA Permit:	N		
GPRA Renewal:	N		
Permit Renewal Wrkld:	------		
Permwrk ID:	------		
Perm Prog:	------		
Pcwrkld:	------		
Closwrkld:	------		
GPRA Ca:	N		
Cawrkld:	N		
Subjca Tsd Discretion:	N		
NCAPS:	N		
EC Indicator:	N		
Ca725 Indicator:	N		
Ca750 Indicator:	N		
Operating Tsdf:	------		
Full Enforcement:	------		
Snc:	N		
Unaddressed Snc:	N		
Addressed Snc:	N		

Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20180905
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	HOLLIDAY ROCK - MOJAVE
Location Street No:	
Location Street1:	7037 TROTTER AVE
Location Street2:	
Location City:	MOJAVE
Location State:	CA
Location Zip:	93501-7014
Location County Code:	CA029
Location County Name:	KERN
Location Country:	US
Contact Name:	GEORGE SMITH
Contact Street No:	
Contact Street1:	1401 N BENSON AVE
Contact Street2:	
Contact City:	UPLAND
Contact State:	CA
Contact Zip:	91786
Contact Country:	
Contact Phone And Ext:	909-652-9899
Contact Fax:	909-652-9999
Contact Email Address:	GSMITH@HOLLIDAYROCK.COM
Contact Title:	
Owner Name:	HOLLIDAY ROCK CO., INC.
Owner Type:	O
Owner Seq:	1
Operator Name:	GEORGE SMITH
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20070828
Handler Name:	HOLLIDAY ROCK - MOJAVE
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Implementer

Owner/Operator Details

Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Other	***Street1:***	1401 N BENSON AVE
Name:	GEORGE SMITH	***Street2:***	
Dt Became Current:		***City:***	UPLAND
Dt Ended Current:		***State:***	CA
Phone:	909-652-9899	***Country:***	
Source Type:	Implementer	***Zip:***	91786
Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street1:***	1401 N BENSON AVE
Name:	HOLLIDAY ROCK CO., INC.	***Street2:***	
Dt Became Current:		***City:***	UPLAND
Dt Ended Current:		***State:***	CA

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Phone: 909-982-1553 **Country:**
Source Type: Implementer **Zip:** 91786-0000

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10 | **14 of20** | **ESE** | **0.01 / 66.37** | **2,984.75 / -209** | **HOLLIDAY ROCK MOJAVE**
7037 TROTTER AVE
MOJAVE CA 93501

EMISSIONS

2018 Criteria Data

Facility ID: 1
Facility SIC Code: 3273
CO: 15
Air Basin: MD
District: KER
COID: KER
DISN: EASTERN KERN APCD
CHAPIS:
CERR Code:
TOGT: .001611584
ROGT: .001524558
COT: 5.727649
NOXT: 5.336754
SOXT:
PMT: 31.296676643
PM10T: 18.168500271

2018 Toxic Data

Facility ID: 1
Facility SIC Code: 3273
CO: 15
Air Basin: MD
District: KER
TS:
Health Risk Asmt:
Non-Cancer Chronic Haz Ind:
Non-Cancer Acute Haz Ind:
COID: KER
DISN: EASTERN KERN APCD
CHAPIS:
CERR Code:

2019 Criteria Data

CO: 15
Air Basin: MD
Facility ID: 1
District: KER
Facility SIC Code: 3273
CO ID: KER
DISN: EASTERN KERN APCD
PM10T: .931625
TOGT: .000010137420718816067653276955602536997885 84
PMT: 1.98416
CHAPIS:
CERR Code:
ROGT: .00000959
COT:
NOXT:
SOXT:

2019 Toxic Data

CO: 15
Air Basin: MD
Faccility ID: 1
District: KER
Facility SIC Code: 3273
COID: KER
Non-Cancer Chronic Haz Ind:
Non-Cancer Acute Haz Ind:
DISN: EASTERN KERN APCD
CHAPIS:
CERR Code:
TS:
Health Risk Asmt:

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10 | **15 of20** | **ESE** | **0.01 / 66.37** | **2,984.75 / -209** | **ASPHALT CONSTRUCTION CO**
7037 TROTTER AVE
MOJAVE CA

UST SWEEPS

C C: A15-000-550071
BOE:
Comp: 550071
Status: ACTIVE
D Filename: SITE07A
Page No: 230
County: KERN
State : CA

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

No of Tanks:	1	**Zip:**	93501
Jurisdict:	KERN COUNTY	**Latitude:**	34.965617
Agency:	ENVIRONMENTAL HEALTH	**Longitude:**	-118.290979
Phone:		**Georesult:**	S5HPNTSCZA

Tank Details

Tank ID:	000001	**S Contain:**	
O Tank ID:	1	**Stg:**	P
SWRCB No:	15-000-550071-000001	**Storage :**	
Removed:		**Storag Type:**	PRODUCT
Installed:		**P Contain:**	
A Date:	05-16-91	**Content:**	DIESEL
Capac:	9000	**ONA:**	
Tank Use:	M.V. FUEL	**D File Name:**	TANK7A

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10 | ***16 of20*** | ***ESE*** | ***0.01 / 66.37*** | ***2,984.75 / -209*** | ***HOLLIDAY ROCK-MOJAVE***
7037 TROTTER AVE
MOJAVE CA 935017014 | ***HAZ GEN***

EPA ID:	CAL000324303	**Facility County:**	15
Address 2:		**County:**	Kern
Details DTSC HWTS:	The Department of Toxic Substances Control (DTSC) makes available a Waste Code Matrix showing each Waste Code, its description, and annual amounts in its Hazardous Waste Tracking System: https://hwts.dtsc.ca.gov/search		
Handler Profile URL:	https://hwts.dtsc.ca.gov/facility/CAL000324303		

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10 | ***17 of20*** | ***ESE*** | ***0.01 / 66.37*** | ***2,984.75 / -209*** | ***FISHER SAND & GRAVEL CO***
7037 TROTTER AVE
MOJAVE CA 935017014 | ***HAZ GEN***

EPA ID:	CAL000320314	**Facility County:**	15
Address 2:		**County:**	Kern
Details DTSC HWTS:	The Department of Toxic Substances Control (DTSC) makes available a Waste Code Matrix showing each Waste Code, its description, and annual amounts in its Hazardous Waste Tracking System: https://hwts.dtsc.ca.gov/search		
Handler Profile URL:	https://hwts.dtsc.ca.gov/facility/CAL000320314		

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10 | ***18 of20*** | ***ESE*** | ***0.01 / 66.37*** | ***2,984.75 / -209*** | ***ASPHALT CONSTRUCTION CO. INC.***
7037 TROTTER AVE
MOJAVE CA 935010000 | ***HAZ GEN***

EPA ID:	CAC002136737	**Facility County:**	15
Address 2:		**County:**	Kern
Details DTSC HWTS:	The Department of Toxic Substances Control (DTSC) makes available a Waste Code Matrix showing each Waste Code, its description, and annual amounts in its Hazardous Waste Tracking System: https://hwts.dtsc.ca.gov/search		
Handler Profile URL:	https://hwts.dtsc.ca.gov/facility/CAC002136737		

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10 | ***19 of20*** | ***ESE*** | ***0.01 / 66.37*** | ***2,984.75 / -209*** | ***HOLLIDAY ROCK MOJAVE***
7037 TROTTER AVE
MOJAVE CA 93501 | ***FINDS/FRS***

Registry ID:	110071764365
FIPS Code:	06029
HUC Code:	
Site Type Name:	STATIONARY
Location Description:	
Supplemental Location:	
Create Date:	15-JUL-24
Update Date:	27-AUG-24
Interest Types:	
SIC Codes:	3273
SIC Code Descriptions:	READY-MIXED CONCRETE

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

NAICS Codes: 327320
NAICS Code Descriptions: READY-MIX CONCRETE MANUFACTURING.
Conveyor:
Federal Facility Code:
Federal Agency Name:
Tribal Land Code:
Tribal Land Name:
Congressional Dist No:
Census Block Code:
EPA Region Code: 09
County Name: UNITED STATES
US/Mexico Border Ind:
Latitude:
Longitude:
Reference Point:
Coord Collection Method:
Accuracy Value:
Datum: NAD83
Source:
Facility Detail Rprt URL: https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110071764365
Program Acronyms:

CARB-TCH:15MDKER1

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
10	20 of20	ESE	0.01 / 66.37	2,984.75 / -209	ASPHALT CONSTRUCTION 7037 TROTTER AVE MOJAVE CA 93501	FINDS/FRS

Registry ID: 110071764366
FIPS Code: 06029
HUC Code: 18090206
Site Type Name: STATIONARY
Location Description:
Supplemental Location:
Create Date: 15-JUL-24
Update Date: 27-AUG-24
Interest Types: AIR EMISSIONS CLASSIFICATION UNKNOWN
SIC Codes:
SIC Code Descriptions:
NAICS Codes: 324121
NAICS Code Descriptions: ASPHALT PAVING MIXTURE AND BLOCK MANUFACTURING.
Conveyor: EIS
Federal Facility Code:
Federal Agency Name:
Tribal Land Code:
Tribal Land Name:
Congressional Dist No: 22
Census Block Code: 060290065003787
EPA Region Code: 09
County Name: KERN
US/Mexico Border Ind:
Latitude: 34.96568
Longitude: -118.29098
Reference Point:
Coord Collection Method:
Accuracy Value:
Datum: NAD83
Source:
Facility Detail Rprt URL: https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110071764366
Program Acronyms:

CARB-TCH:15MDKER3, EIS:10379711

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
11	1 of1	NNE	0.01 / 76.39	3,463.47 / 269	Mojave 16/17/18 BESS CA	POWER PLANTS

Plant Code: 67093
Utility ID: 65552
Utility Name: Terra-Gen Operating Co-BESS 2
Sector Name: IPP Non-CHP
County:
Primary Source: batteries
Source Desc: Battery = 70.6 MW
Tech Desc: Batteries
Install MW: 77
Total MW: 70.6
Battery MW: 70.6
Biomass MW:
Coal MW:
Geothermal MW:
Hydroelectric MW:
Hydro Pumped Storage MW:
Natural Gas MW:
Nuclear MW:
Crude MW:
Solar MW:
Wind MW:
Other MW:
Source: EIA-860, EIA-860M and EIA-923
Period: 202311
Longitude: -118.275556
Latitude: 35.044166
X: -13166374.6672
Y: 4169884.748

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
12	1 of5	NNE	0.01 / 78.08	3,221.79 / 28	Windstar 1 Substation No physcial address - 35.001075°, -118.291575° 35.001075°, -118.291575° Mojave CA	CUPA KERN

Facility ID: FA0041404
CERS ID: 10614052
Mailing Address: 6703 Oak Creek Road
Mailing State: CA
Mailing Address 2:
Mailing Zip: 93501
Mailing City: Mojave
Data Source: CUPA - Hazardous Material Business Plan (HMBP) Inventory

Detail(s)

Billing Status: Active, billable
Prog Element Code: CB2T
Current Inspection Dt: 10/1/2021
Program Element: BUS PLAN MED LOW RISK 1 UNIT
HMIRRP Due Date:
Employee: BEAHM
Report Source: CUPA - Hazardous Material Business Plan (HMBP) Inventory

---

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
12	2 of5	NNE	0.01 / 78.08	3,221.79 / 28	WINDSTAR 1 SUBSTATION NO PHYSCIAL ADDRESS - 35.001075 NA -118.291575 MOJAVE CA 93501	FINDS/FRS

Registry ID: 110065940717
FIPS Code:
HUC Code: 18090206
Site Type Name: STATIONARY
Location Description:
Supplemental Location:
Create Date: 14-OCT-15
Update Date:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Interest Types:	STATE MASTER
SIC Codes:	4911
SIC Code Descriptions:	ELECTRIC SERVICES
NAICS Codes:	221119
NAICS Code Descriptions:	OTHER ELECTRIC POWER GENERATION.
Conveyor:	CALEPA
Federal Facility Code:	
Federal Agency Name:	
Tribal Land Code:	
Tribal Land Name:	
Congressional Dist No:	22
Census Block Code:	060290060073958
EPA Region Code:	09
County Name:	KERN
US/Mexico Border Ind:	
Latitude:	35.001075
Longitude:	-118.29157
Reference Point:	
Coord Collection Method:	THE GEOGRAPHIC COORDINATE DETERMINATION METHOD BASED ON GPS
Accuracy Value:	
Datum:	NAD83
Source:	
Facility Detail Rprt URL:	https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110065940717
Program Acronyms:	

CA-ENVIROVIEW:172100

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
12	3 of5	NNE	0.01 / 78.08	3,221.79 / 28	Windstar 1 Substation NO PHYSCIAL ADDRESS - 35.001075°, -118.291575° MOJAVE CA 93501	CERS HAZ

Site ID:	172100
Latitude:	35.001075
Longitude:	-118.291570

Regulated Programs

EI ID:	10614052	**EI Description:**	Chemical Storage Facilities

Violations

Violation Date:	12/17/2018	**Violation Source:**	CERS
Violation Program:	HMRRP	**Violation Division:**	Kern County Env Health Services Department
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)		
Violation Notes:			

Returned to compliance on 02/03/2020. Facility last certified its HMBP in 2017. Facility shall certify annually. Correct in 30 days.

Violation Description:

Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.

Evaluations

Eval Date:	06/08/2022
Violations Found:	No
Eval General Type:	Compliance Evaluation Inspection
Eval Type:	Routine done by local agency
Eval Division:	Kern County Env Health Services Department
Eval Program:	HMRRP
Eval Source:	CERS

Eval Notes:

Eval Date: 04/19/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Eval Date: 04/19/2016
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Eval Date: 12/17/2018
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Eval Date: 09/26/2024
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Eval Date: 09/26/2024
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Affiliations

Affil Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title:
Address: 6703 Oak Creek Road
City: Mojave
State: CA
Country:
Zip Code: 93501
Phone:

Affil Type Desc: Identification Signer
Entity Name: Kal Kahn
Entity Title: Site Manager
Address:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: CUPA District
Entity Name: Kern County Environmental Health Services Departme
Entity Title:
Address: 2700 M Street, Suite 300
City: Bakersfield
State: CA
Country:
Zip Code: 93301-2370
Phone: (661) 862-8740

Affil Type Desc: Document Preparer
Entity Name: Kal Kahn
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Legal Owner
Entity Name: Windstar Energy LLC
Entity Title:
Address: 13949 Cameron road
City: Mojave
State: CA
Country: United States
Zip Code: 93501
Phone: (661) 300-1665

Affil Type Desc: Parent Corporation
Entity Name: NEXTera ENERGY
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Environmental Contact
Entity Name: Ryan Helmer
Entity Title:
Address: 700 Universe Blvd
City: Juno Beach
State: FL
Country:
Zip Code: 33408
Phone:

Affil Type Desc: Operator
Entity Name: Nextera Energy Resources
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone: (661) 300-1665

12	4 of5	NNE	0.01 / 78.08	3,221.79 / 28	WINDSTAR ENERGY 12490 90TH STREET	FINDS/FRS

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
					MOJAVE CA 93501	

Registry ID: 110070521399
FIPS Code: 06029
HUC Code: 18090206
Site Type Name: STATIONARY
Location Description:
Supplemental Location:
Create Date: 04-MAR-19
Update Date:
Interest Types: AIR EMISSIONS CLASSIFICATION UNKNOWN
SIC Codes:
SIC Code Descriptions:
NAICS Codes: 221112
NAICS Code Descriptions: FOSSIL FUEL ELECTRIC POWER GENERATION.
Conveyor: EIS
Federal Facility Code:
Federal Agency Name:
Tribal Land Code:
Tribal Land Name:
Congressional Dist No: 22
Census Block Code: 060290060073958
EPA Region Code: 09
County Name: KERN
US/Mexico Border Ind:
Latitude: 35.00136
Longitude: -118.29185
Reference Point:
Coord Collection Method:
Accuracy Value:
Datum: NAD83
Source:
Facility Detail Rprt URL: https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110070521399
Program Acronyms:

EIS:18695511

12	5 of5	NNE	0.01 / 78.08	3,221.79 / 28	WINDSTAR ENERGY 12490 90TH STREET MOJAVE CA 93501	EMISSIONS

2017 Criteria Data

Facility ID: 444001
Facility SIC Code: 4911
CO: 15
Air Basin: MD
District: KER
COID: KER
DISN: EASTERN KERN APCD
CHAPIS:
CERR Code:
TOGT: .00060253699788583509513742071881606765 3277
ROGT: .00057
COT: .0106
NOXT: .00802
SOXT: .00001
PMT: .00043
PM10T: .00043

2017 Toxic Data

Facility ID: 444001
Facility SIC Code: 4911
CO: 15
Air Basin: MD
District: KER
TS:
COID: KER
DISN: EASTERN KERN APCD
CHAPIS:
CERR Code:

Health Risk Asmt:
Non-Cancer Chronic Haz Ind:
Non-Cancer Acute Haz Ind:

2020 Criteria Data

CO:	15	***CHAPIS:***	
Air Basin:	MD	***CERR Code:***	
Facility ID:	444001	***ROGT:***	.0004
District:	KER	***COT:***	.0067
Facility SIC Code:	4911	***NOXT:***	.005
CO ID:	KER	***SOXT:***	.000006
DISN:	EASTERN KERN APCD		
TOGT:	.000422832980972515856236786469344608879493		
PMT:	.000201207243460764587525150905432595573441		
PM10T:	.0002		

2020 Toxic Data

CO:	15	***DISN:***	EASTERN KERN APCD
Air Basin:	MD	***CHAPIS:***	
Facility ID:	444001	***CHERR Code:***	
District:	KER	***TS:***	
Facility SIC Code:	4911	***Health Risk Asmt:***	
COID:	KER		
Non-Cancer Chronic Haz Ind:			
Non-Cancer Acute Haz Ind:			

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13 | ***1 of1*** | ***NW*** | ***0.02 / 95.38*** | ***3,784.42 / 590*** | ***LEONA TUNGSTEN MINE***
KERN COUNTY
MOJAVE CA 93501 | ***MRDS***

Dep ID:	10260978	***I1:***	22
Dev Status:	PRODUCER	***Latitude:***	35.016724
Code List:	W	***Longitude:***	-118.336975
Url:	http://mrdata.usgs.gov/mrds/show-mrds.php?dep_id=10260978		

Commodity

I1:	13	***Line:***	1
Code:	W	***Inserted By:***	MAS migration
Commodity:	Tungsten	***Insert Date:***	29-OCT-2002 09:00:24
Commodity Type:	Metallic	***Updated By:***	USGS
Commodity Group:	Tungsten	***Update Date:***	29-OCT-2002 09:02:19
Importance:	Primary		

Names

I1:	33	***Inserted By:***	MAS migration
Status:	Current	***Insert Date:***	29-OCT-02
Site Name:	Leona Tungsten Mine	***Updated By:***	USGS
Line:	1	***Update Date:***	29-OCT-02

---

14 | ***1 of1*** | ***ESE*** | ***0.04 / 217.82*** | ***2,976.44 / -218*** | ***MOJAVE QUARRY***
CA | ***MINE***

Mine ID:	91-15-0080	***Las Code:***	15.00
Mine Status:	ACTIVE	***Rp No:***	
Primary Product:	Sand and Gravel	***Report Type:***	2
Other Products:		***Owner City:***	UPLAND
Report Year:	2023	***Owner Country:***	US
Acres Disturbed:	219	***Owner State:***	CA

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Reclamation Status:	RECLAMATION NOT STARTED	**Owner Street:**	1401 N. BENSON AVE
Permit Acres:	420.00	**Owner Zip:**	91786
Finan Assur Mech:		**Operator City:**	UPLAND
Fin Assur Cost Est:		**Operator Country:**	US
Primary Product 1:		**Operator State:**	CA
Primary Prod Label:		**Operator Street:**	1401 N. BENSON AVE.
Facility City:		**Operator Zip:**	91786
Facility State:		**Shape:**	
Facility Zip:		**Point Y:**	34.972227345945356
Facility County:		**Point X:**	-118.25696072921023
Face Amount:	608760	**Last Name:**	County of Kern
Mech Total:			
Facility Address:	7037 TROTTER AVENUE		
Permit No:			
Operation Type:	OPEN PIT		
Operator:	HOLLIDAY ROCK CO., INC.		
Owner:	HOLLIDAY ROCK CO., INC.		
Lead Agency:			
Document URL:	https://mods.conservation.ca.gov/documents?mineid=91150080		

15	1 of1	NNE	0.05 / 284.64	3,405.50 / 211	Daylight III TLine 7935 OAK CREEK RD MOJAVE CA 93501	CERS HAZ

Site ID:	946951
Latitude:	35.038480
Longitude:	-118.281800

Regulated Programs

EI ID:	10976932	**EI Description:**	Chemical Storage Facilities

Affiliations

Affil Type Desc:	Identification Signer
Entity Name:	Rachel Mireles
Entity Title:	
Address:	
City:	
State:	
Country:	
Zip Code:	
Phone:	

Affil Type Desc:	Environmental Contact
Entity Name:	Rachel Mireles
Entity Title:	
Address:	3521 Gabel Rd.
City:	BILLINGS
State:	MT
Country:	
Zip Code:	59102
Phone:	

Affil Type Desc:	Document Preparer
Entity Name:	Rachel Mireles
Entity Title:	
Address:	
City:	
State:	
Country:	
Zip Code:	
Phone:	

Affil Type Desc:	Operator

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Entity Name: EPC Services
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone: (619) 966-5062

Affil Type Desc: Legal Owner
Entity Name: Sol Systems, LLC
Entity Title:
Address: 1011 Connecticut Ave NW, second Floor
City: Washington
State: DC
Country: United States
Zip Code: 20036
Phone: (888) 235-1538

Affil Type Desc: CUPA District
Entity Name: Kern County Environmental Health Services Departme
Entity Title:
Address: 2700 M Street, Suite 300
City: Bakersfield
State: CA
Country:
Zip Code: 93301-2370
Phone: (661) 862-8740

Affil Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title:
Address: 3521 Gabel Rd.
City: BILLINGS
State: MT
Country:
Zip Code: 59102
Phone:

Affil Type Desc: Parent Corporation
Entity Name: EPC Services Company
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
16	1 of1	ESE	0.08 / 397.62	3,144.68 / -49	WESTERN PROSPECT KERN COUNTY MOJAVE CA 93501	MRDS

Dep ID: 10187871
Dev Status: PROSPECT
Code List: AU
Url: http://mrdata.usgs.gov/mrds/show-mrds.php?dep_id=10187871
I1: 14
Latitude: 34.975281
Longitude: -118.278381

Commodity

I1: 44
Code: AU
Commodity: Gold
Commodity Type: Metallic
Commodity Group: Gold
Importance: Primary
Line: 1
Inserted By: MAS migration
Insert Date: 29-OCT-02
Updated By: USGS
Update Date: 29-OCT-02

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Names

I1:	33	***Inserted By:***	MAS migration
Status:	Current	***Insert Date:***	29-OCT-02
Site Name:	Western Prospect	***Updated By:***	USGS
Line:	1	***Update Date:***	29-OCT-02

Names

I1:	33	***Inserted By:***	MAS migration
Status:	Previous	***Insert Date:***	29-OCT-02
Site Name:	Western Hematite Prospect	***Updated By:***	USGS
Line:	2	***Update Date:***	29-OCT-02

Names

I1:	33	***Inserted By:***	MAS migration
Status:	Previous	***Insert Date:***	29-OCT-02
Site Name:	Hematite	***Updated By:***	USGS
Line:	3	***Update Date:***	29-OCT-02

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
17	*1 of7*	*NNE*	*0.08 / 440.87*	*3,446.03 / 252*	***SCE Windhub Substation 8500 Oak Creek Rd Mojave CA***	***CUPA KERN***

Facility ID:	FA0034742	***CERS ID:***	10198972
Mailing Address:	P.O. Box 5085 (Attn: ESD, Programs & Governance)	***Mailing State:***	CA
Mailing Address 2:		***Mailing Zip:***	91770
Mailing City:	Rosemead		
Data Source:	CUPA - Hazardous Material Business Plan (HMBP) Inventory		

Detail(s)

Billing Status:	Active, billable	***Prog Element Code:***	CB3T
Current Inspection Dt:	8/1/2022	***Program Element:***	BUS PLAN LARGE LOW RISK 1 UNIT
HMIRRP Due Date:	2/28/2013	***Employee:***	COGLEY
Report Source:	CUPA - Hazardous Material Business Plan (HMBP) Inventory		

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
17	*2 of7*	*NNE*	*0.08 / 440.87*	*3,446.03 / 252*	***SCE Windhub Substation 8500 OAK CREEK RD MOJAVE CA 93501***	***CERS HAZ***

Site ID:	155414
Latitude:	35.038345
Longitude:	-118.283087

Regulated Programs

EI ID:	10198972	***EI Description:***	Chemical Storage Facilities

Evaluations

Eval Date:	09/14/2016
Violations Found:	No
Eval General Type:	Compliance Evaluation Inspection
Eval Type:	Routine done by local agency
Eval Division:	Kern County Env Health Services Department
Eval Program:	APSA
Eval Source:	CERS

Eval Notes:

Eval Date: 09/14/2016
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Eval Date: 09/09/2013
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Eval Date: 09/29/2022
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Eval Date: 08/20/2019
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Affiliations

Affil Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title:
Address: P.O. Box 5085 (Attn: Environmental)
City: Rosemead
State: CA
Country:
Zip Code: 91770
Phone:

Affil Type Desc: Property Owner
Entity Name: Southern California Edison
Entity Title:
Address: P.O. Box 5085 (Attn: Environmental)
City: Rosemead
State: CA
Country: United States
Zip Code: 91770
Phone: (626) 302-1212

Affil Type Desc: CUPA District
Entity Name: Kern County Environmental Health Services Departme
Entity Title:
Address: 2700 M Street, Suite 300

City: Bakersfield
State: CA
Country:
Zip Code: 93301-2370
Phone: (661) 862-8740

Affil Type Desc: Identification Signer
Entity Name: Tiffany Chapman
Entity Title: Senior Specialist
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Parent Corporation
Entity Name: Southern California Edison, Transmission and Distribution Organization (TD)
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Document Preparer
Entity Name: Tiffany Chapman
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Operator
Entity Name: Southern California Edison
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone: (626) 302-1212

Affil Type Desc: Environmental Contact
Entity Name: Environmental Operation Center
Entity Title:
Address: P.O. Box 5085 (Attn: Environmental)
City: Rosemead
State: CA
Country:
Zip Code: 91770
Phone:

Affil Type Desc: Legal Owner
Entity Name: Southern California Edison
Entity Title:
Address: P.O. Box 5085 (Attn: Environmental)
City: Rosemead
State: CA
Country: United States
Zip Code: 91770
Phone: (626) 302-1212

Coordinates

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Env Int Type Code: HMBP
Program ID: 10198972
Latitude: 35.038350
Longitude: -118.283090
Coord Name:
Ref Point Type Desc: Center of a facility or station.

---

17 | **3 of7** | **NNE** | **0.08 / 440.87** | **3,446.03 / 252** | **SCE Windhub Substation**
8500 Oak Creek Rd
Mojave CA 93501 | **AST KERN**

Facility ID: FA0034742
Mailing Address: P.O. Box 5085 (Attn: ESD, Programs & Governance)
Mailing Address 2:
Mailing City: Rosemead
Cers ID: 10198972
Mailing States: CA
Mailing Zip: 91770

Kern County - AST Details

Billing Status: Inactive, non-billable
Current Inspection Dt: 8/1/2019
Program Element Code: CD01
Program Element: APSA 1,320-9,999 GALLON CAPACITY
Desig Employee: COGLEY
HMIRRP Due Date:

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17 | **4 of7** | **NNE** | **0.08 / 440.87** | **3,446.03 / 252** | **SOUTHERN CALIFORNIA EDISON**
8500 OAK CREEK ROAD
MOJAVE CA 93501 | **EMISSIONS**

2017 Criteria Data

Facility ID: 173010
Facility SIC Code: 4911
CO: 15
Air Basin: MD
District: KER
COID: KER
DISN: EASTERN KERN APCD
CHAPIS:
CERR Code:
TOGT: .00358350951374207188160676532769556025 37
ROGT: .00339
COT: .04402
NOXT: .07789
SOXT: .00008
PMT: .00254
PM10T: .00254

2017 Toxic Data

Facility ID: 173010
Facility SIC Code: 4911
CO: 15
Air Basin: MD
District: KER
TS:
Health Risk Asmt:
Non-Cancer Chronic Haz Ind:
Non-Cancer Acute Haz Ind:
COID: KER
DISN: EASTERN KERN APCD
CHAPIS:
CERR Code:

2020 Criteria Data

CO: 15
Air Basin: MD
Facility ID: 173010
District: KER
Facility SIC Code: 4911
CO ID: KER
DISN: EASTERN KERN APCD
TOGT: .00358350951374207188160676532769556025 37
PMT: .00255533199195171026156941649899396378 2696
PM10T: .00254
CHAPIS:
CERR Code:
ROGT: .00339
COT: .04402
NOXT: .07789
SOXT: .00008

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

2020 Toxic Data

CO:	15	***DISN:***	EASTERN KERN APCD
Air Basin:	MD	***CHAPIS:***	
Facility ID:	173010	***CHERR Code:***	
District:	KER	***TS:***	
Facility SIC Code:	4911	***Health Risk Asmt:***	
COID:	KER		
Non-Cancer Chronic Haz Ind:			
Non-Cancer Acute Haz Ind:			

17	***5 of7***	***NNE***	***0.08 / 440.87***	***3,446.03 / 252***	***AT&T ENTERPRISES: EXPANDED NATIONAL MGMT CORP - SAXCN 8500 OAK CREEK RD MOJAVE CA 93501***	***CERS HAZ***

Site ID:	554113
Latitude:	35.038345
Longitude:	-118.283087

Regulated Programs

EI ID:	10821064	***EI Description:***	Chemical Storage Facilities

Evaluations

Eval Date:	06/02/2023
Violations Found:	No
Eval General Type:	Compliance Evaluation Inspection
Eval Type:	Routine done by local agency
Eval Division:	Kern County Env Health Services Department
Eval Program:	HMRRP
Eval Source:	CERS
Eval Notes:	

Affiliations

Affil Type Desc:	Environmental Contact
Entity Name:	AT&T EH&S Hotline - Option #1
Entity Title:	
Address:	311 S. Akard Street, Floor 12
City:	Dallas
State:	TX
Country:	
Zip Code:	75202
Phone:	

Affil Type Desc:	Parent Corporation
Entity Name:	AT&T Enterprises: Expanded National Mgmt Corp
Entity Title:	
Address:	
City:	
State:	
Country:	
Zip Code:	
Phone:	

Affil Type Desc:	Identification Signer
Entity Name:	Jeremy McGrue
Entity Title:	National EPCRA Manager
Address:	
City:	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

State:
Country:
Zip Code:
Phone:

Affil Type Desc: Legal Owner
Entity Name: AT&T Enterprises: Expanded National Mgmt Corp
Entity Title:
Address: 311 S. Akard Street, Floor 12
City: Dallas
State: TX
Country: United States
Zip Code: 75202
Phone: (469) 295-2319

Affil Type Desc: Operator
Entity Name: AT&T Enterprises: Expanded National Mgmt Corp
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone: (800) 566-9347

Affil Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title:
Address: 311 S. Akard Street, Floor 12
City: Dallas
State: TX
Country:
Zip Code: 75202
Phone:

Affil Type Desc: CUPA District
Entity Name: Kern County Environmental Health Services Departme
Entity Title:
Address: 2700 M Street, Suite 300
City: Bakersfield
State: CA
Country:
Zip Code: 93301-2370
Phone: (661) 862-8740

Affil Type Desc: Document Preparer
Entity Name: Peter Burnell, Sigma Consultants, Inc.
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Coordinates

Env Int Type Code: HMBP
Program ID: 10821064
Latitude: 35.038140
Longitude: -118.278490
Coord Name:
Ref Point Type Desc: Center of a facility or station.

17	6 of7	NNE	0.08 / 440.87	3,446.03 / 252	WINDHUB SUBSTATION 8000 OAK CREEK RD. MOJAVE CA 93501	RCRA NON GEN

Handler ID: CAC003057612
Generator Status: N

Recycler Activity?:	NO
Recycler Activity Note:	This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note:	NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	***Used Oil Transpor:***	No
Mixed Waste Gen:	No	***Used Oil Trans Fac:***	No
Transporter:	No	***Used Oil Processor:***	No
Transfer Facility:	No	***Used Oil Refiner:***	No
Recycler:	No	***Used Oil Burner:***	No
Onsite Burner Exem:	No	***Commercial TSD:***	No
Furnace Exemption:	No	***Recycl Nonstorage:***	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	I	***NAIC 1:***	221121
Seq No:	1	***NAIC 2:***	
Non Notifier:		***NAIC 3:***	
Receive Date:	20200226	***NAIC 4:***	
Active Site:	-----	***State:***	CA
Land Type:		***Location Latitude:***	
In Handler Univ:	N	***Location Longitude:***	
In A Universe:	N	***Loc GIS Primary:***	N
Gen Status:	N	***Loc GIS Origin:***	
Report Cycle:		***State District Owner:***	
Accessibility:		***State District:***	
Region:	09		
Fed Waste Gen Owner:	HQ		
State Waste Generator Owner:	CA		
State Waste Generator:	2		
Short Term Generator:	N		
Uni Waste:	N		
Universal Waste Dest Facility:	N		
Federal Universal Waste:	N		
As Federally Regulated Tsdf:	------		
As Converter Tsdf:	------		
As State Regulated Tsdf:	------		
As State Regulated Handler:	---		
Federal Indicator:	---		
Hsm:	N		
Subpart K:	----		
GPRA Permit:	N		
GPRA Renewal:	N		
Permit Renewal Wrkld:	------		
Permwrk ID:	------		
Perm Prog:	------		
Pcwrkld:	------		
Closwrkld:	------		
GPRA Ca:	N		
Cawrkld:	N		
Subjca Tsd Discretion:	N		
NCAPS:	N		
EC Indicator:	N		
Ca725 Indicator:	N		
Ca750 Indicator:	N		
Operating Tsdf:	------		
Full Enforcement:	------		

Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20200306
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	WINDHUB SUBSTATION
Location Street No:	
Location Street1:	8000 OAK CREEK RD.
Location Street2:	
Location City:	MOJAVE
Location State:	CA
Location Zip:	93501
Location County Code:	CA029
Location County Name:	KERN
Location Country:	US
Contact Name:	JASON J. THOMAS
Contact Street No:	
Contact Street1:	ESD, PROGRAMS & GOVERNANCE
Contact Street2:	P.O. BOX 5085
Contact City:	ROSEMEAD
Contact State:	CA
Contact Zip:	91770
Contact Country:	
Contact Phone And Ext:	626-302-3105
Contact Fax:	
Contact Email Address:	JASON.THOMAS@SCE.COM
Contact Title:	
Owner Name:	SOUTHERN CALIFORNIA EDISON
Owner Type:	O
Owner Seq:	1
Operator Name:	JASON J. THOMAS
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20200226
Handler Name:	WINDHUB SUBSTATION
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Implementer

Owner/Operator Details

Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Other	***Street1:***	ESD, PROGRAMS & GOVERNANCE
Name:	JASON J. THOMAS	***Street2:***	P.O. BOX 5085
Dt Became Current:		***City:***	ROSEMEAD
Dt Ended Current:		***State:***	CA
Phone:	626-302-3105	***Country:***	
Source Type:	Implementer	***Zip:***	91770
Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street1:***	ESD, PROGRAMS & GOVERNANCE

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Name: SOUTHERN CALIFORNIA EDISON
Dt Became Current:
Dt Ended Current:
Phone: 626-302-1212
Source Type: Implementer
Street2: P.O. BOX 5085
City: ROSEMEAD
State: CA
Country:
Zip: 91770

---

17 | **7 of7** | **NNE** | **0.08 / 440.87** | **3,446.03 / 252** | **AT&T Corp. - SAXCN 8500 OAK CREEK RD Mojave CA** | **CUPA KERN**

Facility ID: FA0048464
Mailing Address: 308 S. Akard St., 17th Floor
Mailing Address 2:
Mailing City: Dallas
Data Source: CUPA - Hazardous Material Business Plan (HMBP) Inventory
CERS ID: 10821064
Mailing State: TX
Mailing Zip: 75202

Detail(s)

Billing Status: Active, billable
Current Inspection Dt: 6/1/2023
HMIRRP Due Date:
Report Source: CUPA - Hazardous Material Business Plan (HMBP) Inventory
Prog Element Code: CB1T
Program Element: BUS PLAN SMALL LOW RISK 1 UNIT
Employee: COGLEY

---

18 | **1 of10** | **WNW** | **0.09 / 488.13** | **3,389.80 / 196** | **Pacific Wind / Mojave O&M 11585 Tehachapi Willow Springs Rd Rosamond CA** | **CUPA KERN**

Facility ID: FA0039852
Mailing Address: 11585 Tehachapi-Willow Springs rd.
Mailing Address 2:
Mailing City: Rosamond
Data Source: CUPA - Hazardous Material Business Plan (HMBP) Inventory; CUPA - Hazardous Waste (HW) Facilities
CERS ID: 10477105
Mailing State: CA
Mailing Zip: 93560

Detail(s)

Billing Status: Active, billable
Current Inspection Dt: 11/1/2023
HMIRRP Due Date:
Report Source: CUPA - Hazardous Waste (HW) Facilities
Prog Element Code: CG07
Program Element: SMALL QUANTITY HAZARDOUS WASTE GENERATOR
Employee: COGLEY

Detail(s)

Billing Status: Active, billable
Current Inspection Dt: 11/1/2023
HMIRRP Due Date:
Report Source: CUPA - Hazardous Material Business Plan (HMBP) Inventory
Prog Element Code: CB1T
Program Element: BUS PLAN SMALL LOW RISK 1 UNIT
Employee: COGLEY

---

18 | **2 of10** | **WNW** | **0.09 / 488.13** | **3,389.80 / 196** | **Pacific Wind / Mojave O&M 11585 TEHACHAPI WILLOW SPRINGS RD ROSAMOND CA 93560** | **DELISTED HAZ**

Siteid: 141145
Latitude: 34.988534
Longitude: -118.321937
Original Source: CHAZ
Record Date: 04-JAN-2018

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
18	3 of10	WNW	0.09 / 488.13	3,389.80 / 196	Pacific Wind - 125 11585 TEHACHAPI WILLOW SPRINGS RD ROSAMOND CA 93560	CERS TANK

Site ID: 141145
Latitude: 34.988534
Longitude: -118.321937

Regulated Programs

EI ID: 10477105
EI Description: Aboveground Petroleum Storage

Violations

Violation Date: 11/25/2014
Violation Source: CERS
Violation Program: HMRRP
Violation Division: Kern County Env Health Services Department
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Notes:

Returned to compliance on 12/04/2015. The hazardous materials inventory previously submitted is not complete or accurate. Please revise the information related to Gasoline: The "Maximum Daily Amount" should be 1,000 gallons, "Largest Container" should be 1,000 gallons, and "Average Daily" can be 500 gallons. The "Storage Container" should be "Aboveground Tank". Revise "Motor Oil" information "Maximum Daily" from 5 gallons to 55 gallons. Add the following items to the inventory: 385 gallons of Gear Oil, 55 gallons of Hydraulic Oil, 360 gallons of Waste Oil, 55 gallons of Waste Absorbent. Revise this information and submit in CERS.

Violation Description:

Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.

Violations

Violation Date: 11/27/2017
Violation Source: CERS
Violation Program: HMRRP
Violation Division: Kern County Env Health Services Department
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Notes:

Returned to compliance on 02/05/2019. The hazardous materials inventory submitted electronically on the California Environmental Reporting System (CERS) is not accurate. Please revise the following information: Delete 220 gallons of Stoddard Solvent. Castrol A320A: uncheck the "EHS" designation (this material is not an Extremely Hazardous Substance (EHS), change the reporting units from "Pounds" to "Gallons", change Max. Daily from 1,000 ponds to 165 gallons and "Largest Container" from 398 pounds to 55 gallons. Waste Oil: change "Max Daily" from 55 gallons to 165 gallons. Add the oil filters to the inventory. The shall be reported in "Pounds". Add one (1) 55 gallon drum of WD-40. Once these changes have been made, submit in CERS. Notify this department once the changes have been submitted in CERS.

Violation Description:

Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.

Violations

Violation Date: 05/03/2023
Violation Source: CERS
Violation Program: HMRRP
Violation Division: Kern County Env Health Services Department
Citation: HSC 6.95 25508(a)(3) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(3)
Violation Notes:

Returned to compliance on 06/13/2023. Please correct the Site Map to show *the location of all hazardous materials/wastes and ensure the areas and/or materials are labeled//the North arrow//adjacent streets//evacuation staging areas//hazardous material storage areas//emergency response equipment etc.*. You may choose to visit http://kernpublichealth.com/hazardous-materials/cers-resources/ for a full list of requirements. Discard the old map, upload the new map, and resubmit with all other elements once all corrections have been made. Please make corrections and resubmit within 30 days. John Cogley - 661-862-8748 - cogleyj@kerncounty.com

Violation Description:

Failure to complete and electronically submit a site map with all required content.

Enforcements

Enf Action Date: 11/25/2014
Enf Action Program: HMRRP
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Source: CERS
Enf Action Division: Kern County Env Health Services Department
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:

Evaluations

Eval Date: 11/25/2014
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: HW
Eval Source: CERS
Eval Notes:

Eval Date: 11/01/2023
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Eval Date: 02/05/2021
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: APSA
Eval Source: CERS
Eval Notes:

Eval Date: 11/25/2014
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Eval Date: 11/01/2023
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: HW
Eval Source: CERS
Eval Notes:

Eval Date: 11/01/2023
Violations Found: No

Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: APSA
Eval Source: CERS
Eval Notes:

Eval Date: 05/03/2023
Violations Found: Yes
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Eval Date: 11/27/2017
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: HW
Eval Source: CERS
Eval Notes:

Eval Date: 11/27/2017
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Eval Date: 02/05/2021
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Eval Date: 11/27/2017
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: APSA
Eval Source: CERS
Eval Notes:

Eval Date: 02/05/2021
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: HW
Eval Source: CERS
Eval Notes:

Affiliations

Affil Type Desc: Operator
Entity Name: EDF Renewable Services
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone: (858) 472-8203

Affil Type Desc: Environmental Contact
Entity Name: Alexander Hezlep
Entity Title:
Address: 1624 Market St Ste 226, PMB 80763
City: Denver
State: CO
Country:
Zip Code: 80202
Phone:

Affil Type Desc: CUPA District
Entity Name: Kern County Environmental Health Services Departme
Entity Title:
Address: 2700 M Street, Suite 300
City: Bakersfield
State: CA
Country:
Zip Code: 93301-2370
Phone: (661) 862-8740

Affil Type Desc: Legal Owner
Entity Name: EDF Renewables
Entity Title:
Address: 15445 Innovation Drive
City: San Diego
State: CA
Country: United States
Zip Code: 92128
Phone: (719) 646-7721

Affil Type Desc: Parent Corporation
Entity Name: EDF Renewable Energy
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Identification Signer
Entity Name: Alexander Hezlep
Entity Title: Environment & Sustainability Specialist
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Document Preparer
Entity Name: Alexander Hezlep
Entity Title:
Address:
City:
State:
Country:
Zip Code:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Phone:

Affil Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title:
Address: 1624 Market St Ste 226 PMB 80763
City: Denver
State: CO
Country:
Zip Code: 80202
Phone:

Coordinates

Env Int Type Code: HWG
Program ID: 10477105
Latitude: 34.988530
Longitude: -118.321940
Coord Name:
Ref Point Type Desc: Center of a facility or station.

18	4 of10	WNW	0.09 / 488.13	3,389.80 / 196	Pacific Wind / Mojave O&M 11585 Tehachapi Willow Springs Rd Rosamond CA 93560	AST KERN

Facility ID: FA0039852
Mailing Address: 11585 Tehachapi-Willow Springs rd.
Mailing Address 2:
Mailing City: Rosamond
Cers ID: 10477105
Mailing States: CA
Mailing Zip: 93560

Kern County - AST Details

Billing Status: Active, billable
Current Inspection Dt: 11/1/2023
Program Element Code: CD01
Program Element: APSA 1,320-9,999 GALLON CAPACITY
Desig Employee: COGLEY
HMIRRP Due Date:

18	5 of10	WNW	0.09 / 488.13	3,389.80 / 196	EDF RENEWABLE SERVICES DBA PACIFIC WINDS LLC 11585 TEHACHAPI WILLOW SPRINGS RD ROSAMOND CA 93560	RCRA NON GEN

Handler ID: CAL000380949
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer: No
Mixed Waste Gen: No
Transporter: No
Transfer Facility: No
Recycler: No
Onsite Burner Exem: No
Furnace Exemption: No
Underground Injec: No
Used Oil Market Burner: No
Used Oil Transpor: No
Used Oil Trans Fac: No
Used Oil Processor: No
Used Oil Refiner: No
Used Oil Burner: No
Commercial TSD: No
Recycl Nonstorage: No

Used Oil Spec Marketer: No

Additional Handler Summary Details

Source Type:	I	***NAIC 1:***	221122
Seq No:	1	***NAIC 2:***	
Non Notifier:		***NAIC 3:***	
Receive Date:	20121212	***NAIC 4:***	
Active Site:	H----	***State:***	CA
Land Type:		***Location Latitude:***	34.989312
In Handler Univ:	Y	***Location Longitude:***	-118.32268
In A Universe:	Y	***Loc GIS Primary:***	N
Gen Status:	N	***Loc GIS Origin:***	AG
Report Cycle:		***State District Owner:***	
Accessibility:		***State District:***	
Region:	09		

Fed Waste Gen Owner:	HQ
State Waste Generator Owner:	CA
State Waste Generator:	2
Short Term Generator:	N
Uni Waste:	Y
Universal Waste Dest Facility:	Y
Federal Universal Waste:	N
As Federally Regulated Tsdf:	------
As Converter Tsdf:	------
As State Regulated Tsdf:	------
As State Regulated Handler:	---
Federal Indicator:	---
Hsm:	N
Subpart K:	----
GPRA Permit:	N
GPRA Renewal:	N
Permit Renewal Wrkld:	------
Permwrk ID:	------
Perm Prog:	------
Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20180906
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	EDF RENEWABLE SERVICES DBA PACIFIC WINDS LLC
Location Street No:	
Location Street1:	11585 TEHACHAPI WILLOW SPRINGS RD
Location Street2:	
Location City:	ROSAMOND
Location State:	CA
Location Zip:	93560
Location County Code:	CA029
Location County Name:	KERN

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Location Country: US
Contact Name: ANN THIEL
Contact Street No:
Contact Street1: 11585 TEHACHAPI WILLOW SPRINGS RD
Contact Street2:
Contact City: ROSAMOND
Contact State: CA
Contact Zip: 93560-0000
Contact Country:
Contact Phone And Ext: 661-824-4244
Contact Fax: 661-584-2131
Contact Email Address: DAVID.BROWN@EDF-RE.COM
Contact Title:
Owner Name: EDF RENEWABLE ENERGY
Owner Type: O
Owner Seq: 1
Operator Name: ANN THIEL
Operator Type: O
Operator Seq: 2
Public Notes:

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No: 1
Receive Date: 20121212
Handler Name: EDF RENEWABLE SERVICES DBA PACIFIC WINDS LLC
Fed Waste Generator: N
Generator Code Description: Not a Generator, Verified
Source Type: Implementer

Owner/Operator Details

Owner/Operator Ind: Current Operator
Type: Other
Name: ANN THIEL
Dt Became Current:
Dt Ended Current:
Phone: 661-824-4244
Source Type: Implementer
Street No:
Street1: 11585 TEHACHAPI WILLOW SPRINGS RD
Street2:
City: ROSAMOND
State: CA
Country:
Zip: 93560-0000

Owner/Operator Ind: Current Owner
Type: Other
Name: EDF RENEWABLE ENERGY
Dt Became Current:
Dt Ended Current:
Phone: 858-521-3300
Source Type: Implementer
Street No:
Street1: 15445 INNOVATION DR
Street2:
City: SAN DIEGO
State: CA
Country:
Zip: 92128-0000

18	6 of10	WNW	0.09 / 488.13	3,389.80 / 196	Catalina Solar 1 11585 TEHACHAPI WILLOW SPRINGS RD ROSAMOND CA 93560	DELISTED CTNK

Site ID: 626982
County:
Tank Type:
Original Source: CTNK
Record Date: 16-OCT-2023
Latitude: 34.988534
Longitude: -118.321937

18	7 of10	WNW	0.09 / 488.13	3,389.80 / 196	Big Beau Solar, LLC 11585 TEHACHAPI WILLOW	DELISTED CTNK

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
					SPRINGS RD ROSAMOND CA 93560	

Site ID: 626974
County:
Tank Type:
Original Source: CTNK
Record Date: 16-OCT-2023
Latitude: 34.988534
Longitude: -118.321937

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
18	8 of10	WNW	0.09 / 488.13	3,389.80 / 196	Valentine Solar LLC 11585 TEHACHAPI WILLOW SPRINGS RD ROSAMOND CA 93560	DELISTED CTNK

Site ID: 627517
County:
Tank Type:
Original Source: CTNK
Record Date: 16-OCT-2023
Latitude: 34.988534
Longitude: -118.321937

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
18	9 of10	WNW	0.09 / 488.13	3,389.80 / 196	Valentine Solar LLC - 492 11585 TEHACHAPI WILLOW SPRINGS RD ROSAMOND CA 93560	CERS HAZ

Site ID: 627517
Latitude: 34.988534
Longitude: -118.321937

Regulated Programs

EI ID: 10918969
EI Description: Chemical Storage Facilities

Evaluations

Eval Date: 11/17/2023
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Eval Date: 11/16/2023
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: APSA
Eval Source: CERS
Eval Notes:

Eval Date: 11/17/2023
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: HW
Eval Source: CERS
Eval Notes:

Affiliations

Affil Type Desc: Document Preparer
Entity Name: Elaina Barni
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Environmental Contact
Entity Name: Elaina Barni
Entity Title:
Address: 15445 Innovation Drive
City: San Diego
State: CA
Country:
Zip Code: 92128
Phone:

Affil Type Desc: Operator
Entity Name: EDF Renewables
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone: (858) 521-3300

Affil Type Desc: Parent Corporation
Entity Name: EDF Renewable Energy
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Identification Signer
Entity Name: Elaina Barni
Entity Title: Environment and sustainability Specialist
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Legal Owner
Entity Name: EDF Renewable Services
Entity Title:
Address: 15445 Innovation Drive
City: San Diego
State: CA
Country: United States
Zip Code: 92128
Phone: (858) 521-3300

Affil Type Desc: CUPA District
Entity Name: Kern County Environmental Health Services Departme
Entity Title:
Address: 2700 M Street, Suite 300
City: Bakersfield

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

State: CA
Country:
Zip Code: 93301-2370
Phone: (661) 862-8740

Affil Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title:
Address: 11585 Tehachapi Willow Springs Road
City: Rosamond
State: CA
Country:
Zip Code: 93560
Phone:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
18	10 of10	WNW	0.09 / 488.13	3,389.80 / 196	Catalina Solar I - 633 11585 TEHACHAPI WILLOW SPRINGS RD ROSAMOND CA 93560	CERS HAZ

Site ID: 626982
Latitude: 34.988534
Longitude: -118.321937

Regulated Programs

EI ID: 10918312 **EI Description:** Chemical Storage Facilities

Evaluations

Eval Date: 11/16/2023
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Eval Date: 11/16/2023
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: HW
Eval Source: CERS
Eval Notes:

Eval Date: 11/16/2023
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: APSA
Eval Source: CERS
Eval Notes:

Affiliations

Affil Type Desc: Legal Owner
Entity Name: Alexander Hezlep
Entity Title:

Address: 1624 Market Street
City: Denver
State: CO
Country: United States
Zip Code: 80202
Phone: (310) 427-0942

Affil Type Desc: Operator
Entity Name: EDF Renewables
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone: (858) 472-8203

Affil Type Desc: Identification Signer
Entity Name: Alexander Hezlep
Entity Title: Environment & Sustainability Specialist
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Document Preparer
Entity Name: Alexander Hezlep
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: CUPA District
Entity Name: Kern County Environmental Health Services Departme
Entity Title:
Address: 2700 M Street, Suite 300
City: Bakersfield
State: CA
Country:
Zip Code: 93301-2370
Phone: (661) 862-8740

Affil Type Desc: Parent Corporation
Entity Name: EDF Renewable Energy
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Environmental Contact
Entity Name: Alexander Hezlep
Entity Title:
Address: 1624 Market Street
City: Denver
State: CO
Country:
Zip Code: 80202
Phone:

Affil Type Desc: Facility Mailing Address
Entity Name: Mailing Address

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Entity Title:
Address: 1624 Market St Ste 226 PMB 80763
City: Denver
State: CO
Country:
Zip Code: 80202
Phone:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
19	1 of1	NNE	0.12 / 653.96	3,465.87 / 272	Darkstar I LLC 8413 OAK CREEK R MOJAVE CA 93501	CERS HAZ

Site ID: 944503
Latitude: 35.038460
Longitude: -118.283430

Regulated Programs

EI ID: 10970044 **EI Description:** Chemical Storage Facilities

Affiliations

Affil Type Desc: Parent Corporation
Entity Name: Darkstar I LLC
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Property Owner
Entity Name: Darkstar I LLC
Entity Title:
Address: 850 New Burton Rd, Ste 201
City: Dover, DE
State: CA
Country: United States
Zip Code: 19904
Phone: (858) 764-3748

Affil Type Desc: Operator
Entity Name: EPC Services Company
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone: (406) 294-8544

Affil Type Desc: Environmental Contact
Entity Name: Susan Jennings
Entity Title:
Address: 605 Third St
City: Encinitas
State: CA
Country:
Zip Code: 92024
Phone:

Affil Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title:
Address: 8413 Oak Creek Rd

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

City: Mojave
State: CA
Country:
Zip Code: 93501
Phone:

Affil Type Desc: CUPA District
Entity Name: Kern County Environmental Health Services Departme
Entity Title:
Address: 2700 M Street, Suite 300
City: Bakersfield
State: CA
Country:
Zip Code: 93301-2370
Phone: (661) 862-8740

Affil Type Desc: Identification Signer
Entity Name: Susan Jennings
Entity Title: Environmental Compliance Manager
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Document Preparer
Entity Name: Andrew Fothergill
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Legal Owner
Entity Name: Darkstar I LLC
Entity Title:
Address: 850 New Burton Rd, Ste 201
City: Dover
State: DE
Country: United States
Zip Code: 19904
Phone: (858) 764-3748

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
20	1 of1	SSE	0.13 / 696.56	2,978.97 / -215	EAGLE WATER TRUCK SERVICE INC 9421 TEHACHAPI WILLOW SPRINGS RD ROSAMOND CA 93560	RCRA NON GEN

Handler ID: CAL000441795
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer: No
Used Oil Transpor: No

Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		

Used Oil Market Burner:	No
Used Oil Spec Marketer:	No

Additional Handler Summary Details

Source Type:	I	**NAIC 1:**	56299
Seq No:	1	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	20181213	**NAIC 4:**	
Active Site:	H----	**State:**	CA
Land Type:		**Location Latitude:**	34.956736
In Handler Univ:	Y	**Location Longitude:**	-118.291855
In A Universe:	Y	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	AG
Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		

Fed Waste Gen Owner:	HQ
State Waste Generator Owner:	CA
State Waste Generator:	2
Short Term Generator:	N
Uni Waste:	Y
Universal Waste Dest Facility:	Y
Federal Universal Waste:	N
As Federally Regulated Tsdf:	------
As Converter Tsdf:	------
As State Regulated Tsdf:	------
As State Regulated Handler:	---
Federal Indicator:	---
Hsm:	N
Subpart K:	----
GPRA Permit:	N
GPRA Renewal:	N
Permit Renewal Wrkld:	------
Permwrk ID:	------
Perm Prog:	------
Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20181220
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	EAGLE WATER TRUCK SERVICE INC

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Location Street No:
Location Street1: 9421 TEHACHAPI WILLOW SPRINGS RD
Location Street2:
Location City: ROSAMOND
Location State: CA
Location Zip: 93560
Location County Code: CA029
Location County Name: KERN
Location Country: US
Contact Name: PETER MACQUEEN
Contact Street No:
Contact Street1: 17621 ASCOT CT
Contact Street2:
Contact City: TEHACHAPI
Contact State: CA
Contact Zip: 93561
Contact Country:
Contact Phone And Ext: 818-422-0872
Contact Fax: 661-822-8312
Contact Email Address: EAGLEWT@DSLEXTREME.COM
Contact Title:
Owner Name: GEORGE P MACQUEEN
Owner Type: O
Owner Seq: 1
Operator Name: PETER MACQUEEN
Operator Type: O
Operator Seq: 2
Public Notes:

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No: 1
Receive Date: 20181213
Handler Name: EAGLE WATER TRUCK SERVICE INC
Fed Waste Generator: N
Generator Code Description: Not a Generator, Verified
Source Type: Implementer

Owner/Operator Details

Owner/Operator Ind: Current Owner
Type: Other
Name: GEORGE P MACQUEEN
Dt Became Current:
Dt Ended Current:
Phone: 661-822-4234
Source Type: Implementer
Street No:
Street1: 17621 ASCOT CT
Street2:
City: TEHACHAPI
State: CA
Country:
Zip: 93561

Owner/Operator Ind: Current Operator
Type: Other
Name: PETER MACQUEEN
Dt Became Current:
Dt Ended Current:
Phone: 818-422-0872
Source Type: Implementer
Street No:
Street1: 17621 ASCOT CT
Street2:
City: TEHACHAPI
State: CA
Country:
Zip: 93561

21	1 of1	SSE	0.20 / 1,043.75	2,971.39 / -223	CACTUS QUEEN CA	MINE

Mine ID: 91-15-0026
Mine Status: RECLAIMED
Primary Product: Silica
Las Code: 15.00
Rp No:
Report Type: 2

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Other Products:		**Owner City:**	GLENDORA
Report Year:	2008	**Owner Country:**	
Acres Disturbed:	0	**Owner State:**	CA
Reclamation Status:	RECLAMATION CERTIFIED COMPLETE BY LEAD AGENCY	**Owner Street:**	2025 E. FINANCIAL WAY
Permit Acres:	30.00	**Owner Zip:**	91741
Finan Assur Mech:		**Operator City:**	GLENDORA
Fin Assur Cost Est:		**Operator Country:**	
Primary Product 1:		**Operator State:**	CA
Primary Prod Label:		**Operator Street:**	2025 E. FINANCIAL WAY
Facility City:		**Operator Zip:**	91741
Facility State:		**Shape:**	
Facility Zip:		**Point Y:**	34.95722734450072
Facility County:		**Point X:**	-118.2944607240391
Face Amount:	0	**Last Name:**	County of Kern
Mech Total:	23315.17		
Facility Address:	2025 E FINANCIAL WAY		
Permit No:	CUP16,MAP2		
Operation Type:	TAILINGS PROCESSING		
Operator:	CALIFORNIA PORTLAND COMPANY		
Owner:	CALIFORNIA PORTLAND CEMENT CO.		
Lead Agency:			
Document URL:	https://mods.conservation.ca.gov/documents?mineid=91150026		

22	1 of1	SSE	0.20 / 1,058.52	3,055.64 / -139	MIDDLE BUTTES (CACTUS) DEPOSIT KERN COUNTY MOJAVE CA 93501	MRDS

Dep ID:	10310650	**I1:**	12
Dev Status:	PAST PRODUCER	**Latitude:**	34.957886
Code List:	AU CU	**Longitude:**	-118.289307
Url:	http://mrdata.usgs.gov/mrds/show-mrds.php?dep_id=10310650		

Commodity

I1:	28	**Line:**	2
Code:	AG	**Inserted By:**	Surveys and An
Commodity:	Silver	**Insert Date:**	01-SEP-2007 00:00:00
Commodity Type:	Metallic	**Updated By:**	Schruben,
Commodity Group:	Silver	**Update Date:**	01-SEP-2007 00:00:00
Importance:	Primary		

I1:	28	**Line:**	4
Code:	PB	**Inserted By:**	Surveys and An
Commodity:	Lead	**Insert Date:**	01-SEP-2007 00:00:00
Commodity Type:	Metallic	**Updated By:**	Schruben,
Commodity Group:	Lead	**Update Date:**	01-SEP-2007 00:00:00
Importance:	Secondary		

I1:	28	**Line:**	1
Code:	AU	**Inserted By:**	Surveys and An
Commodity:	Gold	**Insert Date:**	01-SEP-2007 00:00:00
Commodity Type:	Metallic	**Updated By:**	Schruben,
Commodity Group:	Gold	**Update Date:**	01-SEP-2007 00:00:00
Importance:	Primary		

I1:	27	**Line:**	3
Code:	CU	**Inserted By:**	Surveys and An
Commodity:	Copper	**Insert Date:**	01-SEP-2007 00:00:00
Commodity Type:	Metallic	**Updated By:**	Schruben,
Commodity Group:	Copper	**Update Date:**	01-SEP-2007 00:00:00
Importance:	Secondary		

Materials

I1:	24	***Inserted B:***	Surveys and An
Material:	Marcasite	***Insert Dat:***	01-SEP-2007 00:00:0
Ore or Gangue:	Ore	***Updated By:***	Schruben,
Rec:	14	***Update Dat:***	01-SEP-2007
I1:	24	***Inserted B:***	Surveys and An
Material:	Gold	***Insert Dat:***	01-SEP-2007 00:00:0
Ore or Gangue:	Ore	***Updated By:***	Schruben,
Rec:	1	***Update Dat:***	01-SEP-2007
I1:	24	***Inserted B:***	Surveys and An
Material:	Alunite	***Insert Dat:***	01-SEP-2007 00:00:0
Ore or Gangue:	Ore	***Updated By:***	Schruben,
Rec:	9	***Update Dat:***	01-SEP-2007
I1:	24	***Inserted B:***	Surveys and An
Material:	Electrum	***Insert Dat:***	01-SEP-2007 00:00:0
Ore or Gangue:	Ore	***Updated By:***	Schruben,
Rec:	2	***Update Dat:***	01-SEP-2007
I1:	24	***Inserted B:***	Surveys and An
Material:	Chalcopyrite	***Insert Dat:***	01-SEP-2007 00:00:0
Ore or Gangue:	Ore	***Updated By:***	Schruben,
Rec:	6	***Update Dat:***	01-SEP-2007
I1:	24	***Inserted B:***	Surveys and An
Material:	Galena	***Insert Dat:***	01-SEP-2007 00:00:0
Ore or Gangue:	Ore	***Updated By:***	Schruben,
Rec:	7	***Update Dat:***	01-SEP-2007
I1:	24	***Inserted B:***	Surveys and An
Material:	Kaolinite	***Insert Dat:***	01-SEP-2007 00:00:0
Ore or Gangue:	Ore	***Updated By:***	Schruben,
Rec:	10	***Update Dat:***	01-SEP-2007
I1:	24	***Inserted B:***	Surveys and An
Material:	Adularia	***Insert Dat:***	01-SEP-2007 00:00:0
Ore or Gangue:	Ore	***Updated By:***	Schruben,
Rec:	12	***Update Dat:***	01-SEP-2007
I1:	24	***Inserted B:***	Surveys and An
Material:	Pyrite	***Insert Dat:***	01-SEP-2007 00:00:0
Ore or Gangue:	Ore	***Updated By:***	Schruben,
Rec:	13	***Update Dat:***	01-SEP-2007
I1:	24	***Inserted B:***	Surveys and An
Material:	Argentite	***Insert Dat:***	01-SEP-2007 00:00:0
Ore or Gangue:	Ore	***Updated By:***	Schruben,
Rec:	4	***Update Dat:***	01-SEP-2007
I1:	24	***Inserted B:***	Surveys and An
Material:	Proustite	***Insert Dat:***	01-SEP-2007 00:00:0
Ore or Gangue:	Ore	***Updated By:***	Schruben,
Rec:	5	***Update Dat:***	01-SEP-2007
I1:	24	***Inserted B:***	Surveys and An
Material:	Cerargyrite	***Insert Dat:***	01-SEP-2007 00:00:0
Ore or Gangue:	Ore	***Updated By:***	Schruben,
Rec:	3	***Update Dat:***	01-SEP-2007
I1:	24	***Inserted B:***	Surveys and An
Material:	Quartz	***Insert Dat:***	01-SEP-2007 00:00:0
Ore or Gangue:	Gangue	***Updated By:***	Schruben,
Rec:	8	***Update Dat:***	01-SEP-2007
I1:	24	***Inserted B:***	Surveys and An
Material:	Arsenopyrite	***Insert Dat:***	01-SEP-2007 00:00:0
Ore or Gangue:	Ore	***Updated By:***	Schruben,

Rec: 15 **Update Dat:** 01-SEP-2007

Names

I1: 94 **Inserted By:** Surveys and Analysis Project
Status: Previous **Insert Date:** 01-SEP-07
Site Name: Blue Eagle **Updated By:** Schruben, Paul
Line: 4 **Update Date:** 01-SEP-07

Names

I1: 94 **Inserted By:** Surveys and Analysis Project
Status: Previous **Insert Date:** 01-SEP-07
Site Name: Middle Butte **Updated By:** Schruben, Paul
Line: 12 **Update Date:** 01-SEP-07

Names

I1: 94 **Inserted By:** Surveys and Analysis Project
Status: Previous **Insert Date:** 01-SEP-07
Site Name: Crescent **Updated By:** Schruben, Paul
Line: 8 **Update Date:** 01-SEP-07

Names

I1: 94 **Inserted By:** Surveys and Analysis Project
Status: Previous **Insert Date:** 01-SEP-07
Site Name: Shumake **Updated By:** Schruben, Paul
Line: 5 **Update Date:** 01-SEP-07

Names

I1: 94 **Inserted By:** Surveys and Analysis Project
Status: Previous **Insert Date:** 01-SEP-07
Site Name: Burton-Brite-Blank **Updated By:** Schruben, Paul
Line: 11 **Update Date:** 01-SEP-07

Names

I1: 94 **Inserted By:** Surveys and Analysis Project
Status: Previous **Insert Date:** 01-SEP-07
Site Name: Ella **Updated By:** Schruben, Paul
Line: 9 **Update Date:** 01-SEP-07

Names

I1: 94 **Inserted By:** Surveys and Analysis Project
Status: Previous **Insert Date:** 01-SEP-07
Site Name: Winkler **Updated By:** Schruben, Paul
Line: 6 **Update Date:** 01-SEP-07

Names

I1: 94 **Inserted By:** Surveys and Analysis Project
Status: Current **Insert Date:** 01-SEP-07
Site Name: Middle Buttes (Cactus) Deposit **Updated By:** Schruben, Paul
Line: 1 **Update Date:** 01-SEP-07

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Names

I1:	94	***Inserted By:***	Surveys and Analysis Project
Status:	Previous	***Insert Date:***	01-SEP-07
Site Name:	Cactus Queen	***Updated By:***	Schruben, Paul
Line:	3	***Update Date:***	01-SEP-07

Names

I1:	94	***Inserted By:***	Surveys and Analysis Project
Status:	Previous	***Insert Date:***	01-SEP-07
Site Name:	Silver Prince	***Updated By:***	Schruben, Paul
Line:	7	***Update Date:***	01-SEP-07

Names

I1:	94	***Inserted By:***	Surveys and Analysis Project
Status:	Previous	***Insert Date:***	01-SEP-07
Site Name:	Cactus	***Updated By:***	Schruben, Paul
Line:	2	***Update Date:***	01-SEP-07

Names

I1:	94	***Inserted By:***	Surveys and Analysis Project
Status:	Previous	***Insert Date:***	01-SEP-07
Site Name:	Trent	***Updated By:***	Schruben, Paul
Line:	10	***Update Date:***	01-SEP-07

23	***1 of5***	***SSE***	***0.21 / 1,134.51***	***3,073.47 / -121***	***SHUMAKE PROJECT 8941 W BACKUS RD MOJAVE CA 93501***	***LDS***

Global ID:	L10003439498	***RWQCB Region:***	LAHONTAN RWQCB (REGION 6V)
Facility ID:	L10003439498	***Longitude:***	-118.290693
Cleanup Status:	COMPLETED - CASE CLOSED	***Latitude:***	34.950891
Site Facility Type:	LAND DISPOSAL SITE		
Address:	8941 W BACKUS RD		
City:	MOJAVE		
County:	Kern		
State:	CA		
Zip:	93501		

GeoTracker Sites Data Download – Site Details

RB Case No:	6B158020014
Loc Case No:	
Status:	Completed - Case Closed
Status Date:	6/9/2004
Begin Date:	
Case Type:	Land Disposal Site
Cal Enviroscreen:	
Qty Released Gallons:	
CUF Case:	
EPA Region:	9
Lead Agency:	LAHONTAN RWQCB (REGION 6V)
Case Worker:	
Local Agency:	
File Location:	
Potential COC:	
Military DoD Site:	No
Leak Reported Dt:	
No Further Action Dt:	2004-06-09 00:00:00
Potential Media of Concern:	

How Discovered:
How Discovered Description:
Stop Method:
Stop Description:
Calwater Watershed Name: Antelope - Willow Springs (626.30)
DWR GW Subbasin Name: Antelope Valley (6-044)
Disadvantaged Community:
Discharge Cause:
Coordinate Source: Google Geocode
Discharge Source:
Facility Project Sub Type: Title 27 - Municipal Solid Waste Landfill
Calenviroscreen 3 Score: 51-55%
Calenviroscreen 4 Score: 75-80%
Claim No:
Claim Status:
Site History:

GeoTracker Sites Data Download - Reg Activity

Date: 2004-06-09 00:00:00
Action: Waste Discharge Requirements
Action Type: ENFORCEMENT

GeoTracker Sites Data Download - Status History

Status: Completed - Case Closed
Status Date: 2004-06-09 00:00:00

GeoTracker Search - Facilities

Site Facility Name: SHUMAKE PROJECT
Site Facility Type: LAND DISPOSAL SITE
Cleanup Status: COMPLETED - CASE CLOSED
Project Status:
Potential COC: NONE SPECIFIED
WDR Place Type:
Wdr File No:
Wdr Order No:
Address: 8941 W BACKUS RD
City: MOJAVE
Zip: 93501
County: KERN
Cuf Claim No:
CUF Priority Assig:
CUF Amount Paid:
Designated Beneficial Use: MUN, AGR, IND, FRSH
Designated Beneficl Use Desc: Municipal and Domestic Supply, Agricultural Supply, Industrial Service Supply, Freshwater Replenishment
Project Oversight Agencies:
Report Link: https://geotracker.waterboards.ca.gov/profile_report?global_id=L10003439498
Cleanup Status Detail: COMPLETED - CASE CLOSED AS OF 6/9/2004
Cleanup History Link: https://geotracker.waterboards.ca.gov/profile_report_include?global_id=L10003439498&tabname=regulatoryhistory
Potential Media of Concern: NONE SPECIFIED
User Defined Beneficial Use:
DWR GW Sub Basin: Antelope Valley (6-044)
Calwater Watershed Name: Antelope - Willow Springs (626.30)
Post Closure Site Management:
Future Land Use:
Facility Type: TITLE 27 - MINING UNIT
Composting Method:
Gndwater Monitoring Frequen:
Cleanup Oversight Agencies: LAHONTAN RWQCB (REGION 6V) (LEAD) - CASE #: 6B158020014
File Location:
Site History:

No site history available

GeoTracker Search - Cleanup Status History

Status: Completed - Case Closed
Date: 6/9/2004

GeoTracker Search - Regulatory Activities

Action Type: Enforcement/Orders
Action: Waste Discharge Requirements
Action Date: 6/9/2004
Received Issue Date: 6/9/2004
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=L10003439498&enforcement_id=6206414&temptable=ENFORCEMENT
Title Description Comment: Rescission of WDRs

GeoTracker Search - Documents

Title: RESCISSION OF WDRS
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=L10003439498&enforcement_id=6206414
Type: WASTE DISCHARGE REQUIREMENTS
Submitted:
Submitted By: TOM GAVIGAN (REGULATOR)
Document Type: Site Documents
Document Date: 6/9/2004
Size:

23	2 of5	SSE	0.21 / 1,134.51	3,073.47 / -121	MIDDLE BUTTES PROJECT 8941 W BACKUS RD MOJAVE CA 93501	LDS

Global ID: L10002272084
Facility ID: L10002272084
Cleanup Status: COMPLETED - CASE CLOSED
Site Facility Type: LAND DISPOSAL SITE
Address: 8941 W BACKUS RD
City: MOJAVE
County: Kern
State: CA
Zip: 93501
RWQCB Region: LAHONTAN RWQCB (REGION 6V)
Longitude: -118.289709091187
Latitude: 34.9614772875102

GeoTracker Sites Data Download – Site Details

RB Case No: 6B158020004
Loc Case No:
Status: Completed - Case Closed
Status Date: 2/13/2002
Begin Date:
Case Type: Land Disposal Site
Cal Enviroscreen:
Qty Released Gallons:
CUF Case:
EPA Region: 9
Lead Agency: LAHONTAN RWQCB (REGION 6V)
Case Worker:
Local Agency:
File Location:
Potential COC:
Military DoD Site: No
Leak Reported Dt:
No Further Action Dt: 2002-02-13 00:00:00
Potential Media of Concern:
How Discovered:

How Discovered Description:
Stop Method:
Stop Description:
Calwater Watershed Name: Antelope - Willow Springs (626.30)
DWR GW Subbasin Name: Antelope Valley (6-044)
Disadvantaged Community:
Discharge Cause:
Coordinate Source: Google Map Move
Discharge Source:
Facility Project Sub Type: Title 27 - Municipal Solid Waste Landfill
Calenviroscreen 3 Score: 51-55%
Calenviroscreen 4 Score: 75-80%
Claim No:
Claim Status:
Site History:

GeoTracker Sites Data Download - Reg Activity

Date: 2002-02-13 00:00:00
Action: Waste Discharge Requirements
Action Type: ENFORCEMENT

GeoTracker Sites Data Download - Status History

Status: Completed - Case Closed
Status Date: 2002-02-13 00:00:00

GeoTracker Search - Facilities

Site Facility Name: MIDDLE BUTTES PROJECT
Site Facility Type: LAND DISPOSAL SITE
Cleanup Status: COMPLETED - CASE CLOSED
Project Status:
Potential COC: NONE SPECIFIED
WDR Place Type:
Wdr File No:
Wdr Order No:
Address: 8941 W BACKUS RD
City: MOJAVE
Zip: 93501
County: KERN
Cuf Claim No:
CUF Priority Assig:
CUF Amount Paid:
Designated Beneficial Use: MUN, AGR, IND, FRSH
Designated Beneficl Use Desc: Municipal and Domestic Supply, Agricultural Supply, Industrial Service Supply, Freshwater Replenishment
Project Oversight Agencies:
Report Link: https://geotracker.waterboards.ca.gov/profile_report?global_id=L10002272084
Cleanup Status Detail: COMPLETED - CASE CLOSED AS OF 2/13/2002
Cleanup History Link: https://geotracker.waterboards.ca.gov/profile_report_include?global_id=L10002272084&tabname=regulatoryhistory
Potential Media of Concern: NONE SPECIFIED
User Defined Beneficial Use:
DWR GW Sub Basin: Antelope Valley (6-044)
Calwater Watershed Name: Antelope - Willow Springs (626.30)
Post Closure Site Management:
Future Land Use:
Facility Type: TITLE 27 - MUNICIPAL SOLID WASTE LANDFILL
Composting Method:
Gndwater Monitoring Frequen:
Cleanup Oversight Agencies: LAHONTAN RWQCB (REGION 6V) (LEAD) - CASE #: 6B158020004
File Location:
Site History:

No site history available

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

GeoTracker Search - Cleanup Status History

Status: Completed - Case Closed
Date: 2/13/2002

GeoTracker Search - Regulatory Activities

Action Type: Enforcement/Orders
Action: Waste Discharge Requirements
Action Date: 2/13/2002
Received Issue Date: 2/13/2002
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=L10002272084&enforcement_id=6206413&temptable=ENFORCEMENT
Title Description Comment: Rescission of WDRs

GeoTracker Search - Documents

Title: RESCISSION OF WDRS
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=L10002272084&enforcement_id=6206413
Type: WASTE DISCHARGE REQUIREMENTS
Submitted:
Submitted By: TOM GAVIGAN (REGULATOR)
Document Type: Site Documents
Document Date: 2/13/2002
Size:

23	3 of5	SSE	0.21 / 1,134.51	3,073.47 / -121	CACTUS GOLD MINES COMPANY 8941 WEST BACKUS ROAD MOJAVE CA 93501	EMISSIONS

1996 Toxic Data

Facility ID: 551
Facility SIC Code: 1041
CO: 15
Air Basin: MD
District: KER
TS:
Health Risk Asmt: .65
Non-Cancer Chronic Haz Ind: .03
Non-Cancer Acute Haz Ind: .03
COID: KER
DISN: KERN COUNTY APCD
CHAPIS:
CERR Code:

23	4 of5	SSE	0.21 / 1,134.51	3,073.47 / -121	MIDDLE BUTTES PROJECT 8941 W BACKUS RD MOJAVE CA 93501	WMUD

Wmu ID No: 6B158020004
Wds ID No: 6B158020004
Swis ID No:
Reg ID No:
Edit Date:
Last Edit:
Region: 6V
County: 15
Wds: TRUE
Msw:
Superorder:
Sc15: TRUE
Swat: FALSE
Tpca: FALSE
Rcra: FALSE
Npid:
Rptf: S
Sic1: 1041
Sic2:
Swat Anms:
Swat Fnms:
Atyp: PR
Anms: CACTUS GOLD MINES CO
Adep:
A Street: STAR RT 1 BOX 52-W
A City: MOJAVE CA
A Zip: 93501
A County: DAVE SUHR
Afon: 5097753241
Lnms:

Dod:		**Ldep:**	
Rbpo:	EL	**L Street:**	
Openpub:		**L City:**	
Waste List:		**L State:**	
Tot Wmus:	4	**L Zip:**	
Secrange:		**L County:**	
Basemer:		**Lfon:**	
Fcnt:	DAVE SUHR	**Ttwq:**	3
Fdep:		**Toxi:**	N
F State:	CA	**Cplx:**	C
Ffon:		**Wdrs:**	A
Ftyp:	IND	**Wtp1:**	DPROCES
Tonnage:		**Wtp2:**	
Fac Comment:			

WMU Details

Wmu ID:	6B158020004-04	**G Monitor:**	FALSE
Edit Date:		**S Monitor:**	FALSE
Last Edit:		**V Monitor:**	FALSE
Wmu Type:	SURF. IMP.	**G Back:**	0
Wmu Name:	CACTUS MIDDLE BUTTES BARREN PONDS	**S Back:**	0
Wmustatus:		**V Back:**	0
Wmu Size:		**G Nonback:**	0
Listed:	Yes	**S Nonback:**	0
Printed:	Yes	**V Nonback:**	0
Msw:	FALSE	**G Date:**	
Superorder:		**S Date:**	
Sc15:	TRUE	**V Date:**	
Swat:	FALSE	**Perm Test:**	
Tpca:	FALSE	**Gw Depth:**	0
Rcra:	FALSE	**Precip:**	0
Dod:	FALSE	**Site Alt:**	FALSE
Old Class:		**Site Alta:**	FALSE
Old Waste:		**Line Alt:**	FALSE
Old First:		**Line Alta:**	FALSE
New Class:		**Lcrs Alt:**	FALSE
New Waste:		**Lcrs Alta:**	FALSE
New First:		**Composite:**	
Stat Date:		**Line Des:**	FALSE
Cap Year:		**Liner1:**	FALSE
Closeplan:	FALSE	**Line1 Type:**	
Township:		**Liner2:**	FALSE
Fault Name:		**Line2 Type:**	
Fault Distance:		**Liner3:**	FALSE
Withquake:	FALSE	**Line3 Type:**	
Type Op:			
Gen Com1:			
Gen Com2:			
Gen Com3:			
Gen Com4:			
Formation:			
Form Type:			
Form Permit:			
Form Com1:			
Form Com2:			
Form Com3:			
Form Com4:			
Liner Com:			
Lcrs:	FALSE		
Lcrs Type:			
Lcrs Des:	FALSE		
Cons Com1:			
Cons Com2:			
Cons Com3:			
Cons Com4:			

WMU Details

Wmu ID:	6B158020004-01	***G Monitor:***	FALSE
Edit Date:	16-Jun-1989	***S Monitor:***	FALSE
Last Edit:	JHM	***V Monitor:***	FALSE
Wmu Type:	SURF. IMP.	***G Back:***	0
Wmu Name:	MIDDLE BUTTES PROJECT SURFACE IMPOUND	***S Back:***	0
Wmustatus:		***V Back:***	0
Wmu Size:		***G Nonback:***	0
Listed:	Yes	***S Nonback:***	0
Printed:	Yes	***V Nonback:***	0
Msw:	FALSE	***G Date:***	
Superorder:		***S Date:***	
Sc15:	TRUE	***V Date:***	
Swat:	FALSE	***Perm Test:***	
Tpca:	FALSE	***Gw Depth:***	0
Rcra:	FALSE	***Precip:***	0
Dod:	FALSE	***Site Alt:***	FALSE
Old Class:		***Site Alta:***	FALSE
Old Waste:		***Line Alt:***	FALSE
Old First:		***Line Alta:***	FALSE
New Class:		***Lcrs Alt:***	FALSE
New Waste:		***Lcrs Alta:***	FALSE
New First:		***Composite:***	
Stat Date:		***Line Des:***	FALSE
Cap Year:		***Liner1:***	FALSE
Closeplan:	FALSE	***Line1 Type:***	
Township:		***Liner2:***	FALSE
Fault Name:	UNKNOWN	***Line2 Type:***	
Fault Distance:		***Liner3:***	FALSE
Withquake:	FALSE	***Line3 Type:***	
Type Op:			
Gen Com1:			
Gen Com2:			
Gen Com3:			
Gen Com4:			
Formation:	UNKNOWN		
Form Type:	UNKNOWN		
Form Permit:	UNKNOWN		
Form Com1:			
Form Com2:			
Form Com3:			
Form Com4:			
Liner Com:			
Lcrs:	FALSE		
Lcrs Type:			
Lcrs Des:	FALSE		
Cons Com1:			
Cons Com2:			
Cons Com3:			
Cons Com4:			

WMU Details

Wmu ID:	6B158020004-03	***G Monitor:***	FALSE
Edit Date:		***S Monitor:***	FALSE
Last Edit:		***V Monitor:***	FALSE
Wmu Type:	SURF. IMP.	***G Back:***	0
Wmu Name:	CACTUS MIDDLE BUTTES PREGNANT PONDS	***S Back:***	0
Wmustatus:		***V Back:***	0
Wmu Size:		***G Nonback:***	0
Listed:	Yes	***S Nonback:***	0
Printed:	Yes	***V Nonback:***	0
Msw:	FALSE	***G Date:***	
Superorder:		***S Date:***	
Sc15:	TRUE	***V Date:***	

Swat:	FALSE	**Perm Test:**	
Tpca:	FALSE	**Gw Depth:**	0
Rcra:	FALSE	**Precip:**	0
Dod:	FALSE	**Site Alt:**	FALSE
Old Class:		**Site Alta:**	FALSE
Old Waste:		**Line Alt:**	FALSE
Old First:		**Line Alta:**	FALSE
New Class:		**Lcrs Alt:**	FALSE
New Waste:		**Lcrs Alta:**	FALSE
New First:		**Composite:**	
Stat Date:		**Line Des:**	FALSE
Cap Year:		**Liner1:**	FALSE
Closeplan:	FALSE	**Line1 Type:**	
Township:		**Liner2:**	FALSE
Fault Name:		**Line2 Type:**	
Fault Distance:		**Liner3:**	FALSE
Withquake:	FALSE	**Line3 Type:**	
Type Op:			
Gen Com1:			
Gen Com2:			
Gen Com3:			
Gen Com4:			
Formation:			
Form Type:			
Form Permit:			
Form Com1:			
Form Com2:			
Form Com3:			
Form Com4:			
Liner Com:			
Lcrs:	FALSE		
Lcrs Type:			
Lcrs Des:	FALSE		
Cons Com1:			
Cons Com2:			
Cons Com3:			
Cons Com4:			

WMU Details

Wmu ID:	6B158020004-02	**G Monitor:**	FALSE
Edit Date:		**S Monitor:**	FALSE
Last Edit:		**V Monitor:**	FALSE
Wmu Type:	WASTE PILE	**G Back:**	0
Wmu Name:	CACTUS MIDDLE BUTTES ALL LEACHCELLS WP	**S Back:**	0
Wmustatus:		**V Back:**	0
Wmu Size:		**G Nonback:**	0
Listed:	Yes	**S Nonback:**	0
Printed:	Yes	**V Nonback:**	0
Msw:	FALSE	**G Date:**	
Superorder:		**S Date:**	
Sc15:	TRUE	**V Date:**	
Swat:	FALSE	**Perm Test:**	
Tpca:	FALSE	**Gw Depth:**	0
Rcra:	FALSE	**Precip:**	0
Dod:	FALSE	**Site Alt:**	FALSE
Old Class:		**Site Alta:**	FALSE
Old Waste:		**Line Alt:**	FALSE
Old First:		**Line Alta:**	FALSE
New Class:		**Lcrs Alt:**	FALSE
New Waste:		**Lcrs Alta:**	FALSE
New First:		**Composite:**	
Stat Date:		**Line Des:**	FALSE
Cap Year:		**Liner1:**	FALSE
Closeplan:	FALSE	**Line1 Type:**	
Township:		**Liner2:**	FALSE
Fault Name:		**Line2 Type:**	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Fault Distance:		**Liner3:**	FALSE
Withquake:	FALSE	**Line3 Type:**	
Type Op:			
Gen Com1:			
Gen Com2:			
Gen Com3:			
Gen Com4:			
Formation:			
Form Type:			
Form Permit:			
Form Com1:			
Form Com2:			
Form Com3:			
Form Com4:			
Liner Com:			
Lcrs:	FALSE		
Lcrs Type:			
Lcrs Des:	FALSE		
Cons Com1:			
Cons Com2:			
Cons Com3:			
Cons Com4:			

23	5 of5	SSE	0.21 / 1,134.51	3,073.47 / -121	SHUMAKE PROJECT 8941 W BACKUS RD MOJAVE CA 93501	WMUD

Wmu ID No:	6B158020014	**Npid:**	
Wds ID No:	6B158020014	**Rptf:**	Q
Swis ID No:		**Sic1:**	1041
Reg ID No:		**Sic2:**	
Edit Date:		**Swat Anms:**	
Last Edit:		**Swat Fnms:**	
Region:	6V	**Atyp:**	PR
County:	15	**Anms:**	CACTUS GOLD MINES CO
Wds:	TRUE	**Adep:**	
Msw:		**A Street:**	190 KNOB HILL RD
Superorder:		**A City:**	REPUBLIC WA
Sc15:	TRUE	**A Zip:**	99166
Swat:	FALSE	**A County:**	DAVE SUHR
Tpca:	FALSE	**Afon:**	5097753241
Rcra:	FALSE	**Lnms:**	
Dod:		**Ldep:**	
Rbpo:	EL	**L Street:**	
Openpub:		**L City:**	
Waste List:		**L State:**	
Tot Wmus:	3	**L Zip:**	
Secrange:		**L County:**	
Basemer:		**Lfon:**	
Fcnt:	STEVE HAYNES	**Ttwq:**	3
Fdep:		**Toxi:**	N
F State:	CA	**Cplx:**	C
Ffon:		**Wdrs:**	A
Ftyp:	IND	**Wtp1:**	HPROCES
Tonnage:		**Wtp2:**	
Fac Comment:			

WMU Details

Wmu ID:	6B158020014-01	**G Monitor:**	FALSE
Edit Date:	10-Jun-1998	**S Monitor:**	FALSE
Last Edit:	mulderj.LAND.C	**V Monitor:**	FALSE
Wmu Type:	LEACH PAD	**G Back:**	0
Wmu Name:	SHUMAKE PROJECT LEACH PAD	**S Back:**	0
Wmustatus:	UNDER CLOSURE	**V Back:**	0
Wmu Size:	71	**G Nonback:**	0
Listed:	Yes	**S Nonback:**	0

Printed:	Yes	**V Nonback:**	0
Msw:	FALSE	**G Date:**	
Superorder:		**S Date:**	
Sc15:	TRUE	**V Date:**	
Swat:	FALSE	**Perm Test:**	
Tpca:	FALSE	**Gw Depth:**	0
Rcra:	FALSE	**Precip:**	0
Dod:	FALSE	**Site Alt:**	FALSE
Old Class:		**Site Alta:**	FALSE
Old Waste:		**Line Alt:**	TRUE
Old First:		**Line Alta:**	TRUE
New Class:	B	**Lcrs Alt:**	FALSE
New Waste:		**Lcrs Alta:**	FALSE
New First:		**Composite:**	
Stat Date:		**Line Des:**	FALSE
Cap Year:		**Liner1:**	TRUE
Closeplan:	FALSE	**Line1 Type:**	40 MIL HDPE
Township:		**Liner2:**	TRUE
Fault Name:	UNKNOWN	**Line2 Type:**	40 MIL HDPE
Fault Distance:		**Liner3:**	FALSE
Withquake:	FALSE	**Line3 Type:**	
Type Op:			
Gen Com1:	JUNE 1998: UNDERGOING CLOSURE. PLAN TO GRADE OVER PAD WITH NATIVE		
Gen Com2:	SOIL ENSURING DRAINAGE OFF OF PAD.		
Gen Com3:	THIS IS AN ENGINEERED CLOSURE ALTERNATIVE.		
Gen Com4:			
Formation:	UNKNOWN		
Form Type:	QUAR ALLUVIUM		
Form Permit:	UNKNOWN		
Form Com1:			
Form Com2:			
Form Com3:			
Form Com4:			
Liner Com:			
Lcrs:	TRUE		
Lcrs Type:			
Lcrs Des:	FALSE		
Cons Com1:			
Cons Com2:			
Cons Com3:			
Cons Com4:			

WMU Details

Wmu ID:	6B158020014-03	**G Monitor:**	FALSE
Edit Date:	10-Jun-1998	**S Monitor:**	FALSE
Last Edit:	mulderj.LAND.C	**V Monitor:**	FALSE
Wmu Type:	SURF. IMP.	**G Back:**	0
Wmu Name:	CACTUS SHUMAKE PREGNANT POND	**S Back:**	0
Wmustatus:	UNDER CLOSURE	**V Back:**	0
Wmu Size:	2	**G Nonback:**	0
Listed:	Yes	**S Nonback:**	0
Printed:	Yes	**V Nonback:**	0
Msw:	FALSE	**G Date:**	
Superorder:		**S Date:**	
Sc15:	TRUE	**V Date:**	
Swat:	FALSE	**Perm Test:**	
Tpca:	FALSE	**Gw Depth:**	0
Rcra:	FALSE	**Precip:**	0
Dod:	FALSE	**Site Alt:**	FALSE
Old Class:		**Site Alta:**	FALSE
Old Waste:		**Line Alt:**	FALSE
Old First:		**Line Alta:**	FALSE
New Class:	B	**Lcrs Alt:**	FALSE
New Waste:		**Lcrs Alta:**	FALSE
New First:		**Composite:**	
Stat Date:		**Line Des:**	FALSE
Cap Year:		**Liner1:**	TRUE

Closeplan:	FALSE	***Line1 Type:***	40 MIL HDPE
Township:		***Liner2:***	TRUE
Fault Name:		***Line2 Type:***	40 MIL HDPE
Fault Distance:		***Liner3:***	FALSE
Withquake:	FALSE	***Line3 Type:***	
Type Op:			
Gen Com1:			
Gen Com2:			
Gen Com3:			
Gen Com4:			
Formation:			
Form Type:			
Form Permit:			
Form Com1:			
Form Com2:			
Form Com3:			
Form Com4:			
Liner Com:			
Lcrs:	TRUE		
Lcrs Type:			
Lcrs Des:	FALSE		
Cons Com1:			
Cons Com2:			
Cons Com3:			
Cons Com4:			

WMU Details

Wmu ID:	6B158020014-02	***G Monitor:***	FALSE
Edit Date:	10-Jun-1998	***S Monitor:***	FALSE
Last Edit:	mulderj.LAND.C	***V Monitor:***	FALSE
Wmu Type:	SURF. IMP.	***G Back:***	0
Wmu Name:	CACTUS SHUMAKE BARREN POND	***S Back:***	0
Wmustatus:	UNDER CLOSURE	***V Back:***	0
Wmu Size:	2	***G Nonback:***	0
Listed:		***S Nonback:***	0
Printed:		***V Nonback:***	0
Msw:	FALSE	***G Date:***	
Superorder:		***S Date:***	
Sc15:	TRUE	***V Date:***	
Swat:	FALSE	***Perm Test:***	
Tpca:	FALSE	***Gw Depth:***	0
Rcra:	FALSE	***Precip:***	0
Dod:	FALSE	***Site Alt:***	FALSE
Old Class:		***Site Alta:***	FALSE
Old Waste:		***Line Alt:***	FALSE
Old First:		***Line Alta:***	FALSE
New Class:	B	***Lcrs Alt:***	FALSE
New Waste:		***Lcrs Alta:***	FALSE
New First:		***Composite:***	
Stat Date:		***Line Des:***	FALSE
Cap Year:		***Liner1:***	TRUE
Closeplan:	FALSE	***Line1 Type:***	40 MIL HDPE
Township:		***Liner2:***	TRUE
Fault Name:		***Line2 Type:***	40 MIL HDPE
Fault Distance:		***Liner3:***	FALSE
Withquake:	FALSE	***Line3 Type:***	
Type Op:			
Gen Com1:			
Gen Com2:			
Gen Com3:			
Gen Com4:			
Formation:			
Form Type:			
Form Permit:			
Form Com1:			
Form Com2:			
Form Com3:			

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Form Com4:
Liner Com:
Lcrs: TRUE
Lcrs Type:
Lcrs Des: FALSE
Cons Com1:
Cons Com2:
Cons Com3:
Cons Com4:

---

24 | **1 of4** | **SW** | **0.24 / 1,248.76** | **3,938.93 / 745** | **CATALINA RENEWABLE ENERGY PROJ**
11054 BACKUS RD
MOJAVE CA 93501 | **RCRA NON GEN**

Handler ID: CAR000225615
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	**Used Oil Transpor:**	No
Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		

Used Oil Market Burner: No
Used Oil Spec Marketer: No

Additional Handler Summary Details

Source Type:	N	**NAIC 1:**	23713
Seq No:	2	**NAIC 2:**	23891
Non Notifier:		**NAIC 3:**	23799
Receive Date:	20140206	**NAIC 4:**	23621
Active Site:	-----	**State:**	CA
Land Type:	P	**Location Latitude:**	
In Handler Univ:	N	**Location Longitude:**	
In A Universe:	N	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	
Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		

Fed Waste Gen Owner: HQ
State Waste Generator Owner: CA
State Waste Generator: N
Short Term Generator: N
Uni Waste: N
Universal Waste Dest Facility: N
Federal Universal Waste: N
As Federally Regulated Tsdf: ------
As Converter Tsdf: ------
As State Regulated Tsdf: ------
As State Regulated Handler: ---
Federal Indicator: ---

Hsm:	N
Subpart K:	----
GPRA Permit:	N
GPRA Renewal:	N
Permit Renewal Wrkld:	------
Permwrk ID:	------
Perm Prog:	------
Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20140212
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	CATALINA RENEWABLE ENERGY PROJ
Location Street No:	
Location Street1:	11054 BACKUS RD
Location Street2:	
Location City:	MOJAVE
Location State:	CA
Location Zip:	93501
Location County Code:	CA029
Location County Name:	KERN
Location Country:	US
Contact Name:	JOSEPH CREIGHTON
Contact Street No:	
Contact Street1:	BETCHEL POWER CORP
Contact Street2:	5275 WESTVIEW DR
Contact City:	FREDERICK
Contact State:	MD
Contact Zip:	21703-8306
Contact Country:	US
Contact Phone And Ext:	301-228-6863
Contact Fax:	
Contact Email Address:	
Contact Title:	PROJ ENG
Owner Name:	CATALINA SOLAR LLC
Owner Type:	P
Owner Seq:	1
Operator Name:	BECHTEL POWER CORP
Operator Type:	P
Operator Seq:	2
Public Notes:	

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20120531
Handler Name:	CATALINA RENEWABLE ENERGY PROJ
Fed Waste Generator:	2

Generator Code Description: Small Quantity Generator
Source Type: Notification

Waste Code Details

Waste Code: D001
Waste Code Desc: IGNITABLE WASTE

Waste Code: D002
Waste Code Desc: CORROSIVE WASTE

Waste Code: D003
Waste Code Desc: REACTIVE WASTE

Hazardous Waste Handler Details

Seq No: 2
Receive Date: 20140206
Handler Name: CATALINA RENEWABLE ENERGY PROJ
Fed Waste Generator: N
Generator Code Description: Not a Generator, Verified
Source Type: Notification

Owner/Operator Details

Owner/Operator Ind: Current Operator
Type: Private
Name: BECHTEL CONSTRUCTION
Dt Became Current: 20120501
Dt Ended Current:
Phone:
Source Type: Notification
Street No:
Street1:
Street2:
City:
State:
Country: US
Zip:

Owner/Operator Ind: Current Owner
Type: Private
Name: CATALINA SOLAR LLC
Dt Became Current: 20120101
Dt Ended Current:
Phone:
Source Type: Notification
Street No:
Street1:
Street2:
City:
State:
Country: US
Zip:

Owner/Operator Ind: Current Operator
Type: Private
Name: BECHTEL POWER CORP
Dt Became Current: 20120501
Dt Ended Current:
Phone:
Source Type: Notification
Street No:
Street1:
Street2:
City:
State:
Country: US
Zip:

Owner/Operator Ind: Current Owner
Type: Private
Name: CATALINA SOLAR LLC
Dt Became Current: 20120101
Dt Ended Current:
Phone:
Source Type: Notification
Street No:
Street1: 15445 INNOVATION DR
Street2:
City: SAN DIEGO
State: CA
Country: US
Zip: 92128

Historical Handler Details

Receive Dt: 20120531
Generator Code Description: Small Quantity Generator
Handler Name: CATALINA RENEWABLE ENERGY PROJ

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
24	2 of4	SW	0.24 / 1,248.76	3,938.93 / 745	BECHTEL POWER CORPORATION 11054 Backus Rd MOJAVE CA	CUPA KERN

Facility ID: FA0036927
CERS ID: 10238413
Mailing Address: 5275 WESTVIEW DRIVE
Mailing State: MD
Mailing Address 2:
Mailing Zip: 21703
Mailing City: FREDERICK
Data Source: CUPA - Hazardous Material Business Plan (HMBP) Inventory; CUPA - Hazardous Waste (HW) Facilities

Detail(s)

Billing Status: Inactive, non-billable
Prog Element Code: CG07
Current Inspection Dt: 7/1/2015
Program Element: SMALL QUANTITY HAZARDOUS WASTE GENERATOR
HMIRRP Due Date:
Employee: COGLEY
Report Source: CUPA - Hazardous Waste (HW) Facilities

Detail(s)

Billing Status: Inactive, non-billable
Prog Element Code: CB3T
Current Inspection Dt: 7/1/2015
Program Element: BUS PLAN LARGE LOW RISK 1 UNIT
HMIRRP Due Date: 5/31/2013
Employee: COGLEY
Report Source: CUPA - Hazardous Material Business Plan (HMBP) Inventory

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
24	3 of4	SW	0.24 / 1,248.76	3,938.93 / 745	BECHTEL POWER CORPORATION 11054 Backus Rd MOJAVE CA 93501	AST KERN

Facility ID: FA0036927
Cers ID: 10238413
Mailing Address: 5275 WESTVIEW DRIVE
Mailing States: MD
Mailing Address 2:
Mailing Zip: 21703
Mailing City: FREDERICK

Kern County - AST Details

Billing Status: Inactive, non-billable
Desig Employee: COGLEY
Current Inspection Dt: 7/1/2015
HMIRRP Due Date: 5/31/2013
Program Element Code: CD01
Program Element: APSA 1,320-9,999 GALLON CAPACITY

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
24	4 of4	SW	0.24 / 1,248.76	3,938.93 / 745	CATALINA SOLAR EDF RENEWABLE SERVICES 11054 BACKUS RD MOJAVE CA 93501	RCRA NON GEN

Handler ID: CAL000393349
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer: No
Used Oil Transpor: No
Mixed Waste Gen: No
Used Oil Trans Fac: No
Transporter: No
Used Oil Processor: No

Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	I	**NAIC 1:**	221122
Seq No:	1	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	20140122	**NAIC 4:**	
Active Site:	H----	**State:**	CA
Land Type:		**Location Latitude:**	34.952248
In Handler Univ:	Y	**Location Longitude:**	-118.14031
In A Universe:	Y	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	AG
Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		

Fed Waste Gen Owner:	HQ
State Waste Generator Owner:	CA
State Waste Generator:	2
Short Term Generator:	N
Uni Waste:	Y
Universal Waste Dest Facility:	Y
Federal Universal Waste:	N
As Federally Regulated Tsdf:	------
As Converter Tsdf:	------
As State Regulated Tsdf:	------
As State Regulated Handler:	---
Federal Indicator:	---
Hsm:	N
Subpart K:	----
GPRA Permit:	N
GPRA Renewal:	N
Permit Renewal Wrkld:	------
Permwrk ID:	------
Perm Prog:	------
Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20180906
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	CATALINA SOLAR EDF RENEWABLE SERVICES
Location Street No:	
Location Street1:	11054 BACKUS RD

Location Street2:	
Location City:	MOJAVE
Location State:	CA
Location Zip:	93501
Location County Code:	CA029
Location County Name:	KERN
Location Country:	US
Contact Name:	JAMES FLORES
Contact Street No:	
Contact Street1:	200 EAST 7TH STREET
Contact Street2:	SUITE 414
Contact City:	LOVELAND
Contact State:	CO
Contact Zip:	80537
Contact Country:	
Contact Phone And Ext:	970-397-7021
Contact Fax:	
Contact Email Address:	JAMES.FLORES@EDF-RE.COM
Contact Title:	
Owner Name:	EDF RENEWABLE ENERGY
Owner Type:	O
Owner Seq:	1
Operator Name:	JAMES FLORES
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20140122
Handler Name:	CATALINA SOLAR EDF RENEWABLE SERVICES
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Implementer

Owner/Operator Details

Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street1:***	15445 INNOVATION DRIVE
Name:	EDF RENEWABLE ENERGY	***Street2:***	
Dt Became Current:		***City:***	SAN DIEGO
Dt Ended Current:		***State:***	CA
Phone:	209-836-1921	***Country:***	
Source Type:	Implementer	***Zip:***	92128-1000
Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Other	***Street1:***	200 EAST 7TH STREET
Name:	JAMES FLORES	***Street2:***	SUITE 414
Dt Became Current:		***City:***	LOVELAND
Dt Ended Current:		***State:***	CO
Phone:	970-397-7021	***Country:***	
Source Type:	Implementer	***Zip:***	80537

25	***1 of2***	***ESE***	***0.24 / 1,262.30***	***3,317.16 / 123***	***QUIEN SABE KERN COUNTY MOJAVE CA 93501***	***MRDS***

Dep ID:	10076758	***I1:***	95
Dev Status:	PRODUCER	***Latitude:***	34.976501
Code List:	AU	***Longitude:***	-118.269226
Url:	http://mrdata.usgs.gov/mrds/show-mrds.php?dep_id=10076758		

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Commodity

I1:	31	***Line:***	1
Code:	AU	***Inserted By:***	MRDS migration
Commodity:	Gold	***Insert Date:***	29-OCT-2002 09:00:24
Commodity Type:	Metallic	***Updated By:***	USGS
Commodity Group:	Gold	***Update Date:***	29-OCT-2002 09:01:02
Importance:	Primary		

Names

I1:	21	***Inserted By:***	MRDS migration
Status:	Current	***Insert Date:***	29-OCT-02
Site Name:	Quien Sabe	***Updated By:***	USGS
Line:	1	***Update Date:***	29-OCT-02

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
25	2 of2	ESE	0.24 / 1,262.30	3,317.16 / 123	QUIEN SABE PROSPECT-? KERN COUNTY MOJAVE CA 93501	MRDS

Dep ID:	10236179	***I1:***	18
Dev Status:	PROSPECT	***Latitude:***	34.976501
Code List:	AU	***Longitude:***	-118.269226
Url:	http://mrdata.usgs.gov/mrds/show-mrds.php?dep_id=10236179		

Commodity

I1:	25	***Line:***	1
Code:	AU	***Inserted By:***	MAS migration
Commodity:	Gold	***Insert Date:***	29-OCT-2002 09:00:24
Commodity Type:	Metallic	***Updated By:***	USGS
Commodity Group:	Gold	***Update Date:***	29-OCT-2002 09:02:07
Importance:	Primary		

Names

I1:	33	***Inserted By:***	MAS migration
Status:	Current	***Insert Date:***	29-OCT-02
Site Name:	Quien Sabe Prospect-?	***Updated By:***	USGS
Line:	1	***Update Date:***	29-OCT-02

Names

I1:	33	***Inserted By:***	MAS migration
Status:	Previous	***Insert Date:***	29-OCT-02
Site Name:	Quien Sabe	***Updated By:***	USGS
Line:	2	***Update Date:***	29-OCT-02

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
26	1 of1	ESE	0.24 / 1,262.47	3,290.60 / 96	BLUETT PROSPECT KERN COUNTY MOJAVE CA 93501	MRDS

Dep ID:	10284926	***I1:***	26
Dev Status:	PROSPECT	***Latitude:***	34.976501
Code List:	U	***Longitude:***	-118.269409
Url:	http://mrdata.usgs.gov/mrds/show-mrds.php?dep_id=10284926		

Commodity

I1:	15	***Line:***	1

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Code:	U	**Inserted By:**	MAS migration
Commodity:	Uranium	**Insert Date:**	29-OCT-2002 09:00:24
Commodity Type:	Metallic	**Updated By:**	USGS
Commodity Group:	Uranium	**Update Date:**	29-OCT-2002 09:02:41
Importance:	Primary		

Names

I1:	34	**Inserted By:**	MAS migration
Status:	Current	**Insert Date:**	29-OCT-02
Site Name:	Bluett Prospect	**Updated By:**	USGS
Line:	1	**Update Date:**	29-OCT-02

27	1 of10	NNE	0.25 / 1,299.91	3,481.96 / 288	Vestas 8560 Oak Creek Rd Mojave CA	DELISTED COUNTY

Delisted County Records

Original Source Facility ID:	10479406
Original Source Name:	Kern County CUPA List
Record Dt:	19-MAY-2015
Record Date:	19-MAY-2015

27	2 of10	NNE	0.25 / 1,299.91	3,481.96 / 288	Alta Wind II, LLC 8560 A OAK CREEK RD 8560 A OAK CREEK RD MOJAVE CA	CUPA KERN

Facility ID:	FA0035874	**CERS ID:**	10238119
Mailing Address:	8560 Oak Creek Road	**Mailing State:**	CA
Mailing Address 2:		**Mailing Zip:**	93501
Mailing City:	Mojave		
Data Source:	CUPA - Hazardous Material Business Plan (HMBP) Inventory; CUPA - Hazardous Waste (HW) Facilities		

Detail(s)

Billing Status:	Active, billable	**Prog Element Code:**	CB5T
Current Inspection Dt:	6/1/2023	**Program Element:**	BUS PLAN MED LOW RISK 2-5 UNITS
HMIRRP Due Date:	4/30/2013	**Employee:**	COGLEY
Report Source:	CUPA - Hazardous Material Business Plan (HMBP) Inventory		

Detail(s)

Billing Status:	Active, billable	**Prog Element Code:**	CG07
Current Inspection Dt:	6/1/2023	**Program Element:**	SMALL QUANTITY HAZARDOUS WASTE GENERATOR
HMIRRP Due Date:		**Employee:**	COGLEY
Report Source:	CUPA - Hazardous Waste (HW) Facilities		

27	3 of10	NNE	0.25 / 1,299.91	3,481.96 / 288	Vestas 8560 OAK CREEK RD Mojave CA	CUPA KERN

Facility ID:	FA0043124	**CERS ID:**	10479406
Mailing Address:	8560 Oak Creek Road	**Mailing State:**	CA
Mailing Address 2:		**Mailing Zip:**	93501
Mailing City:	Mojave		
Data Source:	CUPA - Hazardous Material Business Plan (HMBP) Inventory; CUPA - Hazardous Waste (HW) Facilities		

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Detail(s)

Billing Status:	Active, billable	***Prog Element Code:***	CB2T
Current Inspection Dt:	11/1/2022	***Program Element:***	BUS PLAN MED LOW RISK 1 UNIT
HMIRRP Due Date:		***Employee:***	COGLEY
Report Source:	CUPA - Hazardous Material Business Plan (HMBP) Inventory		

Detail(s)

Billing Status:	Active, billable	***Prog Element Code:***	CG07
Current Inspection Dt:	11/1/2022	***Program Element:***	SMALL QUANTITY HAZARDOUS WASTE GENERATOR
HMIRRP Due Date:		***Employee:***	COGLEY
Report Source:	CUPA - Hazardous Waste (HW) Facilities		

27	***4 of10***	***NNE***	***0.25 / 1,299.91***	***3,481.96 / 288***	***Alta Wind II, LLC 8560 A OAK CREEK RD MOJAVE CA 93501***	***CERS TANK***

Site ID:	403639
Latitude:	35.034470
Longitude:	-118.284060

Regulated Programs

EI ID:	10238119
EI Description:	Aboveground Petroleum Storage

Violations

Violation Date:	07/23/2014	***Violation Source:***	CERS
Violation Program:	HMRRP	***Violation Division:***	Kern County Env Health Services Department
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)		
Violation Notes:			

Returned to compliance on 05/13/2015. The hazardous materials inventory is not accurate. Please add 110 gallons of antifreeze and all waste stream items to the inventory. Revise inventory and submit in CERS.

Violation Description:

Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.

Enforcements

Enf Action Date:	07/23/2014	***Enf Action Program:***	HMRRP
Enf Action Type:	Notice of Violation (Unified Program)	***Enf Action Source:***	CERS
Enf Action Division:	Kern County Env Health Services Department		
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection		
Enf Action Notes:			

Evaluations

Eval Date:	07/23/2014
Violations Found:	No
Eval General Type:	Other/Unknown
Eval Type:	Other, not routine, done by local agency
Eval Division:	Kern County Env Health Services Department
Eval Program:	HMRRP
Eval Source:	CERS
Eval Notes:	

Eval Date: 01/24/2023
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Eval Date: 05/17/2017
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: APSA
Eval Source: CERS
Eval Notes:

Eval Date: 05/17/2017
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: HW
Eval Source: CERS
Eval Notes:

Eval Date: 01/24/2023
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: APSA
Eval Source: CERS
Eval Notes:

Eval Date: 05/17/2017
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Eval Date: 01/24/2023
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: HW
Eval Source: CERS
Eval Notes:

Eval Date: 07/23/2014
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: HW
Eval Source: CERS
Eval Notes:

Eval Date: 07/23/2014
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Eval Date: 07/23/2014
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Kern County Env Health Services Department
Eval Program: APSA
Eval Source: CERS
Eval Notes:

Affiliations

Affil Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title:
Address: 8560 Oak Creek Road
City: Mojave
State: CA
Country:
Zip Code: 93501
Phone:

Affil Type Desc: Operator
Entity Name: Alta Wind II, LLC
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone: (661) 822-2958

Affil Type Desc: Document Preparer
Entity Name: Kristin Cooley
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Legal Owner
Entity Name: Alta Wind II, LLC
Entity Title:
Address: 8560 A OAK CREEK RD
City: MOJAVE
State: CA
Country: United States
Zip Code: 93501
Phone: (661) 822-2958

Affil Type Desc: Environmental Contact
Entity Name: Kristin Cooley
Entity Title:
Address: 8560 Oak Creek Road

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

City: Mojave
State: CA
Country:
Zip Code: 93501
Phone:

Affil Type Desc: Identification Signer
Entity Name: Kristin Cooley
Entity Title: Environmental Manager
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Parent Corporation
Entity Name: Alta Wind II, LLC
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: CUPA District
Entity Name: Kern County Environmental Health Services Departme
Entity Title:
Address: 2700 M Street, Suite 300
City: Bakersfield
State: CA
Country:
Zip Code: 93301-2370
Phone: (661) 862-8740

27	5 of10	NNE	0.25 / 1,299.91	3,481.96 / 288	Alta Wind II, LLC 8560 A OAK CREEK RD 8560 A OAK CREEK RD MOJAVE CA 93501	AST KERN

Facility ID: FA0035874
Mailing Address: 8560 Oak Creek Road
Mailing Address 2:
Mailing City: Mojave
Cers ID: 10238119
Mailing States: CA
Mailing Zip: 93501

Kern County - AST Details

Billing Status: Active, billable
Current Inspection Dt: 6/1/2023
Program Element Code: CD01
Program Element: APSA 1,320-9,999 GALLON CAPACITY
Desig Employee: COGLEY
HMIRRP Due Date:

27	6 of10	NNE	0.25 / 1,299.91	3,481.96 / 288	ALTA WIND II LLC 8560 OAK CREEK RD MOJAVE CA 93501	RCRA NON GEN

Handler ID: CAL000422286
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	**Used Oil Transpor:**	No
Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	B	**NAIC 1:**	22121
Seq No:	1	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	20220525	**NAIC 4:**	
Active Site:	H----	**State:**	CA
Land Type:	O	**Location Latitude:**	35.038346
In Handler Univ:	Y	**Location Longitude:**	-118.287911
In A Universe:	Y	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	AG
Report Cycle:	2021	**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		
Fed Waste Gen Owner:	HQ		
State Waste Generator Owner:	CA		
State Waste Generator:	1		
Short Term Generator:	N		
Uni Waste:	Y		
Universal Waste Dest Facility:	Y		
Federal Universal Waste:	N		
As Federally Regulated Tsdf:	------		
As Converter Tsdf:	------		
As State Regulated Tsdf:	------		
As State Regulated Handler:	---		
Federal Indicator:	---		
Hsm:	N		
Subpart K:	----		
GPRA Permit:	N		
GPRA Renewal:	N		
Permit Renewal Wrkld:	------		
Permwrk ID:	------		
Perm Prog:	------		
Pcwrkld:	------		
Closwrkld:	------		
GPRA Ca:	N		
Cawrkld:	N		
Subjca Tsd Discretion:	N		
NCAPS:	N		
EC Indicator:	N		
Ca725 Indicator:	N		
Ca750 Indicator:	N		
Operating Tsdf:	------		
Full Enforcement:	------		
Snc:	N		
Unaddressed Snc:	N		
Addressed Snc:	N		
Snc With Comp Sched:	N		
Fa Required:	-----		
Hhandler Last Change:	20220624		
Recognized Trader Importer:	N		

Recognized Trader Exporter: N
Slab Importer: N
Slab Exporter: N
Manifest Broker: N
Subpart P: N
Contact Language: EN
Handler Name: ALTA WIND II LLC
Location Street No:
Location Street1: 8560 OAK CREEK RD
Location Street2:
Location City: MOJAVE
Location State: CA
Location Zip: 93501
Location County Code: CA029
Location County Name: KERN
Location Country: US
Contact Name: KRISTIN COOLEY
Contact Street No:
Contact Street1: 8560 OAK CREEK RD
Contact Street2:
Contact City: MOJAVE
Contact State: CA
Contact Zip: 93501
Contact Country: US
Contact Phone And Ext: 661-271-7345
Contact Fax:
Contact Email Address: KRISTIN.COOLEY@CLEARWAYENERGY.COM
Contact Title: ENVIRONMENTAL SUPERVISOR
Owner Name: ALTA WIND II LLC
Owner Type: O
Owner Seq: 1
Operator Name: ALTA WIND II, LLC
Operator Type: O
Operator Seq: 2
Public Notes:

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No: 1
Receive Date: 20161117
Handler Name: ALTA WIND II LLC
Fed Waste Generator: N
Generator Code Description: Not a Generator, Verified
Source Type: Implementer

Hazardous Waste Handler Details

Seq No: 1
Receive Date: 20220525
Handler Name: ALTA WIND II LLC
Fed Waste Generator: N
Generator Code Description: Not a Generator, Verified
Source Type: Annual/Biennial Report update with Notification

Waste Code Details

Waste Code: 221
Waste Code Desc: Waste oil and mixed oil

Waste Code: 343
Waste Code Desc: Unspecified organic liquid mixture

Waste Code: 352

Waste Code Desc: Other organic solids

Waste Code: 611
Waste Code Desc: Contaminated soil from site clean-ups

Owner/Operator Details

Owner/Operator Ind:	Current Owner	**Street No:**	
Type:	Other	**Street1:**	8560 OAK CREEK RD
Name:	ALTA WIND II LLC	**Street2:**	
Dt Became Current:		**City:**	MOJAVE
Dt Ended Current:		**State:**	CA
Phone:	661-822-2958	**Country:**	
Source Type:	Implementer	**Zip:**	93501

Owner/Operator Ind:	Current Operator	**Street No:**	
Type:	Other	**Street1:**	8560 OAK CREEK RD
Name:	COLLEEN BROCK	**Street2:**	
Dt Became Current:		**City:**	MOJAVE
Dt Ended Current:		**State:**	CA
Phone:	661-221-8547	**Country:**	
Source Type:	Implementer	**Zip:**	93501

Owner/Operator Ind:	Current Owner	**Street No:**	
Type:	Other	**Street1:**	8560 OAK CREEK RD
Name:	ALTA WIND II LLC	**Street2:**	
Dt Became Current:	20220525	**City:**	MOJAVE
Dt Ended Current:		**State:**	CA
Phone:	661-822-2949	**Country:**	US
Source Type:	Annual/Biennial Report update with Notification	**Zip:**	93501

Owner/Operator Ind:	Current Operator	**Street No:**	
Type:	Other	**Street1:**	8560 OAK CREEK RD
Name:	ALTA WIND II, LLC	**Street2:**	
Dt Became Current:	20220525	**City:**	MOJAVE
Dt Ended Current:		**State:**	CA
Phone:	661-221-8547	**Country:**	US
Source Type:	Annual/Biennial Report update with Notification	**Zip:**	93501

Historical Handler Details

Receive Dt: 20161117
Generator Code Description: Not a Generator, Verified
Handler Name: ALTA WIND II LLC

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27 | **7 of10** | **NNE** | **0.25 / 1,299.91** | **3,481.96 / 288** | **VESTAS AMERICAN WIND TECHNOLOGY INC**
8560 OAK CREEK RD
MOJAVE CA 93501 | **RCRA NON GEN**

Handler ID: CAL000374969
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer: No **Used Oil Transpor:** No

Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		

Used Oil Market Burner:	No
Used Oil Spec Marketer:	No

Additional Handler Summary Details

Source Type:	I	**NAIC 1:**	221122
Seq No:	1	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	20120531	**NAIC 4:**	
Active Site:	H----	**State:**	CA
Land Type:		**Location Latitude:**	35.038346
In Handler Univ:	Y	**Location Longitude:**	-118.287911
In A Universe:	Y	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	AG
Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		

Fed Waste Gen Owner:	HQ
State Waste Generator Owner:	CA
State Waste Generator:	2
Short Term Generator:	N
Uni Waste:	Y
Universal Waste Dest Facility:	Y
Federal Universal Waste:	N
As Federally Regulated Tsdf:	------
As Converter Tsdf:	------
As State Regulated Tsdf:	------
As State Regulated Handler:	---
Federal Indicator:	---
Hsm:	N
Subpart K:	----
GPRA Permit:	N
GPRA Renewal:	N
Permit Renewal Wrkld:	------
Permwrk ID:	------
Perm Prog:	------
Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20180906
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	VESTAS AMERICAN WIND TECHNOLOGY INC

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Location Street No:
Location Street1: 8560 OAK CREEK RD
Location Street2:
Location City: MOJAVE
Location State: CA
Location Zip: 93501
Location County Code: CA029
Location County Name: KERN
Location Country: US
Contact Name: JESSE SANCHEZ
Contact Street No:
Contact Street1: 8560 OAK CREEK RD
Contact Street2: 16409 K STREET
Contact City: MOJAVE
Contact State: CA
Contact Zip: 93501-0000
Contact Country:
Contact Phone And Ext: 661-221-1354
Contact Fax:
Contact Email Address: JESNZ@VESTAS.COM
Contact Title:
Owner Name: VESTAS AMERICAN WIND TECHNOLOGY INC
Owner Type: O
Owner Seq: 1
Operator Name: JESSE SANCHEZ
Operator Type: O
Operator Seq: 2
Public Notes:

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No: 1
Receive Date: 20120531
Handler Name: VESTAS AMERICAN WIND TECHNOLOGY INC
Fed Waste Generator: N
Generator Code Description: Not a Generator, Verified
Source Type: Implementer

Owner/Operator Details

Owner/Operator Ind: Current Owner
Type: Other
Name: VESTAS AMERICAN WIND TECHNOLOGY INC
Dt Became Current:
Dt Ended Current:
Phone: 661-221-1354
Source Type: Implementer
Street No:
Street1: 16409 K ST
Street2:
City: MOJAVE
State: CA
Country:
Zip: 93501

Owner/Operator Ind: Current Operator
Type: Other
Name: JESSE SANCHEZ
Dt Became Current:
Dt Ended Current:
Phone: 661-221-1354
Source Type: Implementer
Street No:
Street1: 8560 OAK CREEK RD
Street2: 16409 K STREET
City: MOJAVE
State: CA
Country:
Zip: 93501-0000

27	8 of10	NNE	0.25 / 1,299.91	3,481.96 / 288	ALTA WIND II LLC 8560 OAK CREEK RD MOJAVE CA 93501-7758	RCRA NON GEN

Handler ID: CAL000362249
Generator Status: N

Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	**Used Oil Transpor:**	No
Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		

Used Oil Market Burner: No
Used Oil Spec Marketer: No

Additional Handler Summary Details

Source Type:	I	**NAIC 1:**	221122
Seq No:	1	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	20110328	**NAIC 4:**	
Active Site:	H----	**State:**	CA
Land Type:		**Location Latitude:**	35.038346
In Handler Univ:	Y	**Location Longitude:**	-118.287911
In A Universe:	Y	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	AG
Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		

Fed Waste Gen Owner: HQ
State Waste Generator Owner: CA
State Waste Generator: 2
Short Term Generator: N
Uni Waste: Y
Universal Waste Dest Facility: Y
Federal Universal Waste: N
As Federally Regulated Tsdf: ------
As Converter Tsdf: ------
As State Regulated Tsdf: ------
As State Regulated Handler: ---
Federal Indicator: ---
Hsm: N
Subpart K: ----
GPRA Permit: N
GPRA Renewal: N
Permit Renewal Wrkld: ------
Permwrk ID: ------
Perm Prog: ------
Pcwrkld: ------
Closwrkld: ------
GPRA Ca: N
Cawrkld: N
Subjca Tsd Discretion: N
NCAPS: N
EC Indicator: N
Ca725 Indicator: N
Ca750 Indicator: N
Operating Tsdf: ------
Full Enforcement: ------

Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20180905
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	ALTA WIND II LLC
Location Street No:	
Location Street1:	8560 OAK CREEK RD
Location Street2:	
Location City:	MOJAVE
Location State:	CA
Location Zip:	93501-7758
Location County Code:	CA029
Location County Name:	KERN
Location Country:	US
Contact Name:	CAROLYN WILES
Contact Street No:	
Contact Street1:	7020 OAK CREEK ROAD
Contact Street2:	
Contact City:	MOJAVE
Contact State:	CA
Contact Zip:	93501
Contact Country:	
Contact Phone And Ext:	661-822-2494
Contact Fax:	661-822-2402
Contact Email Address:	CWILES@TERRA-GEN.COM
Contact Title:	
Owner Name:	TERRA-GEN OPERATING COMPANY LLC
Owner Type:	O
Owner Seq:	1
Operator Name:	CAROLYN WILES
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20110328
Handler Name:	ALTA WIND II LLC
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Implementer

Owner/Operator Details

Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street1:***	7021 OAK CREEK RD
Name:	TERRA-GEN OPERATING COMPANY LLC	***Street2:***	
Dt Became Current:		***City:***	MOJAVE
Dt Ended Current:		***State:***	CA
Phone:	661-822-2495	***Country:***	
Source Type:	Implementer	***Zip:***	93501-7758
Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Other	***Street1:***	7020 OAK CREEK ROAD

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Name:	CAROLYN WILES	**Street2:**	
Dt Became Current:		**City:**	MOJAVE
Dt Ended Current:		**State:**	CA
Phone:	661-822-2494	**Country:**	
Source Type:	Implementer	**Zip:**	93501

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
27	9 of10	NNE	0.25 / 1,299.91	3,481.96 / 288	ALTA WIND II 8560 OAK CREEK ROAD MOJAVE CA 93501	EMISSIONS

2017 Criteria Data

Facility ID:	508001	**CERR Code:**	
Facility SIC Code:	4911	**TOGT:**	.05875402792696025778732545649838882921559
CO:	15	**ROGT:**	.00547
Air Basin:	MD	**COT:**	.01804
District:	KER	**NOXT:**	.01093
COID:	KER	**SOXT:**	.00034
DISN:	EASTERN KERN APCD	**PMT:**	.000191146881287726358148893360160965794769
CHAPIS:		**PM10T:**	.00019

2017 Toxic Data

Facility ID:	508001	**COID:**	KER
Facility SIC Code:	4911	**DISN:**	EASTERN KERN APCD
CO:	15	**CHAPIS:**	
Air Basin:	MD	**CERR Code:**	
District:	KER		
TS:			
Health Risk Asmt:			
Non-Cancer Chronic Haz Ind:			
Non-Cancer Acute Haz Ind:			

2020 Criteria Data

CO:	15	**CHAPIS:**	
Air Basin:	MD	**CERR Code:**	
Facility ID:	508001	**ROGT:**	.01
District:	KER	**COT:**	.03
Facility SIC Code:	4911	**NOXT:**	.021
CO ID:	KER	**SOXT:**	.003
DISN:	EASTERN KERN APCD		
TOGT:	.10741138560687432867883995703544575725 03		
PMT:	.00301810865191146881287726358148893360161		
PM10T:	.003		

2020 Toxic Data

CO:	15	**DISN:**	EASTERN KERN APCD
Air Basin:	MD	**CHAPIS:**	
Facility ID:	508001	**CHERR Code:**	
District:	KER	**TS:**	
Facility SIC Code:	4911	**Health Risk Asmt:**	
COID:	KER		
Non-Cancer Chronic Haz Ind:			
Non-Cancer Acute Haz Ind:			

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
27	10 of10	NNE	0.25 / 1,299.91	3,481.96 / 288	PINYON PINES WIND I 8560 OAK CREEK RD MOJAVE CA 93501	EMISSIONS

2020 Criteria Data

CO:	15	**CHAPIS:**	
Air Basin:	MD	**CERR Code:**	
Facility ID:	4780003	**ROGT:**	0
District:	KER	**COT:**	
Facility SIC Code:	4911	**NOXT:**	
CO ID:	KER	**SOXT:**	
DISN:	EASTERN KERN APCD		
TOGT:	0		
PMT:			
PM10T:			

2020 Toxic Data

CO:	15	**DISN:**	EASTERN KERN APCD
Air Basin:	MD	**CHAPIS:**	
Facility ID:	4780003	**CHERR Code:**	
District:	KER	**TS:**	
Facility SIC Code:	4911	**Health Risk Asmt:**	
COID:	KER		
Non-Cancer Chronic Haz Ind:			
Non-Cancer Acute Haz Ind:			

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
28	1 of2	SSE	0.28 / 1,456.49	3,137.36 / -57	CACTUS GOLD MINE KERN COUNTY MOJAVE CA 93501	MRDS

Dep ID:	10115314	**I1:**	25
Dev Status:	PLANT	**Latitude:**	34.957886
Code List:	AU AG CU	**Longitude:**	-118.287598
Url:	http://mrdata.usgs.gov/mrds/show-mrds.php?dep_id=10115314		

Commodity

I1:	24	**Line:**	4
Code:	AG	**Inserted By:**	MAS migration
Commodity:	Silver	**Insert Date:**	29-OCT-2002 09:00:24
Commodity Type:	Metallic	**Updated By:**	USGS
Commodity Group:	Silver	**Update Date:**	29-OCT-2002 09:01:19
Importance:	Secondary		

I1:	21	**Line:**	1
Code:	CU	**Inserted By:**	MAS migration
Commodity:	Copper	**Insert Date:**	29-OCT-2002 09:00:24
Commodity Type:	Metallic	**Updated By:**	USGS
Commodity Group:	Copper	**Update Date:**	29-OCT-2002 09:01:19
Importance:	Tertiary		

I1:	24	**Line:**	3
Code:	PB	**Inserted By:**	MAS migration
Commodity:	Lead	**Insert Date:**	29-OCT-2002 09:00:24
Commodity Type:	Metallic	**Updated By:**	USGS
Commodity Group:	Lead	**Update Date:**	29-OCT-2002 09:01:19
Importance:	Tertiary		

I1:	21	**Line:**	2
Code:	AU	**Inserted By:**	MAS migration
Commodity:	Gold	**Insert Date:**	29-OCT-2002 09:00:24
Commodity Type:	Metallic	**Updated By:**	USGS

Commodity Group:	Gold	***Update Date:***	29-OCT-2002 09:01:19
Importance:	Primary		

Names

I1:	33	***Inserted By:***	MAS migration
Status:	Previous	***Insert Date:***	29-OCT-02
Site Name:	Cactus	***Updated By:***	USGS
Line:	1	***Update Date:***	29-OCT-02

Names

I1:	33	***Inserted By:***	MAS migration
Status:	Previous	***Insert Date:***	29-OCT-02
Site Name:	Cactus Queen Mine	***Updated By:***	USGS
Line:	5	***Update Date:***	29-OCT-02

Names

I1:	33	***Inserted By:***	MAS migration
Status:	Previous	***Insert Date:***	29-OCT-02
Site Name:	Shumake Deposit	***Updated By:***	USGS
Line:	3	***Update Date:***	29-OCT-02

Names

I1:	33	***Inserted By:***	MAS migration
Status:	Previous	***Insert Date:***	29-OCT-02
Site Name:	Cactus Mine	***Updated By:***	USGS
Line:	6	***Update Date:***	29-OCT-02

Names

I1:	33	***Inserted By:***	MAS migration
Status:	Previous	***Insert Date:***	29-OCT-02
Site Name:	Blue Eagle Mine	***Updated By:***	USGS
Line:	8	***Update Date:***	29-OCT-02

Names

I1:	92	***Inserted By:***	MAS migration
Status:	Current	***Insert Date:***	29-OCT-02
Site Name:	Cactus Gold Mine	***Updated By:***	USGS
Line:	4	***Update Date:***	29-OCT-02

Names

I1:	33	***Inserted By:***	MAS migration
Status:	Previous	***Insert Date:***	29-OCT-02
Site Name:	Shumake Mine	***Updated By:***	USGS
Line:	7	***Update Date:***	29-OCT-02

Names

I1:	33	***Inserted By:***	MAS migration
Status:	Previous	***Insert Date:***	29-OCT-02
Site Name:	Middle Buttes	***Updated By:***	USGS
Line:	9	***Update Date:***	29-OCT-02

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
28	2 of2	SSE	0.28 / 1,456.49	3,137.36 / -57	CACTUS QUEEN MINE KERN COUNTY MOJAVE CA 93501	MRDS

Dep ID: 10110711
Dev Status: PRODUCER
Code List: AU
Url: http://mrdata.usgs.gov/mrds/show-mrds.php?dep_id=10110711

I1: 83
Latitude: 34.957886
Longitude: -118.287598

Commodity

I1: 30
Code: AU
Commodity: Gold
Commodity Type: Metallic
Commodity Group: Gold
Importance: Primary

Line: 1
Inserted By: MRDS migration
Insert Date: 29-OCT-2002 09:00:24
Updated By: USGS
Update Date: 29-OCT-2002 09:01:17

I1: 30
Code: AG
Commodity: Silver
Commodity Type: Metallic
Commodity Group: Silver
Importance: Primary

Line: 2
Inserted By: MRDS migration
Insert Date: 29-OCT-2002 09:00:24
Updated By: USGS
Update Date: 29-OCT-2002 09:01:17

Names

I1: 12
Status: Current
Site Name: Cactus Queen Mine
Line: 1

Inserted By: MRDS migration
Insert Date: 29-OCT-02
Updated By: USGS
Update Date: 29-OCT-02

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
29	1 of1	SE	0.29 / 1,508.74	3,041.48 / -153	SILVER PRINCE DEPOSIT KERN COUNTY MOJAVE CA 93501	MRDS

Dep ID: 10211848
Dev Status: PROSPECT
Code List: AU AG
Url: http://mrdata.usgs.gov/mrds/show-mrds.php?dep_id=10211848

I1: 22
Latitude: 34.960876
Longitude: -118.286682

Commodity

I1: 17
Code: AU
Commodity: Gold
Commodity Type: Metallic
Commodity Group: Gold
Importance: Primary

Line: 1
Inserted By: MAS migration
Insert Date: 29-OCT-2002 09:00:24
Updated By: USGS
Update Date: 29-OCT-2002 09:02:39

I1: 26
Code: AG
Commodity: Silver
Commodity Type: Metallic
Commodity Group: Silver
Importance: Secondary

Line: 2
Inserted By: MAS migration
Insert Date: 29-OCT-2002 09:00:24
Updated By: USGS
Update Date: 29-OCT-2002 09:01:56

Names

I1: 23
Status: Current
Site Name: Silver Prince Deposit
Line: 1

Inserted By: MAS migration
Insert Date: 29-OCT-02
Updated By: USGS
Update Date: 29-OCT-02

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
30	1 of1	SSE	0.29 / 1,512.27	3,131.40 / -63	SHUMAKE OPERATION CA	MINE

Mine ID:	91-15-0005	**Las Code:**	15.00
Mine Status:	CLOSED NO INTENT TO RESUME	**Rp No:**	CUP 11-214
Primary Product:	Gold (Lode)	**Report Type:**	2
Other Products:		**Owner City:**	COEUR D'ALENE
Report Year:	2023	**Owner Country:**	US
Acres Disturbed:	0	**Owner State:**	ID
Reclamation Status:	RECLAMATION IN PROGRESS	**Owner Street:**	6500 N. MINERAL DRIVE- SUITE 200
Permit Acres:	1668.00	**Owner Zip:**	83815-9408
Finan Assur Mech:		**Operator City:**	COEUR D'ALENE
Fin Assur Cost Est:		**Operator Country:**	US
Primary Product 1:		**Operator State:**	ID
Primary Prod Label:		**Operator Street:**	6500 N. MINERAL DRIVE- SUITE 200
Facility City:		**Operator Zip:**	83815-9408
Facility State:		**Shape:**	
Facility Zip:		**Point Y:**	34.958616345254164
Facility County:		**Point X:**	-118.286960724986
Face Amount:	15193	**Last Name:**	County of Kern
Mech Total:	15193		
Facility Address:	6500 N. MINERAL DRIVE, SUITE 200		
Permit No:	CUP 11 M 214		
Operation Type:	OPEN PIT		
Operator:	CO CA MINES, INC.		
Owner:	CO CA MINES, INC.		
Lead Agency:			
Document URL:	https://mods.conservation.ca.gov/documents?mineid=91150005		

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
31	1 of1	SE	0.32 / 1,682.90	3,078.05 / -116	BLUE EAGLE LODE MINE TEHACHAPI-WILLOW SPRINGS ROAD AND BACKUS ROAD MIDDLE BUTTES CA	LDS

Global ID:	T10000005967	**RWQCB Region:**	LAHONTAN RWQCB (REGION 6V)
Facility ID:	T10000005967	**Longitude:**	-118.28354242915
Cleanup Status:	OPEN - OPERATING	**Latitude:**	34.9644464067086
Site Facility Type:	LAND DISPOSAL SITE		
Address:	Tehachapi-Willow Springs Road and Backus Road		
City:	Middle Buttes		
County:	Kern		
State:	CA		
Zip:			

GeoTracker Sites Data Download – Site Details

RB Case No:	6B151404003
Loc Case No:	
Status:	Open - Operating
Status Date:	1/17/2017
Begin Date:	6/10/2014
Case Type:	Land Disposal Site
Cal Enviroscreen:	
Qty Released Gallons:	
CUF Case:	
EPA Region:	9
Lead Agency:	LAHONTAN RWQCB (REGION 6V)
Case Worker:	TFB
Local Agency:	
File Location:	
Potential COC:	
Military DoD Site:	No
Leak Reported Dt:	
No Further Action Dt:	

Potential Media of Concern:
How Discovered:
How Discovered Description:
Stop Method:
Stop Description:
Calwater Watershed Name: Antelope - Willow Springs (626.30)
DWR GW Subbasin Name: Antelope Valley (6-044)
Disadvantaged Community: Severely Disadvantaged Community
Discharge Cause:
Coordinate Source: Google Map Move
Discharge Source:
Facility Project Sub Type: Title 27 - Municipal Solid Waste Landfill
Calenviroscreen 3 Score: 76-80%
Calenviroscreen 4 Score: 75-80%
Claim No:
Claim Status:
Site History:

GeoTracker Sites Data Download - Reg Activity

Date: 2025-01-31 00:00:00
Action: Monitoring Report - Annually
Action Type: RESPONSE

Date: 2024-01-30 00:00:00
Action: Monitoring Report - Annually
Action Type: RESPONSE

Date: 2023-01-26 00:00:00
Action: Monitoring Report - Annually
Action Type: RESPONSE

Date: 2022-02-07 00:00:00
Action: Monitoring Report - Annually
Action Type: RESPONSE

Date: 2022-01-24 00:00:00
Action: Other Report / Document
Action Type: RESPONSE

Date: 2021-01-27 00:00:00
Action: Monitoring Report - Annually
Action Type: RESPONSE

Date: 2019-04-18 00:00:00
Action: Site Assessment Report
Action Type: RESPONSE

Date: 2018-03-14 00:00:00
Action: Site Visit / Inspection / Sampling
Action Type: ENFORCEMENT

Date: 2017-06-11 00:00:00
Action: Other Report / Document
Action Type: RESPONSE

Date: 2017-01-11 00:00:00
Action: Waste Discharge Requirements
Action Type: ENFORCEMENT

Date: 2017-01-09 00:00:00
Action: Correspondence
Action Type: RESPONSE

Date: 2016-11-17 00:00:00
Action: Notice of Public Hearing / Board Action
Action Type: ENFORCEMENT

Date: 2016-11-11 00:00:00
Action: Email Correspondence
Action Type: RESPONSE

Date: 2016-10-19 00:00:00
Action: Correspondence
Action Type: RESPONSE

Date: 2015-03-16 00:00:00
Action: Email Correspondence
Action Type: ENFORCEMENT

Date: 2014-10-23 00:00:00
Action: Staff Letter
Action Type: ENFORCEMENT

Date: 2014-09-22 00:00:00
Action: Other Report / Document - Regulator Responded
Action Type: RESPONSE

Date: 2014-09-22 00:00:00
Action: Other Report / Document
Action Type: RESPONSE

Date: 2014-09-22 00:00:00
Action: Staff Letter
Action Type: ENFORCEMENT

Date: 2014-08-25 00:00:00
Action: Waste Discharge Requirements
Action Type: ENFORCEMENT

GeoTracker Sites Data Download - Regulatory Contacts

Contact Type: Regional Board Caseworker - Primary Caseworker
Contact Name: TODD BATTEY
Organization Name: LAHONTAN RWQCB (REGION 6T)
Address: 15095 AMAROGOSA ROAD, BLDG 2, SUITE 210
City: VICTORVILLE
Email: todd.battey@waterboards.ca.gov
Phone No: 7602417340

GeoTracker Sites Data Download - Status History

Status: Open - Operating
Status Date: 2017-01-17 00:00:00

Status: Open - Operating
Status Date: 2016-10-20 00:00:00

Status: Open - Proposed
Status Date: 2016-10-20 00:00:00

Status: Open - Case Begin Date
Status Date: 2014-06-10 00:00:00

Status: Open - Inactive
Status Date: 2014-06-10 00:00:00

GeoTracker Search - Facilities

Site Facility Name: BLUE EAGLE LODE MINE
Site Facility Type: LAND DISPOSAL SITE
Cleanup Status: OPEN - OPERATING

Project Status:
Potential COC: NONE SPECIFIED
WDR Place Type:
Wdr File No:
Wdr Order No:
Address: TEHACHAPI-WILLOW SPRINGS ROAD AND BACKUS ROAD
City: MIDDLE BUTTES
Zip:
County: KERN
Cuf Claim No:
CUF Priority Assig:
CUF Amount Paid:
Designated Beneficial Use: MUN, AGR, IND, FRSH
Designated Beneficl Use Desc: Municipal and Domestic Supply, Agricultural Supply, Industrial Service Supply, Freshwater Replenishment
Project Oversight Agencies:
Report Link: https://geotracker.waterboards.ca.gov/profile_report?global_id=T10000005967
Cleanup Status Detail: OPEN - OPERATING AS OF 1/17/2017
Cleanup History Link: https://geotracker.waterboards.ca.gov/profile_report_include?global_id=T10000005967&tabname=regulatoryhistory
Potential Media of Concern: NONE SPECIFIED
User Defined Beneficial Use:
DWR GW Sub Basin: Antelope Valley (6-044)
Calwater Watershed Name: Antelope - Willow Springs (626.30)
Post Closure Site Management:
Future Land Use:
Facility Type: TITLE 27 - MINING UNIT
Composting Method:
Gndwater Monitoring Frequen:
Cleanup Oversight Agencies: LAHONTAN RWQCB (REGION 6T) (LEAD) - CASE #: 6B151404003
CASE MANAGER: TODD BATTEY
LAHONTAN RWQCB (REGION 6V) (LEAD) - CASE #: 6B151404003
File Location:
Site History:

No site history available

GeoTracker Search - Cleanup Status History

Status: Open - Operating
Date: 1/17/2017

Status: Open - Operating
Date: 10/20/2016

Status: Open - Proposed
Date: 10/20/2016

Status: Open - Inactive
Date: 6/10/2014

Status: Open - Case Begin Date
Date: 6/10/2014

GeoTracker Search - Regulatory Activities

Action Type: Response Requested - Reports
Action: Monitoring Report - Annually
Action Date: 1/31/2025
Received Issue Date: 1/31/2025
Doc Link: https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T10000005967&doc_id=6144819
Title Description Comment: Annual Monitoring Report (2024 Operations), Blue Eagle Lode Mine

Action Type: Response Requested - Reports
Action: Monitoring Report - Annually
Action Date: 1/30/2024
Received Issue Date: 1/30/2024

Doc Link: https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T10000005967&doc_id=6112718
Title Description Comment: 2023 Annual Monitoring Report

Action Type: Response Requested - Reports
Action: Monitoring Report - Annually
Action Date: 1/26/2023
Received Issue Date: 1/26/2023
Doc Link: https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T10000005967&doc_id=6088291
Title Description Comment: 2022 Annual Monitoring Report, Blue Eagle Lode Mine

Action Type: Response Requested - Reports
Action: Monitoring Report - Annually
Action Date: 2/7/2022
Received Issue Date: 2/7/2022
Doc Link: https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T10000005967&doc_id=6066671
Title Description Comment: 2021 Annual Monitoring Report

Action Type: Response Requested - Other
Action: Other Report / Document
Action Date: 1/24/2022
Received Issue Date: 1/24/2022
Doc Link: https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T10000005967&doc_id=6100231
Title Description Comment: Temporary Shutdown Maintenance Plan, Blue Eagle Lode Mine, Kern County

Action Type: Response Requested - Reports
Action: Monitoring Report - Annually
Action Date: 1/27/2021
Received Issue Date: 1/27/2021
Doc Link: https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T10000005967&doc_id=6042035
Title Description Comment: 2020 Annual Monitoring Report

Action Type: Response Requested - Reports
Action: Site Assessment Report
Action Date: 4/18/2019
Received Issue Date: 4/18/2019
Doc Link: https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T10000005967&doc_id=5990902
Title Description Comment: Sampling and Analysis Plan

Action Type: Other Regulatory Actions
Action: Site Visit / Inspection / Sampling
Action Date: 3/14/2018
Received Issue Date: 3/14/2018
Doc Link:
Title Description Comment: Facility Inspection. No violations observed.

Action Type: Response Requested - Other
Action: Other Report / Document
Action Date: 6/11/2017
Received Issue Date: 10/5/2017
Doc Link: https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T10000005967&doc_id=5945358
Title Description Comment: Temporary Shutdown Plan

Action Type: Response Requested - Other
Action: Other Report / Document
Action Date: 6/11/2017
Received Issue Date: 10/5/2017
Doc Link: https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T10000005967&doc_id=5945355
Title Description Comment: Pollution Prevention Plan

Action Type: Enforcement/Orders
Action: Waste Discharge Requirements
Action Date: 1/11/2017
Received Issue Date: 1/11/2017
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000005967&enforcement_id=6308957&temptable=ENFORCEMENT
Title Description Comment: Waste Discharge Requirements

Action Type: Response Requested - Other
Action: Correspondence

Action Date:	1/9/2017
Received Issue Date:	1/9/2017
Doc Link:	https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T10000005967&doc_id=5909808
Title Description Comment:	Clarification comments provided by County. No action required.
Action Type:	Notices
Action:	Notice of Public Hearing / Board Action
Action Date:	11/17/2016
Received Issue Date:	11/17/2016
Doc Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000005967&enforcement_id=6303850&temptable=ENFORCEMENT
Title Description Comment:	45-day Notice of Board Hearing
Action Type:	Response Requested - Other
Action:	Email Correspondence
Action Date:	11/11/2016
Received Issue Date:	11/11/2016
Doc Link:	https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T10000005967&doc_id=5905280
Title Description Comment:	CEQA information submitted by Mr. Burton.
Action Type:	Response Requested - Other
Action:	Correspondence
Action Date:	10/19/2016
Received Issue Date:	10/19/2016
Doc Link:	https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T10000005967&doc_id=5903683
Title Description Comment:	November 10, 2016 CEQA Public Meeting Announcement and map
Action Type:	Other Regulatory Actions
Action:	Email Correspondence
Action Date:	3/16/2015
Received Issue Date:	3/16/2015
Doc Link:	
Title Description Comment:	New mail address for John Burton: John's email is: JBurton@ruthchek.com, Blue Eagle Lode Mining Co., 162 Prospect Avenue, Sausalito, CA 94965 Justin Zumbro of GeoPentech also indicated he thought it was unlikely CEQA would be completed before 4/17, which is the deadline for the Blue Eagle permit to get to the June Lahontan Board meeting.
Action Type:	Other Regulatory Actions
Action:	Staff Letter
Action Date:	10/23/2014
Received Issue Date:	10/23/2014
Doc Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000005967&enforcement_id=6230835&temptable=ENFORCEMENT
Title Description Comment:	Letter to Randall Cates of Kern County - Water Board Staff Response to Ridgeline Materials LLC Comment Letter
Action Type:	Response Requested - Other
Action:	Other Report / Document - Regulator Responded
Action Date:	9/22/2014
Received Issue Date:	9/9/2014
Doc Link:	https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T10000005967&doc_id=5903639
Title Description Comment:	
Action Type:	Response Requested - Other
Action:	Other Report / Document
Action Date:	9/22/2014
Received Issue Date:	9/8/2014
Doc Link:	https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T10000005967&doc_id=5903638
Title Description Comment:	Clifford Burton comments
Action Type:	Other Regulatory Actions
Action:	Staff Letter
Action Date:	9/22/2014
Received Issue Date:	9/22/2014
Doc Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000005967&enforcement_id=6301514&temptable=ENFORCEMENT
Title Description Comment:	
Action Type:	Enforcement/Orders
Action:	Waste Discharge Requirements

Action Date: 8/25/2014
Received Issue Date: 8/25/2014
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000005967&enforcement_id=6301503&temptable=ENFORCEMENT
Title Description Comment: Tentative WDRs and MRP plus cover letter

GeoTracker Search - Documents

Title: 2022 ANNUAL MONITORING REPORT, BLUE EAGLE LODE MINE - 2022 ANNUAL MONITORING REPORT, BLUE EAGLE LODE MINE
Title Link: https://geotracker.waterboards.ca.gov/regulators/deliverable_documents/4399961173/Blue%20Eagle%20Annual%20Monitoring%20Report%20for%202022%20with%20cover%20letter%2Epdf
Type: MONITORING REPORT - ANNUALLY
Submitted:
Submitted By: TODD BATTEY (REGULATOR)
Document Type: Monitoring Reports
Document Date: 1/26/2023
Size: 7,814 KB

Title: 2020 ANNUAL MONITORING REPORT -
Title Link: https://geotracker.waterboards.ca.gov/regulators/deliverable_documents/5431440055/Blue%20Eagle%20Annual%20Monitoring%20Report%5Fcomplete%2Epdf
Type: MONITORING REPORT - ANNUALLY
Submitted:
Submitted By: JOHN STEUDE (REGULATOR)
Document Type: Monitoring Reports
Document Date: 1/27/2021
Size: 30,576 KB

Title: TEMPORARY SHUTDOWN MAINTENANCE PLAN, BLUE EAGLE LODE MINE, KERN COUNTY
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000005967&document_id=6100231
Type: OTHER REPORT / DOCUMENT
Submitted:
Submitted By: TODD BATTEY (REGULATOR)
Document Type: Site Documents
Document Date: 1/24/2022
Size:

Title: LETTER TO RANDALL CATES OF KERN COUNTY - WATER BOARD STAFF RESPONSE TO RIDGELINE MATERIALS LLC COMMENT LETTER
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000005967&enforcement_id=6230835
Type: STAFF LETTER
Submitted:
Submitted By: TOM GAVIGAN (REGULATOR)
Document Type: Site Documents
Document Date: 10/23/2014
Size:

Title: TENTATIVE WDRS AND MRP PLUS COVER LETTER
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000005967&enforcement_id=6301503
Type: WASTE DISCHARGE REQUIREMENTS
Submitted:
Submitted By: JOHN STEUDE (REGULATOR)
Document Type: Site Documents
Document Date: 8/25/2014
Size:

Title: WASTE DISCHARGE REQUIREMENTS
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000005967&enforcement_id=6308957
Type: WASTE DISCHARGE REQUIREMENTS
Submitted:
Submitted By: JOHN STEUDE (REGULATOR)
Document Type: Site Documents
Document Date: 1/11/2017
Size:

Title: CEQA INFORMATION SUBMITTED BY MR. BURTON.
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000005967&document_id=5905280

Type: EMAIL CORRESPONDENCE
Submitted:
Submitted By: JOHN STEUDE (REGULATOR)
Document Type: Site Documents
Document Date: 11/11/2016
Size:

Title: CLIFFORD BURTON COMMENTS
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000005967&document_id=5903638
Type: OTHER REPORT / DOCUMENT
Submitted:
Submitted By: JOHN STEUDE (REGULATOR)
Document Type: Site Documents
Document Date: 9/8/2014
Size:

Title: 2021 ANNUAL MONITORING REPORT -
Title Link: https://geotracker.waterboards.ca.gov/regulators/deliverable_documents/7662900626/2021%20Blue%20Eagle%20Annual%20Monitoring%20Report%2Epdf
Type: MONITORING REPORT - ANNUALLY
Submitted:
Submitted By: JEFF BROOKS (REGULATOR)
Document Type: Monitoring Reports
Document Date: 2/7/2022
Size: 10,640 KB

Title: POLLUTION PREVENTION PLAN
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000005967&document_id=5945355
Type: OTHER REPORT / DOCUMENT
Submitted:
Submitted By: JOHN STEUDE (REGULATOR)
Document Type: Site Documents
Document Date: 10/5/2017
Size:

Title: CLARIFICATION COMMENTS PROVIDED BY COUNTY. NO ACTION REQUIRED.
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000005967&document_id=5909808
Type: CORRESPONDENCE
Submitted:
Submitted By: JOHN STEUDE (REGULATOR)
Document Type: Site Documents
Document Date: 1/9/2017
Size:

Title: 45-DAY NOTICE OF BOARD HEARING
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000005967&enforcement_id=6303850
Type: NOTICE OF PUBLIC HEARING / BOARD ACTION
Submitted:
Submitted By: TOM GAVIGAN (REGULATOR)
Document Type: Site Documents
Document Date: 11/17/2016
Size:

Title: NOVEMBER 10, 2016 CEQA PUBLIC MEETING ANNOUNCEMENT AND MAP
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000005967&document_id=5903683
Type: CORRESPONDENCE
Submitted:
Submitted By: JOHN STEUDE (REGULATOR)
Document Type: Site Documents
Document Date: 10/19/2016
Size:

Title: OTHER REPORT / DOCUMENT
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000005967&document_id=5903639
Type: OTHER REPORT / DOCUMENT
Submitted:
Submitted By: JOHN STEUDE (REGULATOR)
Document Type: Site Documents
Document Date: 9/9/2014

Size:

Title: SAMPLING AND ANALYSIS PLAN
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000005967&document_id=5990902
Type: SITE ASSESSMENT REPORT
Submitted:
Submitted By: JOHN STEUDE (REGULATOR)
Document Type: Site Documents
Document Date: 4/18/2019
Size:

Title: STAFF LETTER
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000005967&enforcement_id=6301514
Type: STAFF LETTER
Submitted:
Submitted By: JOHN STEUDE (REGULATOR)
Document Type: Site Documents
Document Date: 9/22/2014
Size:

Title: ANNUAL MONITORING REPORT (2024 OPERATIONS), BLUE EAGLE LODE MINE - ANNUAL MONITORING REPORT (2024 OPERATIONS), BLUE EAGLE LODE MINE
Title Link: https://geotracker.waterboards.ca.gov/regulators/deliverable_documents/1924466788/Blue%20Eagle%20Lode%20Mine%20Annual%20Monitoring%20Report%2Epdf
Type: MONITORING REPORT - ANNUALLY
Submitted:
Submitted By: TODD BATTEY (REGULATOR)
Document Type: Monitoring Reports
Document Date: 1/31/2025
Size: 3,235 KB

Title: 2023 ANNUAL MONITORING REPORT -
Title Link: https://geotracker.waterboards.ca.gov/regulators/deliverable_documents/2053418815/Blue%20Eagle%20Annual%20Monitoring%20Report%20for%202023%20%2D%20final%2Epdf
Type: MONITORING REPORT - ANNUALLY
Submitted:
Submitted By: JEFF BROOKS (REGULATOR)
Document Type: Monitoring Reports
Document Date: 1/30/2024
Size: 9,080 KB

Title: TEMPORARY SHUTDOWN PLAN
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000005967&document_id=5945358
Type: OTHER REPORT / DOCUMENT
Submitted:
Submitted By: JOHN STEUDE (REGULATOR)
Document Type: Site Documents
Document Date: 10/5/2017
Size:

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32 | ***1 of1*** | ***SE*** | ***0.33 / 1,716.96*** | ***3,151.01 / -43*** | ***BLUE EAGLE LODE MINE*** | ***MINE***

CA

Mine ID: 91-15-0117
Mine Status: NEWLY PERMITTED
Primary Product: Gold (Lode)
Other Products: Silver
Report Year: 2023
Acres Disturbed: 2.45
Reclamation Status: RECLAMATION NOT STARTED
Permit Acres: 2.00
Finan Assur Mech:
Fin Assur Cost Est:
Primary Product 1:
Primary Prod Label:
Facility City:
Facility State:

Las Code: 15.00
Rp No:
Report Type: 2
Owner City: SAUSALITO
Owner Country:
Owner State: CA
Owner Street: 162 PROSPECT AVENUE
Owner Zip: 94965
Operator City: SAUSALITO
Operator Country:
Operator State: CA
Operator Street: 162 PROSPECT AVENUE
Operator Zip: 94965
Shape:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Facility Zip:		**Point Y:**	34.962505344417515
Facility County:		**Point X:**	-118.28501672561063
Face Amount:	85089.36	**Last Name:**	County of Kern
Mech Total:			
Facility Address:	162 Prospect Avenue		
Permit No:	CUP-32		
Operation Type:	UNDERGROUND		
Operator:	BLUE EAGLE LODE MINING CO.		
Owner:	BLUE EAGLE LODE MINING CO.		
Lead Agency:			
Document URL:	https://mods.conservation.ca.gov/documents?mineid=91150117		

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
33	1 of1	NW	0.41 / 2,169.71	3,893.57 / 699	ESPERANZA KERN COUNTY MOJAVE CA 93501	MRDS

Dep ID:	10035219	**I1:**	89
Dev Status:	OCCURRENCE	**Latitude:**	35.022278
Code List:	W	**Longitude:**	-118.338684
Url:	http://mrdata.usgs.gov/mrds/show-mrds.php?dep_id=10035219		

Commodity

I1:	78	**Line:**	1
Code:	W	**Inserted By:**	MRDS migration
Commodity:	Tungsten	**Insert Date:**	29-OCT-2002 09:00:24
Commodity Type:	Metallic	**Updated By:**	USGS
Commodity Group:	Tungsten	**Update Date:**	29-OCT-2002 09:00:41
Importance:	Tertiary		

Materials

I1:	15	**Inserted B:**	MRDS migration
Material:	Scheelite	**Insert Dat:**	29-OCT-2002 09:44:3
Ore or Gangue:	Ore	**Updated By:**	
Rec:	1	**Update Dat:**	

Names

I1:	20	**Inserted By:**	MRDS migration
Status:	Current	**Insert Date:**	29-OCT-02
Site Name:	Esperanza	**Updated By:**	USGS
Line:	1	**Update Date:**	29-OCT-02

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
34	1 of1	SE	0.42 / 2,219.90	3,225.39 / 31	WINKLER DEPOSIT KERN COUNTY MOJAVE CA 93501	MRDS

Dep ID:	10138892	**I1:**	22
Dev Status:	OCCURRENCE	**Latitude:**	34.958679
Code List:	AU	**Longitude:**	-118.284485
Url:	http://mrdata.usgs.gov/mrds/show-mrds.php?dep_id=10138892		

Commodity

I1:	22	**Line:**	1
Code:	AU	**Inserted By:**	MAS migration
Commodity:	Gold	**Insert Date:**	29-OCT-2002 09:00:24
Commodity Type:	Metallic	**Updated By:**	USGS
Commodity Group:	Gold	**Update Date:**	29-OCT-2002 09:01:28
Importance:	Primary		

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Names

I1:	78	***Inserted By:***	MAS migration
Status:	Current	***Insert Date:***	29-OCT-02
Site Name:	Winkler Deposit	***Updated By:***	USGS
Line:	1	***Update Date:***	29-OCT-02

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
35	1 of1	NW	0.54 / 2,876.29	4,228.36 / 1,034	ESPERANZA PROSPECT KERN COUNTY MOJAVE CA 93501	MRDS

Dep ID:	10285255	***I1:***	13
Dev Status:	PROSPECT	***Latitude:***	35.020874
Code List:	W	***Longitude:***	-118.344788
Url:	http://mrdata.usgs.gov/mrds/show-mrds.php?dep_id=10285255		

Commodity

I1:	35	***Line:***	1
Code:	W	***Inserted By:***	MAS migration
Commodity:	Tungsten	***Insert Date:***	29-OCT-2002 09:00:24
Commodity Type:	Metallic	***Updated By:***	USGS
Commodity Group:	Tungsten	***Update Date:***	29-OCT-2002 09:02:28
Importance:	Primary		

Names

I1:	32	***Inserted By:***	MAS migration
Status:	Current	***Insert Date:***	29-OCT-02
Site Name:	Esperanza Prospect	***Updated By:***	USGS
Line:	1	***Update Date:***	29-OCT-02

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
36	1 of1	SE	0.61 / 3,198.40	3,223.88 / 30	CACTUS GOLD MINE BACKUS TEHACHAPI-WILLOW SPRINGS ROADS MOJAVE CA 93504	ENVIROSTOR

Envirostor ID:	15100010
Site History:	

Facilities Details

Estor/EPA ID:	15100010	***Site Code:***	
Program Type:	EVALUATION	***APN:***	NONE SPECIFIED
Program Type1:		***Assembly District:***	34
Status:	REFER: RWQCB	***Census Tract:***	6029006500
Site Facility Name:	CACTUS GOLD MINE	***Funding:***	
Site Type:	EVALUATION	***Office:***	CLEANUP SACRAMENTO
Address Desc:	BACKUS TEHACHAPI-WILLOW SPRINGS ROADS	***Project Manager:***	
City:	MOJAVE	***Special Program:***	
County:	KERN	***Supervisor:***	
Zip:	93504	***Senate District:***	12
Acres:	1600 ACRES		
Public Participation Specialis:			
Cal Enviro Screen Score:	75-80%		
National Priority List:	NO		
Past Use that Caused Contam:	NONE SPECIFIED		
Permit Renewal Lead:			
Cleanup Oversight Agencies:	RWQCB - LEAD AGENCY		
Cleanup Status:	REFER: RWQCB AS OF 1/16/1996		
Potential Conta of Conc:	NONE SPECIFIED		

Potential Media Affected: NONE SPECIFIED
School District:
Summary Link: https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=15100010

Completed Activities

Title: Site Screening
Title Link: https://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=15100010&doc_id=5013250
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Site Screening
Date Completed: 1/16/1996
Comments: On August 8, 1995 a PA was done by URS Consultants, Inc. Occasional leaks and spills have occured in the past and were remediated under County Health and Regional Water Quality Control Board (RWQCB) supervision. RWQCB oversees monitoring of groundwater and is lead agency for oversight of operations. Refer to RWQCB.
Activity Type: Completed Activities

Title: Site Screening
Title Link:
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Site Screening
Date Completed: 5/28/1991
Comments: Pea-LOW recommended. Emissions concerns referred to Air Board
Activity Type: Completed Activities

Title: Cactus Gold Mine Preliminary Assessment
Title Link: https://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=15100010&doc_id=6028737
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Preliminary Assessment Report
Date Completed: 9/1/2009
Comments: USEPA completed a Preliminary Assessment for this site.
Activity Type: Completed Activities

Search Results Details

Address Description: BACKUS TEHACHAPI-WILLOW SPRINGS ROADS
Site Facility Name: CACTUS GOLD MINE
City: MOJAVE
County: KERN
Zip: 93504
Latitude: 34.961182
Longitude: -118.278222
Program Type: EVALUATION
Site Code:
Status: REFER: RWQCB
Status Date: 1/16/1996
Cal Enviroscreen Score: 75-80%

Sites Details

Status: Refer: RWQCB
Status Date: 1/16/1996
Site Code:
Site Type: Evaluation
Site Type Detailed: Evaluation
Special Program:
City: MOJAVE
County: KERN
Assembly: 34
Division Branch: Cleanup Sacramento
Funding:
Lead Agency: RWQCB
Project Manager:
Supervisor: Referred - Not Assigned
Restricted Use: NO
Senate: 12

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Congres Dis:	20	**Site Mgmt Req:**	NONE SPECIFIED
State :	CA	**Acres:**	1600
Latitude:	34.961182	**Zip:**	93504
Longitude:	-118.278222		
Address:	BACKUS TEHACHAPI-WILLOW SPRINGS ROADS		
National Priorities List:	NO		
APN:	NONE SPECIFIED		
Confirmed Coc:	NONE SPECIFIED		
Past Uses:	NONE SPECIFIED		
Potential Coc:	NONE SPECIFIED		
Potential Media Affected:	NONE SPECIFIED		
Project Name:	CACTUS GOLD MINE		
Regulatory Agencies Involved:	RWQCB		

37	1 of1	SE	0.85 / 4,479.97	2,905.63 / -289	CRESCENT PROSPECT KERN COUNTY MOJAVE CA 93501	MRDS

Dep ID:	10212394	**I1:**	98
Dev Status:	PROSPECT	**Latitude:**	34.952271
Code List:	AU	**Longitude:**	-118.28009
Url:	http://mrdata.usgs.gov/mrds/show-mrds.php?dep_id=10212394		

Commodity

I1:	24	**Line:**	1
Code:	AU	**Inserted By:**	MAS migration
Commodity:	Gold	**Insert Date:**	29-OCT-2002 09:00:24
Commodity Type:	Metallic	**Updated By:**	USGS
Commodity Group:	Gold	**Update Date:**	29-OCT-2002 09:01:56
Importance:	Primary		

Names

I1:	33	**Inserted By:**	MAS migration
Status:	Current	**Insert Date:**	29-OCT-02
Site Name:	Crescent Prospect	**Updated By:**	USGS
Line:	1	**Update Date:**	29-OCT-02

38	1 of1	ESE	0.87 / 4,575.40	2,911.57 / -283	ROSAMOND-MOJAVE KERN COUNTY MOJAVE CA 93501	MRDS

Dep ID:	10072429	**I1:**	99
Dev Status:	PRODUCER	**Latitude:**	34.966675
Code List:	AU	**Longitude:**	-118.234192
Url:	http://mrdata.usgs.gov/mrds/show-mrds.php?dep_id=10072429		

Commodity

I1:	26	**Line:**	1
Code:	AU	**Inserted By:**	MRDS migration
Commodity:	Gold	**Insert Date:**	29-OCT-2002 09:00:24
Commodity Type:	Metallic	**Updated By:**	USGS
Commodity Group:	Gold	**Update Date:**	29-OCT-2002 09:01:00
Importance:	Primary		

Names

I1:	21	**Inserted By:**	MRDS migration
Status:	Current	**Insert Date:**	29-OCT-02
Site Name:	Rosamond-Mojave	**Updated By:**	USGS
Line:	1	**Update Date:**	29-OCT-02

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
39	1 of1	NW	0.88 / 4,648.21	4,141.32 / 947	CALIFORNIA PORTLAND CEMENT CO. KERN COUNTY MOJAVE CA 93501	MRDS

Dep ID: 10236526
Dev Status: PAST PRODUCER
Code List: LST
Url: http://mrdata.usgs.gov/mrds/show-mrds.php?dep_id=10236526
I1: 27
Latitude: 35.029297
Longitude: -118.336182

Commodity

I1: 26
Code: LST
Commodity: Limestone, General
Commodity Type: Non-metallic
Commodity Group: Limestone
Importance: Primary
Line: 1
Inserted By: MAS migration
Insert Date: 29-OCT-2002 09:00:24
Updated By: USGS
Update Date: 29-OCT-2002 09:02:07

Names

I1: 33
Status: Previous
Site Name: Creal Plant and Deposits
Line: 1
Inserted By: MAS migration
Insert Date: 29-OCT-02
Updated By: USGS
Update Date: 29-OCT-02

Names

I1: 33
Status: Current
Site Name: California Portland Cement Co.
Line: 2
Inserted By: MAS migration
Insert Date: 29-OCT-02
Updated By: USGS
Update Date: 29-OCT-02

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
40	1 of1	SE	0.91 / 4,789.93	3,305.49 / 111	MIDDLE BUTTES OPERATION CA	MINE

Mine ID: 91-15-0006
Mine Status: RECLAIMED
Primary Product: Gold (Lode)
Other Products: Silver
Report Year: 2003
Acres Disturbed: 0
Reclamation Status: RECLAMATION CERTIFIED COMPLETE BY LEAD AGENCY
Permit Acres: 1668.00
Finan Assur Mech:
Fin Assur Cost Est:
Primary Product 1:
Primary Prod Label:
Facility City:
Facility State:
Facility Zip:
Facility County:
Face Amount:
Mech Total:
Facility Address: 6500 NORTH MINERAL DRIVE, # 200
Permit No: P 8, M 214
Operation Type: PLANT OR MILL
Operator: CACTUS GOLD MINES COMPANY
Owner: CACTUS GOLD MINES COMPANY
Lead Agency:
Document URL: https://mods.conservation.ca.gov/documents?mineid=91150006
Las Code: 15.00
Rp No:
Report Type: 2
Owner City: COEUR D' ALENE
Owner Country:
Owner State: ID
Owner Street: 6500 MINERAL DRIVE, SUITE 200
Owner Zip: 83815-9408
Operator City: COEUR D'ALENE
Operator Country:
Operator State: ID
Operator Street: 6500 NORTH MINERAL DRIVE, # 200
Operator Zip: 83815-9408
Shape:
Point Y: 34.95889434668461
Point X: -118.27279472603163
Last Name: County of Kern

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
41	1 of1	SE	0.94 / 4,952.91	3,095.76 / -98	CRESCENT DEPOSIT KERN COUNTY MOJAVE CA 93501	MRDS

Dep ID:	10284873	**I1:**	86
Dev Status:	PROSPECT	**Latitude:**	34.954712
Code List:	AU	**Longitude:**	-118.276489
Url:	http://mrdata.usgs.gov/mrds/show-mrds.php?dep_id=10284873		

Commodity

I1:	36	**Line:**	1
Code:	AU	**Inserted By:**	MAS migration
Commodity:	Gold	**Insert Date:**	29-OCT-2002 09:00:24
Commodity Type:	Metallic	**Updated By:**	USGS
Commodity Group:	Gold	**Update Date:**	29-OCT-2002 09:02:28
Importance:	Primary		

Names

I1:	33	**Inserted By:**	MAS migration
Status:	Current	**Insert Date:**	29-OCT-02
Site Name:	Crescent Deposit	**Updated By:**	USGS
Line:	1	**Update Date:**	29-OCT-02

Unplottable Summary

Total: 16 Unplottable sites

DB	Company Name/Site Name	Address	City	Zip	ERIS ID
CHMIRS	Southern California Gas Company	Tehachapi Willow Spring Rd ***Control No* | *Notified Date:*** 17-2829 |	Tehachapi CA		860464134
CHMIRS	Kern Co	Trotter Avenue ***Control No* | *Notified Date:*** 4/10/199708:28:27 AM	Mojave CA		821892650
CHMIRS	UPRR	Purdy Rd. ***Control No* | *Notified Date:*** 2/18/200509:02:27 AM	Mojave CA		821867502
CHMIRS	CHP Bishop	Tehachapi willow springs ***Control No* | *Notified Date:*** 8/7/200310:21:15 AM	Tehachapi CA		821857452
CHMIRS	UPRR	Oak Creek Road ***Control No* | *Notified Date:*** 11-4789 |	Mojave CA		821808285
CHMIRS	NRC	OAK CREEK ***Control No* | *Notified Date:*** 17-2404 |	Tehachapi CA		860455476
ERNS		OAK CREEK STREET ***NRC Report No:*** 476255	MOJAVE CA		806868328
ERNS		OAK CREEK ***NRC Report No:*** 1174229	TEHACHAPI CA		867619421
FINDS/FRS	MANZANA WIND ENERGY	AQUEDUCT ***Registry ID:*** 110065296110	TEHACHAPI CA	93561	840224506
FINDS/FRS	CALIFORNIA PORTLAND CEMENT CO	OAK CREEK RD ***Registry ID:*** 110071424841	MOJAVE CA	93501	920766091
HAZ GEN	MARK WALKER	OAK CREEK RD	TEHACHAPI CA	935610000	900539903

HAZ GEN	CALPORTLAND - MOJAVE	OAK CREEK ROAD	MOJAVE CA	935010000	900232967
HAZ TSD	CALPORTLAND - MOJAVE	OAK CREEK ROAD	MOJAVE CA	935010000	899867323
HIST CHMIRS	SOUTHERN PACIFIC R/R	OAK CREEK ROAD	UNINC CA		826016138
HIST MANIFEST		OAK CREEK ROAD	MOJAVE CA	935010000	827522689
RCRA LQG	CALIFORNIA PORTLAND CEMENT CO	OAK CREEK RD	MOJAVE CA	93501	902274923

Handler ID | Recycler Activity?: CAD008256315 | NO

Unplottable Report

Site: ***Southern California Gas Company***
Tehachapi Willow Spring Rd Tehachapi CA

CHMIRS

Control No:	17-2829	***Notified Date:***	
Year:	2017	***Notified Date Time:***	
County:	Kern County		
URL:	https://w3.calema.ca.gov/operational/malhaz.nsf/f1841a103c102734882563e200760c4a/6a48a66afe08f3e888258104002e973e?OpenDocument		

California Hazardous Material Incident Report System (2017)

Contained:	Yes	***Incident Date:***	4/15/2017
1 Substance:	Natural Gas	***Incident Time:***	2100
1 Quantity:	N/A	***Spill Site:***	Other
1 Measure:	N/A	***Injuries?:***	No
1 Type:	VAPOR	***No of Injuries:***	
1 Pipeline:	No	***Fatals?:***	No
1 Vessel >= 300 Tons:	No	***No of Fatals:***	
1 Other:		***Evacs?:***	No
2 Substance:		***No of Evacs:***	
2 Quantity:		***Cleanup:***	Unknown
2 Measure:		***Site:***	
2 Type:		***Cause:***	Mechanical
2 Other:		***Cause Other:***	
2 Pipeline:	No	***Drinking Wtr Imp:***	No
2 Vessel >= 300 Tons:	No	***Known Impact:***	None
3 Substance:		***Water:***	No
3 Quantity:		***Water Way:***	
3 Measure:		***City:***	Tehachapi
3 Type:		***County:***	Kern County
3 Other:		***Zip:***	
3 Pipeline:	No	***DOG No:***	
3 Vessel >= 300 Tons:	No		
Admin Agency:	Kern Co. Environmental Health Services Department		
Notification Area:	AA/CUPA,DFG-OSPR,DTSC,RWQCB,US EPA,USFWS,AIR RESOURCES BD,Co/E-Hlth		
Location:	Tehachapi Willow Spring Rd		
Description:	Caller states PG&E has an issue at their limiting station which is effecting Southern California Gas Company supply line by causing over pressurization. No natural gas has been released. No release is expected.		

Spill Report View

Water:		***Creation Date:***	04/16/2017 01:28 AM
Document Title:	SPILL Report		
Spill Site:	Other		
Type:	VAPOR		

Hazardous Materials Spill Report

Date :	04/16/2017	***Name:***	
Time:	0128	***Phone:***	
Incident Date:	04/15/2017	***Ext:***	
Incident Time:	2100	***Pag Cell:***	
Control Cal OES:	17-2829	***Prs Name:***	
Control NRC:		***Prs Phone:***	
Water Involved:	No	***Prs Ext:***	
Drink Wtr Impact:	No	***Prs Pag Cell:***	
Detail for Other:		***Incident Desc:***	
UPRR Rim No:		***Notification Info:***	
DOG Unit:		***Notification List:***	

RWQCB Unit:	5C
Contained:	Yes
Waterway:	
Received By:	
Cleanup By:	Unknown
Incident Location:	Tehachapi Willow Spring Rd
Additional County:	
1 Substance:	Natural Gas
1 Qty:	=
1 Amount :	N/A
1 Measure:	N/A
1 Type:	VAPOR
1 Other:	
1 Pipeline:	No
1 Ves >= 300 Tons:	No
2 Substance:	
2 Qty:	=
2 Amount:	
2 Measure:	
2 Type:	
2 Other:	
2 Pipeline:	No
2 Ves >= 300 Tns:	No
3 Substance:	
3 Qty:	=
3 Amount:	
3 Measure:	
3 Type:	
3 Other:	
3 Pipeline:	No
3 Ves >= 300 Tons:	No
Injuries:	No
Fatality:	No
Evacuation:	No
Known Impact:	None
Agency:	Southern California Gas Company
PRS Agency:	
Sec Agency:	
Admin Agency:	Kern Co. Environmental Health Services Department
Admin Agency 2:	
On Scene:	
Other on Scene:	
Other Notified:	
Header Unknown:	KERN COUNTY APCD
Site:	Other Description for Other : Supply Line
Reported Cause:	Mechanical
R R Crssing < 50 Ft:	
Description:	Caller states PG&E has an issue at their limiting station which is effecting Southern California Gas Company supply line by causing over pressurization. No natural gas has been released. No release is expected.

Site: ***Kern Co***
Trotter Avenue ***Mojave CA***

CHMIRS

Control No:		***Notified Date:***	4/10/199708:28:27 AM
Year:	1997	***Notified Date Time:***	
County:	Kern County		
URL:			

California Hazardous Material Incident Report System (as of 1997 to 2005)

Contained:	Yes	***Bbls:***	0
Substance:	Misc Drug lab waste	***Cups:***	0
Incident Date:	4/9/199712:00:00 AM	***Cu Ft:***	0
No of Injuries:	0	***Gals:***	0.000000
No of Fatals:	0	***Grams:***	0
No of Evacs:	0	***Lbs:***	0
Cleanup:	Reporting Party	***Liters:***	0
Water:	No	***Oz:***	0

Water Way:		***Pts:***	0
City:	Mojave	***Qts:***	0
County:	Kern County	***Sheen:***	0
ZIP:		***Tons:***	0
Site:	Road	***Unknown:***	0
Admin Agency:	Kern Co. Environmental Health Services Dept		
Location:	Trotter Avenue		
Description:	Anon report of someone dumping cyclinders on the roadway.		

Site: ***UPRR***
Purdy Rd. Mojave CA

CHMIRS

Control No:		***Notified Date:***	2/18/200509:02:27 AM
Year:	2005	***Notified Date Time:***	
County:	Kern County		
URL:			

California Hazardous Material Incident Report System (as of 1997 to 2005)

Contained:	Unknown	***Bbls:***	0
Substance:	Lube Oil	***Cups:***	0
Incident Date:	2/18/200512:00:00 AM	***Cu Ft:***	0
No of Injuries:	0	***Gals:***	100
No of Fatals:	0	***Grams:***	0
No of Evacs:	0	***Lbs:***	0
Cleanup:	Unknown	***Liters:***	0
Water:		***Oz:***	0
Water Way:		***Pts:***	0
City:	Mojave	***Qts:***	0
County:	Kern County	***Sheen:***	0
ZIP:		***Tons:***	0
Site:	Rail Road	***Unknown:***	0
Admin Agency:	Kern Co. Environmental Health Services Dept		
Location:	Purdy Rd.		
Description:	Substance found on the tracks from unknown source.		

Site: ***CHP Bishop***
Tehachapi willow springs Tehachapi CA

CHMIRS

Control No:		***Notified Date:***	8/7/200310:21:15 AM
Year:	2003	***Notified Date Time:***	
County:	Kern County		
URL:			

California Hazardous Material Incident Report System (as of 1997 to 2005)

Contained:	Yes	***Bbls:***	0
Substance:	Diesel	***Cups:***	0
Incident Date:	8/7/200312:00:00 AM	***Cu Ft:***	0
No of Injuries:	1	***Gals:***	50
No of Fatals:	0	***Grams:***	0
No of Evacs:	0	***Lbs:***	0
Cleanup:	Contractor	***Liters:***	0
Water:	No	***Oz:***	0
Water Way:		***Pts:***	0
City:	Tehachapi	***Qts:***	0
County:	Kern County	***Sheen:***	0
ZIP:		***Tons:***	0
Site:	Road	***Unknown:***	0
Admin Agency:	Kern Co. Environmental Health Services Dept		
Location:	Tehachapi willow springs		
Description:	Over turned two semi truck, fuel from truck saddle tanks.		

Site: ***UPRR***
Oak Creek Road Mojave CA

CHMIRS

Control No:	11-4789	***Notified Date:***	

Year:	2011	***Notified Date Time:***	
County:	Kern County		
URL:	https://w3.calema.ca.gov/operational/malhaz.nsf/f1841a103c102734882563e200760c4a/8149c94a94475bc4882578ea00311f8a?OpenDocument		

California Hazardous Material Incident Report System (as of 2006 to 2015)

Contained:	Yes	***3 Ves >= 300 Tons:***	No
1 Substance:	Train vs. Trespasser	***Incident Date:***	8/12/2011
1 Measure:	N/A	***Incident Time:***	130
1 Other:		***Spill Site:***	Rail Road
1 Quantity:	N/A	***Injuries?:***	No
1 Type:	RAILROAD	***No of Injuries:***	
1 Pipeline:		***Fatals?:***	No
1 Vessel >= 300 Tons:	No	***No of Fatals:***	
2 Substance:		***Evacs?:***	No
2 Quantity:		***No of Evacs:***	
2 Measure:		***Cleanup:***	Unknown
2 Type:		***Site:***	
2 Other:		***Cause:***	Unknown
2 Pipeline:		***Cause Other:***	
2 Vessel >= 300 Tons:	No	***Dog No:***	
3 Substance:		***Water:***	No
3 Quantity:		***Water Way:***	
3 Measure:		***City:***	Mojave
3 Type:		***County:***	Kern County
3 Other:		***ZIP:***	
3 Pipeline:			
Admin Agency:	Kern Co. Environmental Health Services Department		
Notification Area:	AA/CUPA,DFG-OSPR,DTSC,RWQCB,US EPA,USFWS,PUC		
Location:	Oak Creek Road		
Description:	Train ID# QRVWC of the 11th stuck a trespasser at MP 380.3 on the Mojave Sub division.		

Spill Report View

Water:		***Creation Date:***	08/12/2011 01:56 AM
Document Title:	SPILL Report		
Spill Site:	Rail Road		
Type:	RAILROAD		

Hazardous Materials Spill Report

Date :	08/12/2011	***Name:***	
Time:	0156	***Phone:***	
Incident Date:	08/12/2011	***Ext:***	
Incident Time:	0130	***Pag Cell:***	
Control Cal OES:	11-4789	***Prs Name:***	
Control NRC:		***Prs Phone:***	
Water Involved:	No	***Prs Ext:***	
Drink Wtr Impact:		***Prs Pag Cell:***	
Detail for Other:		***Incident Desc:***	
UPRR Rim No:		***Notification Info:***	
DOG Unit:		***Notification List:***	
RWQCB Unit:	6B		
Contained:	Yes		
Waterway:			
Received By:			
Cleanup By:	Unknown		
Incident Location:	Oak Creek Road		
Additional County:			
1 Substance:	Train vs. Trespasser		
1 Qty:	=		
1 Amount :	N/A		
1 Measure:	N/A		
1 Type:	RAILROAD		
1 Other:			
1 Pipeline:	No		
1 Ves >= 300 Tons:	No		

2 Substance:	
2 Qty:	=
2 Amount:	
2 Measure:	
2 Type:	
2 Other:	
2 Pipeline:	No
2 Ves >= 300 Tns:	No
3 Substance:	
3 Qty:	=
3 Amount:	
3 Measure:	
3 Type:	
3 Other:	
3 Pipeline:	No
3 Ves >= 300 Tons:	No
Injuries:	No
Fatality:	No
Evacuation:	No
Known Impact:	None
Agency:	UPRR
PRS Agency:	
Sec Agency:	
Admin Agency:	Kern Co. Environmental Health Services Department
Admin Agency 2:	
On Scene:	CHP, Fire Dept., Sheriff Ofc.
Other on Scene:	
Other Notified:	
Header Unknown:	KERN COUNTY APCD
Site:	Rail Road
Reported Cause:	Unknown
R R Crssing < 50 Ft:	
Description:	Train ID# QRVWC of the 11th stuck a trespasser at MP 380.3 on the Mojave Sub division.

Site: ***NRC***
OAK CREEK Tehachapi CA

CHMIRS

Control No:	17-2404	***Notified Date:***	
Year:	2017	***Notified Date Time:***	
County:	Kern County		
URL:	https://w3.calema.ca.gov/operational/malhaz.nsf/f1841a103c102734882563e200760c4a/3ba97ae5200d22d5882580f1004ecb25?OpenDocument		

California Hazardous Material Incident Report System (2017)

Contained:	Unknown	***Incident Date:***	1/1/2017
1 Substance:	Oil	***Incident Time:***	900
1 Quantity:	UNKNOWN	***Spill Site:***	Other
1 Measure:	Gal(s)	***Injuries?:***	No
1 Type:	PETROLEUM	***No of Injuries:***	
1 Pipeline:	No	***Fatals?:***	No
1 Vessel >= 300 Tons:	No	***No of Fatals:***	
1 Other:		***Evacs?:***	No
2 Substance:		***No of Evacs:***	
2 Quantity:		***Cleanup:***	Unknown
2 Measure:		***Site:***	
2 Type:		***Cause:***	Unknown
2 Other:		***Cause Other:***	
2 Pipeline:	No	***Drinking Wtr Imp:***	No
2 Vessel >= 300 Tons:	No	***Known Impact:***	Unknown
3 Substance:		***Water:***	No
3 Quantity:		***Water Way:***	
3 Measure:		***City:***	Tehachapi
3 Type:		***County:***	Kern County
3 Other:		***Zip:***	
3 Pipeline:	No	***DOG No:***	
3 Vessel >= 300 Tons:	No		
Admin Agency:	Kern Co. Environmental Health Services Department		
Notification Area:	AA/CUPA,DFG-OSPR,DTSC,RWQCB,US EPA,USFWS		

Location: OAK CREEK
Description: THE REPORTING SOURCE STATED THAT OIL LEAKS FROM THE WIND TURBINE TOWERS DAILY AND HAS PRODUCED PUDDLES OF OIL THAT AREN'T CLEANED PROPERLY. CALLER ALSO STATED THAT THE COMPANY IS ALSO NOT IN COMPLIANCE WITH OSHA REGULATIONS. THE RP BELIEVES WILDLIFE HAS BEEN AFFECTED AND THE COMPANY HAS BURIED THE ANIMALS. THE RP WAS ADVISED TO NOTIFY STATE OFFICIALS

Spill Report View

Water:
Creation Date: 03/28/2017 07:20 AM
Document Title: SPILL Report
Spill Site: Other
Type: PETROLEUM

Hazardous Materials Spill Report

Date : 03/28/2017
Time: 0720
Incident Date: 01/01/2017
Incident Time: 0900
Control Cal OES: 17-2404
Control NRC: 1174229
Water Involved: No
Drink Wtr Impact: No
Detail for Other:
UPRR Rim No:
DOG Unit:
RWQCB Unit: 5C
Contained: Unknown
Waterway:
Received By:
Cleanup By: Unknown
Incident Location: OAK CREEK
Additional County:
1 Substance: Oil
1 Qty: =
1 Amount : UNKNOWN
1 Measure: Gal(s)
1 Type: PETROLEUM
1 Other:
1 Pipeline: No
1 Ves >= 300 Tons: No
2 Substance:
2 Qty: =
2 Amount:
2 Measure:
2 Type:
2 Other:
2 Pipeline: No
2 Ves >= 300 Tns: No
3 Substance:
3 Qty: =
3 Amount:
3 Measure:
3 Type:
3 Other:
3 Pipeline: No
3 Ves >= 300 Tons: No
Injuries: No
Fatality: No
Evacuation: No
Known Impact: Unknown
Agency: NRC
PRS Agency:
Sec Agency:
Admin Agency: Kern Co. Environmental Health Services Department
Admin Agency 2:
On Scene:
Other on Scene:

Name:
Phone:
Ext:
Pag Cell:
Prs Name:
Prs Phone:
Prs Ext:
Prs Pag Cell:
Incident Desc:
Notification Info:
Notification List:

Other Notified:	NRC
Header Unknown:	KERN COUNTY APCD
Site:	Other
	Description for Other : Construction Site
Reported Cause:	Unknown
R R Crssing < 50 Ft:	
Description:	THE REPORTING SOURCE STATED THAT OIL LEAKS FROM THE WIND TURBINE TOWERS DAILY AND HAS PRODUCED PUDDLES OF OIL THAT AREN'T CLEANED PROPERLY. CALLER ALSO STATED THAT THE COMPANY IS ALSO NOT IN COMPLIANCE WITH OSHA REGULATIONS. THE RP BELIEVES WILDLIFE HAS BEEN AFFECTED AND THE COMPANY HAS BURIED THE ANIMALS. THE RP WAS ADVISED TO NOTIFY STATE OFFICIALS

Site:

OAK CREEK STREET MOJAVE CA

ERNS

NRC Report No:	476255	***Latitude Degrees:***	
Type of Incident:	RAILROAD	***Latitude Minutes:***	
Incident Cause:	UNKNOWN	***Latitude Seconds:***	
Incident Date:	09-Mar-1999 08:00:00	***Longitude Degrees:***	
Incident Location:		***Longitude Minutes:***	
Incident Dtg:	OCCURRED	***Longitude Seconds:***	
Distance from City:		***Lat Quad:***	
Distance Units:		***Long Quad:***	
Direction from City:		***Location Section:***	
Location County:	KERN	***Location Township:***	
Potential Flag:		***Location Range:***	
Year:	Year 1999 Reports		
Description of Incident:	REFRIGERATION UNIT / CAUSE UNKNOWN / 1 CAR DERAILED / RELEASE UNKMATERIALS IN UNK LOCATION / TRAIN DIRECTION: NORTH BOUND / SPEED: UNK		

Material Spill Information

Chris Code:	OUN	***Unit of Measure:***	UNKNOWN AMOUNT
CAS No:		***If Reached Water:***	YES
UN No:		***Amount in Water:***	0
Name of Material:	UNKNOWN OIL	***Unit Reach Water:***	UNKNOWN AMOUNT
Amount of Material:	0		

Calls Information

Date Time Received:	09-Mar-1999 10:00:07	***Responsible City:***	
Date Time Complete:	09-Mar-1999 10:09:23	***Responsible State:***	XX
Call Type:	INC	***Responsible Zip:***	
Resp Company:		***Source:***	UNAVAILABLE
Resp Org Type:	UNKNOWN		

Incident Information

Tank ID:		***Building ID:***	
Tank Regulated:	U	***Location Area ID:***	
Tank Regulated By:		***Location Block ID:***	
Capacity of Tank:		***OCSG No:***	
Capacity Tank Units:		***OCSP No:***	
Description of Tank:		***State Lease No:***	
Actual Amount:		***Pier Dock No:***	
Actual Amount Units:		***Berth Slip No:***	
Tank Above Ground:	ABOVE	***Brake Failure:***	N
NPDES:		***Airbag Deployed:***	
NPDES Compliance:	U	***Transport Contain:***	U
Init Contin Rel No:		***Location Subdiv:***	
Contin Rel Permit:		***Platform Rig Name:***	
Contin Release Type:		***Platform Letter:***	
Aircraft ID:		***Allision:***	N
Aircraft Runway No:		***Type of Structure:***	
Aircraft Spot No:		***Structure Name:***	
Aircraft Type:	UNKNOWN	***Structure Oper:***	Y
Aircraft Model:		***Transit Bus Flag:***	
Aircraft Fuel Cap:		***Date Time Norm Serv:***	

Aircraft Fuel Cap U:		***Serv Disrupt Time:***	
Aircraft Fuel on Brd:		***Serv Disrupt Units:***	
Aircraft Fuel OB U:		***CR Begin Date:***	
Aircraft Hanger:		***CR End Date:***	
Road Mile Marker:		***CR Change Date:***	
Power Gen Facility:	U	***FBI Contact:***	
Generating Capacity:		***FBI Contact Dt Tm:***	
Type of Fixed Obj:	UNKNOWN	***Passenger Handling:***	
Type of Fuel:		***Passenger Route:***	XXX
DOT Crossing No:		***Passenger Delay:***	XXX
DOT Regulated:	U	***Sub Part C Test Req:***	XXX
Pipeline Type:	UNKNOWN	***No of Conductor Tested:***	
Pipeline Abv Ground:	ABOVE	***No of Engineer Tested:***	
Pipeline Covered:	U	***No of Trainman Tested:***	
Exposed Underwater:	U	***No of Yard Foreman Tested:***	
Railroad Hotline:	No	***No of RCL Operator Tested:***	
Railroad Milepost:	380.7	***No of Brakeman Tested:***	
Grade Crossing:	N	***No of Train Dispat Tested:***	
Crossing Device Ty:		***No of Signalman Tested:***	
Ty Vehicle Involved:	UNKNOWN	***No of Other Emp Tested:***	
Device Operational:	Y	***No of Unknown Emp Tested:***	

Incident Details Information

Release Secured:	U	***State Agen Report No:***	
Release Rate:		***State Agen on Scene:***	
Release Rate Unit:		***State Agen Notified:***	
Release Rate Rate:		***Fed Agency Notified:***	
Est Duration of Rel:		***Oth Agency Notified:***	
Desc Remedial Act:	CTS PERSONNEL EN ROUTE	***Body of Water:***	
Fire Involved:	N	***Tributary of:***	
Fire Extinguished:	U	***Near River Mile Make:***	
Any Evacuations:	N	***Near River Mile Mark:***	
No Evacuated:		***Offshore:***	N
Who Evacuated:		***Weather Conditions:***	
Radius of Evac:		***Air Temperature:***	
Any Injuries:	U	***Wind Direction:***	
No. Injured:		***Wind Speed:***	
No. Hospitalized:		***Wind Speed Unit:***	
No. Fatalities:		***Water Supp Contam:***	U
Any Fatalities:	U	***Water Temperature:***	
Any Damages:	U	***Wave Condition:***	
Damage Amount:		***Current Speed:***	
Air Corridor Closed:	N	***Current Direction:***	
Air Corridor Desc:		***Current Speed Unit:***	
Air Closure Time:		***EMPL Fatality:***	
Waterway Closed:	N	***Pass Fatality:***	
Waterway Desc:		***Community Impact:***	N
Waterway Close Time:		***Passengers Transfer:***	UNK
Road Closed:	N	***Passenger Injuries:***	
Road Desc:		***Employee Injuries:***	
Road Closure Time:		***Occupant Fatality:***	
Road Closure Units:		***Sheen Size:***	
Closure Direction:		***Sheen Size Units:***	
Major Artery:	No	***Sheen Size Length:***	
Track Closed:	N	***Sheen Size Length U:***	
Track Desc:		***Sheen Size Width:***	
Track Closure Time:		***Sheen Size Width U:***	
Track Closure Units:		***Sheen Color:***	
Track Close Dir:		***Dir of Sheen Travel:***	

Media Interest:		***Sheen Odor Desc:***	
Medium Desc:	UNKNOWN	***Duration Unit:***	
Addl Medium Info:		***Additional Info:***	CALLER HAD NO ADDITIONAL INFORMATIONCALLER HAD NO WEATHER INFORMATION /TRAIN HAS 4 ENGINES / 145 CARS

Site:

OAK CREEK TEHACHAPI CA

ERNS

NRC Report No:	1174229	***Latitude Degrees:***	
Type of Incident:	FIXED	***Latitude Minutes:***	
Incident Cause:	DUMPING	***Latitude Seconds:***	
Incident Date:	1/1/2017 9:00	***Longitude Degrees:***	
Incident Location:		***Longitude Minutes:***	
Incident Dtg:	OCCURRED	***Longitude Seconds:***	
Distance from City:		***Lat Quad:***	
Distance Units:		***Long Quad:***	
Direction from City:		***Location Section:***	
Location County:	KERN	***Location Township:***	
Potential Flag:	No	***Location Range:***	
Year:	Year 2017 Reports		

Description of Incident: THE REPORTING SOURCE STATED THAT OIL LEAKS FROM THE WIND TURBINE TOWERS DAILY AND HAS PRODUCED PUDDLES OF OIL THAT AREN'T CLEANED PROPERLY. CALLER ALSO STATED THAT THE COMPANY IS ALSO NOT IN COMPLIANCE WITH OSHA REGULATIONS. THE RP BELIEVES WILDLIFE HAS BEEN AFFECTED AND THE COMPANY HAS BURIED THE ANIMALS.

Material Spill Information

Chris Code:	OUN	***Unit of Measure:***	UNKNOWN AMOUNT
CAS No:	000000-00-0	***If Reached Water:***	NO
UN No:		***Amount in Water:***	
Name of Material:	UNKNOWN OIL	***Unit Reach Water:***	
Amount of Material:	0		

Calls Information

Date Time Received:	28-Mar-2017 10:03:00	***Responsible City:***	TEHACHAPI
Date Time Complete:	28-Mar-2017 10:14:00	***Responsible State:***	CA
Call Type:	INC	***Responsible Zip:***	
Resp Company:	TERRA-GEN OPERATING CO LLC	***Source:***	TELEPHONE
Resp Org Type:	PRIVATE ENTERPRISE		

Incident Information

Tank ID:		***Building ID:***	
Tank Regulated:	U	***Location Area ID:***	
Tank Regulated By:		***Location Block ID:***	
Capacity of Tank:		***OCSG No:***	
Capacity Tank Units:		***OCSP No:***	
Description of Tank:		***State Lease No:***	
Actual Amount:		***Pier Dock No:***	
Actual Amount Units:		***Berth Slip No:***	
Tank Above Ground:	ABOVE	***Brake Failure:***	U
NPDES:		***Airbag Deployed:***	U
NPDES Compliance:	U	***Transport Contain:***	U
Init Contin Rel No:		***Location Subdiv:***	
Contin Rel Permit:		***Platform Rig Name:***	
Contin Release Type:		***Platform Letter:***	
Aircraft ID:		***Allision:***	U
Aircraft Runway No:		***Type of Structure:***	
Aircraft Spot No:		***Structure Name:***	
Aircraft Type:		***Structure Oper:***	U
Aircraft Model:		***Transit Bus Flag:***	
Aircraft Fuel Cap:		***Date Time Norm Serv:***	
Aircraft Fuel Cap U:		***Serv Disrupt Time:***	
Aircraft Fuel on Brd:		***Serv Disrupt Units:***	
Aircraft Fuel OB U:		***CR Begin Date:***	

Aircraft Hanger:		***CR End Date:***	
Road Mile Marker:		***CR Change Date:***	
Power Gen Facility:	N	***FBI Contact:***	
Generating Capacity:		***FBI Contact Dt Tm:***	
Type of Fixed Obj:	CONSTRUCTION SITE	***Passenger Handling:***	
Type of Fuel:		***Passenger Route:***	XXX
DOT Crossing No:		***Passenger Delay:***	XXX
DOT Regulated:	U	***Sub Part C Test Req:***	XXX
Pipeline Type:		***No of Conductor Tested:***	
Pipeline Abv Ground:	ABOVE	***No of Engineer Tested:***	
Pipeline Covered:	U	***No of Trainman Tested:***	
Exposed Underwater:	N	***No of Yard Foreman Tested:***	
Railroad Hotline:		***No of RCL Operator Tested:***	
Railroad Milepost:		***No of Brakeman Tested:***	
Grade Crossing:	U	***No of Train Dispat Tested:***	
Crossing Device Ty:		***No of Signalman Tested:***	
Ty Vehicle Involved:		***No of Other Emp Tested:***	
Device Operational:	U	***No of Unknown Emp Tested:***	

Incident Details Information

Release Secured:	U	***State Agen Report No:***	
Release Rate:		***State Agen on Scene:***	
Release Rate Unit:		***State Agen Notified:***	
Release Rate Rate:		***Fed Agency Notified:***	OSHA
Est Duration of Rel:		***Oth Agency Notified:***	
Desc Remedial Act:		***Body of Water:***	
Fire Involved:	N	***Tributary of:***	
Fire Extinguished:	U	***Near River Mile Make:***	
Any Evacuations:	N	***Near River Mile Mark:***	
No Evacuated:		***Offshore:***	N
Who Evacuated:		***Weather Conditions:***	
Radius of Evac:		***Air Temperature:***	
Any Injuries:	N	***Wind Direction:***	
No. Injured:		***Wind Speed:***	
No. Hospitalized:		***Wind Speed Unit:***	
No. Fatalities:		***Water Supp Contam:***	U
Any Fatalities:	N	***Water Temperature:***	
Any Damages:	N	***Wave Condition:***	
Damage Amount:		***Current Speed:***	
Air Corridor Closed:	N	***Current Direction:***	
Air Corridor Desc:		***Current Speed Unit:***	
Air Closure Time:		***EMPL Fatality:***	
Waterway Closed:	N	***Pass Fatality:***	
Waterway Desc:		***Community Impact:***	
Waterway Close Time:		***Passengers Transfer:***	NO
Road Closed:	N	***Passenger Injuries:***	
Road Desc:		***Employee Injuries:***	
Road Closure Time:		***Occupant Fatality:***	
Road Closure Units:		***Sheen Size:***	
Closure Direction:		***Sheen Size Units:***	
Major Artery:	No	***Sheen Size Length:***	
Track Closed:	N	***Sheen Size Length U:***	
Track Desc:		***Sheen Size Width:***	
Track Closure Time:		***Sheen Size Width U:***	
Track Closure Units:		***Sheen Color:***	
Track Close Dir:		***Dir of Sheen Travel:***	
Media Interest:	UNKNOWN	***Sheen Odor Desc:***	
Medium Desc:	LAND	***Duration Unit:***	
Addl Medium Info:	/ GROUND	***Additional Info:***	* THE RP WAS ADVISED TO NOTIFY STATE

OFFICIALS.

Site: ***MANZANA WIND ENERGY***
AQUEDUCT TEHACHAPI CA 93561

FINDS/FRS

Registry ID:	110065296110
FIPS Code:	
HUC Code:	
Site Type Name:	STATIONARY
Location Description:	
Supplemental Location:	
Create Date:	10-OCT-15
Update Date:	
Interest Types:	STATE MASTER
SIC Codes:	
SIC Code Descriptions:	
NAICS Codes:	
NAICS Code Descriptions:	
Conveyor:	
Federal Facility Code:	
Federal Agency Name:	
Tribal Land Code:	
Tribal Land Name:	
Congressional Dist No:	
Census Block Code:	
EPA Region Code:	09
County Name:	KERN COUNTY
US/Mexico Border Ind:	
Latitude:	
Longitude:	
Reference Point:	
Coord Collection Method:	
Accuracy Value:	
Datum:	NAD83
Source:	
Facility Detail Rprt URL:	https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110065296110
Program Acronyms:	

CA-ENVIROVIEW:266399

Site: ***CALIFORNIA PORTLAND CEMENT CO***
OAK CREEK RD MOJAVE CA 93501

FINDS/FRS

Registry ID:	110071424841
FIPS Code:	06029
HUC Code:	
Site Type Name:	STATIONARY
Location Description:	
Supplemental Location:	
Create Date:	23-MAY-23
Update Date:	
Interest Types:	HAZARDOUS WASTE BIENNIAL REPORTER
SIC Codes:	
SIC Code Descriptions:	
NAICS Codes:	
NAICS Code Descriptions:	
Conveyor:	
Federal Facility Code:	
Federal Agency Name:	
Tribal Land Code:	
Tribal Land Name:	
Congressional Dist No:	
Census Block Code:	
EPA Region Code:	09
County Name:	KERN
US/Mexico Border Ind:	
Latitude:	

Longitude:
Reference Point:
Coord Collection Method:
Accuracy Value:
Datum: NAD83
Source:
Facility Detail Rprt URL: https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110071424841
Program Acronyms:

BR:CAD008256315

Site: ***MARK WALKER***
OAK CREEK RD TEHACHAPI CA 935610000 HAZ GEN

EPA ID: CLU960011023 ***Facility County:*** 15
Address 2: ***County:*** Kern
Details DTSC HWTS: The Department of Toxic Substances Control (DTSC) makes available a Waste Code Matrix showing each Waste Code, its description, and annual amounts in its Hazardous Waste Tracking System: https://hwts.dtsc.ca.gov/search
Handler Profile URL:

Site: ***CALPORTLAND - MOJAVE***
OAK CREEK ROAD MOJAVE CA 935010000 HAZ GEN

EPA ID: CAD008256315 ***Facility County:*** KERN
Address 2: ***County:***
Details DTSC HWTS:
Handler Profile URL: https://hwts.dtsc.ca.gov/facility/CAD008256315

Tanner Details

Waste Category Code: 141
Waste Category: Off-specification, aged or surplus inorganics
Yearly Totals:

2024: 4.75
2022: 0.35

Waste Category Code: 133
Waste Category: Aqueous solution with total organic residues 10 percent or more
Yearly Totals:

2024: 2.375
2023: 2.975
2022: 0.95
2021: 0.95

Waste Category Code: 223
Waste Category: Unspecified oil-containing waste
Yearly Totals:

2024: 13.475
2023: 11.35
2022: 3.275
2021: 13.475

Waste Category Code: 352
Waste Category: Other organic solids
Yearly Totals:

2024: 20.2375
2023: 27.075
2022: 30.425
2021: 19.81

Waste Category Code: 291
Waste Category: Latex waste
Yearly Totals:

2018: 0.45872

Waste Category Code: 611
Waste Category: Contaminated soil from site clean-up
Yearly Totals:

2024: 36.72

Waste Category Code: 551
Waste Category: Laboratory waste chemicals
Yearly Totals:

2022: 0.0345

Waste Category Code: 221
Waste Category: Waste oil and mixed oil
Yearly Totals:

2024: 21.26774
2023: 13.41328
2022: 3.869
2021: 0.675
2020: 8.17
2019: 8.17
2018: 7.125

Waste Category Code: 134
Waste Category: Aqueous solution with total organic residues less than 10 percent
Yearly Totals:

2020: 3.276
2019: 3.276
2018: 2.961

Waste Category Code: 135
Waste Category: Unspecified aqueous solution
Yearly Totals:

2018: 4.725

Waste Category Code: 792
Waste Category: Liquids with pH <= 2 with metals
Yearly Totals:

2022: 0.3
2021: 0.1075

Waste Category Code: 343
Waste Category: Unspecified organic liquid mixture
Yearly Totals:

2024: 13.75
2023: 12.905
2022: 15.2
2021: 30.675
2020: 1.19
2019: 1.19
2018: 0.782

Waste Category Code: 181

Waste Category: Other inorganic solid waste
Yearly Totals:

2022: 0.105
2021: 0.205

Waste Category Code: 513
Waste Category: Empty containers less than 30 gallons
Yearly Totals:

2018: 0.005

Waste Category Code: 213
Waste Category: Hydrocarbon solvents (benzene, hexane, Stoddard, Etc.)
Yearly Totals:

2023: 0.1

Waste Category Code: 741
Waste Category: Liquids with halogenated organic compounds >= 1,000 Mg./L
Yearly Totals:

2024: 0.125
2023: 0.2
2020: 0.25021
2019: 0.25021

Contact Details

Contact Name: LEANNA EAST
Mailing Street: PO BOX 46
Mailing City: PO BOX 46
Mailing Zip: 923680000
Contact Phone: 6266912459
Year: 2023

Contact Details

Contact Name: LEANNA EAST
Mailing Street: PO BOX 46
Mailing City: PO BOX 46
Mailing Zip: 923680000
Contact Phone: 6266912459
Year: 2024

Contact Details

Contact Name: LEANNA EAST
Mailing Street: PO BOX 46
Mailing City: PO BOX 46
Mailing Zip: 923680000
Contact Phone: 6266912459
Year: 2018

Contact Details

Contact Name: LEANNA EAST
Mailing Street: PO BOX 46
Mailing City: PO BOX 46
Mailing Zip: 923680000
Contact Phone: 6266912459
Year: 2019

Contact Details

Contact Name: LEANNA EAST
Mailing Street: PO BOX 46
Mailing City: PO BOX 46
Mailing Zip: 923680000
Contact Phone: 6266912459
Year: 2020

Contact Details

Contact Name: LEANNA EAST
Mailing Street: PO BOX 46
Mailing City: PO BOX 46
Mailing Zip: 923680000
Contact Phone: 6266912459
Year: 2021

Contact Details

Contact Name: LEANNA EAST
Mailing Street: PO BOX 46
Mailing City: PO BOX 46
Mailing Zip: 923680000
Contact Phone: 6266912459
Year: 2022

Site: ***CALPORTLAND - MOJAVE***
OAK CREEK ROAD MOJAVE CA 935010000

HAZ TSD

EPA ID: CAD008256315
Facility County: 15
Facility Street2:
County: Kern
Details DTSC HWTS: The Department of Toxic Substances Control (DTSC) makes available a Waste Code Matrix showing each Waste Code, its description, and annual amounts in its Hazardous Waste Tracking System: https://hwts.dtsc.ca.gov/search
Handler Profile URL: https://hwts.dtsc.ca.gov/facility/CAD008256315

Site: ***SOUTHERN PACIFIC R/R***
OAK CREEK ROAD UNINC CA

HIST CHMIRS

OES Control NO: 9120644
Incident Date: 11/26/1991
Release Factors: Collision/Overturn
Date Reported: 11/26/1991
Release Text:
Fatalities: 0
Equipm Involved: Vehicular Fuel System
Other Injury: 0
Action Taken Text:
Other Decon: 0
Chemicals: DIESEL FUEL
Other Fatal: 0
Case Number:
Vehicle: RAIN/LOCOMOTIVE
HazMat Other:
State:
HM Injury: 0
CA DOT PUC ICC:
Decon: 0
Company Name: SOUTHERN PACIFIC R/R
Agency Name: KERN CFD
County: KERN
HazMat Pers: On-site Non-fire Serv.,Private Info Source,Dot Manual,Off-site Fire Services
Action Taken: 63,Contain/Control Hazmat,ID/Analysis of Hazmat,Investigate
More than three involved?: 2

Site:
OAK CREEK ROAD MOJAVE CA 935010000

HIST MANIFEST

Gen EPA ID: CAD008256315
Create Date: 7/23/1982 0:00:00
Inact Date:
Facility Mail Street: 2025 E FINANCIAL WAY
Facility Mail City: GLENDORA
Facility Mail State: CA
Facility Mail Zip: 917410000
Contact Phone(s): 6268526264
File Year(s): 1983; 1984; 1985; 1986; 1987; 1988; 1989; 1990; 1991; 1992

Contact Name(s): JULIA LAKES

Tanner Information

State Waste Code: 352
Year: 1989
Tons: 50.95
Method Code: D80
State Waste Code Desc: Other organic solids
Method Description:

Generator County: Kern
Tsd Epa ID: CAD020748125
Tsd County: Santa Barbara

Tanner Information

State Waste Code: 223
Year: 1990
Tons: 25.5
Method Code:
State Waste Code Desc: Unspecified oil-containing waste
Method Description:

Generator County: Kern
Tsd Epa ID: NVT330010000
Tsd County: Unknown

Tanner Information

State Waste Code: 352
Year: 1988
Tons: 14.26
Method Code: 3
State Waste Code Desc: Other organic solids
Method Description:

Generator County: Kern
Tsd Epa ID: CAD020748125
Tsd County: Santa Barbara

Tanner Information

State Waste Code: 512
Year: 1988
Tons: 21.07
Method Code: D80
State Waste Code Desc: Other empty containers 30 gallons or more
Method Description:

Generator County: Kern
Tsd Epa ID: CAT000646117
Tsd County: Kings

Tanner Information

State Waste Code: 261
Year: 1983
Tons: 0.3
Method Code: D80
State Waste Code Desc: Polychlorinated biphenyls and material containing PCBs
Method Description:

Generator County: Kern
Tsd Epa ID: TXD055141378
Tsd County: Unknown

Tanner Information

State Waste Code: 221
Year: 1987
Tons: 29.19
Method Code: R01
State Waste Code Desc: Waste oil and mixed oil
Method Description:

Generator County: Kern
Tsd Epa ID: CAT080011059
Tsd County: Los Angeles

Tanner Information

State Waste Code: 221
Year: 1985
Tons: 5.21
Method Code: H01
State Waste Code Desc: Waste oil and mixed oil
Method Description:

Generator County: Kern
Tsd Epa ID: CAD040370645
Tsd County: Los Angeles

Tanner Information

State Waste Code:	221	***Generator County:***	Kern
Year:	1984	***Tsd Epa ID:***	CAD020748125
Tons:	40.57	***Tsd County:***	Santa Barbara
Method Code:	D80		
State Waste Code Desc:	Waste oil and mixed oil		
Method Description:			

Tanner Information

State Waste Code:	261	***Generator County:***	Kern
Year:	1984	***Tsd Epa ID:***	CAD020748125
Tons:	5.05	***Tsd County:***	Santa Barbara
Method Code:	D80		
State Waste Code Desc:	Polychlorinated biphenyls and material containing PCBs		
Method Description:			

Tanner Information

State Waste Code:	261	***Generator County:***	Kern
Year:	1986	***Tsd Epa ID:***	CAD980665947
Tons:	20.5	***Tsd County:***	Los Angeles
Method Code:	H01		
State Waste Code Desc:	Polychlorinated biphenyls and material containing PCBs		
Method Description:			

Tanner Information

State Waste Code:	151	***Generator County:***	Kern
Year:	1990	***Tsd Epa ID:***	AZC000000150
Tons:	0	***Tsd County:***	Unknown
Method Code:	3		
State Waste Code Desc:	Asbestos containing waste		
Method Description:			

Tanner Information

State Waste Code:	223	***Generator County:***	Kern
Year:	1990	***Tsd Epa ID:***	NVT330010000
Tons:	11.37	***Tsd County:***	Unknown
Method Code:	D80		
State Waste Code Desc:	Unspecified oil-containing waste		
Method Description:			

Tanner Information

State Waste Code:	741	***Generator County:***	Kern
Year:	1991	***Tsd Epa ID:***	CAD066113465
Tons:	0.17	***Tsd County:***	Fresno
Method Code:	H01		
State Waste Code Desc:	Liquids with halogenated organic compounds >= 1,000 Mg./L		
Method Description:			

Tanner Information

State Waste Code:	223	***Generator County:***	Kern
Year:	1991	***Tsd Epa ID:***	NVT330010000
Tons:	5.6	***Tsd County:***	Unknown
Method Code:			
State Waste Code Desc:	Unspecified oil-containing waste		
Method Description:			

Tanner Information

State Waste Code: 352 ***Generator County:*** Kern
Year: 1988 ***Tsd Epa ID:*** CAD020748125
Tons: 40.02 ***Tsd County:*** Santa Barbara
Method Code: D80
State Waste Code Desc: Other organic solids
Method Description:

Tanner Information

State Waste Code: 261 ***Generator County:*** Kern
Year: 1983 ***Tsd Epa ID:*** TXD055141378
Tons: 1.41 ***Tsd County:*** Unknown
Method Code: T03
State Waste Code Desc: Polychlorinated biphenyls and material containing PCBs
Method Description:

Tanner Information

State Waste Code: 741 ***Generator County:*** Kern
Year: 1992 ***Tsd Epa ID:*** CAT000613968
Tons: 0.47 ***Tsd County:*** Stanislaus
Method Code: H01
State Waste Code Desc: Liquids with halogenated organic compounds >= 1,000 Mg./L
Method Description:

Tanner Information

State Waste Code: 223 ***Generator County:*** Kern
Year: 1992 ***Tsd Epa ID:*** NVT330010000
Tons: 11.45 ***Tsd County:*** Unknown
Method Code:
State Waste Code Desc: Unspecified oil-containing waste
Method Description:

Tanner Information

State Waste Code: 261 ***Generator County:*** Kern
Year: 1983 ***Tsd Epa ID:*** ARD069748192
Tons: 2.29 ***Tsd County:*** Unknown
Method Code: T03
State Waste Code Desc: Polychlorinated biphenyls and material containing PCBs
Method Description:

Tanner Information

State Waste Code: 221 ***Generator County:*** Kern
Year: 1990 ***Tsd Epa ID:*** CAT080013352
Tons: 13.23 ***Tsd County:*** Los Angeles
Method Code: R01
State Waste Code Desc: Waste oil and mixed oil
Method Description:

Tanner Information

State Waste Code: 221 ***Generator County:*** Kern
Year: 1990 ***Tsd Epa ID:*** NVT330010000
Tons: 0.2 ***Tsd County:*** Unknown
Method Code:
State Waste Code Desc: Waste oil and mixed oil
Method Description:

Tanner Information

State Waste Code: 741 ***Generator County:*** Kern

Year: 1992
Tons: 2.22
Method Code: H01
State Waste Code Desc: Liquids with halogenated organic compounds >= 1,000 Mg./L
Method Description:
Tsd Epa ID: CAD066113465
Tsd County: Fresno

Tanner Information

State Waste Code: 134
Year: 1991
Tons: 0.2
Method Code: R01
State Waste Code Desc: Aqueous solution with total organic residues less than 10 percent
Method Description:
Generator County: Kern
Tsd Epa ID: CAD089446710
Tsd County: Los Angeles

Tanner Information

State Waste Code: 223
Year: 1992
Tons: 0.22
Method Code: R01
State Waste Code Desc: Unspecified oil-containing waste
Method Description:
Generator County: Kern
Tsd Epa ID: CAT080011059
Tsd County: Los Angeles

Tanner Information

State Waste Code: 261
Year: 1986
Tons: 10.03
Method Code:
State Waste Code Desc: Polychlorinated biphenyls and material containing PCBs
Method Description:
Generator County: Kern
Tsd Epa ID: NVT330010000
Tsd County: Unknown

Tanner Information

State Waste Code: 261
Year: 1986
Tons: 24.78
Method Code:
State Waste Code Desc: Polychlorinated biphenyls and material containing PCBs
Method Description:
Generator County: Kern
Tsd Epa ID:
Tsd County:

Tanner Information

State Waste Code: 221
Year: 1986
Tons: 5.83
Method Code: H01
State Waste Code Desc: Waste oil and mixed oil
Method Description:
Generator County: Kern
Tsd Epa ID: CAX000245043
Tsd County: Los Angeles

Tanner Information

State Waste Code: 221
Year: 1986
Tons: 4.58
Method Code:
State Waste Code Desc: Waste oil and mixed oil
Method Description:
Generator County: Kern
Tsd Epa ID: CAX00245043
Tsd County:

Tanner Information

State Waste Code: 261
Year: 1986
Tons: 1
Generator County: Kern
Tsd Epa ID: NUT330010000
Tsd County:

Method Code:
State Waste Code Desc: Polychlorinated biphenyls and material containing PCBs
Method Description:

Tanner Information

State Waste Code: 551
Year: 1987
Tons: 0.21
Method Code: D80
State Waste Code Desc: Laboratory waste chemicals
Method Description:
Generator County: Kern
Tsd Epa ID: CAD020748125
Tsd County: Santa Barbara

Tanner Information

State Waste Code: 611
Year: 1987
Tons: 0.75
Method Code: D80
State Waste Code Desc: Contaminated soil from site clean-up
Method Description:
Generator County: Kern
Tsd Epa ID: CAD020748125
Tsd County: Santa Barbara

Tanner Information

State Waste Code: 221
Year: 1987
Tons: 41.28
Method Code: 1
State Waste Code Desc: Waste oil and mixed oil
Method Description:
Generator County: Kern
Tsd Epa ID:
Tsd County:

Tanner Information

State Waste Code: 221
Year: 1989
Tons: 6.11
Method Code: D80
State Waste Code Desc: Waste oil and mixed oil
Method Description:
Generator County: Kern
Tsd Epa ID: CAD020748125
Tsd County: Santa Barbara

Tanner Information

State Waste Code: 221
Year: 1989
Tons: 30.02
Method Code: R01
State Waste Code Desc: Waste oil and mixed oil
Method Description:
Generator County: Kern
Tsd Epa ID: CAT080011059
Tsd County: Los Angeles

Tanner Information

State Waste Code: 731
Year: 1986
Tons: 4.67
Method Code: H01
State Waste Code Desc: Liquids with polychloronated biphenyls >= 50 Mg./L
Method Description:
Generator County: Kern
Tsd Epa ID: CAD980665947
Tsd County: Los Angeles

Tanner Information

State Waste Code: 261
Year: 1984
Tons: 5.98
Method Code: T03
State Waste Code Desc: Polychlorinated biphenyls and material containing PCBs
Generator County: Kern
Tsd Epa ID: ARD069748192
Tsd County: Unknown

Method Description:

Tanner Information

State Waste Code:	221	***Generator County:***	Kern
Year:	1984	***Tsd Epa ID:***	CAD040370645
Tons:	9.79	***Tsd County:***	Los Angeles
Method Code:	14		
State Waste Code Desc:	Waste oil and mixed oil		
Method Description:			

Tanner Information

State Waste Code:	151	***Generator County:***	Kern
Year:	1990	***Tsd Epa ID:***	AZC000000150
Tons:	0.46	***Tsd County:***	Unknown
Method Code:	D80		
State Waste Code Desc:	Asbestos containing waste		
Method Description:			

Tanner Information

State Waste Code:	134	***Generator County:***	Kern
Year:	1990	***Tsd Epa ID:***	CAD089446710
Tons:	1.66	***Tsd County:***	Los Angeles
Method Code:	R01		
State Waste Code Desc:	Aqueous solution with total organic residues less than 10 percent		
Method Description:			

Tanner Information

State Waste Code:	611	***Generator County:***	Kern
Year:	1990	***Tsd Epa ID:***	NVT330010000
Tons:	3.96	***Tsd County:***	Unknown
Method Code:	D80		
State Waste Code Desc:	Contaminated soil from site clean-up		
Method Description:			

Tanner Information

State Waste Code:	141	***Generator County:***	Kern
Year:	1989	***Tsd Epa ID:***	CAD020748125
Tons:	1.26	***Tsd County:***	Santa Barbara
Method Code:	D80		
State Waste Code Desc:	Off-specification, aged or surplus inorganics		
Method Description:			

Tanner Information

State Waste Code:	512	***Generator County:***	Kern
Year:	1989	***Tsd Epa ID:***	CAD020748125
Tons:	1.68	***Tsd County:***	Santa Barbara
Method Code:	D80		
State Waste Code Desc:	Other empty containers 30 gallons or more		
Method Description:			

Tanner Information

State Waste Code:	261	***Generator County:***	Kern
Year:	1988	***Tsd Epa ID:***	CAT000646117
Tons:	45.51	***Tsd County:***	Kings
Method Code:	D80		
State Waste Code Desc:	Polychlorinated biphenyls and material containing PCBs		
Method Description:			

Tanner Information

State Waste Code:	221	***Generator County:***	Kern
Year:	1988	***Tsd Epa ID:***	CAT080011059
Tons:	40.86	***Tsd County:***	Los Angeles
Method Code:	R01		
State Waste Code Desc:	Waste oil and mixed oil		
Method Description:			

Tanner Information

State Waste Code:	221	***Generator County:***	Kern
Year:	1989	***Tsd Epa ID:***	CAT080011059
Tons:	5.83	***Tsd County:***	Los Angeles
Method Code:	1		
State Waste Code Desc:	Waste oil and mixed oil		
Method Description:			

Tanner Information

State Waste Code:	221	***Generator County:***	Kern
Year:	1990	***Tsd Epa ID:***	CAT080011059
Tons:	40.86	***Tsd County:***	Los Angeles
Method Code:	R01		
State Waste Code Desc:	Waste oil and mixed oil		
Method Description:			

Tanner Information

State Waste Code:	223	***Generator County:***	Kern
Year:	1990	***Tsd Epa ID:***	NVT330010000
Tons:	10.5	***Tsd County:***	Unknown
Method Code:	3		
State Waste Code Desc:	Unspecified oil-containing waste		
Method Description:			

Tanner Information

State Waste Code:	221	***Generator County:***	Kern
Year:	1991	***Tsd Epa ID:***	NVT330010000
Tons:	12.3	***Tsd County:***	Unknown
Method Code:			
State Waste Code Desc:	Waste oil and mixed oil		
Method Description:			

Tanner Information

State Waste Code:	261	***Generator County:***	Kern
Year:	1988	***Tsd Epa ID:***	CAT000646117
Tons:	0	***Tsd County:***	Kings
Method Code:	3		
State Waste Code Desc:	Polychlorinated biphenyls and material containing PCBs		
Method Description:			

Tanner Information

State Waste Code:	221	***Generator County:***	Kern
Year:	1992	***Tsd Epa ID:***	CAD089446710
Tons:	1.1	***Tsd County:***	Los Angeles
Method Code:			
State Waste Code Desc:	Waste oil and mixed oil		
Method Description:			

Tanner Information

State Waste Code: 221 ***Generator County:*** Kern
Year: 1992 ***Tsd Epa ID:*** CAD089446710
Tons: 1.45 ***Tsd County:*** Los Angeles
Method Code: R01
State Waste Code Desc: Waste oil and mixed oil
Method Description:

Tanner Information

State Waste Code: 221 ***Generator County:*** Kern
Year: 1992 ***Tsd Epa ID:*** CAT080025711
Tons: 39.11 ***Tsd County:*** San Bernardino
Method Code: R01
State Waste Code Desc: Waste oil and mixed oil
Method Description:

Tanner Information

State Waste Code: 221 ***Generator County:*** Kern
Year: 1992 ***Tsd Epa ID:*** NVT330010000
Tons: 53.08 ***Tsd County:*** Unknown
Method Code:
State Waste Code Desc: Waste oil and mixed oil
Method Description:

Tanner Information

State Waste Code: 512 ***Generator County:*** Kern
Year: 1992 ***Tsd Epa ID:*** NVT330010000
Tons: 0.17 ***Tsd County:*** Unknown
Method Code:
State Waste Code Desc: Other empty containers 30 gallons or more
Method Description:

Tanner Information

State Waste Code: 261 ***Generator County:*** Kern
Year: 1984 ***Tsd Epa ID:*** CAD020748125
Tons: 0 ***Tsd County:*** Santa Barbara
Method Code: 3
State Waste Code Desc: Polychlorinated biphenyls and material containing PCBs
Method Description:

Tanner Information

State Waste Code: 261 ***Generator County:*** Kern
Year: 1987 ***Tsd Epa ID:*** CAD980665947
Tons: 3.16 ***Tsd County:*** Los Angeles
Method Code: H01
State Waste Code Desc: Polychlorinated biphenyls and material containing PCBs
Method Description:

Tanner Information

State Waste Code: 221 ***Generator County:*** Kern
Year: 1986 ***Tsd Epa ID:***
Tons: 3.96 ***Tsd County:***
Method Code: 1
State Waste Code Desc: Waste oil and mixed oil
Method Description:

Tanner Information

State Waste Code: 151 ***Generator County:*** Kern

Year: 1986
Tons: 0.18
Method Code: D80
State Waste Code Desc: Asbestos containing waste
Method Description:
Tsd Epa ID: CAD020748125
Tsd County: Santa Barbara

Tanner Information

State Waste Code: 122
Year: 1991
Tons: 0.22
Method Code: T01
State Waste Code Desc: Alkaline solution without metals pH >= 12.5
Method Description:
Generator County: Kern
Tsd Epa ID: CAD097030993
Tsd County: Los Angeles

Tanner Information

State Waste Code: 221
Year: 1991
Tons: 9.06
Method Code: R01
State Waste Code Desc: Waste oil and mixed oil
Method Description:
Generator County: Kern
Tsd Epa ID: CAD089446710
Tsd County: Los Angeles

Tanner Information

State Waste Code: 211
Year: 1991
Tons: 0.47
Method Code: R01
State Waste Code Desc: Halogenated solvents (chloroforms, methyl chloride, perchloroethylene, etc)
Method Description:
Generator County: Kern
Tsd Epa ID: CAD089446710
Tsd County: Los Angeles

Tanner Information

State Waste Code: 221
Year: 1986
Tons: 3.96
Method Code: D99
State Waste Code Desc: Waste oil and mixed oil
Method Description:
Generator County: Kern
Tsd Epa ID: CAX000245043
Tsd County: Los Angeles

Tanner Information

State Waste Code: 512
Year: 1990
Tons: 1.68
Method Code:
State Waste Code Desc: Other empty containers 30 gallons or more
Method Description:
Generator County: Kern
Tsd Epa ID: NVT330010000
Tsd County: Unknown

Tanner Information

State Waste Code: 221
Year: 1991
Tons: 8.13
Method Code: 14
State Waste Code Desc: Waste oil and mixed oil
Method Description:
Generator County: Kern
Tsd Epa ID: CAT080013352
Tsd County: Los Angeles

Tanner Information

State Waste Code: 221
Year: 1991
Tons: 8.02
Generator County: Kern
Tsd Epa ID: CAT080025711
Tsd County: San Bernardino

Method Code: H01
State Waste Code Desc: Waste oil and mixed oil
Method Description:

Tanner Information

State Waste Code: 221
Year: 1991
Tons: 29.81
Method Code: R01
State Waste Code Desc: Waste oil and mixed oil
Method Description:
Generator County: Kern
Tsd Epa ID: CAT080025711
Tsd County: San Bernardino

Tanner Information

State Waste Code: 512
Year: 1991
Tons: 0.84
Method Code:
State Waste Code Desc: Other empty containers 30 gallons or more
Method Description:
Generator County: Kern
Tsd Epa ID: NVT330010000
Tsd County: Unknown

Tanner Information

State Waste Code: 221
Year: 1987
Tons: 15.23
Method Code: R01
State Waste Code Desc: Waste oil and mixed oil
Method Description:
Generator County: Kern
Tsd Epa ID: CAD980883177
Tsd County: Kern

Tanner Information

State Waste Code: 261
Year: 1987
Tons: 5.18
Method Code: T31
State Waste Code Desc: Polychlorinated biphenyls and material containing PCBs
Method Description:
Generator County: Kern
Tsd Epa ID: OHD044946127
Tsd County: Unknown

Tanner Information

State Waste Code: 512
Year: 1990
Tons: 2.52
Method Code: D80
State Waste Code Desc: Other empty containers 30 gallons or more
Method Description:
Generator County: Kern
Tsd Epa ID: NVT330010000
Tsd County: Unknown

Site: ***CALIFORNIA PORTLAND CEMENT CO***
OAK CREEK RD MOJAVE CA 93501

RCRA LQG

Handler ID: CAD008256315
Generator Status: LQG
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	***Used Oil Transpor:***	No
Mixed Waste Gen:	No	***Used Oil Trans Fac:***	No
Transporter:	No	***Used Oil Processor:***	No
Transfer Facility:	No	***Used Oil Refiner:***	No
Recycler:	No	***Used Oil Burner:***	No
Onsite Burner Exem:	No	***Commercial TSD:***	No
Furnace Exemption:	No	***Recycl Nonstorage:***	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	B	***NAIC 1:***	32731
Seq No:	2	***NAIC 2:***	
Non Notifier:		***NAIC 3:***	
Receive Date:	20240226	***NAIC 4:***	
Active Site:	H----	***State:***	CA
Land Type:	P	***Location Latitude:***	35.046241
In Handler Univ:	Y	***Location Longitude:***	-118.366486
In A Universe:	Y	***Loc GIS Primary:***	N
Gen Status:	LQG	***Loc GIS Origin:***	AG
Report Cycle:	2023	***State District Owner:***	CA
Accessibility:		***State District:***	5
Region:	09		
Fed Waste Gen Owner:	HQ		
State Waste Generator Owner:	CA		
State Waste Generator:	1		
Short Term Generator:	N		
Uni Waste:	N		
Universal Waste Dest Facility:	N		
Federal Universal Waste:	N		
As Federally Regulated Tsdf:	------		
As Converter Tsdf:	------		
As State Regulated Tsdf:	------		
As State Regulated Handler:	---		
Federal Indicator:	---		
Hsm:	N		
Subpart K:	----		
GPRA Permit:	N		
GPRA Renewal:	N		
Permit Renewal Wrkld:	------		
Permwrk ID:	------		
Perm Prog:	------		
Pcwrkld:	------		
Closwrkld:	------		
GPRA Ca:	N		
Cawrkld:	N		
Subjca Tsd Discretion:	N		
NCAPS:	N		
EC Indicator:	N		
Ca725 Indicator:	N		
Ca750 Indicator:	N		
Operating Tsdf:	------		
Full Enforcement:	------		
Snc:	N		
Unaddressed Snc:	N		
Addressed Snc:	N		
Snc With Comp Sched:	N		
Fa Required:	-----		
Hhandler Last Change:	20240910		
Recognized Trader Importer:	N		
Recognized Trader Exporter:	N		
Slab Importer:	N		
Slab Exporter:	N		
Manifest Broker:	N		
Subpart P:	N		
Contact Language:	EN		
Handler Name:	CALIFORNIA PORTLAND CEMENT CO		

Location Street No:
Location Street1: OAK CREEK RD
Location Street2:
Location City: MOJAVE
Location State: CA
Location Zip: 93501
Location County Code: CA029
Location County Name: KERN
Location Country: US
Contact Name: OLIVIA FISHER
Contact Street No: 9350
Contact Street1: OAK CREEK RD
Contact Street2:
Contact City: MOJAVE
Contact State: CA
Contact Zip: 93501
Contact Country: US
Contact Phone And Ext: 661-823-3731
Contact Fax:
Contact Email Address: MOJAVEENVIRONMENTAL@CALPORTLAND.COM
Contact Title: ENVIRONMENTAL MANAGER
Owner Name: CALPORTLAND COMPANY
Owner Type: P
Owner Seq: 1
Operator Name: CALPORTLAND COMPANY
Operator Type: P
Operator Seq: 2
Public Notes:

Hazardous Waste Handler Details

Seq No: 1
Receive Date: 19800808
Handler Name: CALIFORNIA PORTLAND CEMENT CO
Fed Waste Generator: 1
Generator Code Description: Large Quantity Generator
Source Type: Notification

Hazardous Waste Handler Details

Seq No: 1
Receive Date: 19920228
Handler Name: CALIFORNIA PORTLAND CEMENT COM
Fed Waste Generator: 1
Generator Code Description: Large Quantity Generator
Source Type: Annual/Biennial Report

Hazardous Waste Handler Details

Seq No: 2
Receive Date: 19960320
Handler Name: CPCC MOJAVE PLANT
Fed Waste Generator: 1
Generator Code Description: Large Quantity Generator
Source Type: Annual/Biennial Report

Hazardous Waste Handler Details

Seq No: 1
Receive Date: 19960901
Handler Name: CALIFORNIA PORTLAND CEMENT CO
Fed Waste Generator: 2
Generator Code Description: Small Quantity Generator
Source Type: Implementer

Hazardous Waste Handler Details

Seq No: 3
Receive Date: 19990304
Handler Name: CALIFORNIA PORTLAND CEMENT- COLTON PLANT
Fed Waste Generator: 1
Generator Code Description: Large Quantity Generator
Source Type: Annual/Biennial Report

Hazardous Waste Handler Details

Seq No: 1
Receive Date: 20220221
Handler Name: CALIFORNIA PORTLAND CEMENT CO
Fed Waste Generator: 1
Generator Code Description: Large Quantity Generator
Source Type: Annual/Biennial Report update with Notification

Waste Code Details

Waste Code: 133
Waste Code Desc: Aqueous solution with 10% or more total organic residues

Waste Code: 343
Waste Code Desc: Unspecified organic liquid mixture

Waste Code: 352
Waste Code Desc: Other organic solids

Waste Code: 792
Waste Code Desc: Liquids with pH < 2 with metals

Waste Code: D002
Waste Code Desc: CORROSIVE WASTE

Waste Code: D006
Waste Code Desc: CADMIUM

Waste Code: D007
Waste Code Desc: CHROMIUM

Waste Code: D008
Waste Code Desc: LEAD

Waste Code: D018
Waste Code Desc: BENZENE

Waste Code: D039
Waste Code Desc: TETRACHLOROETHYLENE

Waste Code: D040
Waste Code Desc: TRICHLOROETHYLENE

Waste Code: F001
Waste Code Desc: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLORETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste Code: F002
Waste Code Desc: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste Code: F003

Waste Code Desc: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Hazardous Waste Handler Details

Seq No: 2
Receive Date: 20240226
Handler Name: CALIFORNIA PORTLAND CEMENT CO
Fed Waste Generator: 1
Generator Code Description: Large Quantity Generator
Source Type: Annual/Biennial Report update with Notification

Waste Code Details

Waste Code: 133
Waste Code Desc: Aqueous solution with 10% or more total organic residues

Waste Code: 213
Waste Code Desc: Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)

Waste Code: 343
Waste Code Desc: Unspecified organic liquid mixture

Waste Code: 352
Waste Code Desc: Other organic solids

Waste Code: 792
Waste Code Desc: Liquids with pH < 2 with metals

Waste Code: D001
Waste Code Desc: IGNITABLE WASTE

Waste Code: D002
Waste Code Desc: CORROSIVE WASTE

Waste Code: D005
Waste Code Desc: BARIUM

Waste Code: D006
Waste Code Desc: CADMIUM

Waste Code: D007
Waste Code Desc: CHROMIUM

Waste Code: D008
Waste Code Desc: LEAD

Waste Code: D018
Waste Code Desc: BENZENE

Waste Code: D039
Waste Code Desc: TETRACHLOROETHYLENE

Waste Code: D040
Waste Code Desc: TRICHLOROETHYLENE

Waste Code: F001
Waste Code Desc: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLORETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste Code:	F002
Waste Code Desc:	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Waste Code:	F003
Waste Code Desc:	THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Waste Code:	F005
Waste Code Desc:	THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Owner/Operator Details

Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Private	***Street1:***	800 WILSHIRE BLVD
Name:	CALIFORNIA PORTLAND CEMENT COMPANY	***Street2:***	
Dt Became Current:		***City:***	LOS ANGELES
Dt Ended Current:		***State:***	CA
Phone:	213-680-2316	***Country:***	
Source Type:	Notification	***Zip:***	90017
Owner/Operator Ind:	Current Owner	***Street No:***	10655
Type:	Private	***Street1:***	W PARK RUN DRIVE SUITE 275
Name:	CALPORTLAND COMPANY	***Street2:***	
Dt Became Current:	19520101	***City:***	LAS VEGAS
Dt Ended Current:		***State:***	NV
Phone:	626-852-6200	***Country:***	US
Source Type:	Annual/Biennial Report update with Notification	***Zip:***	89144
Owner/Operator Ind:	Current Operator	***Street No:***	9350
Type:	Private	***Street1:***	OAK CREEK ROAD
Name:	CALPORTLAND COMPANY	***Street2:***	
Dt Became Current:	19550101	***City:***	MOJAVE
Dt Ended Current:		***State:***	CA
Phone:	661-258-3352	***Country:***	US
Source Type:	Annual/Biennial Report update with Notification	***Zip:***	93501
Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Private	***Street1:***	800 WILSHIRE BLVD
Name:	CALIFORNIA PORTLAND CEMENT COMPANY	***Street2:***	
Dt Became Current:		***City:***	NOT REQUIRED
Dt Ended Current:		***State:***	CA
Phone:	213-680-2316	***Country:***	
Source Type:	Implementer	***Zip:***	99999

Historical Handler Details

Receive Dt:	20220221
Generator Code Description:	Large Quantity Generator
Handler Name:	CALIFORNIA PORTLAND CEMENT CO
Receive Dt:	19990304

Generator Code Description: Large Quantity Generator
Handler Name: CALIFORNIA PORTLAND CEMENT- COLTON PLANT

Receive Dt: 19960901
Generator Code Description: Small Quantity Generator
Handler Name: CALIFORNIA PORTLAND CEMENT CO

Receive Dt: 19960320
Generator Code Description: Large Quantity Generator
Handler Name: CPCC MOJAVE PLANT

Receive Dt: 19920228
Generator Code Description: Large Quantity Generator
Handler Name: CALIFORNIA PORTLAND CEMENT COM

Receive Dt: 19800808
Generator Code Description: Large Quantity Generator
Handler Name: CALIFORNIA PORTLAND CEMENT CO

Appendix: Database Descriptions

Environmental Risk Information Services (ERIS) can search the following databases. The extent of historical information varies with each database and current information is determined by what is publicly available to ERIS at the time of update. ERIS updates databases as set out in ASTM Standard E1527-13 and E1527-21, Section 8.1.8 Sources of Standard Source Information:

"Government information from nongovernmental sources may be considered current if the source updates the information at least every 90 days, or, for information that is updated less frequently than quarterly by the government agency, within 90 days of the date the government agency makes the information available to the public."

Standard Environmental Record Sources

Federal

National Priority List: NPL

The U.S. Environmental Protection Agency (EPA)'s National Priorities List (NPL) includes the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under the Superfund program, based primarily on the score a site receives from EPA's Hazard Ranking System. A site must be on the NPL to receive money from the Superfund Trust Fund for remedial action. This data includes NPL sites represented as polygons, where available, that can be sourced from the EPA NPL Superfund Site Boundaries dataset, refreshed by the Shared Enterprise Geodata and Services (SEGS). These site boundaries represent the footprint of a whole site, the sum of all the Operable Units (OUs) and the current understanding of the full extent of contamination; for Federal Facility sites, the total site polygon may be the Facility boundary. As site investigation and remediation progress, OUs may be added, modified or refined. Data provided by external parties is not independently verified by EPA. This boundary data is made available to the public strictly for informational purposes. Where there is no polygon boundary data available for a given site, the site is represented as a point.

Government Publication Date: Mar 8, 2025

National Priority List - Proposed: PROPOSED NPL

Sites proposed by the U.S. Environmental Protection Agency (EPA), the state agency, or concerned citizens for addition to the National Priorities List (NPL) due to contamination by hazardous waste and identified by the EPA as a candidate for cleanup because it poses a risk to human health and/or the environment. Sites represented as polygons, where available, can be sourced from the EPA NPL Superfund Site Boundaries dataset, refreshed by the Shared Enterprise Geodata and Services (SEGS). These site boundaries represent the footprint of a whole site, the sum of all the Operable Units (OUs) and the current understanding of the full extent of contamination; for Federal Facility sites, the total site polygon may be the Facility boundary. Data provided by external parties is not independently verified by EPA. This boundary data is made available to the public strictly for informational purposes. Where there is no polygon boundary data available for a given site, the site is represented as a point.

Government Publication Date: Mar 8, 2025

Deleted NPL: DELETED NPL

Sites deleted from the U.S. Environmental Protection Agency (EPA)'s National Priorities List (NPL). The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate. Sites represented as polygons, where available, can be sourced from the EPA NPL Superfund Site Boundaries dataset, refreshed by the Shared Enterprise Geodata and Services (SEGS). These site boundaries represent the footprint of a whole site, the sum of all the Operable Units (OUs) and the current understanding of the full extent of contamination; for Federal Facility sites, the total site polygon may be the Facility boundary. Data provided by external parties is not independently verified by EPA. This boundary data is made available to the public strictly for informational purposes. Where there is no polygon boundary data available for a given site, the site is represented as a point.

Government Publication Date: Mar 8, 2025

SEMS List 8R Active Site Inventory: SEMS

The U.S. Environmental Protection Agency's (EPA) Superfund Program has deployed the Superfund Enterprise Management System (SEMS), which integrates multiple legacy systems into a comprehensive tracking and reporting tool. This inventory contains active sites evaluated by the Superfund program that are either proposed to be or are on the National Priorities List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL. The Active Site Inventory Report displays site and location information at active SEMS sites. An active site is one at which site assessment, removal, remedial, enforcement, cost recovery, or oversight activities are being planned or conducted. This data includes SEMS sites from the List 8R Active file as well as applicable sites from the EPA's Facility Registry Service map tool.

Government Publication Date: Apr 25, 2025

SEMS List 8R Archive Sites: SEMS ARCHIVE

The U.S. Environmental Protection Agency's (EPA) Superfund Enterprise Management System (SEMS) Archived Site Inventory displays site and location information at sites archived from SEMS. An archived site is one at which EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program at this time. This data includes sites from the List 8R Archived site file.

Government Publication Date: Apr 25, 2025

Inventory of Open Dumps, June 1985: ODI

The Resource Conservation and Recovery Act (RCRA) provides for publication of an inventory of open dumps. The Act defines "open dumps" as facilities which do not comply with EPA's "Criteria for Classification of Solid Waste Disposal Facilities and Practices" (40 CFR 257).

Government Publication Date: Jun 1985

EPA Report on the Status of Open Dumps on Indian Lands: IODI

Public Law 103-399, The Indian Lands Open Dump Cleanup Act of 1994, enacted October 22, 1994, identified congressional concerns that solid waste open dump sites located on American Indian or Alaska Native (AI/AN) lands threaten the health and safety of residents of those lands and contiguous areas. The purpose of the Act is to identify the location of open dumps on Indian lands, assess the relative health and environment hazards posed by those sites, and provide financial and technical assistance to Indian tribal governments to close such dumps in compliance with Federal standards and regulations or standards promulgated by Indian Tribal governments or Alaska Native entities.

Government Publication Date: Dec 31, 1998

Comprehensive Environmental Response, Compensation and Liability Information System - CERCLIS: CERCLIS

Superfund is a program administered by the United States Environmental Protection Agency (EPA) to locate, investigate, and clean up the worst hazardous waste sites throughout the United States. CERCLIS is a database of potential and confirmed hazardous waste sites at which the EPA Superfund program has some involvement. It contains sites that are either proposed to be or are on the National Priorities List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL. The EPA administers the Superfund program in cooperation with individual states and tribal governments; this database is made available by the EPA.

Government Publication Date: Oct 25, 2013

CERCLIS - No Further Remedial Action Planned: CERCLIS NFRAP

An archived site is one at which EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program at this time. The Archive designation means that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL). This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Government Publication Date: Oct 25, 2013

CERCLIS Liens: CERCLIS LIENS

A Federal Superfund lien exists at any property where EPA has incurred Superfund costs to address contamination ("Superfund site") and has provided notice of liability to the property owner. A Federal CERCLA ("Superfund") lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. This database is made available by the United States Environmental Protection Agency (EPA). This database was provided by the United States Environmental Protection Agency (EPA). Refer to SEMS LIEN as the current data source for Superfund Liens.

Government Publication Date: Jan 30, 2014

RCRA CORRACTS-Corrective Action: RCRA CORRACTS

RCRA Info is the U.S. Environmental Protection Agency's (EPA) comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. At these sites, the Corrective Action Program ensures that cleanups occur. EPA and state regulators work with facilities and communities to design remedies based on the contamination, geology, and anticipated use unique to each site.

Government Publication Date: Jan 6, 2025

RCRA non-CORRACTS TSD Facilities: RCRA TSD

RCRA Info is the U.S. Environmental Protection Agency's (EPA) comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. This database includes Non-Corrective Action sites that have indicated engagement in the treatment, storage, or disposal of hazardous waste which requires a RCRA hazardous waste permit.

Government Publication Date: Jan 6, 2025

RCRA Generator List: RCRA LQG

RCRA Info is the U.S. Environmental Protection Agency's (EPA) comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Large Quantity Generators (LQGs) generate 1,000 kilograms per month or more of hazardous waste or more than one kilogram per month of acutely hazardous waste.

Government Publication Date: Jan 6, 2025

RCRA Small Quantity Generators List: RCRA SQG

RCRA Info is the U.S. Environmental Protection Agency's (EPA) comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Small Quantity Generators (SQGs) generate more than 100 kilograms, but less than 1,000 kilograms, of hazardous waste per month.

Government Publication Date: Jan 6, 2025

RCRA Very Small Quantity Generators List: RCRA VSQG

RCRA Info is the U.S. Environmental Protection Agency's (EPA) comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Very Small Quantity Generators (VSQG) generate 100 kilograms or less per month of hazardous waste, or one kilogram or less per month of acutely hazardous waste. Additionally, VSQG may not accumulate more than 1,000 kilograms of hazardous waste at any time.

Government Publication Date: Jan 6, 2025

RCRA Non-Generators: RCRA NON GEN

RCRA Info is the U.S. Environmental Protection Agency's (EPA) comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Non-Generators do not presently generate hazardous waste.

Government Publication Date: Jan 6, 2025

RCRA Sites with Controls: RCRA CONTROLS

List of Resource Conservation and Recovery Act (RCRA) facilities with institutional controls in place. RCRA gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances.

Government Publication Date: Jan 6, 2025

Federal Engineering Controls-ECs: FED ENG

List of Engineering controls (ECs) made availabe by the United States Environmental Protection Agency (EPA). ECs encompass a variety of engineered and constructed physical barriers (e.g., soil capping, sub-surface venting systems, mitigation barriers, fences) to contain and/or prevent exposure to contamination on a property. The EC listing includes remedy component data from Superfund decision documents for applicable sites on the final or deleted on the National Priorities List (NPL); and sites with a Superfund Alternative Approach (SAA) Agreement in place. The only sites included that are not on the NPL; proposed for NPL; or removed from proposed NPL, are those with an SAA Agreement in place.

Government Publication Date: May 30, 2025

Federal Institutional Controls- ICs: FED INST

List of Institutional controls (ICs) made available by the United States Environmental Protection Agency (EPA). ICs are non-engineered instruments, such as administrative and legal controls, that help minimize the potential for human exposure to contamination and/or protect the integrity of the remedy. Although it is EPA's expectation that treatment or engineering controls will be used to address principal threat wastes and that groundwater will be returned to its beneficial use whenever practicable, ICs play an important role in site remedies because they reduce exposure to contamination by limiting land or resource use and guide human behavior at a site. The IC listing includes remedy component data from Superfund decision documents for applicable sites on the final or deleted on the National Priorities List (NPL); and sites with a Superfund Alternative Approach (SAA) Agreement in place. The only sites included that are not on the NPL; proposed for NPL; or removed from proposed NPL, are those with an SAA Agreement in place.

Government Publication Date: May 30, 2025

Land Use Controls Information System: LUCIS

The Land Use Controls Information System (LUCIS) database is sourced from the U.S. Department of the Navy (DON). This data contains information for former Base Realignment and Closure (BRAC) properties across the United States. DON's BRAC office was tasked with tracking certain base closures while requiring the prevention of risks to human health and the environment of those properties with LUCs in place. Regarding currently available LUC Sites data, the sites listing is limited to centroid point locations for the overall installation property boundaries. Formerly obtained LUC Sites data may reflect site details that applied previously for a BRAC property.

Government Publication Date: Jun 13, 2024

Institutional Control Boundaries at NPL sites: NPL IC

These boundaries of Institutional Control areas at sites on the U.S. Environmental Protection Agency's (EPA) National Priorities List (NPL), or as Proposed or Deleted, are sourced from the EPA NPL Superfund Site Boundaries dataset, refreshed by the Shared Enterprise Geodata and Services (SEGS). The EPA's NPL includes the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under the Superfund program. Institutional controls are non-engineered instruments such as administrative and legal controls that help minimize the potential for human exposure to contamination and/or protect the integrity of the remedy. Data provided by external parties is not independently verified by EPA. This boundary data is made available to the public strictly for informational purposes.

Government Publication Date: Mar 8, 2025

Emergency Response Notification System: ERNS 1982 TO 1986

Database of oil and hazardous substances spill reports controlled by the National Response Center. The primary function of the National Response Center is to serve as the sole national point of contact for reporting oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the United States and its territories.

Government Publication Date: 1982-1986

Emergency Response Notification System: ERNS 1987 TO 1989

Database of oil and hazardous substances spill reports controlled by the National Response Center. The primary function of the National Response Center is to serve as the sole national point of contact for reporting oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the United States and its territories.

Government Publication Date: 1987-1989

Emergency Response Notification System: ERNS

Database of oil and hazardous substances spill reports made available by the United States Coast Guard National Response Center (NRC). The NRC fields initial reports for pollution and railroad incidents and forwards that information to appropriate federal/state agencies for response. These data contain initial incident data that has not been validated or investigated by a federal/state response agency.

Government Publication Date: Apr 6, 2025

The Assessment, Cleanup and Redevelopment Exchange System (ACRES) Brownfield Database: FED BROWNFIELDS

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties protects the environment, reduces blight, and takes development pressures off greenspaces and working lands. This data is provided by the United States Environmental Protection Agency (EPA) and includes Brownfield sites from the Cleanups in My Community (CIMC) web application.

Government Publication Date: Feb 19, 2025

FEMA Underground Storage Tank Listing: FEMA UST

The Federal Emergency Management Agency (FEMA) of the Department of Homeland Security maintains a list of FEMA owned underground storage tanks.

Government Publication Date: Dec 31, 2017

Facility Response Plan: FRP

This listing contains facilities that have submitted Facility Response Plans (FRPs) to the U.S. Environmental Protection Agency (EPA). Facilities that could reasonably be expected to cause "substantial harm" to the environment by discharging oil into or on navigable waters are required to prepare and submit FRPs. Harm is determined based on total oil storage capacity, secondary containment and age of tanks, oil transfer activities, history of discharges, proximity to a public drinking water intake or sensitive environments. This listing includes FRP facilities from an applicable EPA FOIA file and Homeland Infrastructure Foundation-Level Data (HIFLD) data file.

Government Publication Date: Jan 9, 2024

Delisted Facility Response Plans: DELISTED FRP

Facilities that once appeared in - and have since been removed from - the list of facilities that have submitted Facility Response Plans (FRP) to EPA. Facilities that could reasonably be expected to cause "substantial harm" to the environment by discharging oil into or on navigable waters are required to prepare and submit Facility Response Plans (FRPs). Harm is determined based on total oil storage capacity, secondary containment and age of tanks, oil transfer activities, history of discharges, proximity to a public drinking water intake or sensitive environments.

Government Publication Date: Jan 9, 2024

Historical Gas Stations: HIST GAS STATIONS

This historic directory of service stations is provided by the Cities Service Company. The directory includes Cities Service filling stations that were located throughout the United States in 1930.

Government Publication Date: Jul 1, 1930

Petroleum Refineries: REFN

This list of petroleum refineries is sourced from the U.S. Energy Information Administration (EIA), Refinery Capacity Report. The listing includes operating and idle petroleum refineries (including new refineries under construction) and refineries shut down during the previous year. The geographic area the report covers is the 50 States, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, Guam, and other U.S. possessions. Per the EIA, the facility location data represents the approximate location based on research of publicly available information from sources such as Federal agencies, company websites, and satellite images on public websites.

Government Publication Date: Oct 31, 2024

Petroleum Product and Crude Oil Rail Terminals: BULK TERMINAL

A list of petroleum product and crude oil rail terminals from the U.S. Energy Information Administration (EIA), as well as petroleum terminals sourced from Oak Ridge National Laboratory hosted by the Homeland Infrastructure Foundation-Level Database. Data includes operable bulk petroleum product terminals with a total bulk shell storage capacity of 50,000 barrels or more, and/or the ability to receive volumes from tanker, barge, or pipeline; also rail terminals handling the loading and unloading of crude oil with activity between 2017 and 2018. EIA petroleum product terminal data comes from the EIA-815 Bulk Terminal and Blender Report, which includes working, shell in operation, and shell idle for several major product groupings.

Government Publication Date: Oct 31, 2024

LIEN on Property: SEMS LIEN

The U.S. Environmental Protection Agency's (EPA) Superfund Enterprise Management System (SEMS) provides Lien details on applicable properties, such as the Superfund lien on property activity, the lien property information, and the parties associated with the lien.

Government Publication Date: Apr 25, 2025

Superfund Decision Documents: SUPERFUND ROD

This database contains a list of decision documents for Superfund sites. Decision documents serve to provide the reasoning for the choice of (or) changes to a Superfund Site cleanup plan. The decision documents include completed Records of Decision (ROD), ROD Amendments, Explanations of Significant Differences (ESD) for active and archived sites stored in the Superfund Enterprise Management System (SEMS), along with other associated memos and files. This information is maintained and made available by the U.S. Environmental Protection Agency.

Government Publication Date: Feb 26, 2025

State

State Response Sites: RESPONSE

A list of identified confirmed release sites where the Department of Toxic Substances Control (DTSC) is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk. This database serves a purpose similar to that of the federal NPL, functioning as a state-level counterpart for prioritizing cleanup efforts at hazardous substance release sites.

Government Publication Date: Jun 1, 2025

EnviroStor Database: ENVIROSTOR

The EnviroStor Data Management System is made available by the Department of Toxic Substances Control (DTSC). Includes Corrective Action sites, Tiered Permit sites, Historical Sites and Evaluation/Investigation sites. This database serves a purpose similar to that of the federal Superfund Enterprise Management System (SEMS), functioning as a state-level counterpart for tracking potential hazardous substance release sites.

Government Publication Date: Jun 1, 2025

Delisted State Response Sites: DELISTED ENVS

Sites removed from the list of State Response Sites made available by the EnviroStor Data Management System, Department of Toxic Substances Control (DTSC).

Government Publication Date: Jun 1, 2025

Solid Waste Information System (SWIS): SWF/LF

The Solid Waste Information System (SWIS) database made available by the Department of Resources Recycling and Recovery (CalRecycle) contains information on solid waste facilities, operations, and disposal sites throughout the State of California. The types of facilities found in this database include landfills, transfer stations, material recovery facilities, composting sites, transformation facilities, waste tire sites, and closed disposal sites.

Government Publication Date: Jun 21, 2025

Solid Waste Disposal Sites with Waste Constituents Above Hazardous Waste Levels: SWRCB SWF

This is a list of solid waste disposal sites identified by California State Water Resources Control Board with waste constituents above hazardous waste levels outside the waste management unit.

Government Publication Date: Sep 20, 2006

Waste Management Unit Database: WMUD

The Waste Management Unit Database System tracks and inventories waste management units. CCR Title 27 contains criteria stating that Waste Management Units are classified according to their ability to contain wastes. Containment shall be determined by geology, hydrology, topography, climatology, and other factors relating to the ability of the Unit to protect water quality. Water Code Section 13273.1 requires that operators submit a water quality solid waste assessment test (SWAT) report to address leak status. The WMUDS was last updated by the State Water Resources control board in 2000.

Government Publication Date: Jan 1, 2000

EnviroStor Hazardous Waste Facilities: HWP

A list of hazardous waste facilities including permitted, post-closure and historical facilities found in the Department of Toxic Substances Control (DTSC) EnviroStor database.

Government Publication Date: Jun 1, 2025

Sites Listed in the Solid Waste Assessment Test (SWAT) Program Report: SWAT

In a 1993 Memorandum of Understanding, the State Water Resources Control Board (SWRCB) agreed to submit a comprehensive report on the Solid Waste Assessment Test (SWAT) Program to the California Integrated Waste Management Board (CIWMB). This report summarizes the work completed to date on the SWAT Program, and addresses both the impacts that leakage from solid waste disposal sites (SWDS) may have upon waters of the State and the actions taken to address such leakage.

Government Publication Date: Dec 31, 1995

Construction and Demolition Debris Recyclers: C&D DEBRIS RECY

This listing of Construction and Demolition Debris Recyclers is maintained by the California Intergrated Waste Management Board-common C&D materials include lumber, drywall, metals, masonry (brick, concrete, etc.), carpet, plastic, pipe, rocks, dirt, paper, cardboard, or green waste related to land development.

Government Publication Date: Jun 20, 2018

Recycling Centers: RECYCLING

This list of Certified Recycling Centers that are operating under the state of California's Beverage Container Recycling Program is maintained by the California Department of Resources Recycling and Recovery.

Government Publication Date: Jun 21, 2025

Listing of Certified Processors: PROCESSORS

This list of Certified Processors that are operating under the state of California's Beverage Container Recycling Program is maintained by the California Department of Resources Recycling and Recovery.

Government Publication Date: May 31, 2025

Listing of Certified Dropoff, Collection, and Community Service Programs: CONTAINER RECY

This list of Certified Dropoff, Collection, and Community Service Programs (non-buyback) operating under the state of California's Beverage Container Recycling Program is maintained by the California Department of Resources Recycling and Recovery.

Government Publication Date: May 22, 2025

Land Disposal Sites: LDS

Land Disposal Sites in GeoTracker, the State Water Resources Control Board (SWRCB)'s data management system. The Land Disposal program regulates of waste discharge to land for treatment, storage and disposal in waste management units. Waste management units include waste piles, surface impoundments, and landfills.

Government Publication Date: Apr 4, 2025

Leaking Underground Fuel Tank Reports: LUST

List of Leaking Underground Storage Tanks within the Cleanup Sites data in GeoTracker database. GeoTracker is the State Water Resources Control Board's (SWRCB) data management system for managing sites that impact groundwater, especially those that require groundwater cleanup (Underground Storage Tanks, Department of Defense and Site Cleanup Program) as well as permitted facilities such as operating Underground Storage Tanks. The Leak Prevention Program that overlooks LUST sites is the SWRCB in California's Environmental Protection Agency.

Government Publication Date: Apr 4, 2025

Delisted Leaking Storage Tanks: DELISTED LST

List of Leaking Underground Storage Tanks (LUST) cleanup sites removed from GeoTracker, the State Water Resources Control Board (SWRCB)'s database system, as well as sites removed from the SWRCB's list of UST Case closures.

Government Publication Date: May 27, 2025

Permitted Underground Storage Tank (UST) in GeoTracker: UST

List of Permitted Underground Storage Tank (UST) sites made available by the State Water Resources Control Board (SWRCB) in California's Environmental Protection Agency (EPA).

Government Publication Date: May 25, 2025

Proposed Closure of Underground Storage Tank Cases: UST CLOSURE

This listing includes Proposed Closure of Underground Storage Tank (UST) Cases which are being considered for closure by either the State Water Resources Control Board at a Future Board Meeting or the Executive Director that have been posted for a 60-day public comment period, and Closure of UST Cases with Closure Denials and Approved Orders. The lists are provided by the California Water Boards.

Government Publication Date: Apr 7, 2025

Historical Hazardous Substance Storage Information Database: HHSS

The Historical Hazardous Substance Storage database contains information collected in the 1980s from facilities that stored hazardous substances. The information was originally collected on paper forms, was later transferred to microfiche, and recently indexed as a searchable database. When using this database, please be aware that it is based upon self-reported information submitted by facilities which has not been independently verified. It is unlikely that every facility responded to the survey and the database should not be expected to be a complete inventory of all facilities that were operating at that time. This database is maintained by the California State Water Resources Control Board's (SWRCB) Geotracker.

Government Publication Date: Aug 27, 2015

Statewide Environmental Evaluation and Planning System: UST SWEEPS

The Statewide Environmental Evaluation and Planning System (SWEEPS) is a historical listing of active and inactive underground storage tanks made available by the California State Water Resources Control Board (SWRCB).

Government Publication Date: Oct 1, 1994

Aboveground Storage Tanks: AST

A statewide list from 2009 of aboveground storage tanks (ASTs) made available by the Cal FIRE Office of the State Fire Marshal (OSFM). This list is no longer maintained or updated by the Cal FIRE OSFM.

Government Publication Date: Aug 31, 2009

SWRCB Historical Aboveground Storage Tanks: AST SWRCB

A list of aboveground storage tanks made available by the California State Water Resources Control Board (SWRCB). Effective January 1, 2008, the Certified Unified Program Agencies (CUPAs) are vested with the responsibility and authority to implement the Aboveground Petroleum Storage Act (APSA).

Government Publication Date: Dec 1, 2007

Oil and Gas Facility Tanks: TANK OIL GAS

Locations of oil and gas tanks that fall under the jurisdiction of the Geologic Energy Management Division of the California Department of Conservation (CalGEM) (CCR 1760). CalGEM was formerly the Division of Oil, Gas, and Geothermal Resources (DOGGR).

Government Publication Date: Feb 20, 2025

Delisted Storage Tanks: DELISTED TNK

This database contains a list of storage tank sites that were removed by the State Water Resources Control Board (SWRCB) in California's Environmental Protection Agency (EPA) and the Cal FIRE Office of State Fire Marshal (OSFM).

Government Publication Date: Jun 14, 2025

California Environmental Reporting System (CERS) Tanks: CERS TANK

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs. The CalEPA oversees the statewide implementation of the Unified Program which applies regulatory standards to protect Californians from hazardous waste and materials.

Government Publication Date: May 28, 2025

Delisted California Environmental Reporting System (CERS) Tanks: DELISTED CTNK

This database contains a list of Aboveground Petroleum Storage and Underground Storage Tank sites that were removed from in the California Environmental Protection Agency (CalEPA) Regulated Site Portal.

Government Publication Date: May 28, 2025

Historical Hazardous Substance Storage Container Information - Facility Summary: HIST TANK

The State Water Resources Control Board maintained the Hazardous Substance Storage Containers listing and inventory in th 1980s. This facility summary lists historic tank sites where the following container types were present: farm motor vehicle fuel tanks; waste tanks; sumps; pits, ponds, lagoons, and others; and all other product tanks. This set, published in May 1988, lists facility and owner information, as well as the number of containers. This data is historic and will not be updated.

Government Publication Date: May 27, 1988

Site Mitigation and Brownfields Reuse Program Facility Sites with Land Use Restrictions: LUR

The Department of Toxic Substances Control (DTSC) Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents land use restrictions that are active. Some sites have multiple land use restrictions.

Government Publication Date: Jun 1, 2025

CALSITES Database: CALSITES

This historical database was maintained by the Department of Toxic Substance Control (DTSC) for more than a decade. CALSITES contains information on Brownfield properties with confirmed or potential hazardous contamination. In 2006, DTSC introduced EnviroStor as the latest Brownfields site database.

Government Publication Date: May 1, 2004

Hazardous Waste Management Program Facility Sites with Deed / Land Use Restrictions: HLUR

The Department of Toxic Substances Control (DTSC) Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Government Publication Date: Feb 18, 2021

Deed Restrictions and Land Use Restrictions: DEED

List of Deed Restrictions, Land Use Restrictions and Covenants in GeoTracker made available by the State Water Resources Control Board (SWRCB) in California's Environmental Protection Agency. A deed restriction (land use covenant) may be required to facilitate the remediation of past environmental contamination and to protect human health and the environment by reducing the risk of exposure to residual hazardous materials.

Government Publication Date: May 27, 2025

Voluntary Cleanup Program: VCP

List of sites in the Voluntary Cleanup Program made available by the Department of Toxic Substances and Control (DTSC). The Voluntary Cleanup Program was designed to respond to lower priority sites. Under the Voluntary Cleanup Program, DTSC enters site-specific agreements with project proponents for DTSC oversight of site assessment, investigation, and/or removal or remediation activities, and the project proponents agree to pay DTSC's reasonable costs for those services.

Government Publication Date: Jun 1, 2025

GeoTracker Cleanup Program Sites: CLEANUP SITES

A list of Cleanup Program sites in the state of California made available by The State Water Resources Control Board (SWRCB) of the California Environmental Protection Agency (EPA). SWRCB tracks leaking underground storage tank cleanups as well as other water board cleanups.

Government Publication Date: Apr 4, 2025

Delisted Cleanup Program Sites: DELISTED CLEANUP

A list of Cleanup Program sites which were once included - and have since been removed from - the list of Cleanup Program Sites in GeoTracker. GeoTracker is the State Water Resource Control Boards' data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Government Publication Date: May 27, 2025

Delisted County Records: DELISTED COUNTY

Records removed from county or CUPA databases. Records may be removed from the county lists made available by the respective county departments because they are inactive, or because they have been deemed to be below reportable thresholds.

Government Publication Date: Jun 24, 2025

Delisted County Tanks: DELISTED COUNTY TANK

Storage Tank records removed from county or CUPA databases. Records may be removed from the county lists made available by the respective county departments because they are inactive, or because they have been deemed to be below reportable thresholds.

Government Publication Date: Apr 9, 2025

Delisted County Leaking Tanks: DELISTED COUNTY LTANK

Leaking Storage tank records removed from county or CUPA databases.

Government Publication Date: Jul 25, 2025

Tribal

Leaking Underground Storage Tanks on Tribal/Indian Lands: INDIAN LUST

This list of leaking underground storage tanks (LUSTs) on Tribal/Indian Lands in Region 9, which includes California, is made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: Oct 15, 2024

Underground Storage Tanks on Tribal/Indian Lands: INDIAN UST

This list of underground storage tanks (USTs) on Tribal/Indian Lands in Region 9, which includes California, is made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: Oct 15, 2024

Delisted Tribal Leaking Storage Tanks: DELISTED INDIAN LST

Leaking Underground Storage Tank (LUST) facilities which once appeared on - and have since been removed from - the Regional Tribal/Indian LUST lists made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: Apr 1, 2025

Delisted Tribal Underground Storage Tanks: DELISTED INDIAN UST

Underground Storage Tank (UST) facilities which once appeared on - and have since been removed from - the Regional Tribal/Indian UST lists made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: Apr 1, 2025

County

Kern County - UST List: UST KERN

A list of active and inactive Underground Storage Tanks made available by the Environmental Health Division of Kern County, California.

Government Publication Date: Nov 30, 2021

Kern County - AST List: AST KERN

A list of aboveground storage tanks in the county of Kern. This list is made available by Kern County Public Health Services Department.

Government Publication Date: Nov 30, 2021

Kern County - CUPA List: CUPA KERN

A list of facilities associated with various Certified Unified Program Agency (CUPA) programs in the County of Kern. This list is made available by Kern County Environmental Health Services Department which has been certified by CalEPA to implement the Unified program as a CUPA for Kern County.

Government Publication Date: Nov 30, 2021

Kern County - City of Bakersfield CUPA List: CUPA BAKERSFIELD

A list of facilities associated with various Certified Unified Program Agency (CUPA) programs in the City of Bakersfield. This list is made available by the City of Bakersfield Fire Department.

Government Publication Date: Jul 28, 2023

Additional Environmental Record Sources

Federal

PFAS Greenhouse Gas Emissions Data: PFAS GHG

The U.S. Environmental Protection Agency's Greenhouse Gas Reporting Program (GHGRP) collects Greenhouse Gas (GHG) data from large emitting facilities (25,000 metric tons of carbon dioxide equivalent (CO2e) per year), and suppliers of fossil fuels and industrial gases that results in GHG emissions when used. Includes GHG emissions data for facilities that emit or have emitted since 2010 chemicals identified in EPA's CompTox Chemicals Dashboard list of PFAS without explicit structures and list of PFAS structures in DSSTox. PFAS emissions data has been identified for facilities engaged in the following industrial processes: Aluminum Production (GHGRP Subpart F), HCFC-22 Production and HFC-23 Destruction (Subpart O), Electronics Manufacturing (Subpart I), Fluorinated Gas Production (Subpart L), Magnesium Production (Subpart T), Electrical Transmission and Distribution Equipment Use (Subpart DD), and Manufacture of Electric Transmission and Distribution Equipment (Subpart SS). Over time, other industrial processes with required GHGRP reporting may include PFAS emissions data and the list of reportable gases may change over time. Note that some regulatory programs have specified chemical structure requirements that define PFAS differently than the lists in EPA's CompTox Chemicals Dashboard.

Government Publication Date: May 9, 2025

On-Scene Coordinator Response Sites: OSC RESPONSE

This list of On-Scene Coordinator (OSC) Response Sites is provided by the U.S. Environmental Protection Agency (EPA). OSCs are the federal officials responsible for monitoring or directing responses to all oil spills and hazardous substance releases reported to the federal government. OSCs coordinate all federal efforts with, and provide support and information to local, state, and regional response communities. An OSC is an agent of either EPA or the U.S. Coast Guard (USCG), depending on where the incident occurs. EPA's OSCs have primary responsibility for spills and releases to inland areas and waters. USCG OSCs have responsibility for coastal waters and the Great Lakes. In general, an OSC has the following key responsibilities during and after a response: Assessment, Monitoring, Response Assistance, and Evaluation.

Government Publication Date: Apr 4, 2024

Facility Registry Service/Facility Index: FINDS/FRS

The Facility Registry Service (FRS) is a centrally managed database that identifies facilities, sites, or places subject to environmental regulations or of environmental interest. FRS creates high-quality, accurate, and authoritative facility identification records through rigorous verification and management procedures that incorporate information from program national systems, state master facility records, and data collected from EPA's Central Data Exchange registrations and data management personnel. This list is made available by the U.S. Environmental Protection Agency (EPA).

Government Publication Date: Apr 23, 2025

Toxics Release Inventory (TRI) Program: TRIS

The U.S. Environmental Protection Agency's Toxics Release Inventory (TRI) is a database containing data on disposal or other releases of toxic chemicals from U.S. facilities and information about how facilities manage those chemicals through recycling, energy recovery, and treatment. There are currently 770 individually listed chemicals and 33 chemical categories covered by the TRI Program. Facilities that manufacture, process or otherwise use these chemicals in amounts above established levels must submit annual reporting forms for each chemical. Note that the TRI chemical list does not include all toxic chemicals used in the U.S. One of TRI's primary purposes is to inform communities about toxic chemical releases to the environment. This database includes TRI Reporting Data for calendar years 1987 through 2021 and Preliminary Data for 2022.

Government Publication Date: Sep 20, 2023

PFOA/PFOS Contaminated Sites: PFAS NPL

This list of Superfund Sites with Per- and Polyfluoroalkyl Substances (PFAS) detections is made available by the U.S. Environmental Protection Agency (EPA) in their PFAS Analytic Tools data, previously the list was obtained by EPA FOIA requests. EPA's Office of Land and Emergency Management and EPA Regional Offices maintain what is known about site investigations, contamination, and remedial actions under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) where PFAS is present in the environment. Limitations: Detections of PFAS at National Priorities List (NPL) sites do not mean that people are at risk from PFAS, are exposed to PFAS, or that the site is the source of the PFAS. The information in the Superfund NPL and Superfund Alternative Agreement (SAA) PFAS detection site list is years old and may not be accurate today. Site information such as site name, site ID, and location has been confirmed for accuracy; however, PFAS-related information such as media sampled, drinking water being above the health advisory, or mitigation efforts has not been verified. For Federal Facilities data, the other Federal agencies (OFA) are the lead agency for their data and provided them to EPA.

Government Publication Date: Mar 31, 2025

Federal Agency Locations with Known or Suspected PFAS Detections: PFAS FED SITES

This list of federal agency locations with known or suspected detections of Per- and Polyfluoroalkyl Substances (PFAS) is made available by the U.S. Environmental Protection Agency's (EPA) PFAS Analytic Tools data. The EPA outlines that these data are gathered from several federal entities, such as the federal Superfund program, Department of Defense (DOD), National Aeronautics and Space Administration (NASA), Department of Transportation (DOT), and Department of Energy (DOE). The dates this data was extracted for the PFAS Analytic Tools range from 2022 to 2024. Sites on this list do not necessarily reflect the source/s of PFAS contamination and detections do not indicate level of risk or human exposure at the site. Agricultural notifications in this data are limited to DOD sites only. At this time, the EPA is aware that this list is not comprehensive of all Federal agencies.

Government Publication Date: Oct 24, 2024

SSEHRI PFAS Contamination Sites: PFAS SSEHRI

This PFAS Contamination Site Tracker database is compiled by the PFAS Project Lab, part of the Social Science Environmental Health Research Institute (SSEHRI) at Northeastern University. According to the SSEHRI, the database records qualitative and quantitative data from each known site of PFAS contamination, including timeline of discovery, sources, levels, health impacts, community response, and government response. The goal of this database is to compile information and support public understanding of the rapidly unfolding issue of PFAS contamination. All data presented was extracted from government websites, news articles, or publicly available documents. Locations for the Known PFAS Contamination Sites are sourced from the PFAS Sites and Community Resources Map by the PFAS-REACH team, credited to PFAS Project Lab, Silent Spring Institute, and PFAS Exchange. Disclaimer: The source conveys the data undergoes regular updates as new information becomes available, some sites may be missing and/or contain information that is incorrect or outdated, as well as their information represents all contamination sites SSEHRI is aware of, not all possible contamination sites. This data is not intended to be used for legal purposes. Access the following source link for the most current information: https://pfasproject.com/pfas-sites-and-community-resources/

Government Publication Date: Jun 27, 2024

National Response Center PFAS Spills: PFAS ERNS

This Per- and Poly-Fluoroalkyl Substances (PFAS) Spills dataset is made available via the U.S. Environmental Protection Agency's (EPA) PFAS Analytic Tools. The National Response Center (NRC), operated by the U.S. Coast Guard, is the designated federal point of contact for reporting all oil, chemical, and other discharges into the environment, for the United States and its territories. This dataset contains NRC spill information from 1990 to the present that is restricted to records associated with PFAS and PFAS-containing materials. Incidents are filtered to include only records with a "Material Involved" or "Incident Description" related to Aqueous Film Forming Foam (AFFF). The keywords used to filter the data included "AFFF," "Fire Fighting Foam," "Aqueous Film Forming Foam," "Fire Suppressant Foam, "PFAS," "PERFL," "PFOA," "PFOS," and "Genx." Limitations: The data from the NRC website contains initial incident data that has not been validated or investigated by a federal/state response agency. Keyword searches may misidentify some incident reports that do not contain PFAS. This dataset should also not be considered to be exhaustive of all PFAS spills/release incidents.

Government Publication Date: Jun 16, 2025

PFAS NPDES Discharge Monitoring: PFAS NPDES

This list of National Pollutant Discharge Elimination System (NPDES) permitted facilities with required monitoring for Per- and Polyfluoroalkyl (PFAS) Substances is made available via the U.S. Environmental Protection Agency (EPA)'s PFAS Analytic Tools. Any point-source wastewater discharger to waters of the United States must have a NPDES permit, which defines a set of parameters for pollutants and monitoring to ensure that the discharge does not degrade water quality or impair human health. This list includes NPDES permitted facilities associated with permits that monitor for Per- and Polyfluoroalkyl Substances (PFAS), limited to the years 2007 - present. EPA further advises the following regarding these data: currently, fewer than half of states have required PFAS monitoring for at least one of their permittees, and fewer states have established PFAS effluent limits for permittees. For states that may have required monitoring, some reporting and data transfer issues may exist on a state-by-state basis.

Government Publication Date: Dec 16, 2024

Perfluorinated Alkyl Substances (PFAS) from Toxic Release Inventory: PFAS TRI

List of Toxics Release Inventory (TRI) facilities at which the reported chemical is a per- or polyfluoroalkyl (PFAS) substance included in the U.S. Environmental Protection Agency's (EPA) consolidated PFAS Master List of PFAS Substances. Encompasses Toxics Release Inventory records included in the EPA PFAS Analytic Tools. The EPA's TRI database currently tracks information on disposal or releases of 770 individually listed toxic chemicals and 33 chemical categories from thousands of U.S. facilities and details about how facilities manage those chemicals through recycling, energy recovery, and treatment. This listing includes TRI Reporting Data for calendar years 1987 through 2021 and Preliminary Data for 2022.

Government Publication Date: Sep 20, 2023

PFAS Water Quality Portal Sampling Data: PFAS WATER

This Per- and Poly-Fluoroalkyl Substances (PFAS) Environmental Media Sampling Data is made available via the U.S. Environmental Protection Agency's (EPA) PFAS Analytic Tools. The Water Quality Portal (WQP), as a cooperative service sponsored by the United States Geological Survey, the EPA, and the National Water Quality Monitoring Council, is part of a modernized repository storing ambient sampling data for all environmental media and tissue samples. A wide range of federal, state, tribal and local governments, academic and non-governmental organizations, and individuals submit project details and sampling results to this public repository. Limitations: EPA did not carry out the sampling or testing of a majority of the data in the WQP PFAS dataset. EPA can only speak to the accuracy and completeness of the data from projects like the National Aquatic Resource Surveys for which EPA is the data owner/organization. Data may exist within the file on Quality Assurance Project Plans (QAPPs) and the approving agency of the QAPP, if a QAPP is entered.

Government Publication Date: Jan 13, 2025

PFAS TSCA Manufacture and Import Facilities: PFAS TSCA

The U.S. Environmental Protection Agency (EPA) issued the Chemical Data Reporting (CDR) Rule under the Toxic Substances Control Act (TSCA) and requires chemical manufacturers and facilities that manufacture or import chemical substances to report data to EPA. This list is specific only to TSCA Manufacture and Import Facilities with reported per- and poly-fluoroalkyl (PFAS) substances. Data file is sourced from EPA's PFAS Analytic Tools TSCA dataset which includes CDR/Inventory Update Reporting data from 1998 up to 2020. Disclaimer: This data file includes production and importation data for chemicals identified in EPA's CompTox Chemicals Dashboard list of PFAS without explicit structures and list of PFAS structures in DSSTox. Note that some regulations have specific chemical structure requirements that define PFAS differently than the lists in EPA's CompTox Chemicals Dashboard. Reporting information on manufactured or imported chemical substance amounts should not be compared between facilities, as some companies claim Chemical Data Reporting Rule data fields for PFAS information as Confidential Business Information.

Government Publication Date: Jan 5, 2023

PFAS Waste Transfers from RCRA e-Manifest: PFAS E-MANIFEST

This Per- and Poly-Fluoroalkyl Substances (PFAS) Waste Transfers dataset is made available via the U.S. Environmental Protection Agency's (EPA) PFAS Analytic Tools. Every shipment of hazardous waste in the U.S. must be accompanied by a shipment manifest, which is a critical component of the cradle-to-grave tracking of wastes mandated by the Resource Conservation and Recovery Act (RCRA). According to the EPA, currently no Federal Waste Code exists for any PFAS compounds. To work around the lack of PFAS waste codes in the RCRA database, EPA developed the PFAS Transfers dataset by mining e-Manifest records containing at least one of these common PFAS keywords: • PFAS • PFOA • PFOS • PERFL • AFFF • GENX • GEN-X (plus the Vermont state-specific waste codes). Limitations: Amount or concentration of PFAS being transferred cannot be determined from the manifest information. Keyword searches may misidentify some manifest records that do not contain PFAS. This dataset should also not be considered to be exhaustive of all PFAS waste transfers.

Government Publication Date: Mar 23, 2025

PFAS Industry Sectors: PFAS IND

This Per- and Poly-Fluoroalkyl Substances (PFAS) Industry Sectors dataset is made available via the U.S. Environmental Protection Agency's (EPA) PFAS Analytic Tools. The EPA developed the dataset from various sources that show which industries may be handling PFAS including: EPA's Enforcement and Compliance History Online (ECHO) records restricted to potential PFAS-handling industry sectors; ECHO records for Fire Training Sites identified where fire-fighting foam may have been used in training exercises; and 14 CFR Part 139 Airports compiled from historic and current records from the FAA Airport Data and Information Portal. Since July 2006, all certificated Part 139 Airports are required to have fire-fighting foam onsite that meet certain military specifications, which to date have been fluorinated (Aqueous Film Forming Foam). Limitations: Inclusion in this dataset does not indicate that PFAS are being manufactured, processed, used, or released by the facility. Listed facilities potentially handle PFAS based on their industrial profile, but are unconfirmed by the EPA. Keyword searches in ECHO for Fire Training sites may misidentify some facilities and should not be considered to be an exhaustive list of fire training facilities in the U.S.

Government Publication Date: Jun 2, 2025

Hazardous Materials Information Reporting System: HMIRS

The Hazardous Materials Incident Reporting System (HMIRS) database contains unintentional hazardous materials release information reported to the U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration.

Government Publication Date: May 29, 2024

National Clandestine Drug Labs: NCDL

The U.S. Department of Justice ("the Department"), Drug Enforcement Administration (DEA), provides this data as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy.

Government Publication Date: Nov 30, 2023

Toxic Substances Control Act: TSCA

The U.S. Environmental Protection Agency (EPA) is amending the Toxic Substances Control Act (TSCA) section 8(a) Inventory Update Reporting (IUR) rule and changing its name to the Chemical Data Reporting (CDR) rule. The CDR enables EPA to collect and publish information on the manufacturing, processing, and use of commercial chemical substances and mixtures (referred to hereafter as chemical substances) on the TSCA Chemical Substance Inventory (TSCA Inventory). This includes current information on chemical substance production volumes, manufacturing sites, and how the chemical substances are used. This information helps the Agency determine whether people or the environment are potentially exposed to reported chemical substances. EPA publishes submitted CDR data that is not Confidential Business Information (CBI). EPA CDR collections occur approximately every four years and reporting requirements change per collection.

Government Publication Date: May 12, 2022

Hist TSCA: HIST TSCA

The Environmental Protection Agency (EPA) is amending the Toxic Substances Control Act (TSCA) section 8(a) Inventory Update Reporting (IUR) rule and changing its name to the Chemical Data Reporting (CDR) rule.
The 2006 IUR data summary report includes information about chemicals manufactured or imported in quantities of 25,000 pounds or more at a single site during calendar year 2005. In addition to the basic manufacturing information collected in previous reporting cycles, the 2006 cycle is the first time EPA collected information to characterize exposure during manufacturing, processing and use of organic chemicals. The 2006 cycle also is the first time manufacturers of inorganic chemicals were required to report basic manufacturing information.

Government Publication Date: Dec 31, 2006

FTTS Administrative Case Listing: FTTS ADMIN

An administrative case listing from the Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA) and Toxic Substances Control Act (TSCA), together known as FTTS. This database was obtained from the Environmental Protection Agency's (EPA) National Compliance Database (NCDB). The FTTS and NCDB was shut down in 2006.

Government Publication Date: Jan 19, 2007

FTTS Inspection Case Listing: FTTS INSP

An inspection case listing from the Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA) and Toxic Substances Control Act (TSCA), together known as FTTS. This database was obtained from the Environmental Protection Agency's (EPA) National Compliance Database (NCDB). The FTTS and NCDB was shut down in 2006.

Government Publication Date: Jan 19, 2007

Potentially Responsible Parties List: PRP

Early in the site cleanup process, the U.S. Environmental Protection Agency (EPA) conducts a search to find the Potentially Responsible Parties (PRPs). The EPA looks for evidence to determine liability by matching wastes found at the site with parties that may have contributed wastes to the site. This listing contains PRPs, Noticed Parties, at sites in the EPA's Superfund Enterprise Management System (SEMS).

Government Publication Date: Apr 25, 2025

State Coalition for Remediation of Drycleaners Listing: SCRD DRYCLEANER

The State Coalition for Remediation of Drycleaners (SCRD) was established in 1998, with support from the U.S. Environmental Protection Agency (EPA) Office of Superfund Remediation and Technology Innovation. Coalition members are states with mandated programs and funding for drycleaner site remediation. Current members are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin. Since 2017, the SCRD no longer maintains this data, refer to applicable state source data where available.

Government Publication Date: Nov 08, 2017

Integrated Compliance Information System (ICIS): ICIS

The Integrated Compliance Information System (ICIS) database contains integrated enforcement and compliance information across most of U.S. Environmental Protection Agency's (EPA) programs. The vision for ICIS is to replace EPA's independent databases that contain enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions and a subset of the Permit Compliance System (PCS), which supports the National Pollutant Discharge Elimination System (NPDES). This information is maintained by the EPA Headquarters and at the Regional offices. A future release of ICIS will completely replace PCS and will integrate that information with Federal actions already in the system. ICIS also has the capability to track other activities that support compliance and enforcement programs, including incident tracking, compliance assistance, and compliance monitoring.

Government Publication Date: May 3, 2025

Drycleaner Facilities: FED DRYCLEANERS

A list of drycleaner facilities from Enforcement and Compliance History Online (ECHO) data as made available by the U.S. Environmental Protection Agency (EPA), sourced from the ECHO Exporter file. This EPA source file tracks facilities that possess NAICS and SIC codes that classify businesses as drycleaner establishments.

Government Publication Date: Apr 19, 2025

Delisted Drycleaner Facilities: DELISTED FED DRY

List of sites removed from the list of Drycleaner Facilities (sites in the EPA's Integrated Compliance Information System (ICIS) with NAIC or SIC codes identifying the business as a drycleaner establishment).

Government Publication Date: Apr 19, 2025

Formerly Used Defense Sites: FUDS

Formerly Used Defense Sites (FUDS) are properties that were formerly owned by, leased to, or otherwise possessed by and under the jurisdiction of the Secretary of Defense prior to October 1986, where the Department of Defense (DOD) is responsible for an environmental restoration. The FUDS Annual Report to Congress (ARC) is published by the U.S. Army Corps of Engineers (USACE). This data is compiled from the USACE's Geospatial FUDS data layers and Homeland Infrastructure Foundation-Level Data (HIFLD) FUDS dataset which applies to the Fiscal Year 2021 FUDS Inventory.

Government Publication Date: May 15, 2023

FUDS Munitions Response Sites: FUDS MRS

Boundaries of Munitions Response Sites (MRS), published with the Formerly Used Defense Sites (FUDS) Annual Report to Congress (ARC) by the U.S. Army Corps of Engineers (USACE). An MRS is a discrete location within a Munitions response area (MRA) that is known to require a munitions response. An MRA means any area on a defense site that is known or suspected to contain unexploded ordnance (UXO), discarded military munitions (DMM), or munitions constituents (MC). This data is compiled from the USACE's Geospatial MRS data layers and Homeland Infrastructure Foundation-Level Data (HIFLD) MRS dataset.

Government Publication Date: May 15, 2023

Former Military Nike Missile Sites: FORMER NIKE

This information was taken from report DRXTH-AS-IA-83A016 (Historical Overview of the Nike Missile System, 12/1984) which was performed by Environmental Science and Engineering, Inc. for the U.S. Army Toxic and Hazardous Materials Agency Assessment Division. The Nike system was deployed between 1954 and the mid-1970's. Among the substances used or stored on Nike sites were liquid missile fuel (JP-4); starter fluids (UDKH, aniline, and furfuryl alcohol); oxidizer (IRFNA); hydrocarbons (motor oil, hydraulic fluid, diesel fuel, gasoline, heating oil); solvents (carbon tetrachloride, trichloroethylene, trichloroethane, stoddard solvent); and battery electrolyte. The quantities of material a disposed of and procedures for disposal are not documented in published reports. Virtually all information concerning the potential for contamination at Nike sites is confined to personnel who were assigned to Nike sites. During deactivation most hardware was shipped to depot-level supply points. There were reportedly instances where excess materials were disposed of on or near the site itself at closure. There was reportedly no routine site decontamination.

Government Publication Date: Dec 2, 1984

PHMSA Pipeline Safety Flagged Incidents: PIPELINE INCIDENT

This list of flagged pipeline incidents is made available by the U.S. Department of Transportation (US DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA). PHMSA regulations require incident and accident reports for five different pipeline system types. Accidents reported on hazardous liquid gravity lines (§195.13) and reporting-regulated-only hazardous liquid gathering lines (§195.15) and incidents reported on Type R gas gathering (§192.8(c)) are not included in the flagged incident file data.

Government Publication Date: May 6, 2024

Material Licensing Tracking System (MLTS): MLTS

A list of sites that store radioactive material subject to the Nuclear Regulatory Commission (NRC) licensing requirements. This list is maintained by the NRC. As of September 2016, the NRC no longer releases location information for sites. Site locations were last received in July 2016.

Government Publication Date: May 11, 2021

Historic Material Licensing Tracking System (MLTS) sites: HIST MLTS

A historic list of sites that have inactive licenses and/or removed from the Material Licensing Tracking System (MLTS). In some cases, a site is removed from the MLTS when the state becomes an "Agreement State". An Agreement State is a State that has signed an agreement with the Nuclear Regulatory Commission (NRC) authorizing the State to regulate certain uses of radioactive materials within the State.

Government Publication Date: Jan 31, 2010

Mines Master Index File: MINES

The Master Index File (MIF) is provided by the United States Department of Labor, Mine Safety and Health Administration (MSHA). This file, which was originally created in the 1970's, contained many Mine-IDs that were invalid. MSHA removes invalid IDs from the MIF upon discovery. MSHA applicable data includes the following: all Coal and Metal/Non-Metal mines under MSHA's jurisdiction since 1/1/1970; mine addresses for all mines in the database except for Abandoned mines prior to 1998 from MSHA's legacy system (addresses may or may not correspond with the physical location of the mine itself); violations that have been assessed penalties as a result of MSHA inspections beginning on 1/1/2000; and violations issued as a result of MSHA inspections conducted beginning on 1/1/2000.

Government Publication Date: Feb 5, 2024

Surface Mining Control and Reclamation Act Sites: SMCRA

This inventory of land and water impacted by past mining (primarily legacy coal mining operations) is maintained by the U.S. Department of the Interior's Office of Surface Mining Reclamation and Enforcement (OSMRE), as it provides information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). This inventory contains information on the type and extent of Abandoned Mine Land (AML) Problems, as well as information on the cost associated with the reclamation of those problems. The data is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed. Disclaimer: Per the OSMRE, States and tribes who enter their data into e-AMLIS (AML Inventory System) may truncate their latitude and longitude so the precise location of usually dangerous AMLs is not revealed in an effort to protect the public from searching for these AMLs, most of which are on private property. If more precise location information is needed, please contact the applicable state/tribe of interest.

Government Publication Date: May 20, 2024

Mineral Resource Data System: MRDS

The Mineral Resource Data System (MRDS) is a collection of reports describing metallic and nonmetallic mineral resources throughout the world. Included are deposit name, location, commodity, deposit description, geologic characteristics, production, reserves, resources, and references. This database contains the records previously provided in the Mineral Resource Data System (MRDS) of USGS and the Mineral Availability System/Mineral Industry Locator System (MAS/MILS) originated in the U.S. Bureau of Mines, which is now part of USGS. The USGS has ceased systematic updates of the MRDS database with their focus more recently on deposits of critical minerals while providing a well-documented baseline of historical mine locations from USGS topographic maps.

Government Publication Date: Mar 15, 2016

DOE Legacy Management Sites: LM SITES

The U.S. Department of Energy (DOE) Office of Legacy Management (LM) currently manages radioactive and chemical waste, environmental contamination, and hazardous material at over 100 sites across the U.S. The LM manages sites with diverse regulatory drivers (statutes or programs that direct cleanup and management requirements at DOE sites) or as part of internal DOE or congressionally-recognized programs, such as but not limited to: Formerly Utilized Sites Remedial Action Program (FUSRAP), Uranium Mill Tailings Radiation Control Act (UMTRCA Title I, Tile II), Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Resource Conservation and Recovery Act (RCRA), Decontamination and Decommissioning (D&D), Nuclear Waste Policy Act (NWPA). This site listing includes data exported from the DOE Office of LM's Geospatial Environmental Mapping System (GEMS). GEMS Data disclaimer: The DOE Office of LM makes no representation or warranty, expressed or implied, regarding the use, accuracy, availability, or completeness of the data presented herein.

Government Publication Date: Dec 12, 2023

Alternative Fueling Stations: ALT FUELS

This list of alternative fueling stations is sourced from the Alternative Fuels Data Center (AFDC). The U.S. Department of Energy's Office of Energy Efficiency & Renewable Energy launched the AFDC in 1991 as a repository for alternative fuel vehicle performance data, which provides a wealth of information and data on alternative and renewable fuels, advanced vehicles, fuel-saving strategies, and emerging transportation technologies. The data includes Biodiesel (B20 and above), Compressed Natural Gas (CNG), Electric, Ethanol (E85), Hydrogen, Liquefied Natural Gas (LNG), Propane (LPG), and Renewable Diesel (R20 and above) fuel type locations.

Government Publication Date: May 12, 2025

Superfunds Consent Decrees: CONSENT DECREES

This list of Superfund consent decrees is provided by the Department of Justice, Environment & Natural Resources Division (ENRD) through a Freedom of Information Act (FOIA) applicable file. This listing includes Cases filed since 2010 limited to the following: Consent Decrees for CERCLA or Superfund Sites filed and/or as proposed within the ENRD's Case Management System (CMS); and applicable ENRD's Environmental Defense Section (EDS) CERCLA Cases with "Consent" in History Note. CMS may not reflect the latest developments in a case, nor can the agency guarantee the accuracy of the data. ENRD Disclaimer: Congress excluded three discrete categories of law enforcement and national security records from the requirements of the FOIA; response is limited to those records that are subject to the requirements of the FOIA; however, this should not be taken as an indication that excluded records do, or do not, exist.

Government Publication Date: Jun 26, 2024

Air Facility System: AFS

This EPA retired Air Facility System (AFS) dataset contains emissions, compliance, and enforcement data on stationary sources of air pollution. Regulated sources cover a wide spectrum; from large industrial facilities to relatively small operations such as dry cleaners. AFS does not contain data on facilities that are solely asbestos demolition and/or renovation contractors, or landfills. ECHO Clean Air Act data from AFS are frozen and reflect data as of October 17, 2014; the EPA retired this system for Clean Air Act stationary sources and transitioned to ICIS-Air.

Government Publication Date: Oct 17, 2014

Registered Pesticide Establishments: SSTS

This national list of active EPA-registered foreign and domestic pesticide and/or device-producing establishments is based on data from the Section Seven Tracking System (SSTS). The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Section 7 requires that each producing establishment must place its EPA establishment number on the label or immediate container of each pesticide, active ingredient or device produced. An EPA establishment number on a pesticide product label identifies the EPA registered location where the product was produced. The list of establishments is made available by the U.S. Environmental Protection Agency (EPA).

Government Publication Date: Feb 29, 2024

Polychlorinated Biphenyl (PCB) Transformers: PCBT

Locations of Transformers Containing Polychlorinated Biphenyls (PCBs) registered with the United States Environmental Protection Agency. PCB transformer owners must register their transformer(s) with EPA. Although not required, PCB transformer owners who have removed and properly disposed of a registered PCB transformer may notify EPA to have their PCB transformer de-registered. Data made available by EPA.

Government Publication Date: Oct 15, 2019

Polychlorinated Biphenyl (PCB) Notifiers: PCB

Facilities included in the national list of facilities that have notified the United States Environmental Protection Agency (EPA) of Polychlorinated Biphenyl (PCB) activities. Any company or person storing, transporting or disposing of PCBs or conducting PCB research and development must notify the EPA and receive an identification number.

Government Publication Date: May 23, 2024

Power Plants: POWER PLANTS

This list of power plants is provided by the U.S. Energy Information Administration (EIA). The listing includes operable electric generating plants in the United States by energy source, originating from the EIA-860, Annual Electric Generator Report; EIA-860M, Monthly Update to the Annual Electric Generator Report; and EIA-923, Power Plant Operations Report. It includes all operable plants by energy source with a combined nameplate capacity of 1 megawatt or more that are operating, are on standby, or out of service for short- or long-term.

Government Publication Date: Apr 15, 2024

Historical Business Activity Risk: HIST RISK

Proprietary list of sites identified as potentially having engaged in business activity that poses a higher-than-normal risk of contamination. Records originate from historical city directories, and are included in this list based on broad business categories Potentially Hazardous Chemical Users and Fuel and Automotive, including but not limited to Dry Cleaners and Fuel Stations, Garages, etc. Inclusion in this listing does not indicate that there is or ever has been contamination; rather, sites are included in this list due to their potential for having engaged in a business activity presenting an elevated risk of contamination. The list was compiled from various city directories including Polks, Millers, Mullin Kille, Interstate Directory, and State Directory Co; spanning roughly 1920s through 1960 depending on information available by city.

Government Publication Date: Jan 1, 1960

State

PFAS Sampling Locations: PFAS SAMPLING

This data is sourced from the State Water Board's GeoTracker Per- and Polyfluoroalkyl Substances (PFAS) Map tool which contains individual sampling points (i.e., soil boring, groundwater monitoring well, drinking water well for municipal drinking water systems, etc.) or a site location with PFAS analytical data. Includes analytical results that are finalized and submitted electronically by the Responsible Parties via GeoTracker's Electronic Submittal of Information Portal, and after it's accepted by a Regional Water Quality Control Board.

Government Publication Date: Feb 25, 2025

Dry Cleaning Facilities: DRYCLEANERS

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial, linen supply, commercial laundry, dry cleaning and pressing machines - Coin Operated Laundry and Dry Cleaning. This is provided by the Department of Toxic Substance Control.

Government Publication Date: Dec 20, 2021

Delisted Drycleaners: DELISTED DRYCLEANERS

Sites removed from the list of drycleaner related facilities that have EPA ID numbers, made available by the California Department of Toxic Substance Control.

Government Publication Date: Jan 31, 2022

Non-Toxic Dry Cleaning Incentive Program: DRYC GRANT

A list of grant recipients of the Non-Toxic Dry Cleaning Incentive Program made available by the California Air Resources Board (CARB). The program provides grants to eligible dry cleaning businesses to assist them in transitioning away from PERC machines to alternative non-toxic and non-smog forming technologies.

Government Publication Date: Jan 31, 2022

PFAS GeoTracker Cleanup Sites: PFAS GT CLEANUPS

A list of applicable cleanup sites from the State Water Resources Control Board's (SWRCB) GeoTracker data management system where one or more of the potential contaminants of concern are identified in the PFAS Structure List and/or PFAS Chemicals Without Explicit Structure List made available by the United States Environmental Protection Agency (US EPA).

Government Publication Date: May 27, 2025

PFOA/PFOS Groundwater: PFAS GW

A list of water wells from the Groundwater Ambient Monitoring and Assessment Program (GAMA) Groundwater Information System with the groundwater chemical perfluorooctanoic acid (PFOA) (NL = 0.014 UG/L) or perfluorooctanoic sulfonate (PFOS) (NL = 0.013 UG/L). The GAMA Groundwater Information System search is made available by California Water Boards.

Government Publication Date: Feb 15, 2025

PFAS Investigations: PFAS INVEST

This list of potential Per- and Polyfluoroalkyl Substance (PFAS) sites is compiled from the California State Water Resources Control Board's (SWRCB) PFAS Investigations Map tool. The SWRCB issued investigative orders, per California Water Code (CWC) Section 13267 and/or 13383, to these sites. Orders were also issued to the public water systems to sample wells in the vicinity of these locations. Military facilities have been identified by the Department of Defense (DOD) as part of their efforts to investigate PFAS per the Defense Environmental Restoration Program (DERP) under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The data includes locations for Airports, Chrome Plating Facilities, Landfills, Publicly Owned Treatment Works, Refineries and Bulk Terminals, DOD Facilities, and Monitored Drinking Water Wells being investigated for potential PFAS.

Government Publication Date: Jan 23, 2024

Hazardous Waste and Substances Site List - Site Cleanup: HWSS CLEANUP

The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the State, local agencies and developers to comply with the California Environmental Quality Act requirements in providing information about the location of hazardous materials release sites. This list is published by California Department of Toxic Substance Control.

Government Publication Date: Mar 15, 2023

Toxic Pit Cleanup Act Sites: TOXIC PITS

The Toxic Pits Cleanup Act (TPCA) list identifies sites suspected of containing hazardous substances where cleanup has not yet been completed. This list was maintained by the State Water Resources Control Board (SWRCB), is not longer maintained, and updates are not planned.

Government Publication Date: Jul 1, 1995

List of Hazardous Waste Facilities Subject to Corrective Action: DTSC HWF

This is a list of hazardous waste facilities identified in Health and Safety Code (HSC) § 25187.5. These facilities are those where Department of Toxic Substances Control (DTSC) has taken or contracted for corrective action because a facility owner/operator has failed to comply with a date for taking corrective action in an order issued under HSC § 25187, or because DTSC determined that immediate corrective action was necessary to abate an imminent or substantial endangerment.

Government Publication Date: Jul 18, 2016

EnviroStor Inspection, Compliance, and Enforcement: INSP COMP ENF

A list of permitted facilities with inspections and enforcements tracked by the California Department of Toxic Substance Control's (DTSC) EnviroStor data management system.

Government Publication Date: Jun 17, 2025

School Property Evaluation Program Sites: SCH

A list of sites registered with The Department of Toxic Substances Control (DTSC) School Property Evaluation and Cleanup (SPEC) Division. SPEC is responsible for assessing, investigating and cleaning up proposed school sites. The Division ensures that selected properties are free of contamination or, if the properties were previously contaminated, that they have been cleaned up to a level that protects the students and staff who will occupy the new school.

Government Publication Date: Jun 1, 2025

California Hazardous Material Incident Report System (CHMIRS): CHMIRS

A list of reported hazardous material incidents, spills, and releases from the California Hazardous Material Incident Report System (CHMIRS). This listing has been made available by the California Governor's Office of Emergency Services (Cal OES).

Government Publication Date: Apr 2, 2025

Historical California Hazardous Material Incident Report System (CHMIRS): HIST CHMIRS

A list of reported hazardous material incidents, spills, and releases from the California Hazardous Material Incident Report System (CHMIRS) prior to 1993. This list has been made available by the California Office of Emergency Services (OES).

Government Publication Date: Jan 1, 1993

Handlers from Hazardous Waste Manifest Data: HAZNET

A list of handlers not otherwise classified as Treatment, Storage, Disposal facilities (TSDF) or generators from the facilities and manifests data made available by the California Department of Toxic Substances Control (DTSC) in their Hazardous Waste Tracking System (HWTS).

Government Publication Date: Feb 20, 2025

Generators from Hazardous Waste Manifest Data: HAZ GEN

List of handlers listed as having generated waste from the facilities and manifests data made available by the California Department of Toxic Substances Control (DTSC) in their Hazardous Waste Tracking System (HWTS).

Government Publication Date: Feb 20, 2025

TSDF from Hazardous Waste Manifest Data: HAZ TSD

List of Treatment, Storage, and Disposal Facilities (TSDFs) from the facilities and manifests data made available by the California Department of Toxic Substances Control (DTSC) in their Hazardous Waste Tracking System (HWTS).

Government Publication Date: Feb 20, 2025

Historical Hazardous Waste Manifest Data: HIST MANIFEST

A list of historic hazardous waste manifests received by the Department of Toxic Substances Control (DTSC) from year the 1980 to 1992. The volume of manifests is typically 900,000 - 1,000,000 annually, representing approximately 450,000 - 500,000 shipments.

Government Publication Date: Dec 31, 1992

DTSC Registered Hazardous Waste Transporters: HW TRANSPORT

The California Department of Toxic Substances Control (DTSC) maintains this list of Registered Hazardous Waste Transporters.

Government Publication Date: Jun 21, 2025

Registered Waste Tire Haulers: WASTE TIRE

This list of registered waste tire haulers is maintained by the California Department of Resources Recycling and Recovery.

Government Publication Date: Jun 21, 2025

California Medical Waste Management Program Facility List: MEDICAL WASTE

This list of Medical Waste Management Program Facilities is maintained by the California Department of Public Health. The Medical Waste Management Program (MWMP) regulates the generation, handling, storage, treatment, and disposal of medical waste by providing oversight for the implementation of the Medical Waste Management Act (MWMA). The MWMP permits and inspects all medical waste off-site treatment facilities, medical waste transporters, and medical waste transfer stations. This list contains transporters, treatment, and transfer facilities.

Government Publication Date: Apr 28, 2025

Historical Cortese List: HIST CORTESE

List of sites which were once included on the Cortese list. The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the State, local agencies and developers to comply with the California Environmental Quality Act requirements for providing information about the location of hazardous sites.

Government Publication Date: Nov 13, 2008

Cease and Desist Orders and Cleanup and Abatement Orders: CDO/CAO

The California Environment Protection Agency "Cortese List" of active Cease and Desist Orders (CDO) and Cleanup and Abatement Orders (CAO). This list contains many CDOs and CAOs that do NOT concern the discharge of wastes that are hazardous materials. Many of the listed orders concern, as examples, discharges of domestic sewage, food processing wastes, or sediment that do not contain hazardous materials, but the Water Boards' database does not distinguish between these types of orders.

Government Publication Date: Dec 6, 2021

California Environmental Reporting System (CERS) Hazardous Waste Sites: CERS HAZ

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the following regulatory programs: Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, RCRA LQ HW Generator. The CalEPA oversees the statewide implementation of the Unified Program which applies regulatory standards to protect Californians from hazardous waste and materials.

Government Publication Date: May 28, 2025

Delisted Environmental Reporting System (CERS) Hazardous Waste Sites: DELISTED HAZ

This database contains a list of sites that were removed from the California Environmental Protection Agency (CalEPA) in the following regulatory programs: Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, RCRA LQ HW Generator.

Government Publication Date: Nov 29, 2018

Sites in GeoTracker: GEOTRACKER

GeoTracker is the State Water Resource Control Boards' data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater. This is a list of sites in GeoTracker that aren't otherwise categorized as LUST, Land Disposal Sites (LDS), Cleanup Sites, or sites having Waste Discharge Requirements (WDR). This listing includes program types such as Underground Injection Control (UIC), Confined Animal Facilities (CAF), Irrigated Lands Regulatory Program, plans, and non-case information.

Government Publication Date: Apr 4, 2025

Mines Listing: MINE

This list includes mine site locations extracted from the Mines Online database, maintained by the California Department of Conservation. Mines Online (MOL) is an interactive web map designed with GIS features that provide information such as the mine name, mine status, commodity sold, location, and other mine specific data. Please note: Mine location information is provided to assist experts in determining the location of mine operators in accordance with California Civil Code section 1103.4 and reflects information reported by mine operators in annual reports provided under Public Resources Code section 2207. While the Division of Mine Reclamation (DMR) attempts to populate MOL with accurate location information, the DMR cannot guarantee the accuracy of operator reported location information.

Government Publication Date: Apr 10, 2025

Recorded Environmental Cleanup Liens: LIEN

The California Department of Toxic Substance Control (DTSC) maintains this list of liens placed upon real properties. A lien is utilized by the DTSC to obtain reimbursement from responsible parties for costs associated with the remediation of contaminated properties.

Government Publication Date: Apr 10, 2025

Waste Discharge Requirements: WASTE DISCHG

List of sites in California State Water Resources Control Board (SWRCB) Waste Discharge Requirements (WDRs) Program in California, made available by the SWRCB via GeoTracker. The WDR program regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Government Publication Date: Apr 4, 2025

Toxic Pollutant Emissions Facilities: EMISSIONS

A list of criteria and toxic pollutant emissions data for facilities in California made available by the California Environmental Protection Agency - Air Resources Board (ARB). Risk data may be based on previous inventory submittals. The toxics data are submitted to the ARB by the local air districts as requirement of the Air Toxics "Hot Spots" Program.

Government Publication Date: Dec 31, 2021

Clandestine Drug Lab Sites: CDL

The Department of Toxic Substances Control (DTSC) maintains a listing of drug lab sites. DTSC is responsible for removal and disposal of hazardous substances discovered by law enforcement officials while investigating illegal/clandestine drug laboratories.

Government Publication Date: Jan 19, 2021

Tribal

No Tribal additional environmental record sources available for this State.

County

Definitions

Database Descriptions: This section provides a detailed explanation for each database including: source, information available, time coverage, and acronyms used. They are listed in alphabetic order.

Detail Report: This is the section of the report which provides the most detail for each individual record. Records are summarized by location, starting with the project property followed by records in closest proximity.

Distance: The distance value is the distance between plotted points, not necessarily the distance between the sites' boundaries. All values are an approximation.

Direction: The direction value is the compass direction of the site in respect to the project property and/or center point of the report.

Elevation: The elevation value is taken from the location at which the records for the site address have been plotted. All values are an approximation. Source: Google Elevation API.

Executive Summary: This portion of the report is divided into 3 sections:

'Report Summary'- Displays a chart indicating how many records fall on the project property and, within the report search radii.

'Site Report Summary'-Project Property'- This section lists all the records which fall on the project property. For more details, see the 'Detail Report' section.

'Site Report Summary-Surrounding Properties'- This section summarizes all records on adjacent properties, listing them in order of proximity from the project property. For more details, see the 'Detail Report' section.

Map Key: The map key number is assigned according to closest proximity from the project property. Map Key numbers always start at #1. The project property will always have a map key of '1' if records are available. If there is a number in brackets beside the main number, this will indicate the number of records on that specific property. If there is no number in brackets, there is only one record for that property.

The symbol and colour used indicates 'elevation': the red inverted triangle will dictate 'ERIS Sites with Lower Elevation', the yellow triangle will dictate 'ERIS Sites with Higher Elevation' and the orange square will dictate 'ERIS Sites with Same Elevation.'

Unplottables: These are records that could not be mapped due to various reasons, including limited geographic information. These records may or may not be in your study area, and are included as reference.

PSR
PHYSICAL SETTING REPORT

Property Information

Order Number:	25071400346p
Date Completed:	July 15, 2025
Project Number:	25-507061.1
Project Property:	Discovery Project Area - Combined Phase I n/a MOJAVE CA
Coordinates:	
Latitude:	35.0524699
Longitude:	-118.1739645
UTM Northing:	3872001.01362 Meters
UTM Easting:	381076.331689 Meters
UTM Zone:	UTM Zone 11S
Elevation:	3,194.16 ft
Slope Direction:	N

Topographic Information....2
Hydrologic Information....44
Geologic Information....65
Soil Information....84
Wells and Additional Sources....112
Summary....133
Detail Report....135
Radon Information....160
Appendix....161
Liability Notice....163

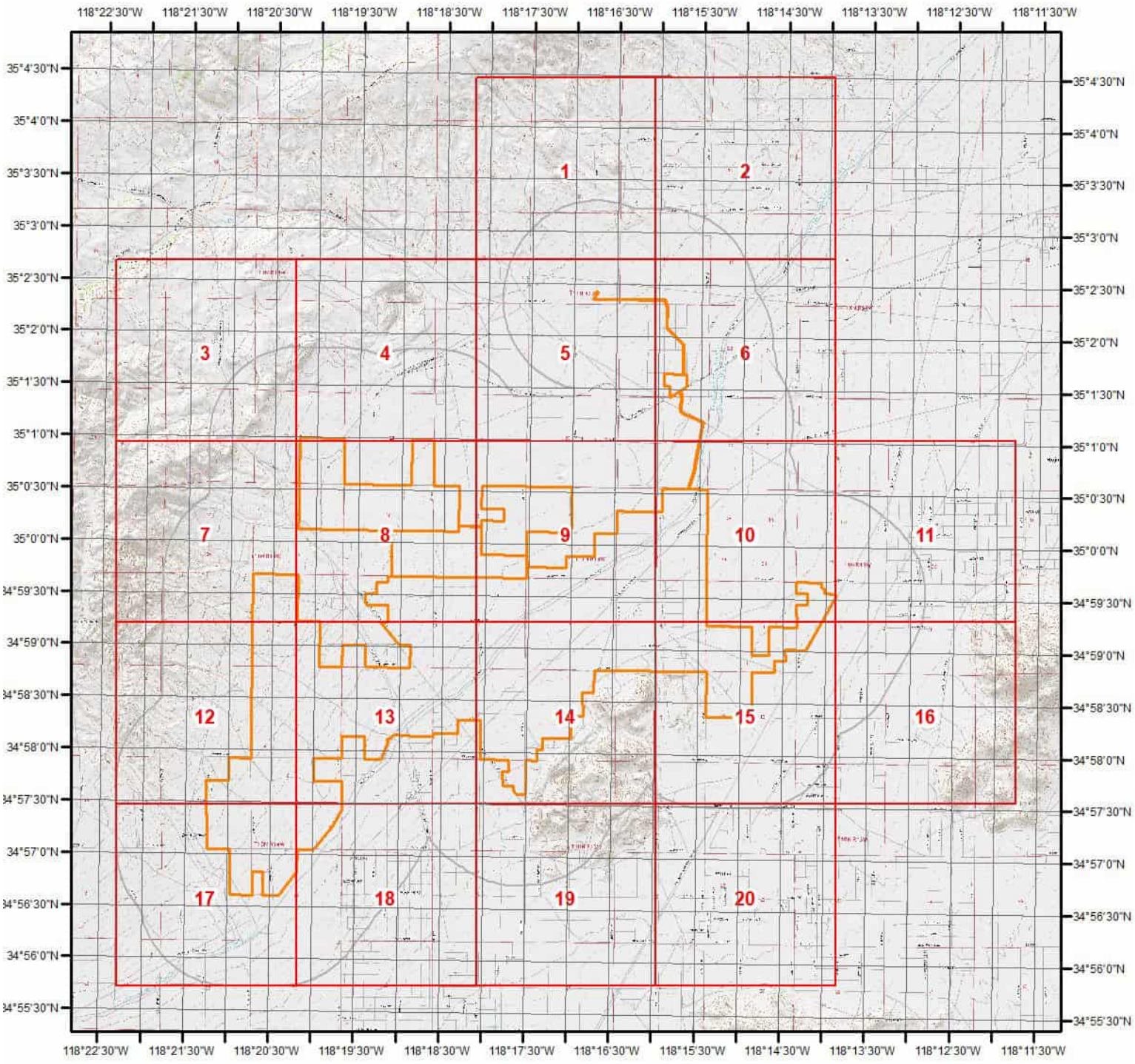
The ERIS ***Physical Setting Report - PSR*** provides comprehensive information about the physical setting around a site and includes a complete overview of topography and surface topology, in addition to hydrologic, geologic and soil characteristics. The location and detailed attributes of oil and gas wells, water wells, public water systems and radon are also included for review.

The compilation of both physical characteristics of a site and additional attribute data is useful in assessing the impact of migration of contaminants and subsequent impact on soils and groundwater.

Disclaimer

This Report does not provide a full environmental evaluation for the site or adjacent properties. Please see the terms and disclaimer at the end of the Report for greater detail.

Topographic Information



Current USGS Topo (2021)

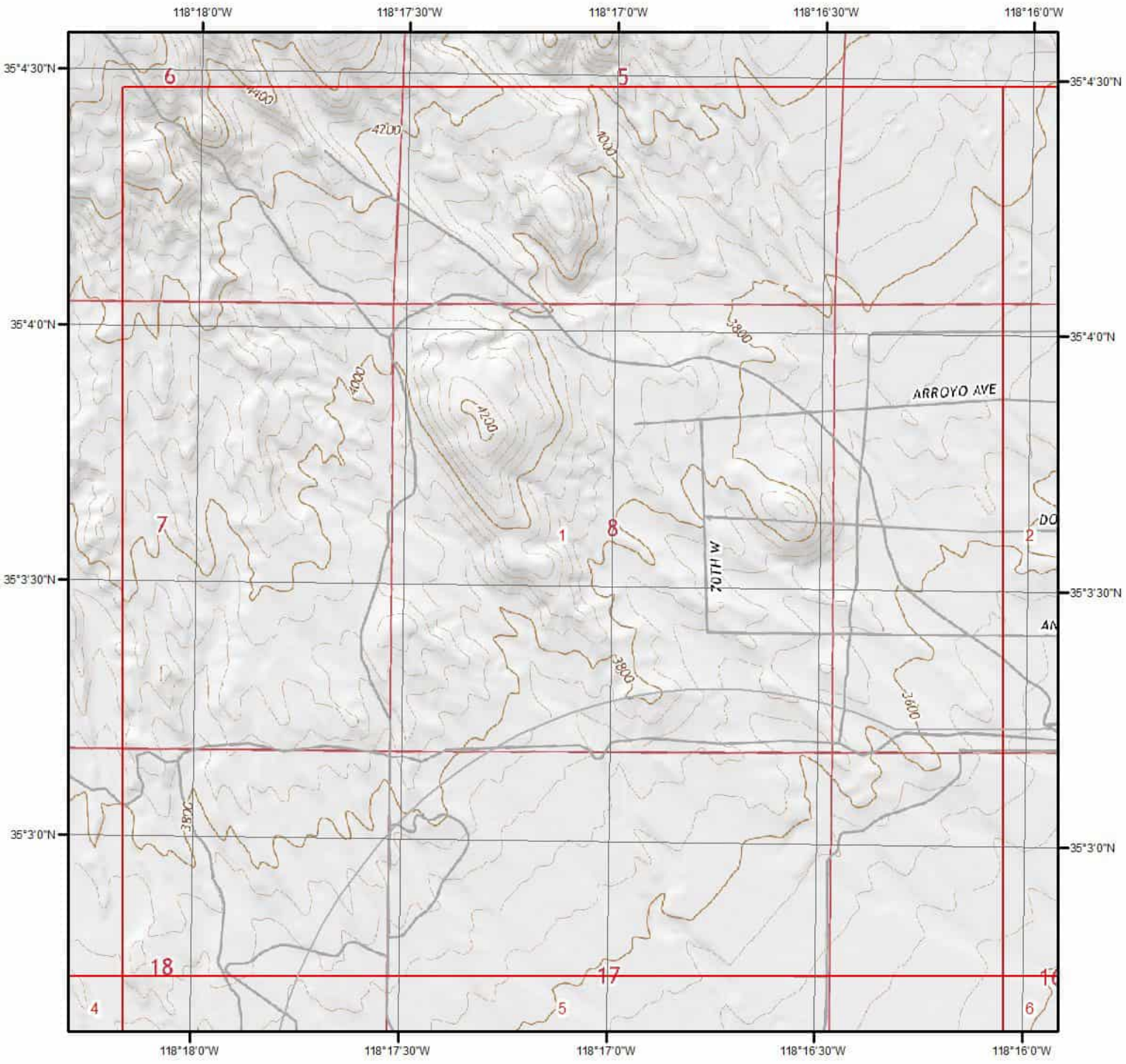
Miles
0 0.2 0.4 0.8 1.2 1.6 2 2.4

N

Quadrangle(s): Soledad Mountain,CA; Tehachapi South,CA; Fairmont Butte,CA; Monolith,CA; Tylerhorse Canyon,CA; Willow Springs,CA;

Source: USGS 7.5 Minute Topographic Map

Topographic Information



Current USGS Topo - Page 1

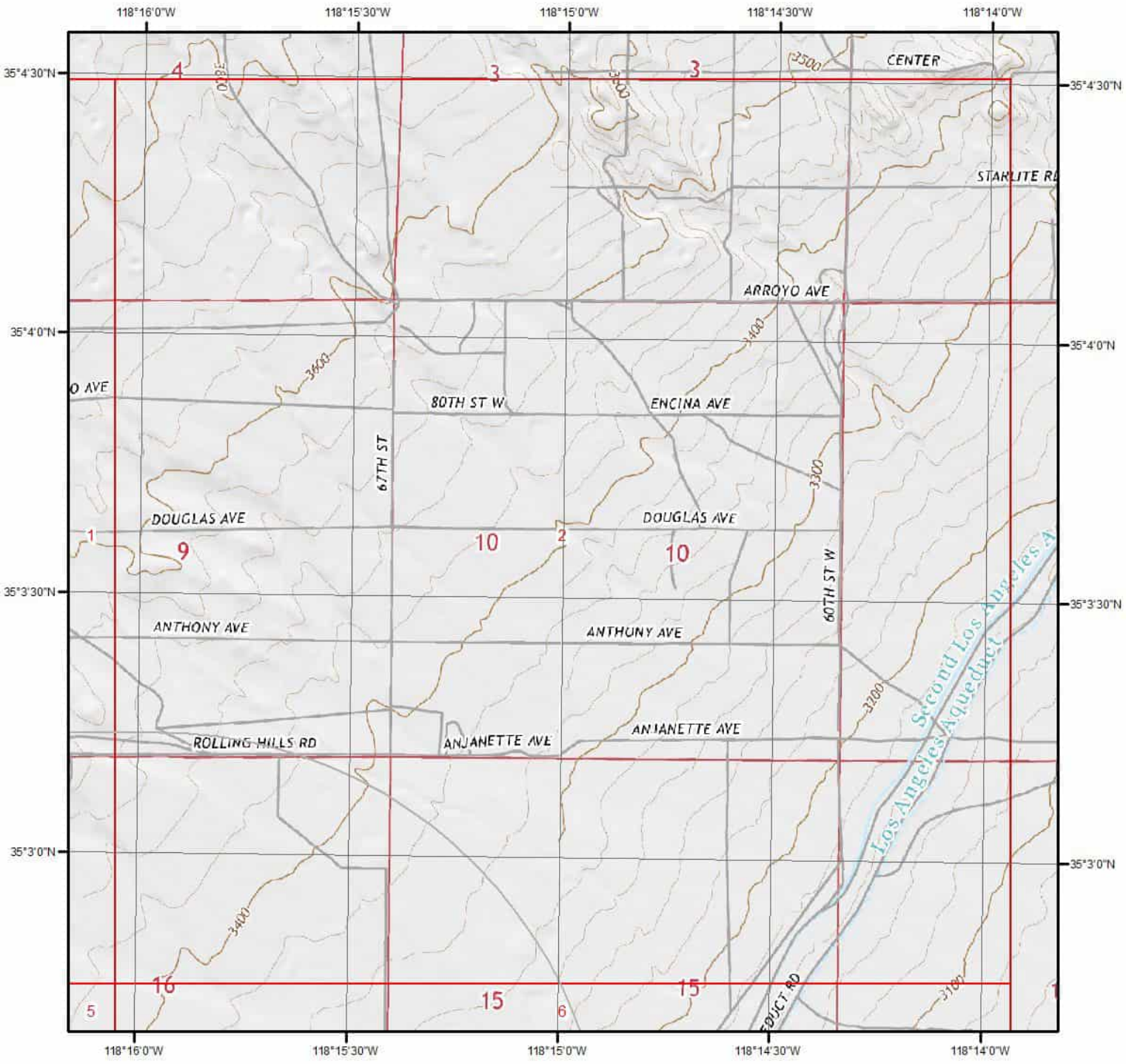
0 0.2 0.4 0.8 Miles

N

Quadrangle(s): Monolith,CA

Source: USGS 7.5 Minute Topographic Map

Topographic Information



Current USGS Topo - Page 2

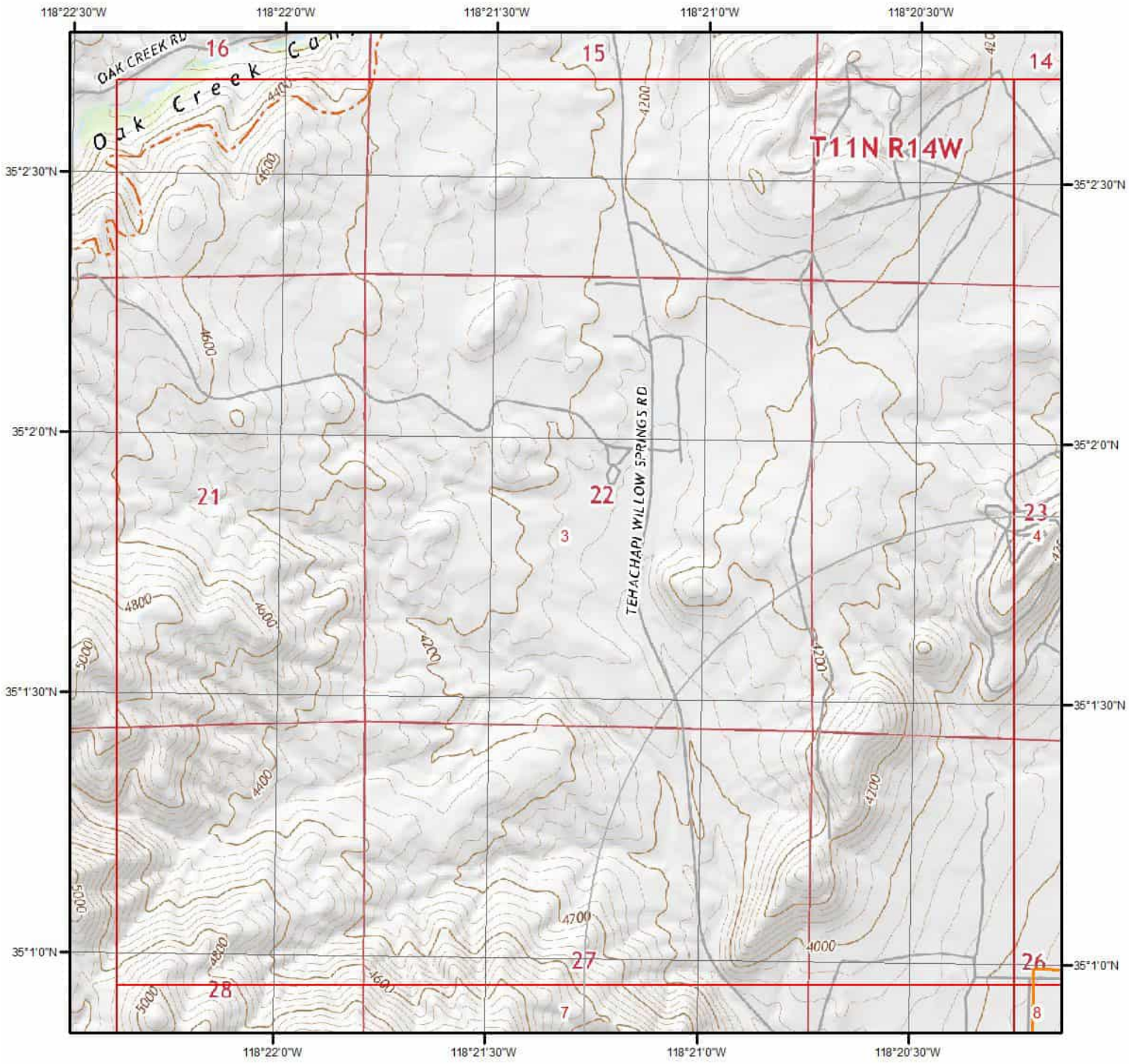
0 0.2 0.4 0.8 Miles

N

Quadrangle(s): Monolith,CA; Mojave,CA

Source: USGS 7.5 Minute Topographic Map

Topographic Information



Current USGS Topo - Page 3

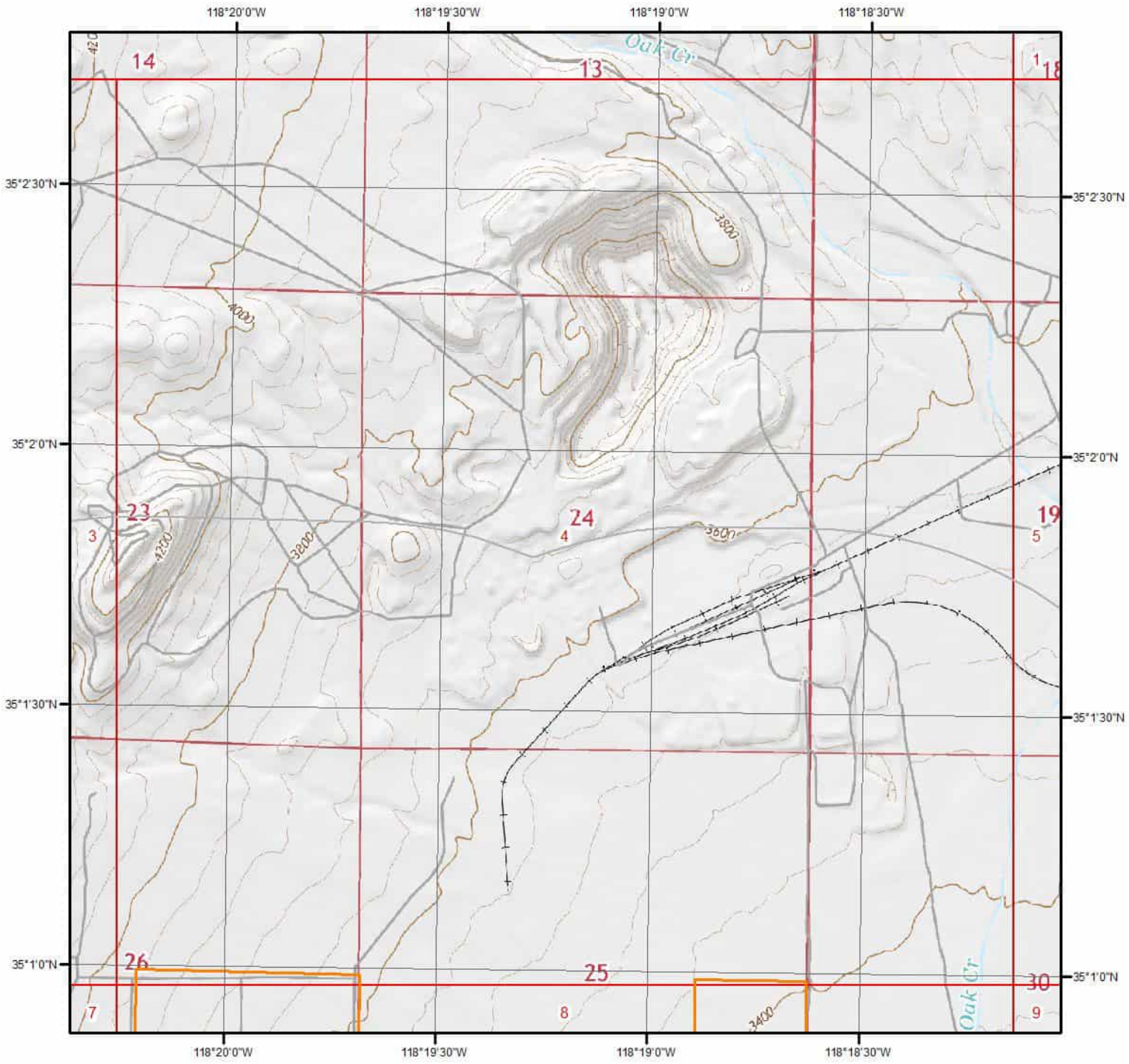
0 0.2 0.4 0.8 Miles

N

Quadrangle(s): Monolith,CA

Source: USGS 7.5 Minute Topographic Map

Topographic Information



Current USGS Topo - Page 4

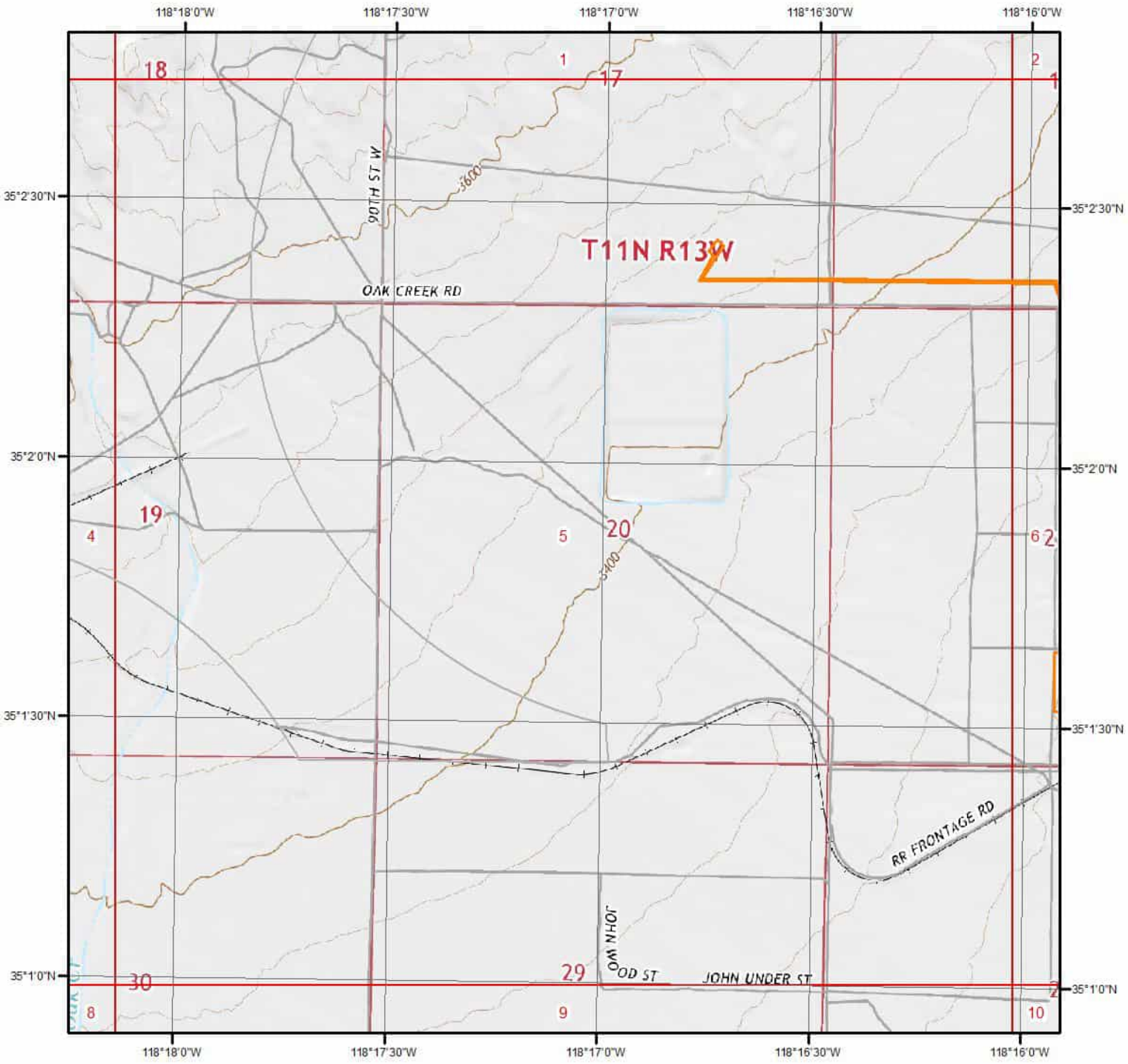
0 0.2 0.4 0.8 Miles

N

Quadrangle(s): Monolith,CA

Source: USGS 7.5 Minute Topographic Map

Topographic Information



Current USGS Topo - Page 5

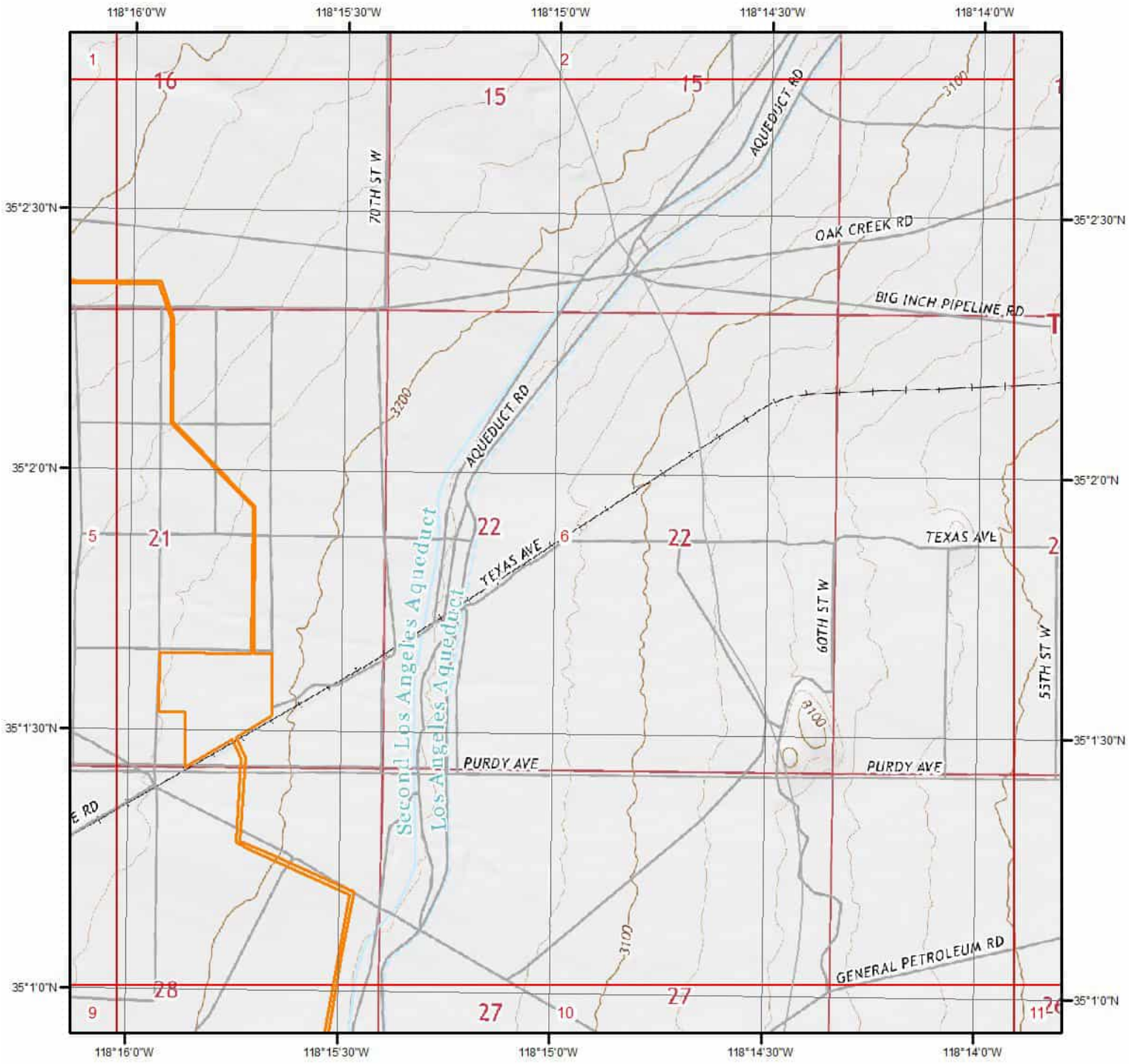
0 0.2 0.4 0.8 Miles

N

Quadrangle(s): Monolith,CA

Source: USGS 7.5 Minute Topographic Map

Topographic Information



Current USGS Topo - Page 6

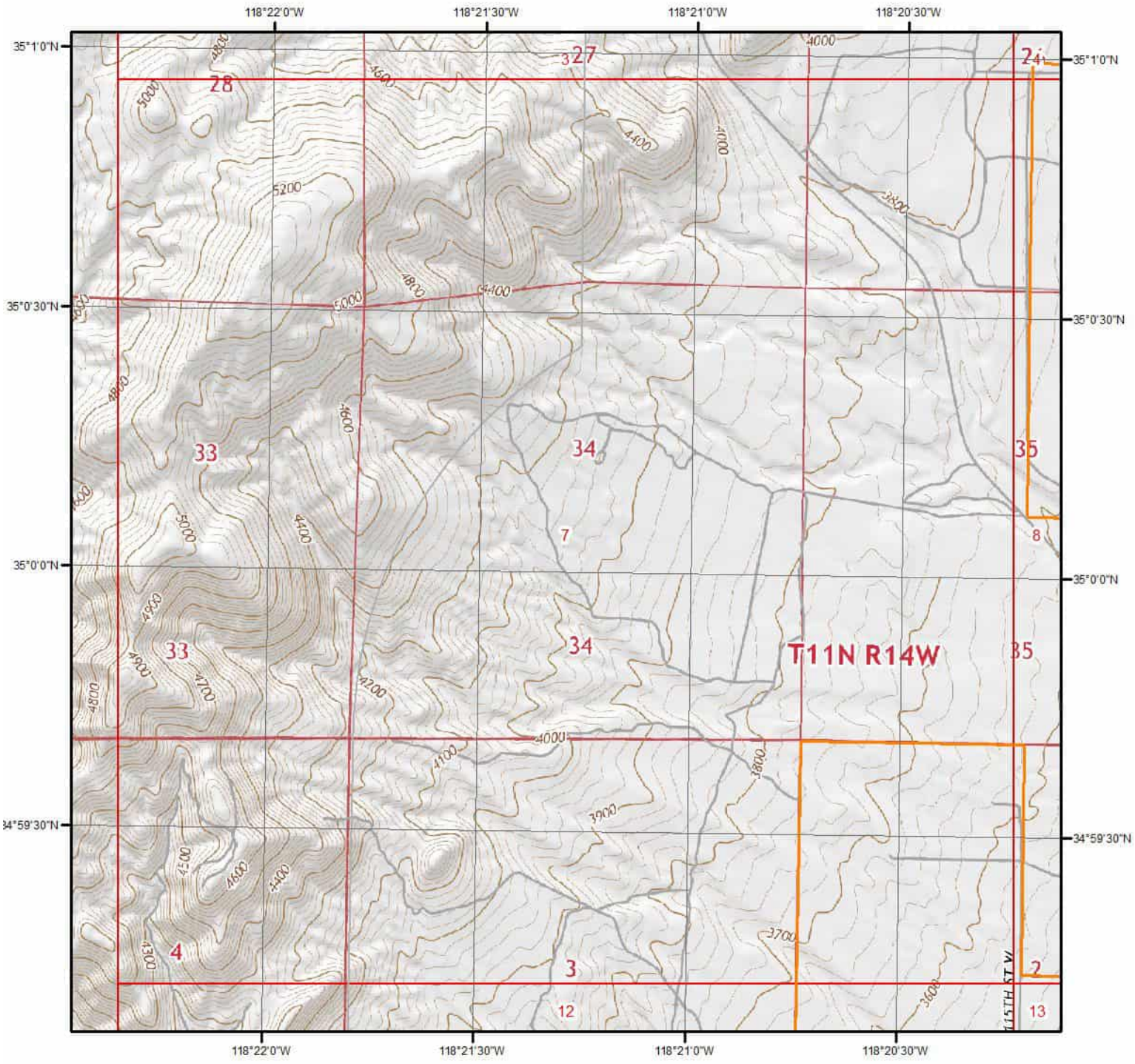
0 0.2 0.4 0.8 Miles

N

Quadrangle(s): Monolith,CA; Mojave,CA

Source: USGS 7.5 Minute Topographic Map

Topographic Information



Current USGS Topo - Page 7

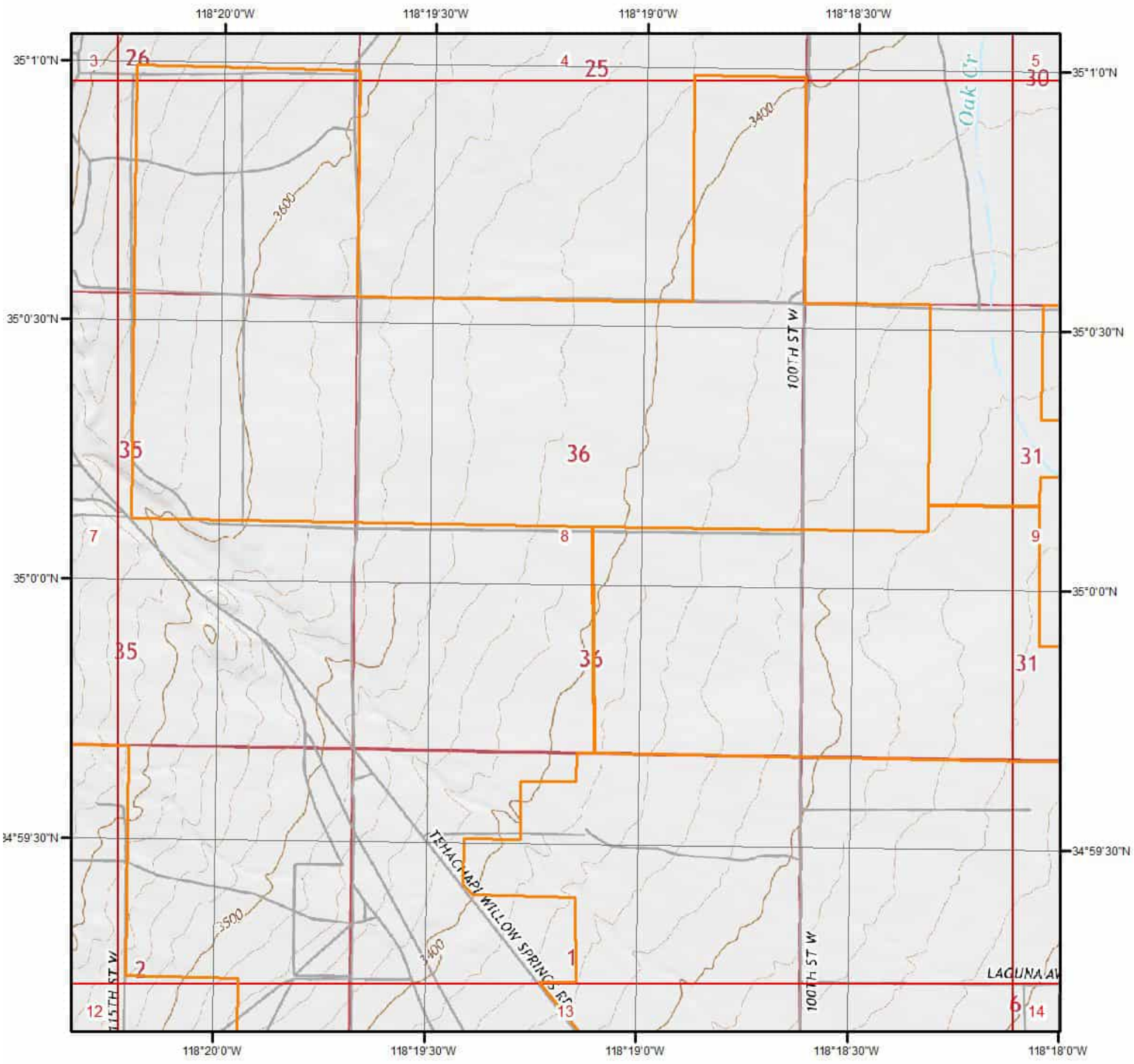
Miles
0 0.2 0.4 0.8

N

Quadrangle(s): Monolith,CA; Willow Springs,CA

Source: USGS 7.5 Minute Topographic Map

Topographic Information



Current USGS Topo - Page 8

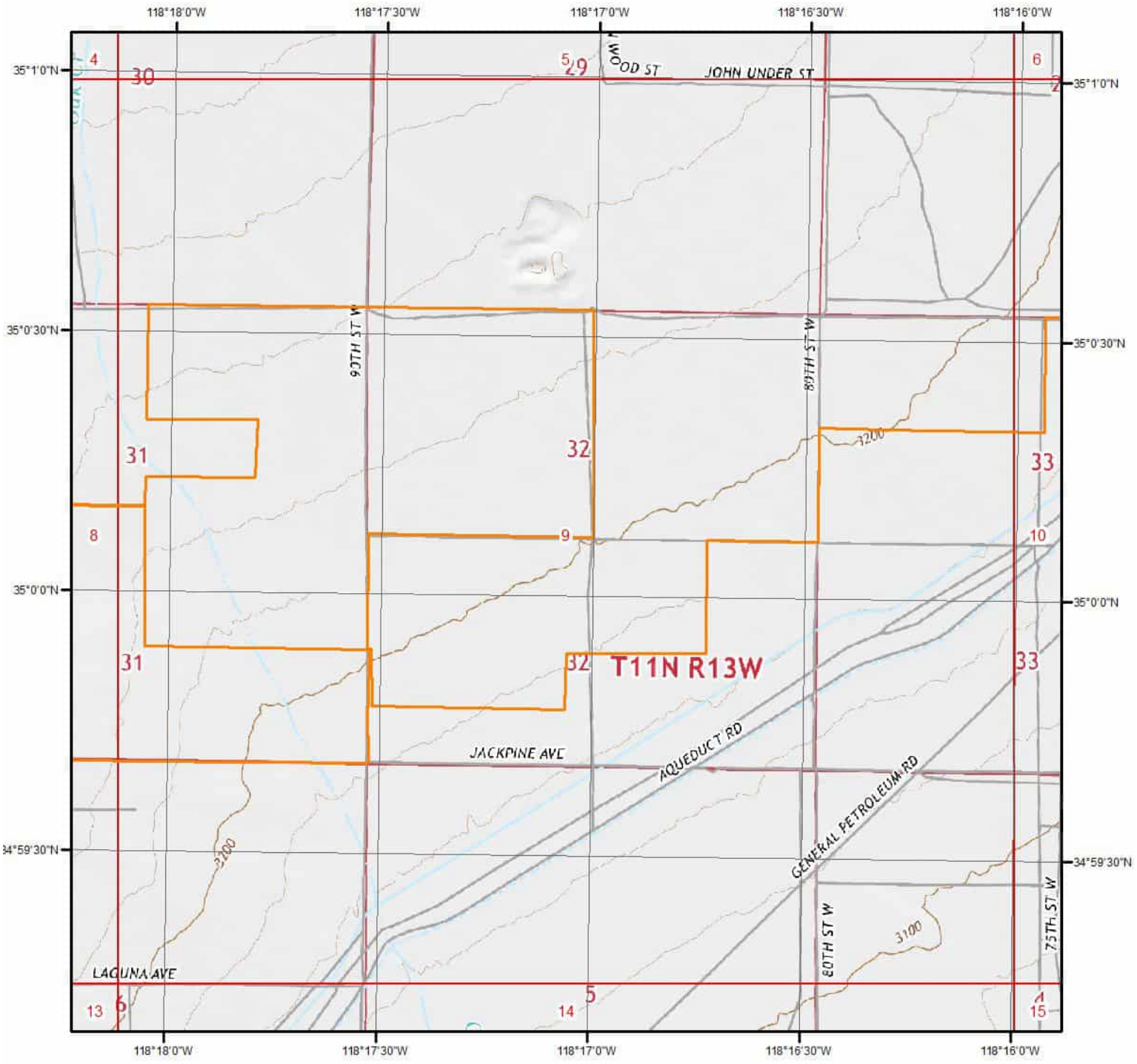
Miles
0 0.2 0.4 0.8

N

Quadrangle(s): Monolith,CA; Willow Springs,CA

Source: USGS 7.5 Minute Topographic Map

Topographic Information



Current USGS Topo - Page 9

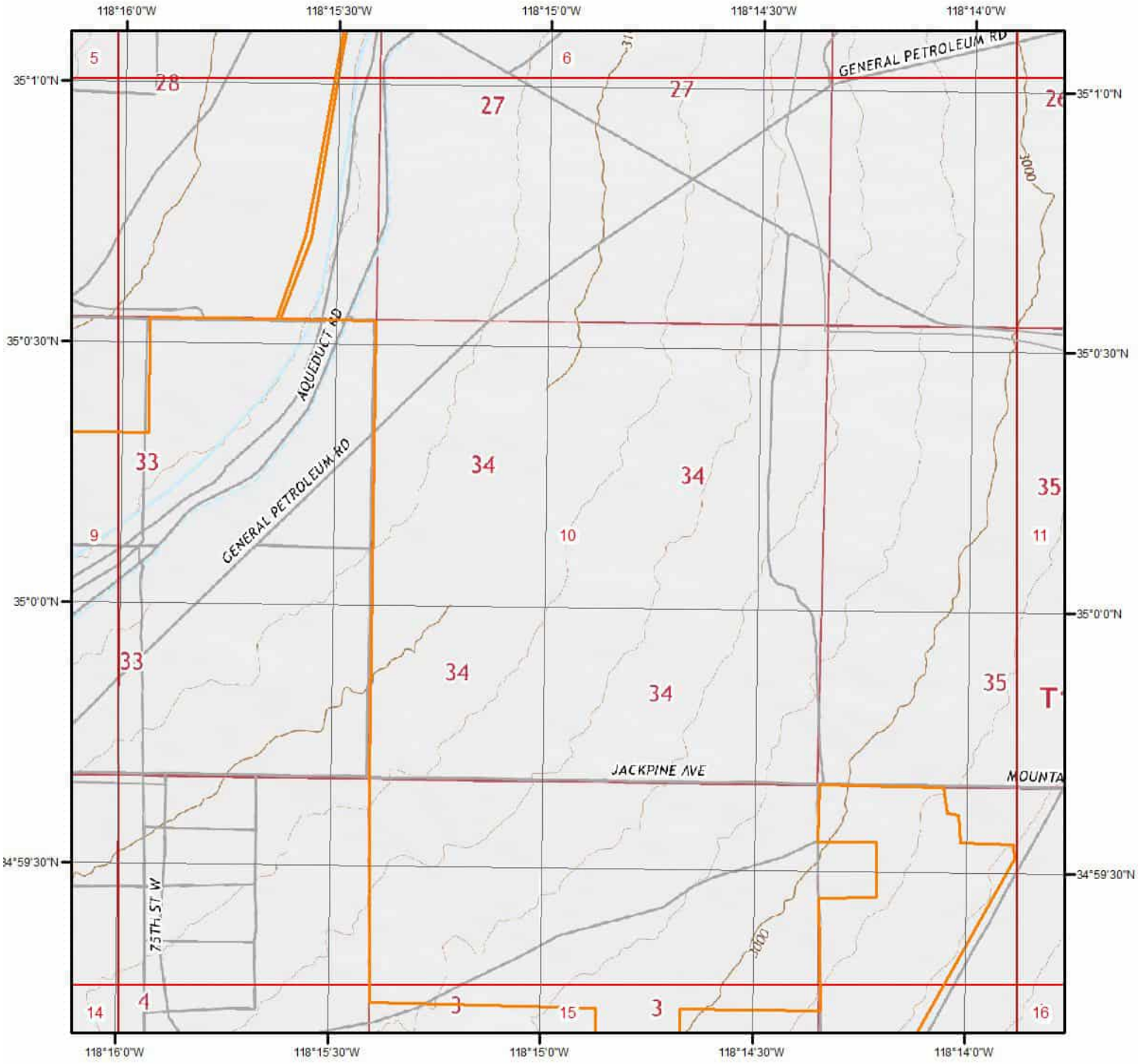
0 0.2 0.4 0.8 Miles

N

Quadrangle(s): Monolith,CA; Willow Springs,CA

Source: USGS 7.5 Minute Topographic Map

Topographic Information



Current USGS Topo - Page 10

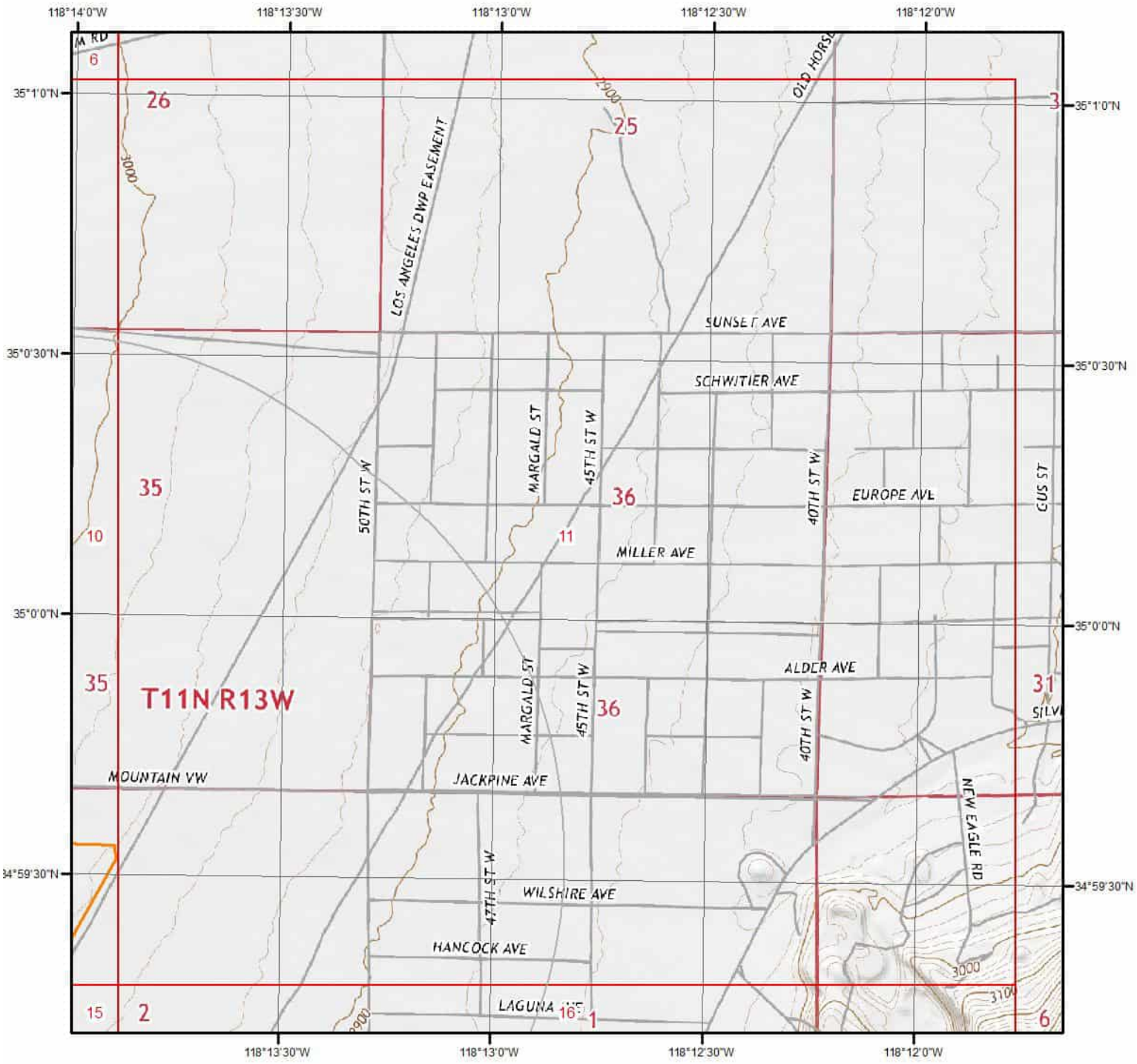
0 0.2 0.4 0.8 Miles

N

Quadrangle(s): Soledad Mountain,CA; Monolith,CA; Willow Springs,CA; Mojave,CA

Source: USGS 7.5 Minute Topographic Map

Topographic Information



Current USGS Topo - Page 11

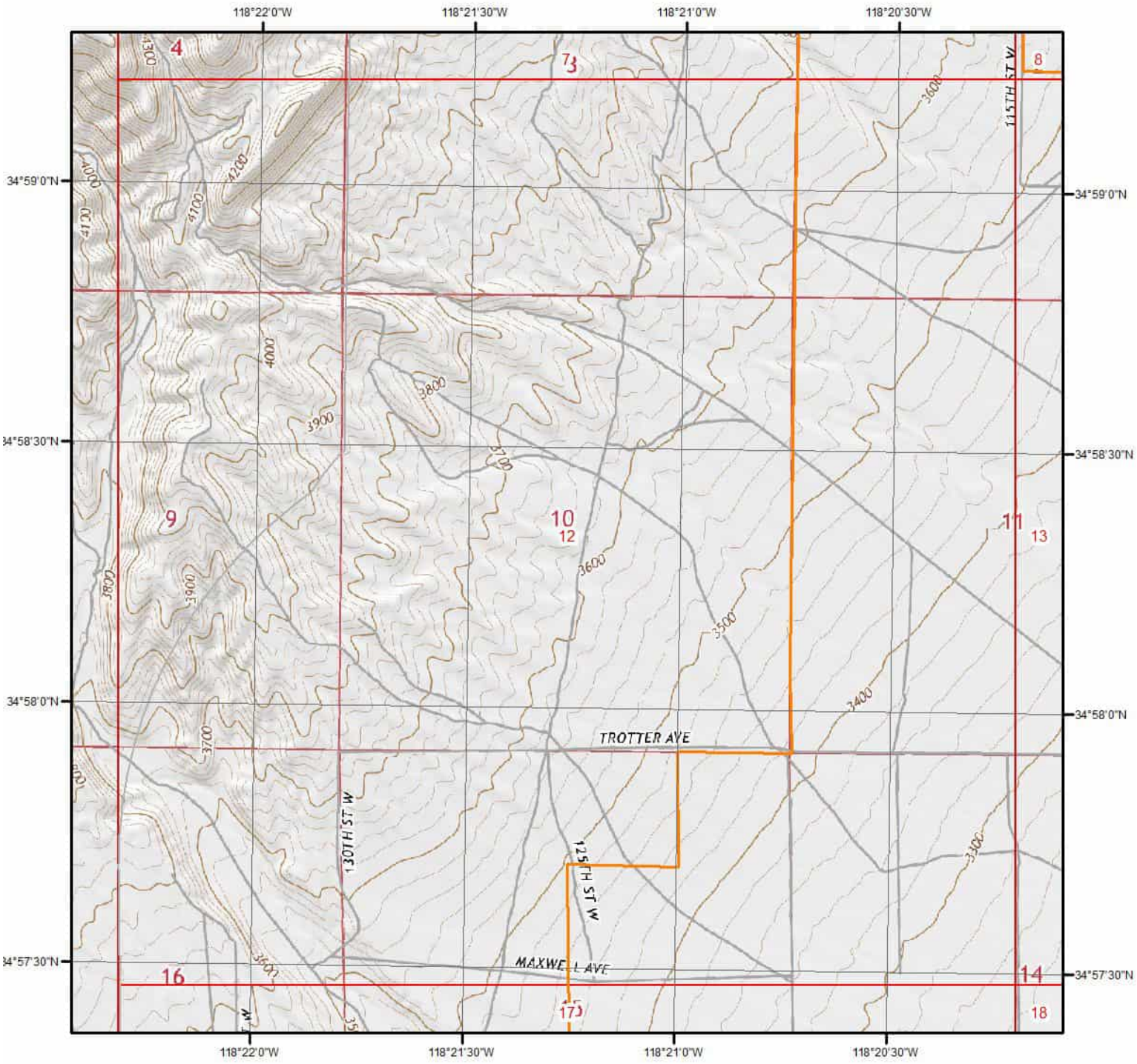
0 0.2 0.4 0.8 Miles

N

Quadrangle(s): Soledad Mountain,CA; Mojave,CA

Source: USGS 7.5 Minute Topographic Map

Topographic Information



Current USGS Topo - Page 12

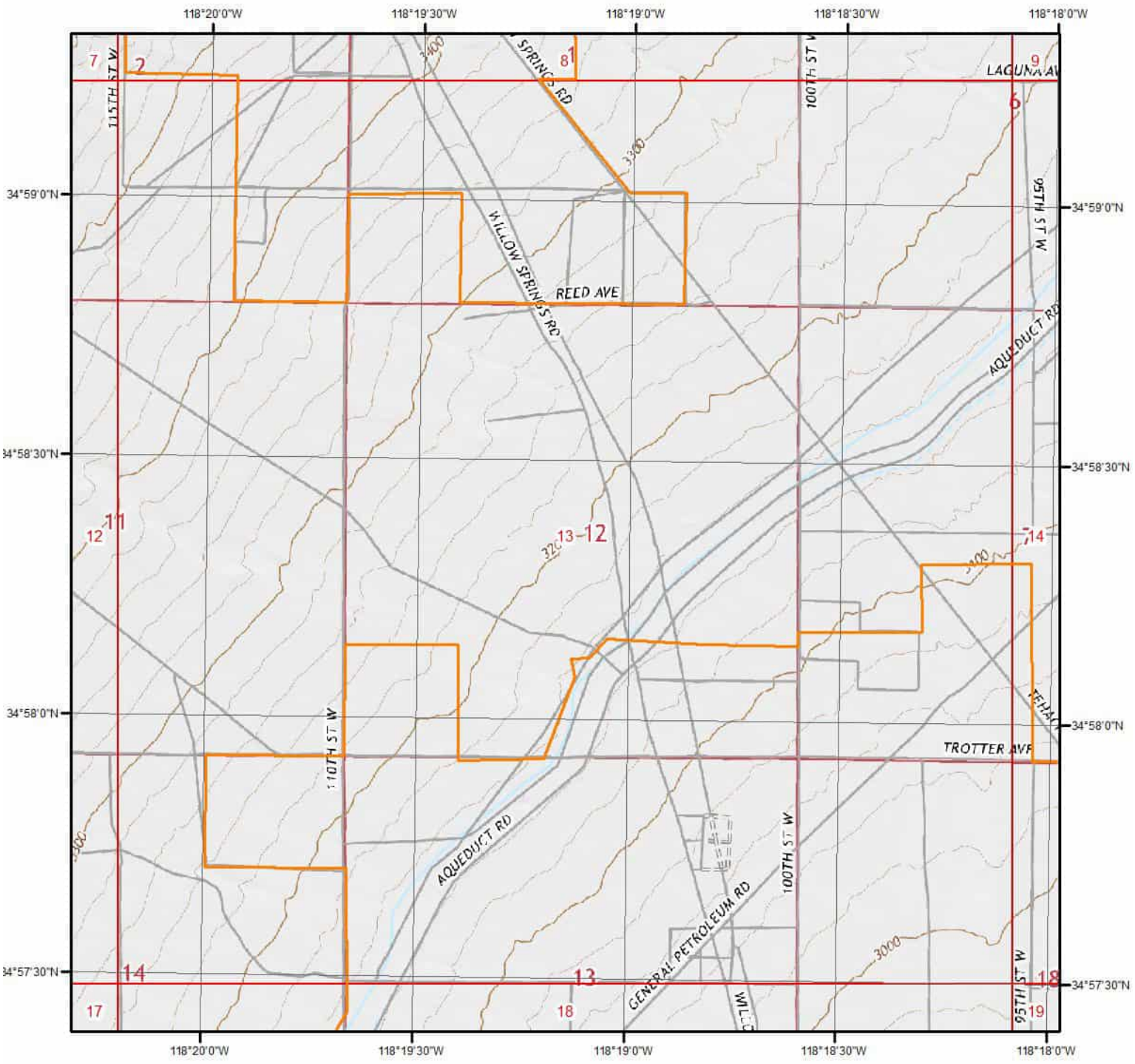
0 0.2 0.4 0.8 Miles

N

Quadrangle(s): Willow Springs,CA

Source: USGS 7.5 Minute Topographic Map

Topographic Information



Current USGS Topo - Page 13

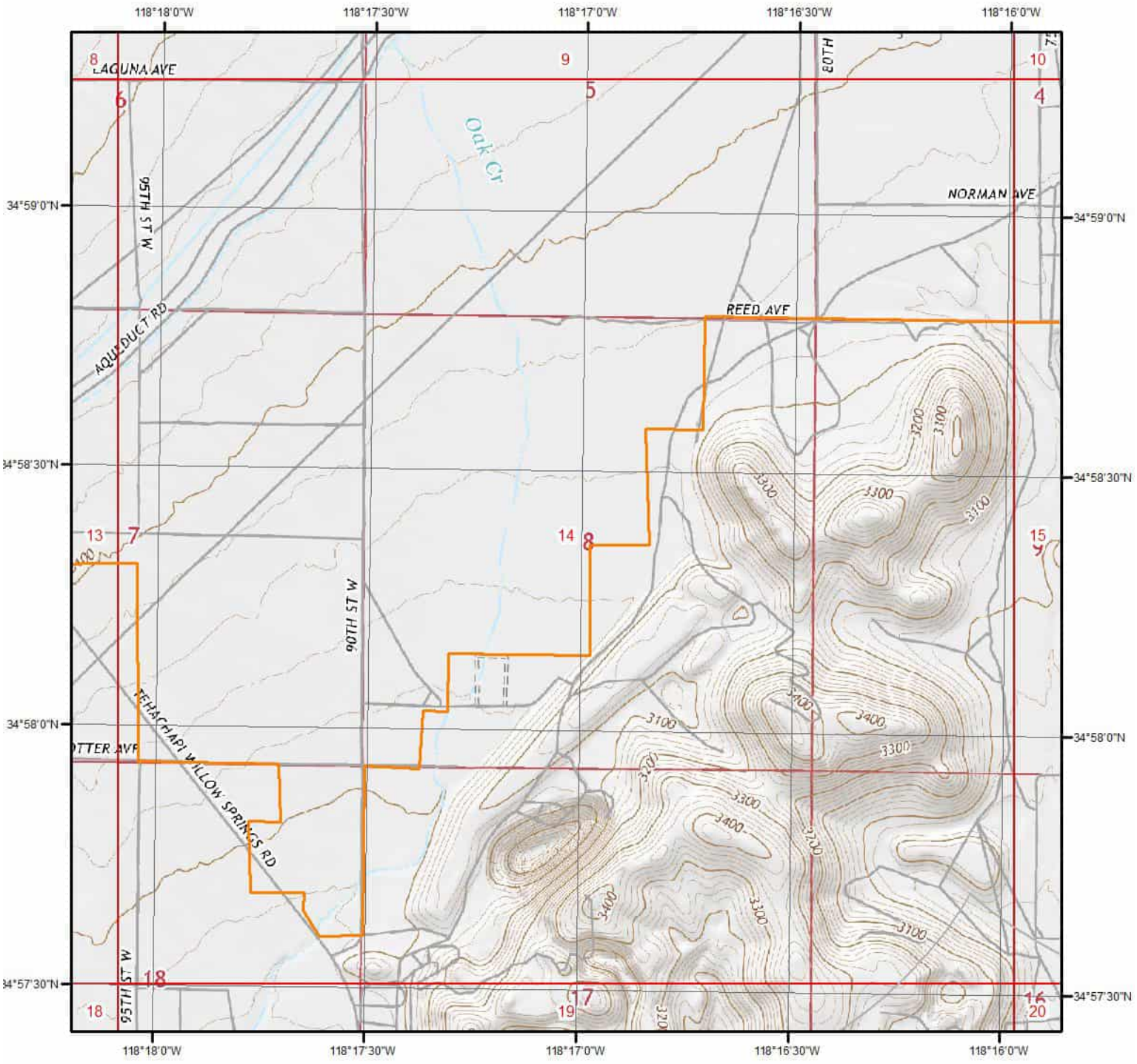
0 0.2 0.4 0.8 Miles

N

Quadrangle(s): Willow Springs,CA

Source: USGS 7.5 Minute Topographic Map

Topographic Information



Current USGS Topo - Page 14

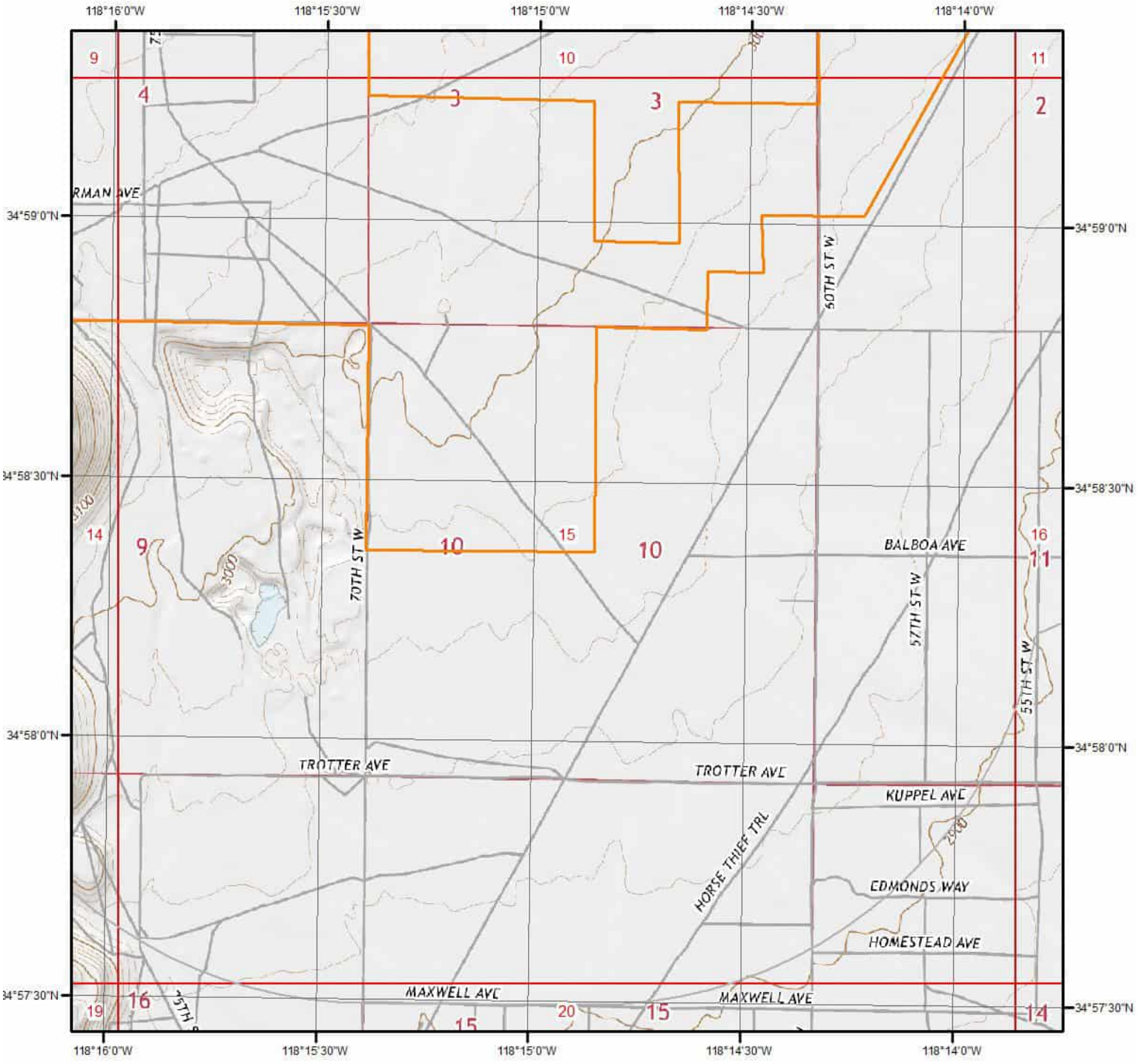
0 0.2 0.4 0.8 Miles

N

Quadrangle(s): Willow Springs,CA

Source: USGS 7.5 Minute Topographic Map

Topographic Information



Current USGS Topo - Page 15

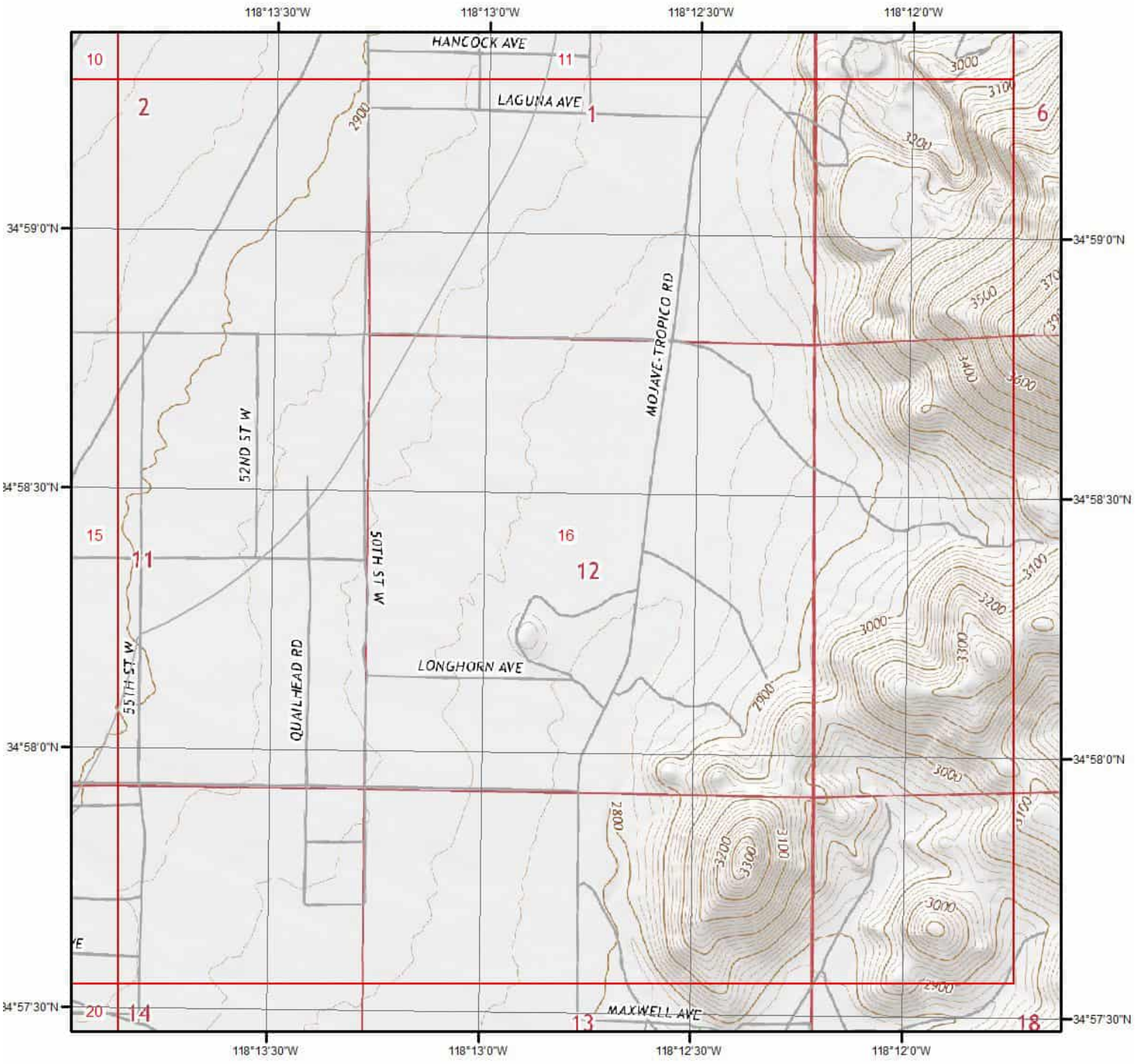
0 0.2 0.4 0.8 Miles

N

Quadrangle(s): Soledad Mountain,CA; Willow Springs,CA

Source: USGS 7.5 Minute Topographic Map

Topographic Information



Current USGS Topo - Page 16

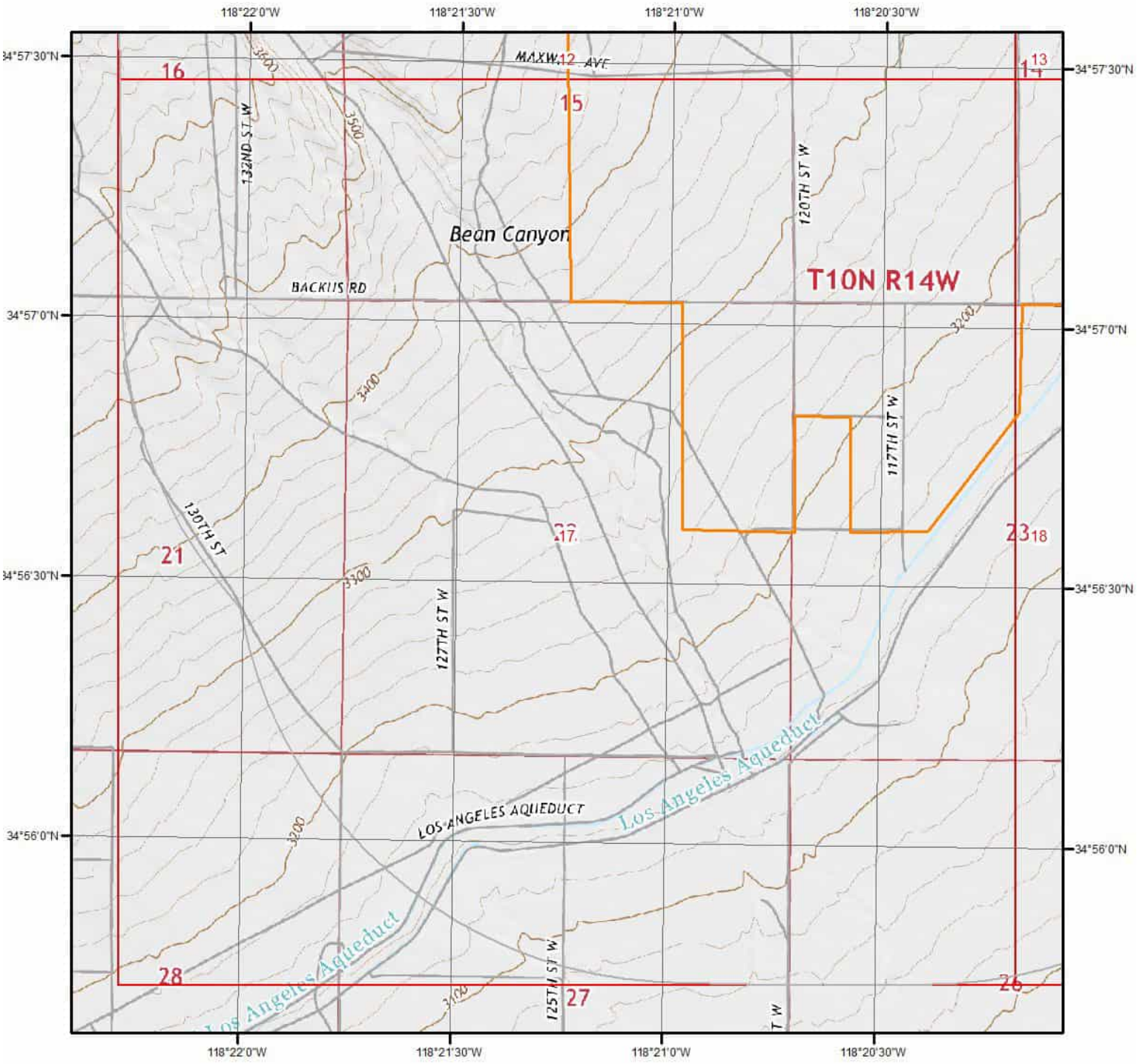
0 0.2 0.4 0.8 Miles

N

Quadrangle(s): Soledad Mountain,CA

Source: USGS 7.5 Minute Topographic Map

Topographic Information



Current USGS Topo - Page 17

Miles 0 0.2 0.4 0.8

N

Quadrangle(s): Willow Springs,CA

Source: USGS 7.5 Minute Topographic Map

Topographic Information



Current USGS Topo - Page 18

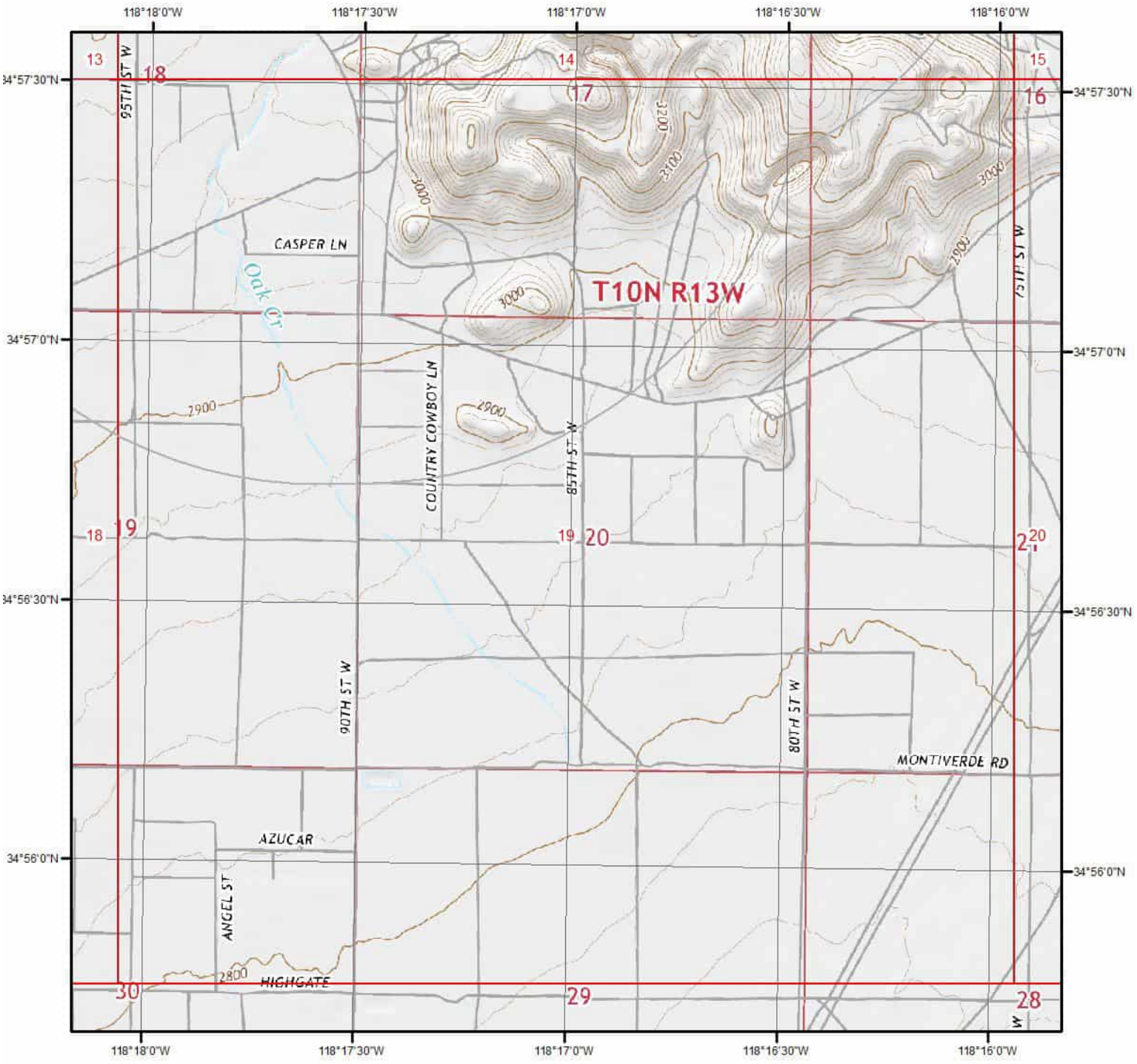
Miles
0 0.2 0.4 0.8

N

Quadrangle(s): Willow Springs,CA

Source: USGS 7.5 Minute Topographic Map

Topographic Information



Current USGS Topo - Page 19

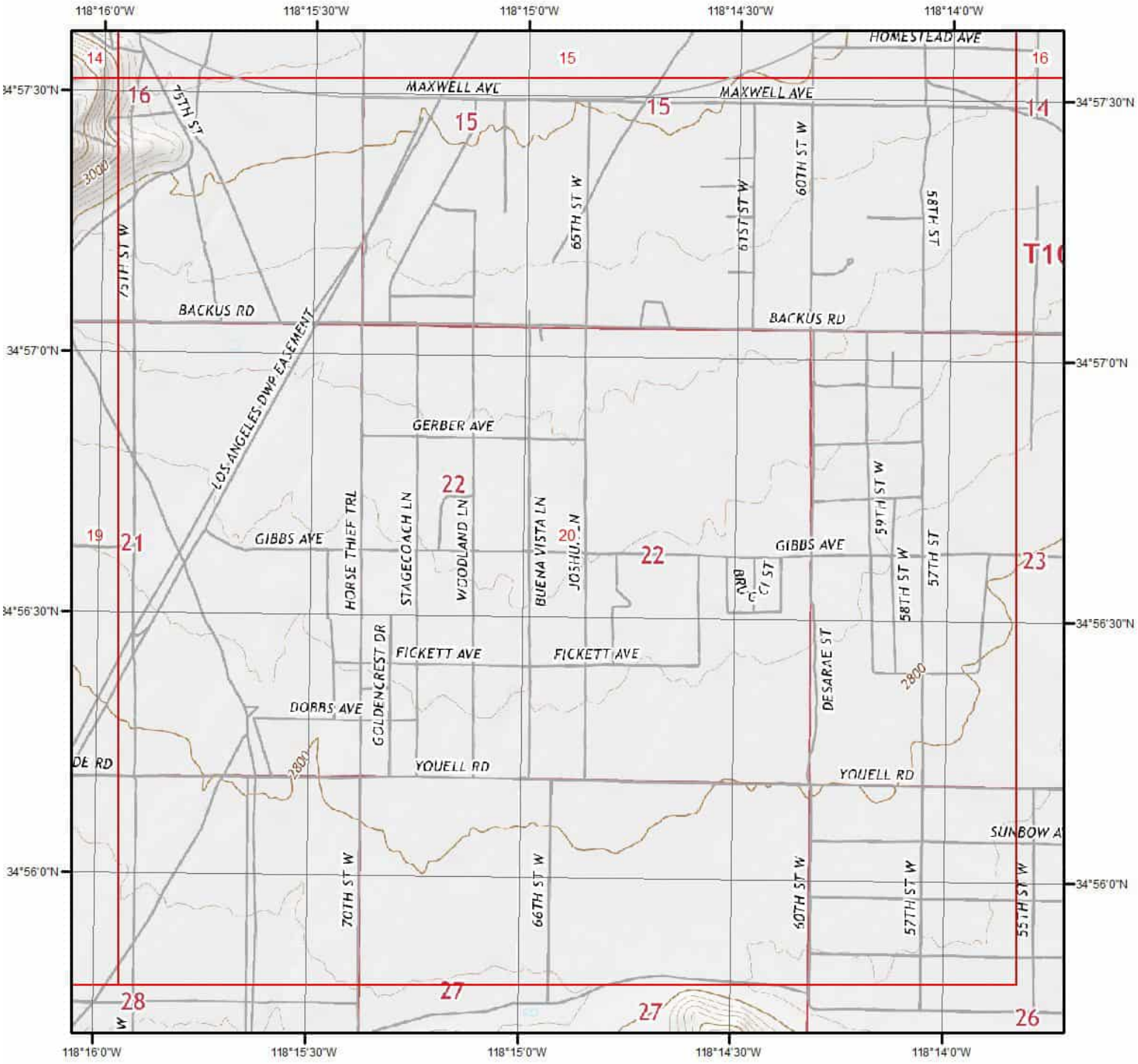
0 0.2 0.4 0.8 Miles

N

Quadrangle(s): Willow Springs,CA

Source: USGS 7.5 Minute Topographic Map

Topographic Information



Current USGS Topo - Page 20

0 0.2 0.4 0.8 Miles

N

Quadrangle(s): Soledad Mountain,CA; Willow Springs,CA

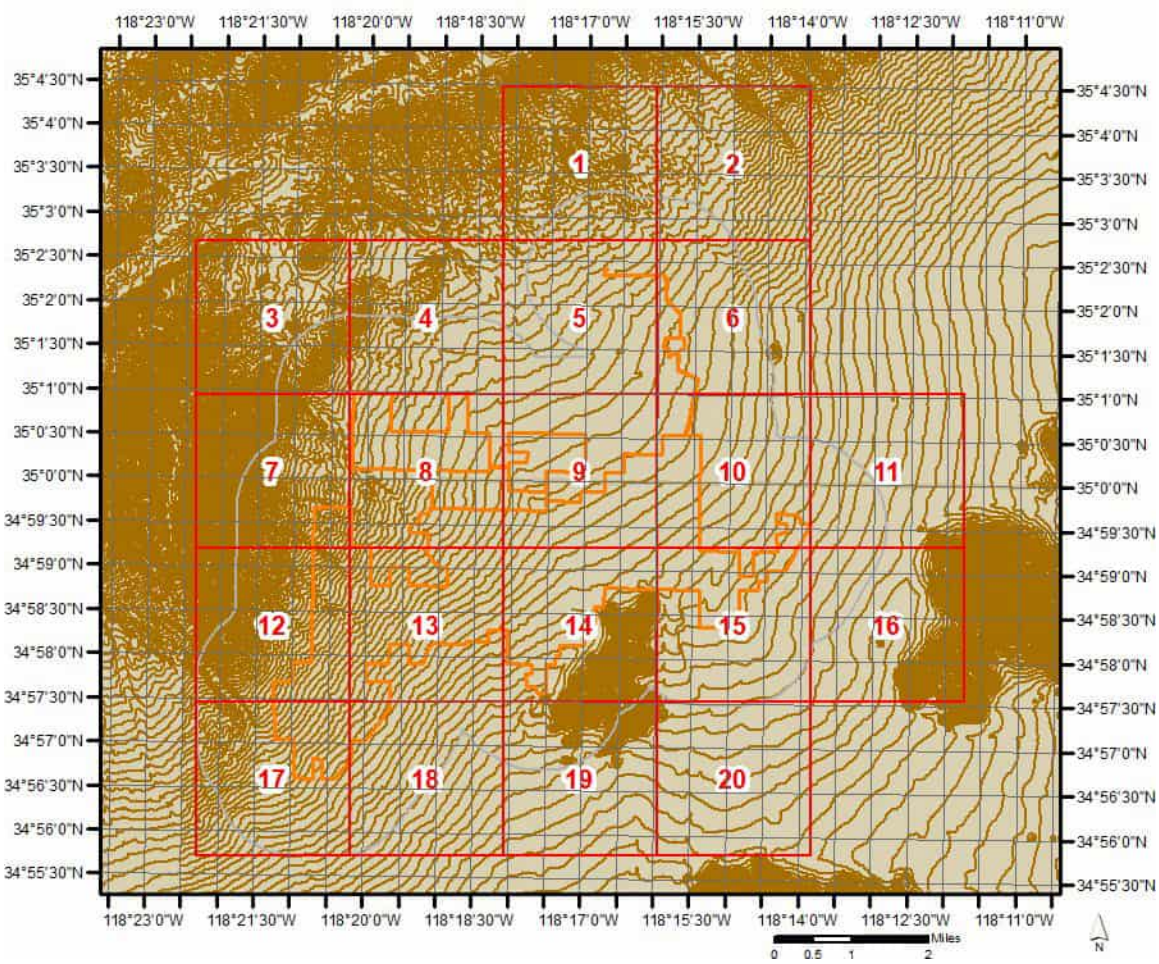
Source: USGS 7.5 Minute Topographic Map

Topographic Information

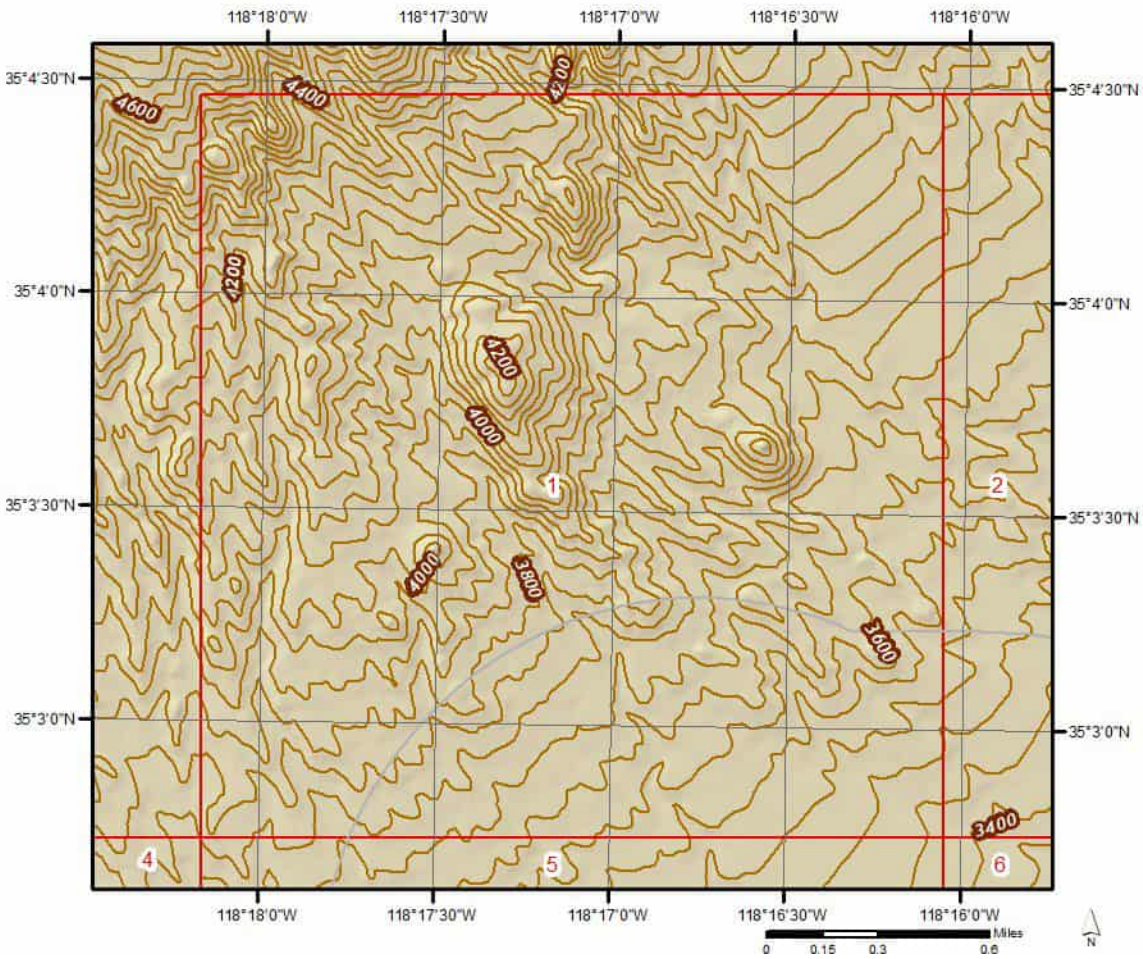
The previous topographic map(s) are created by seamlessly merging and cutting current USGS topographic data. Below are shaded relief map(s), derived from USGS elevation data to show surrounding topography in further detail.

Topographic information at project property:

Elevation:	3,194.16 ft
Slope Direction:	N



Topographic Information



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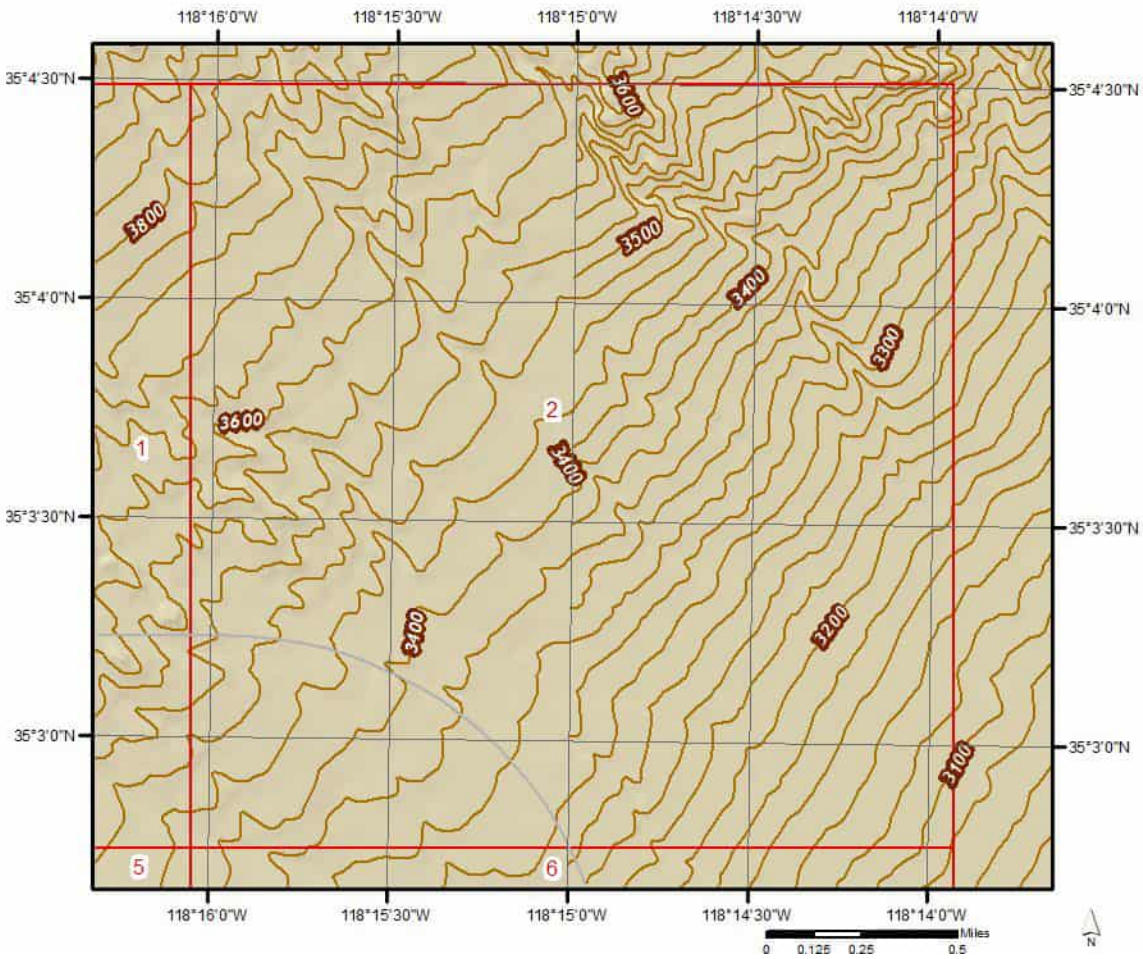

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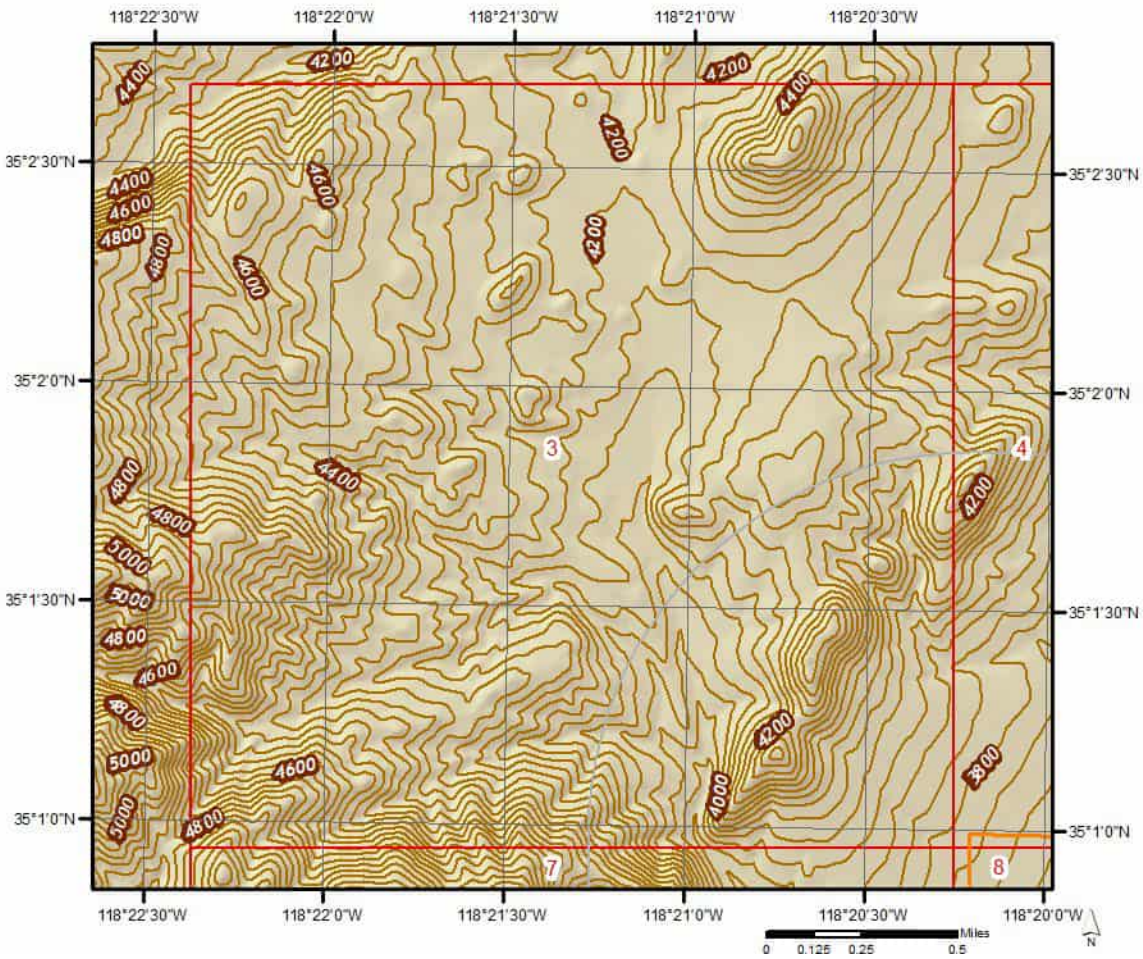

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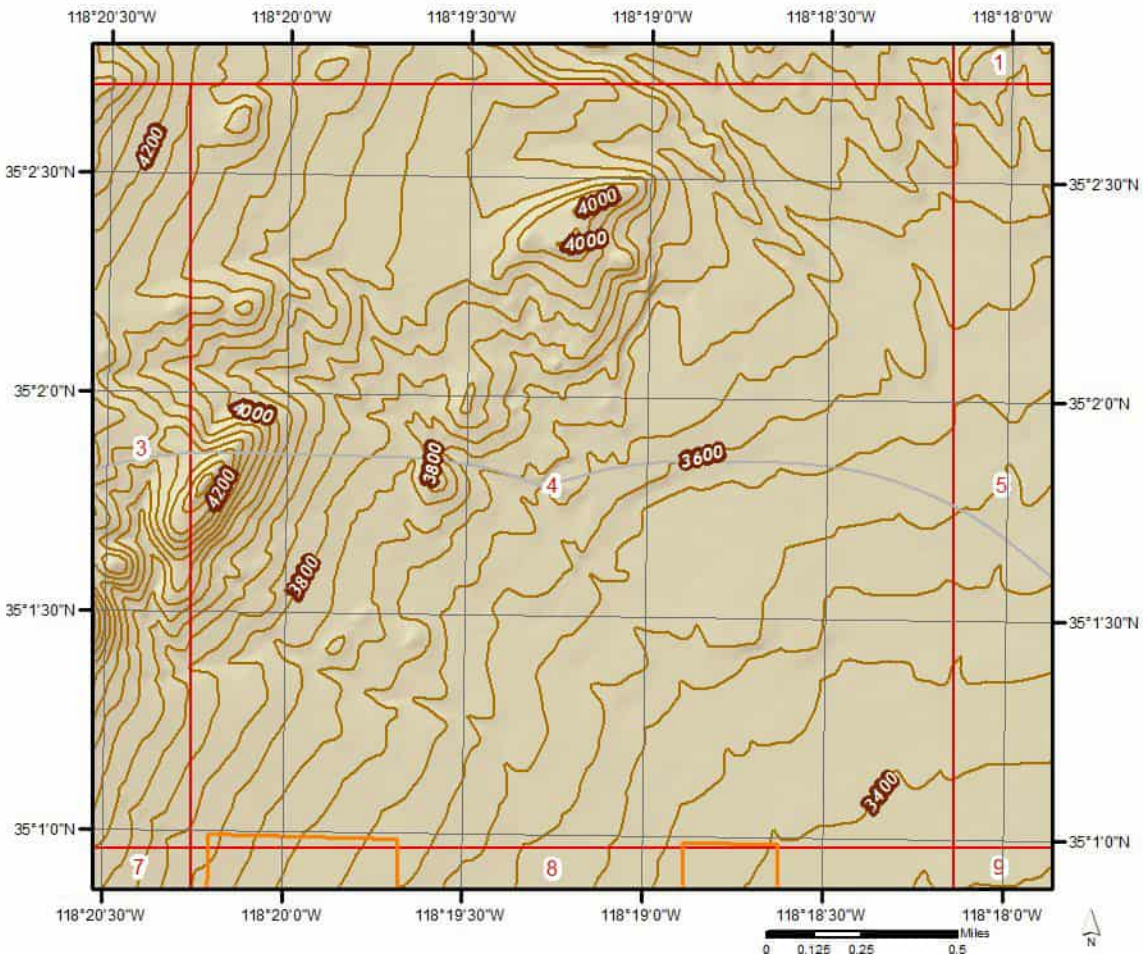

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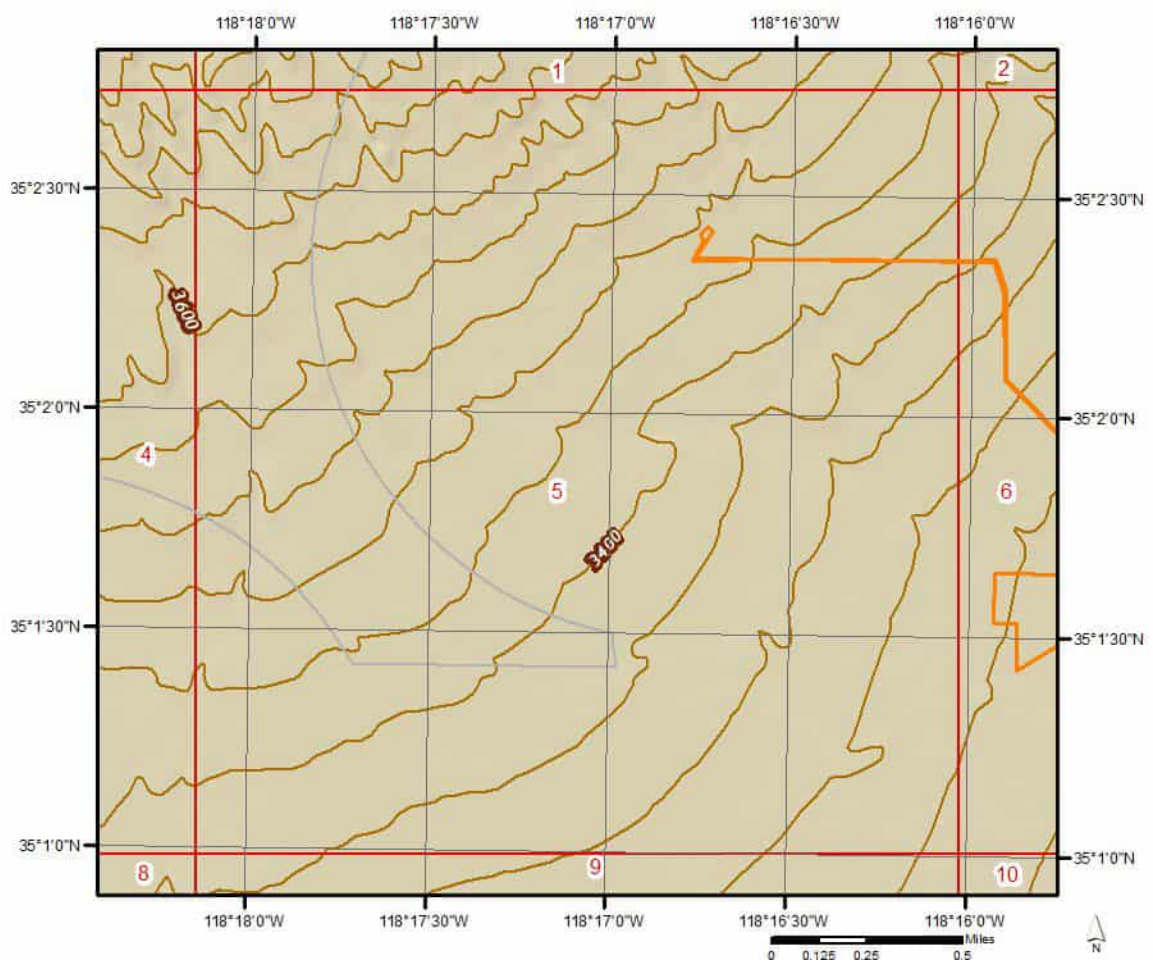

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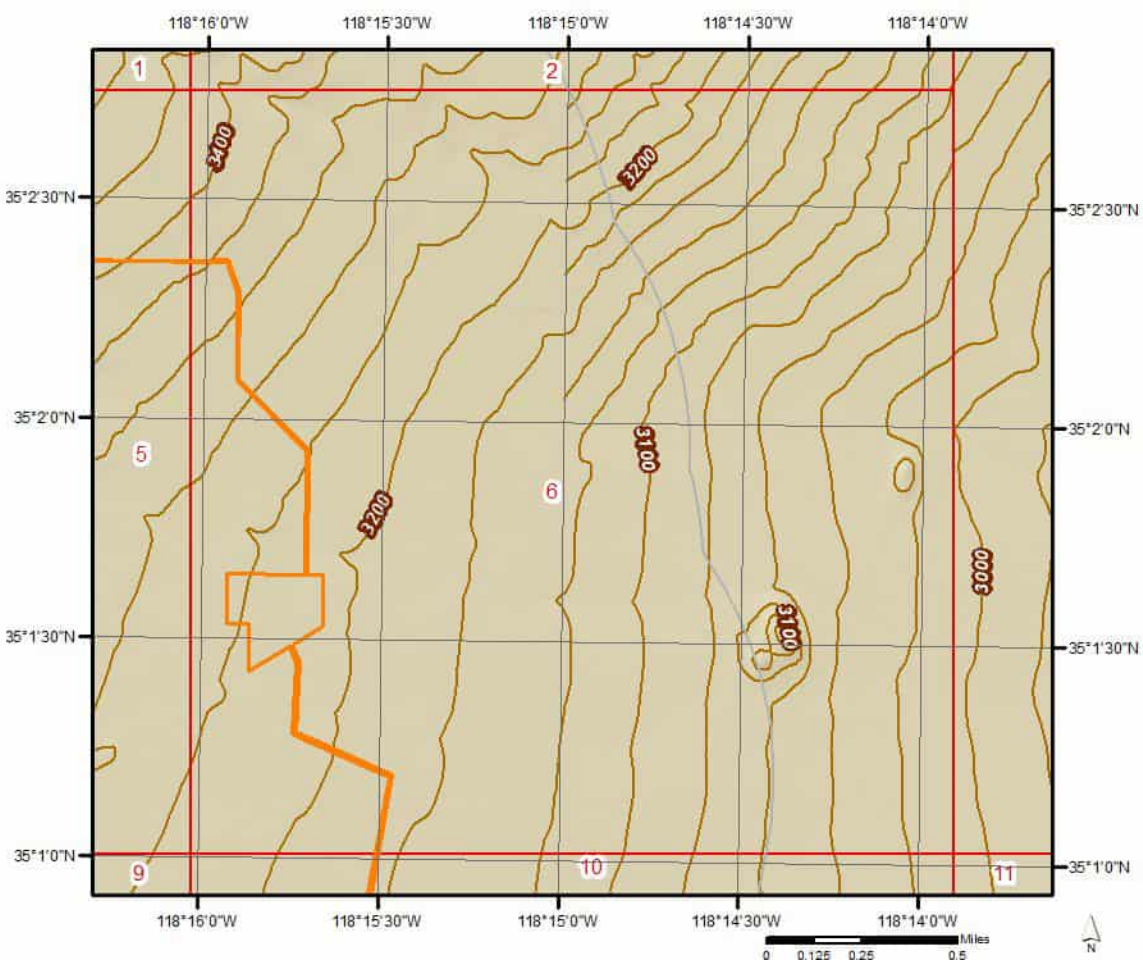

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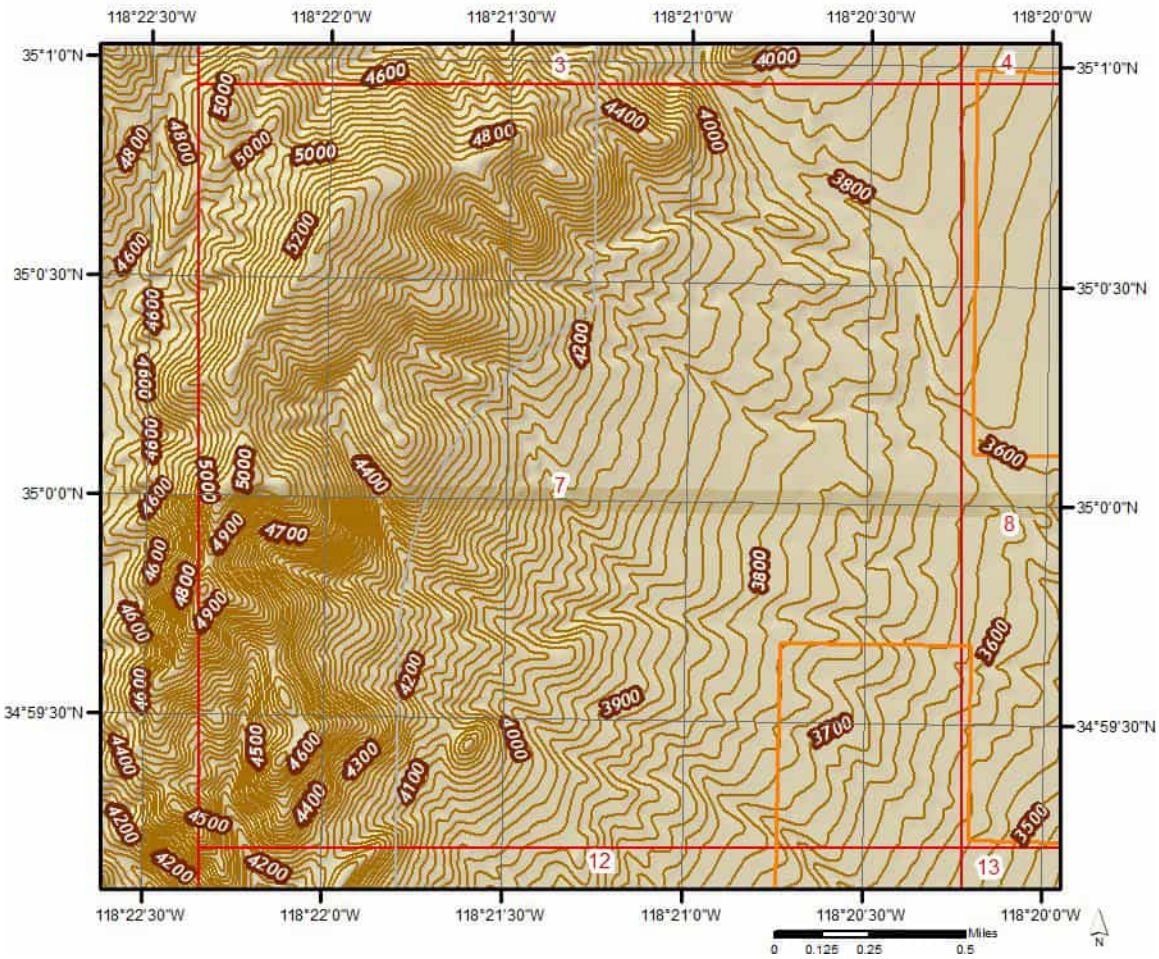

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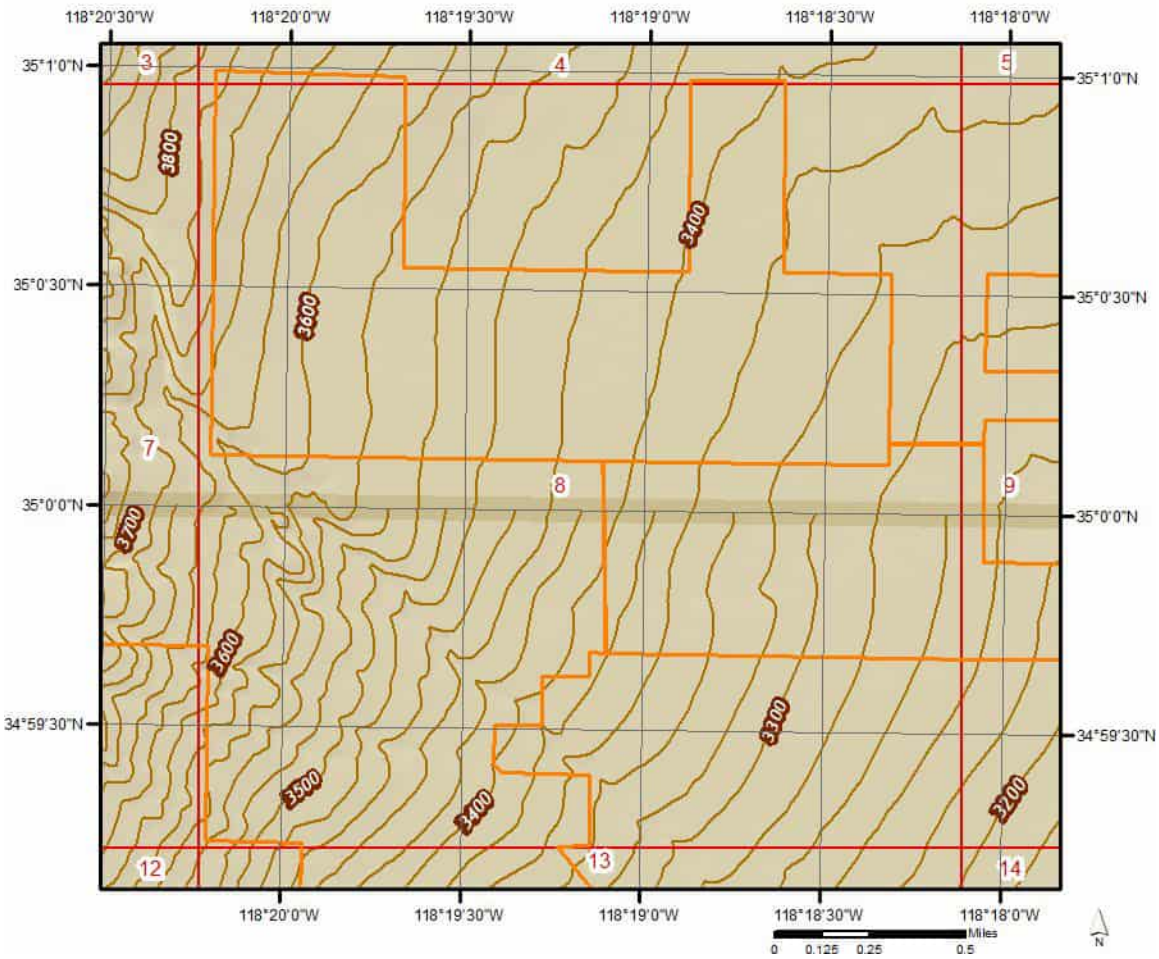

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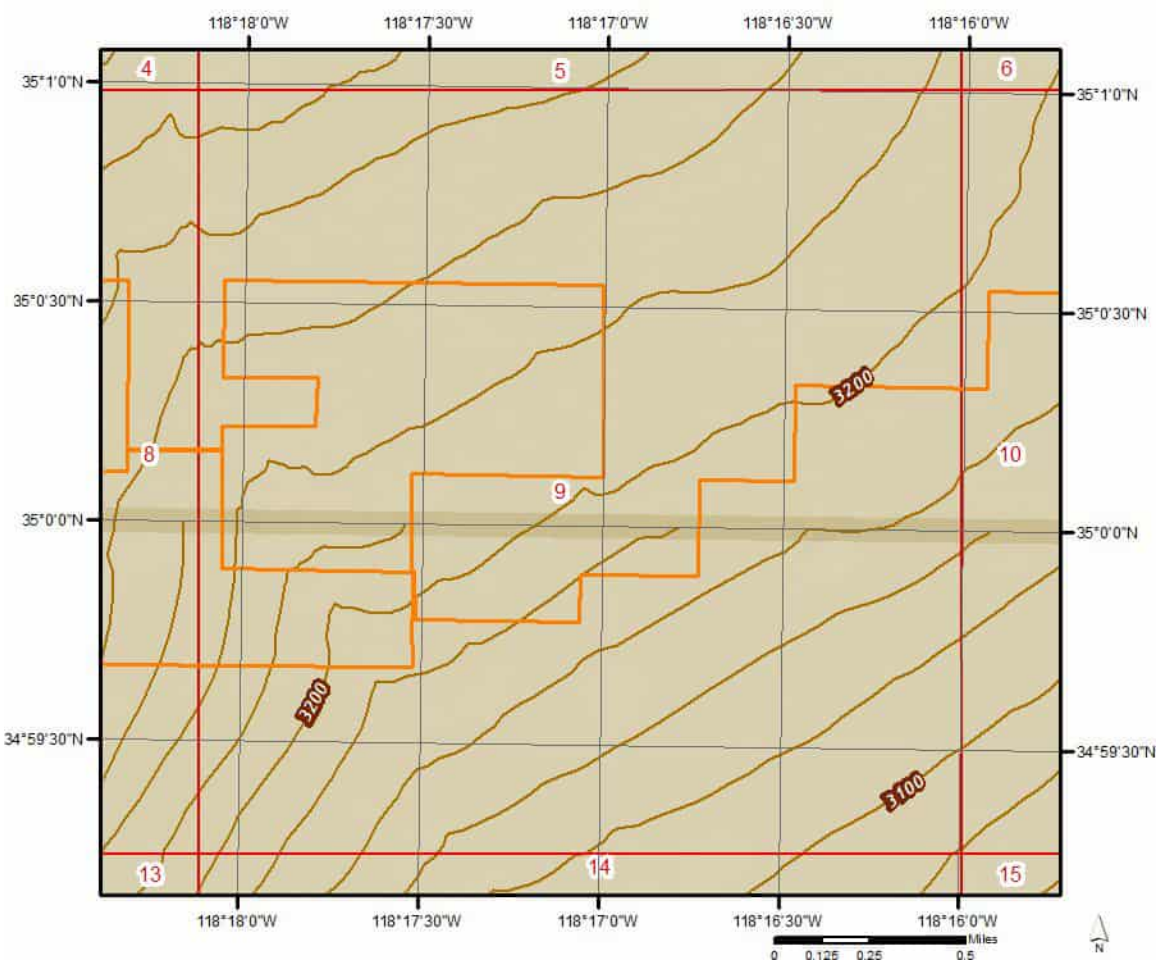

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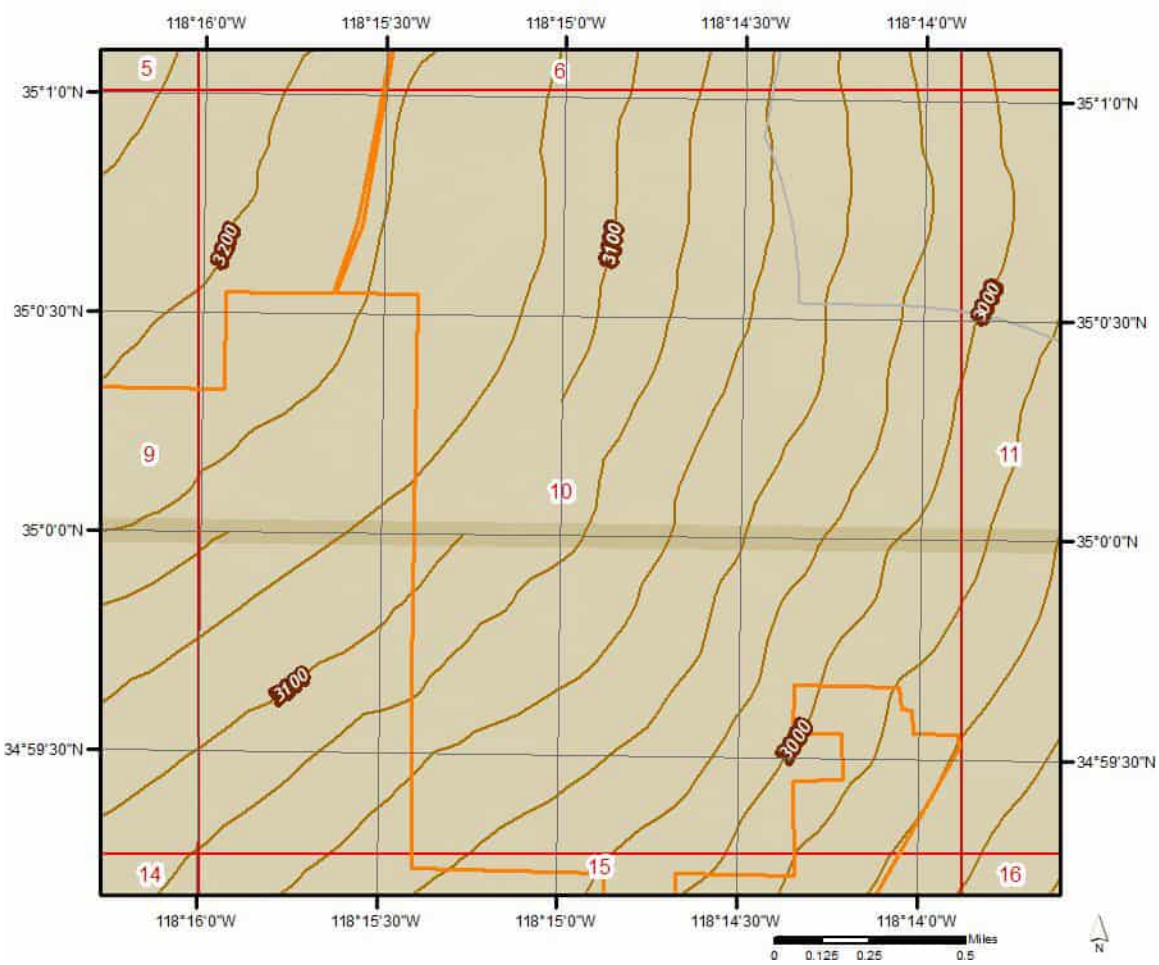

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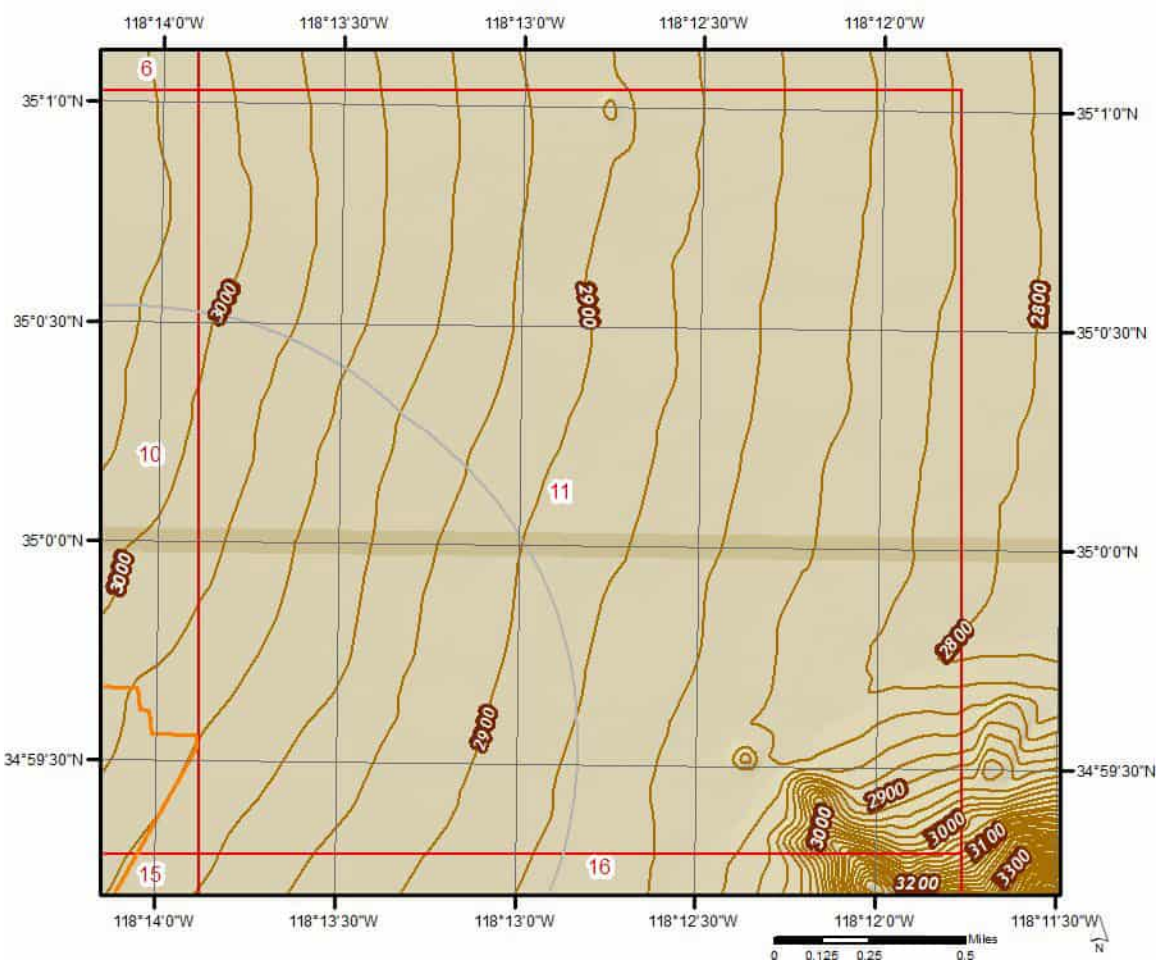

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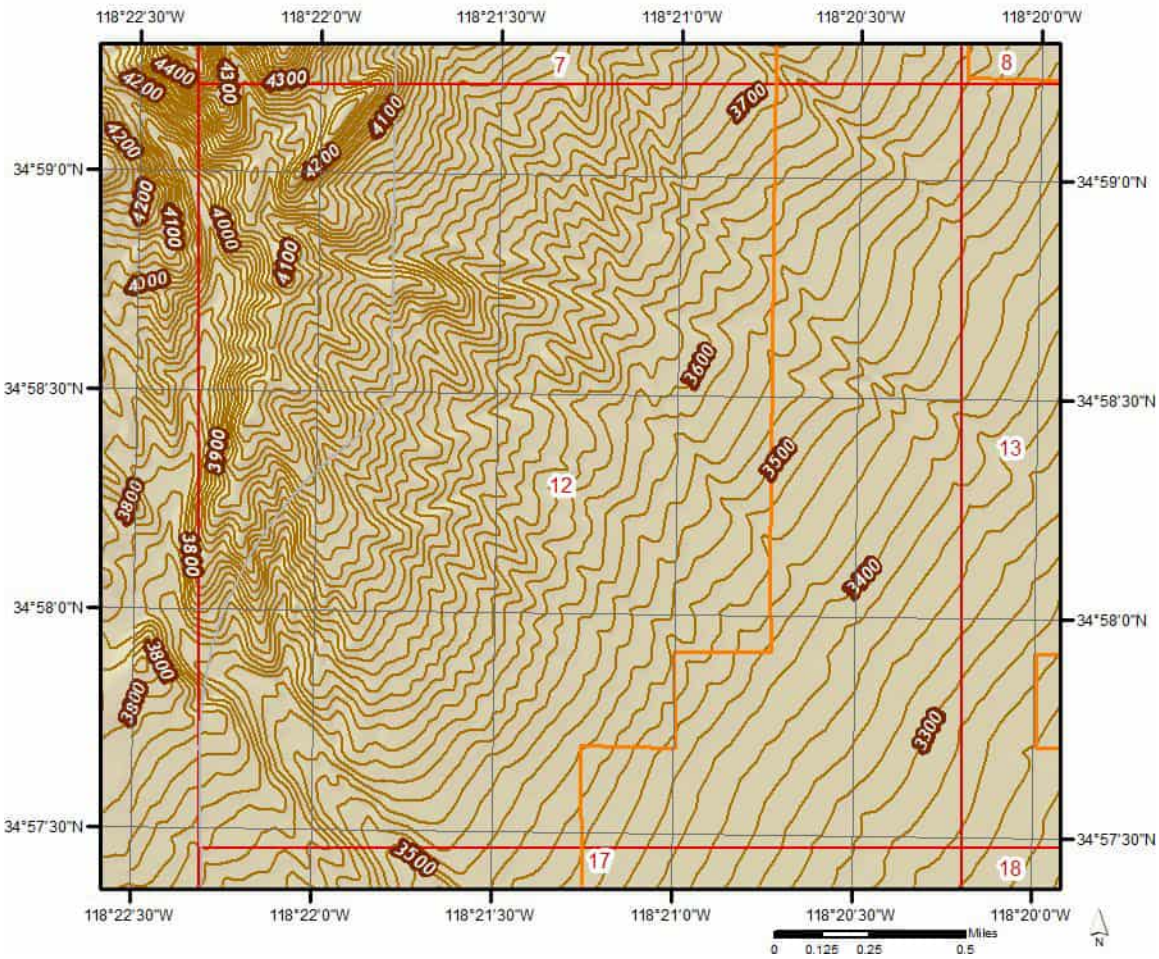

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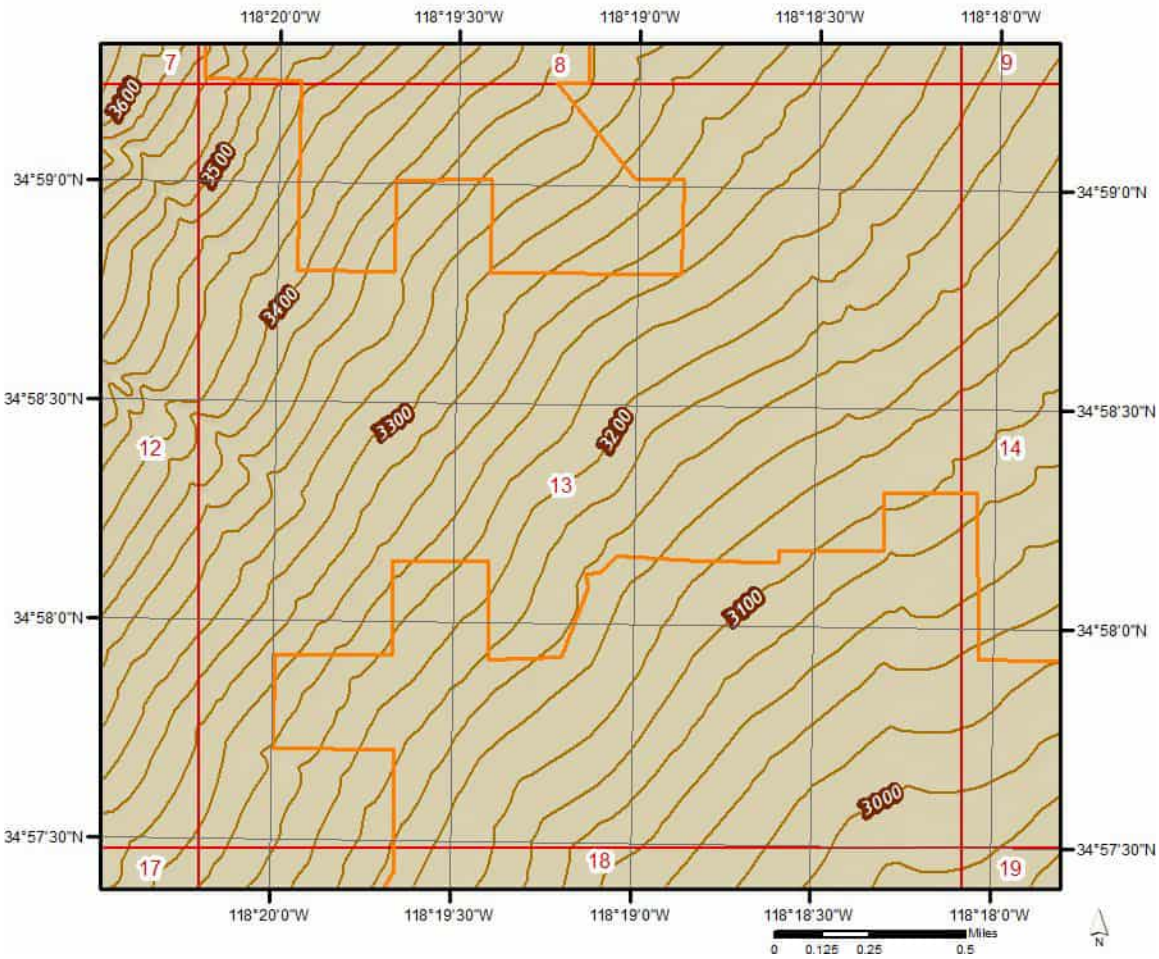

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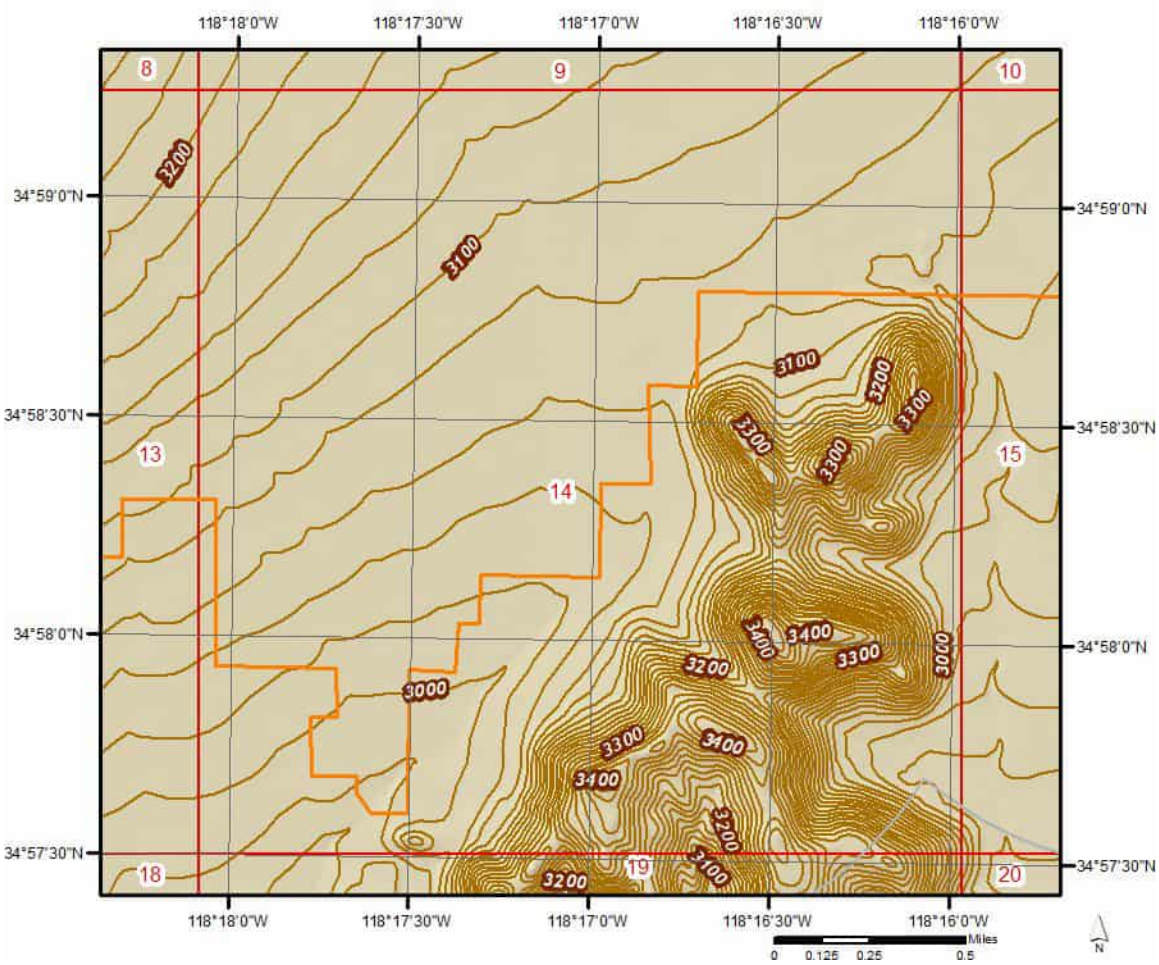

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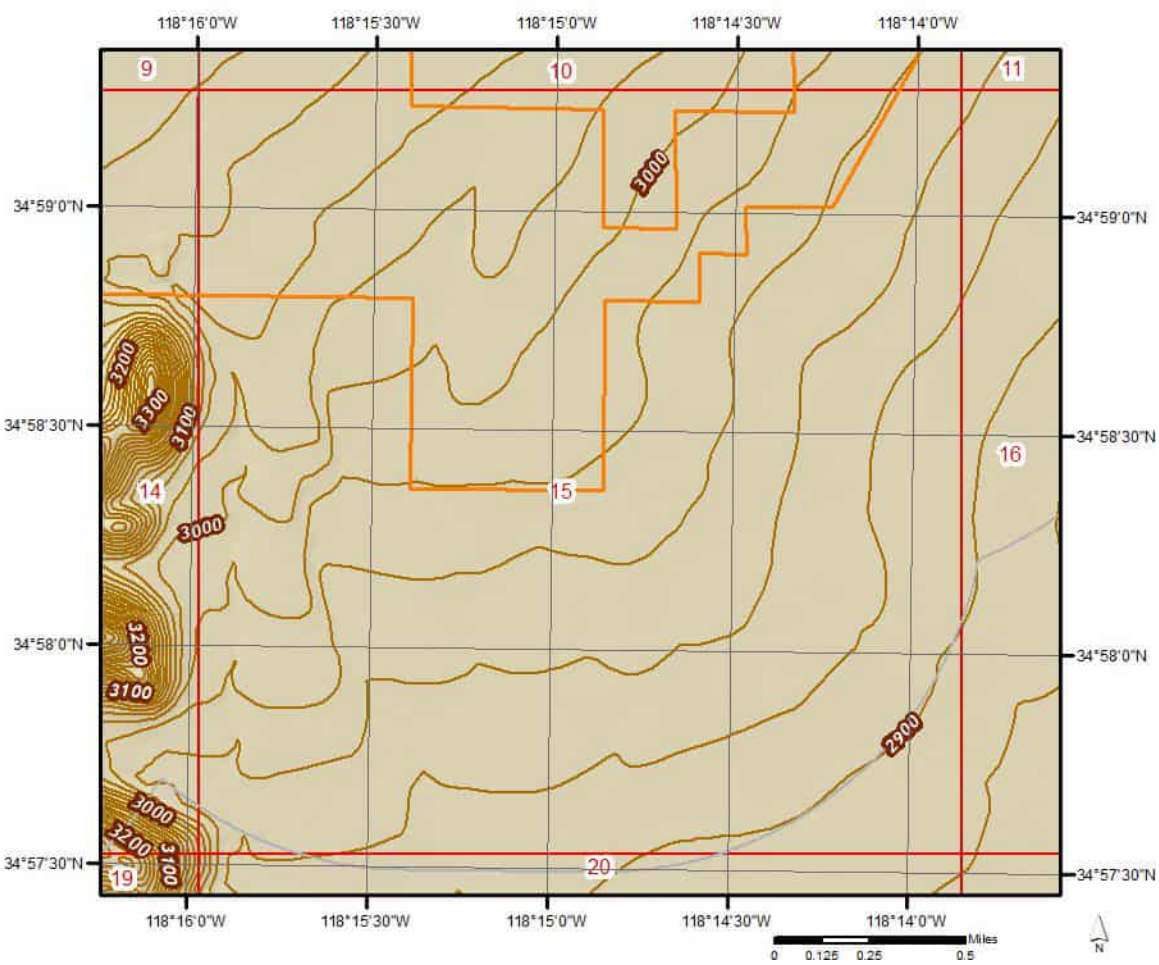

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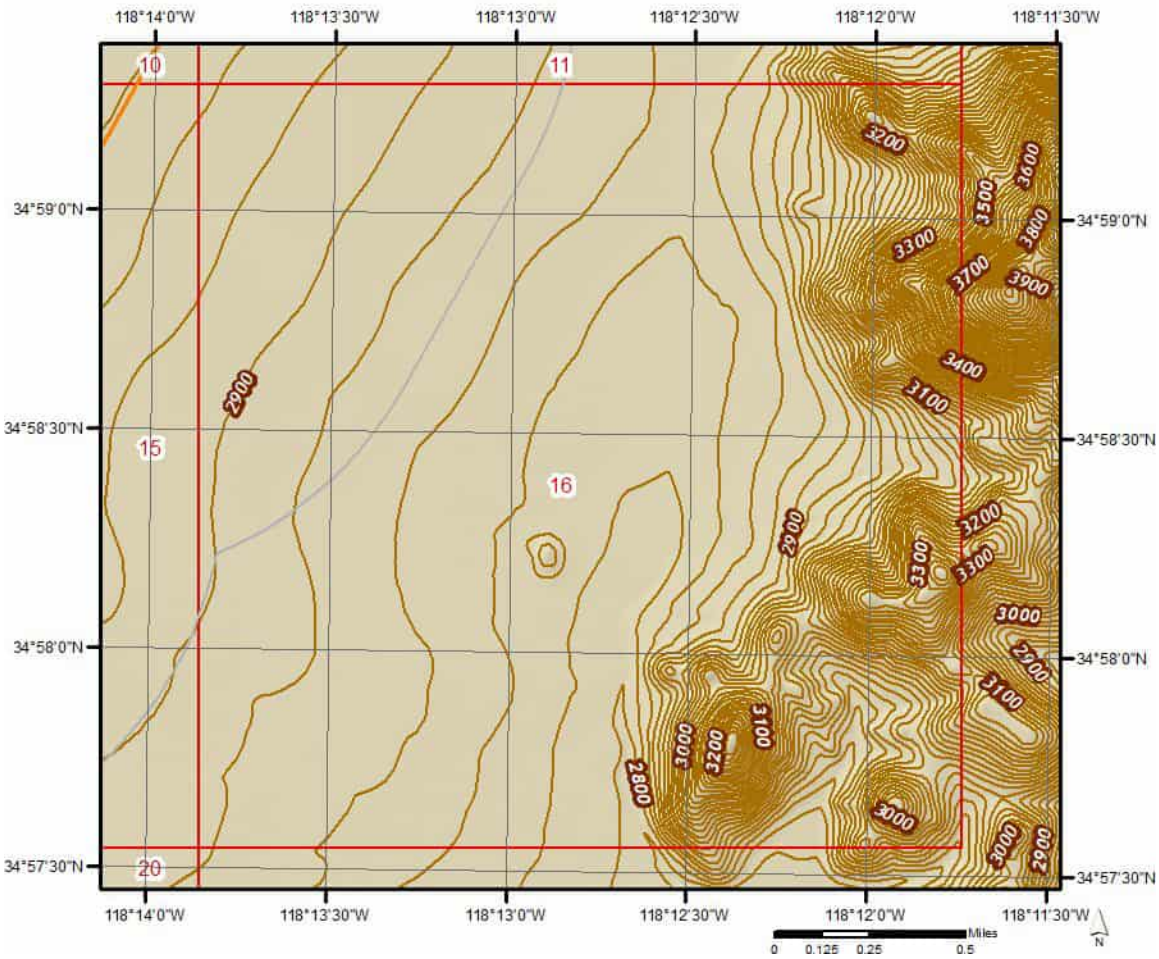

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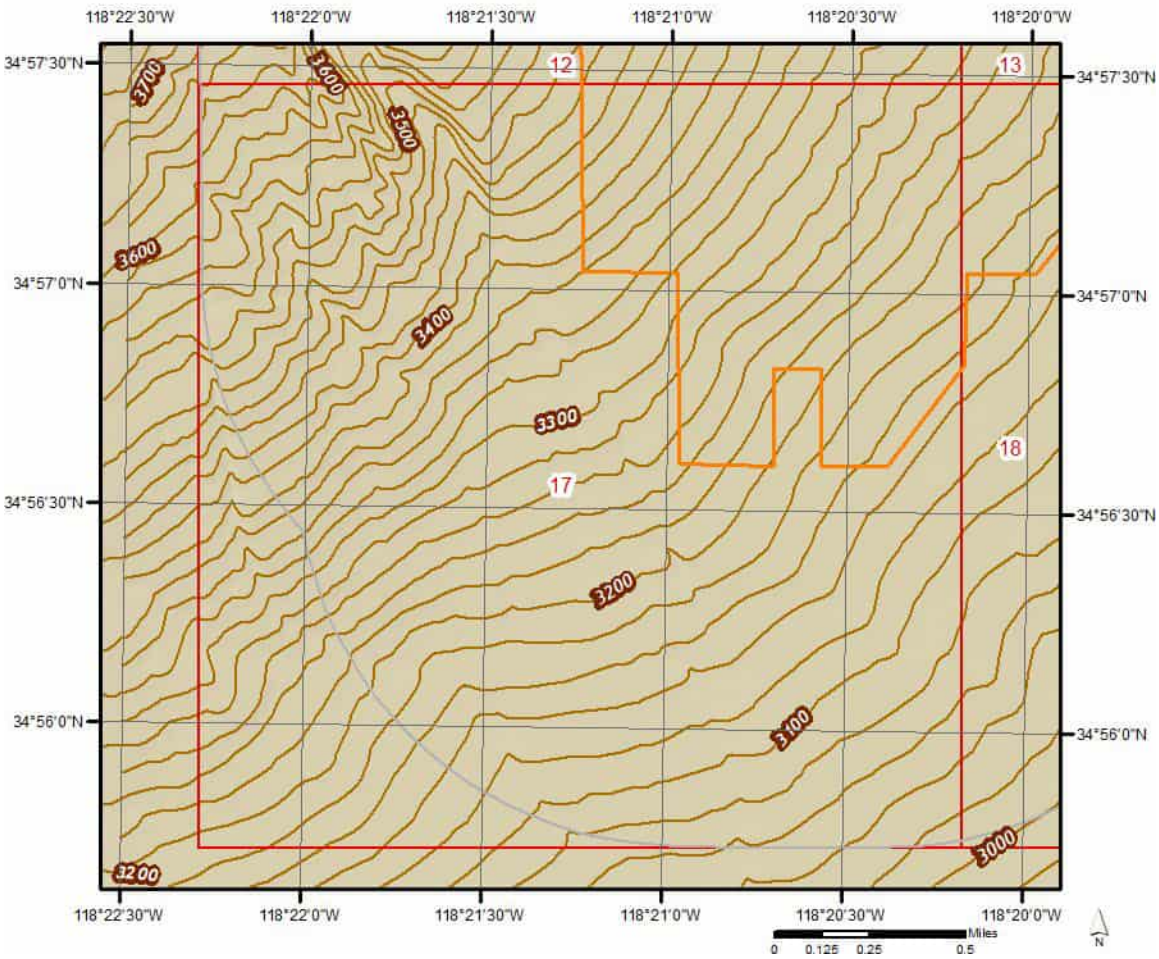

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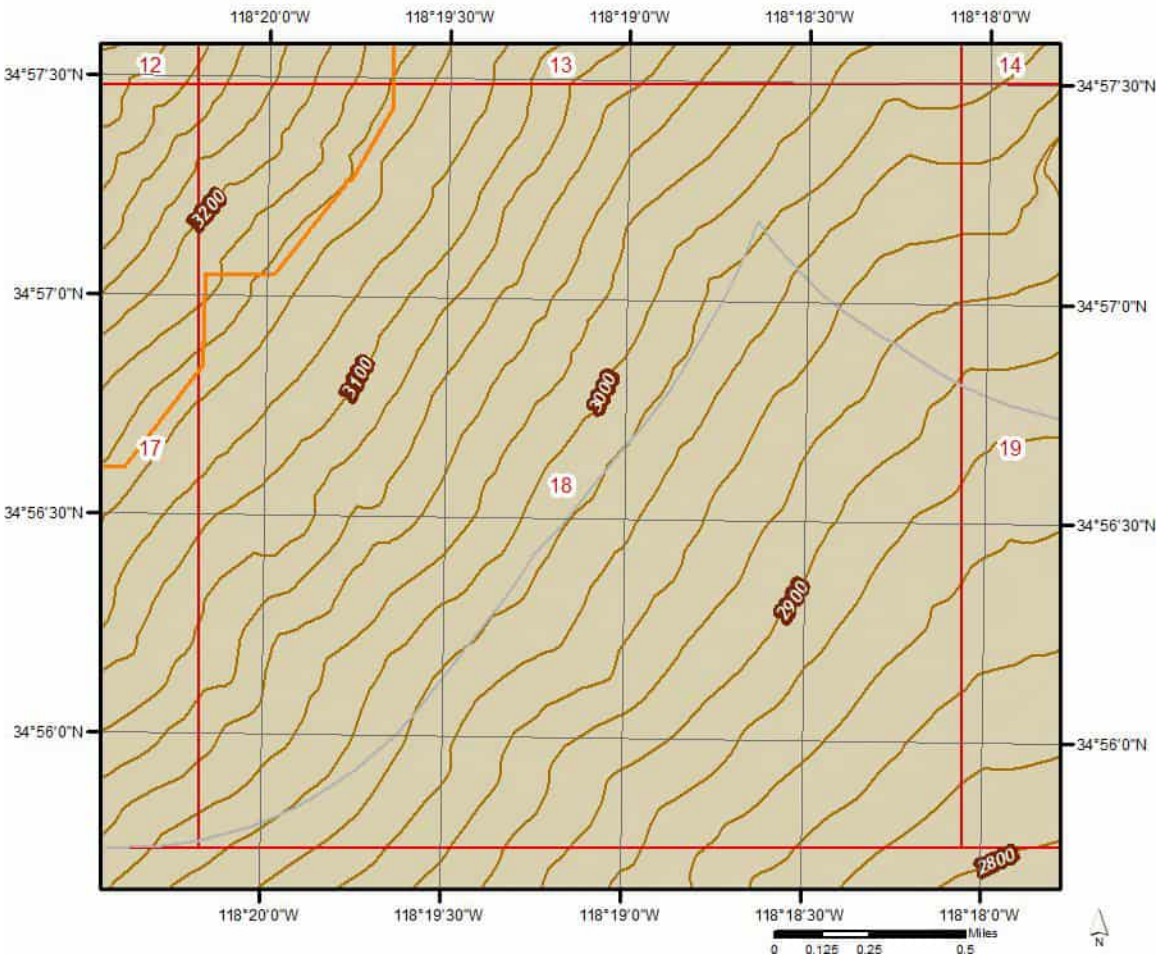

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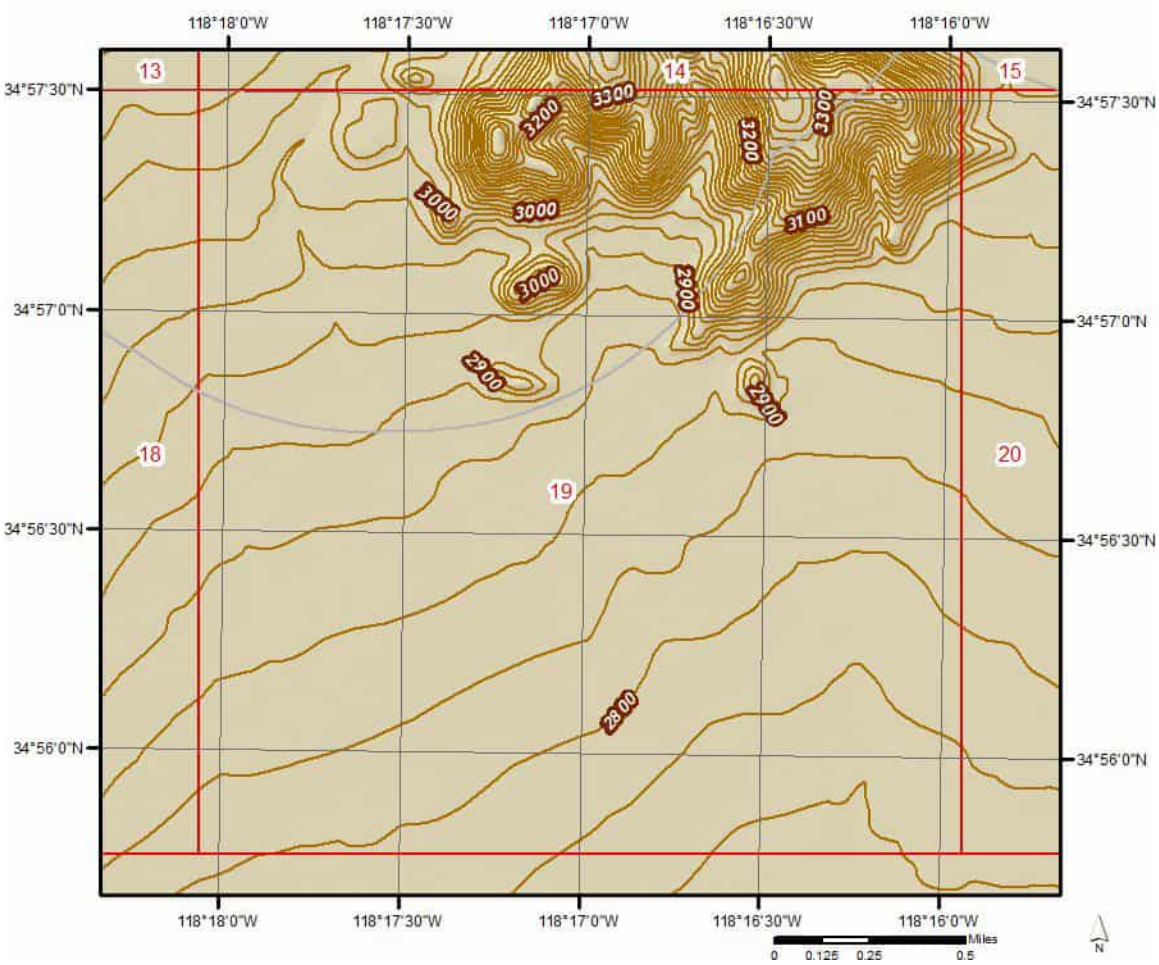

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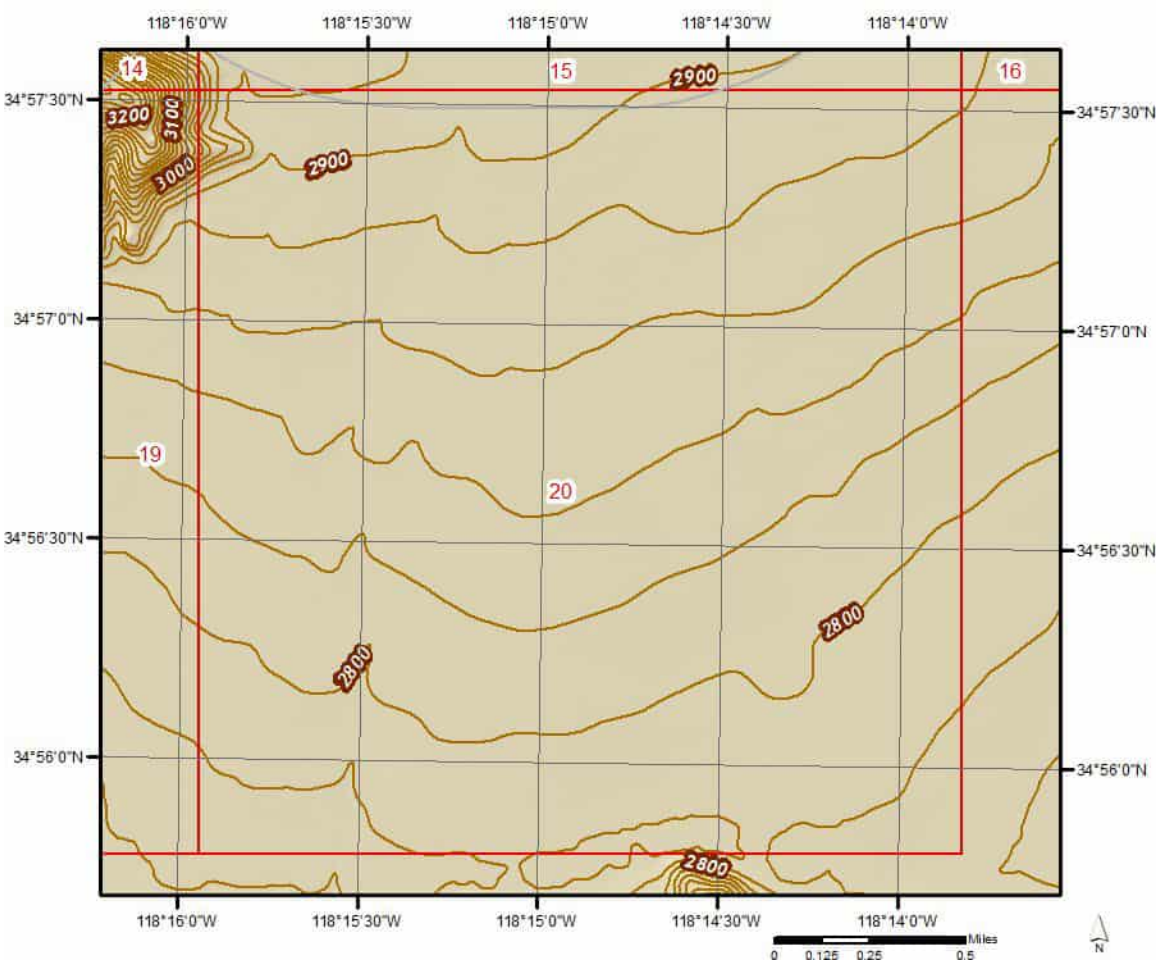
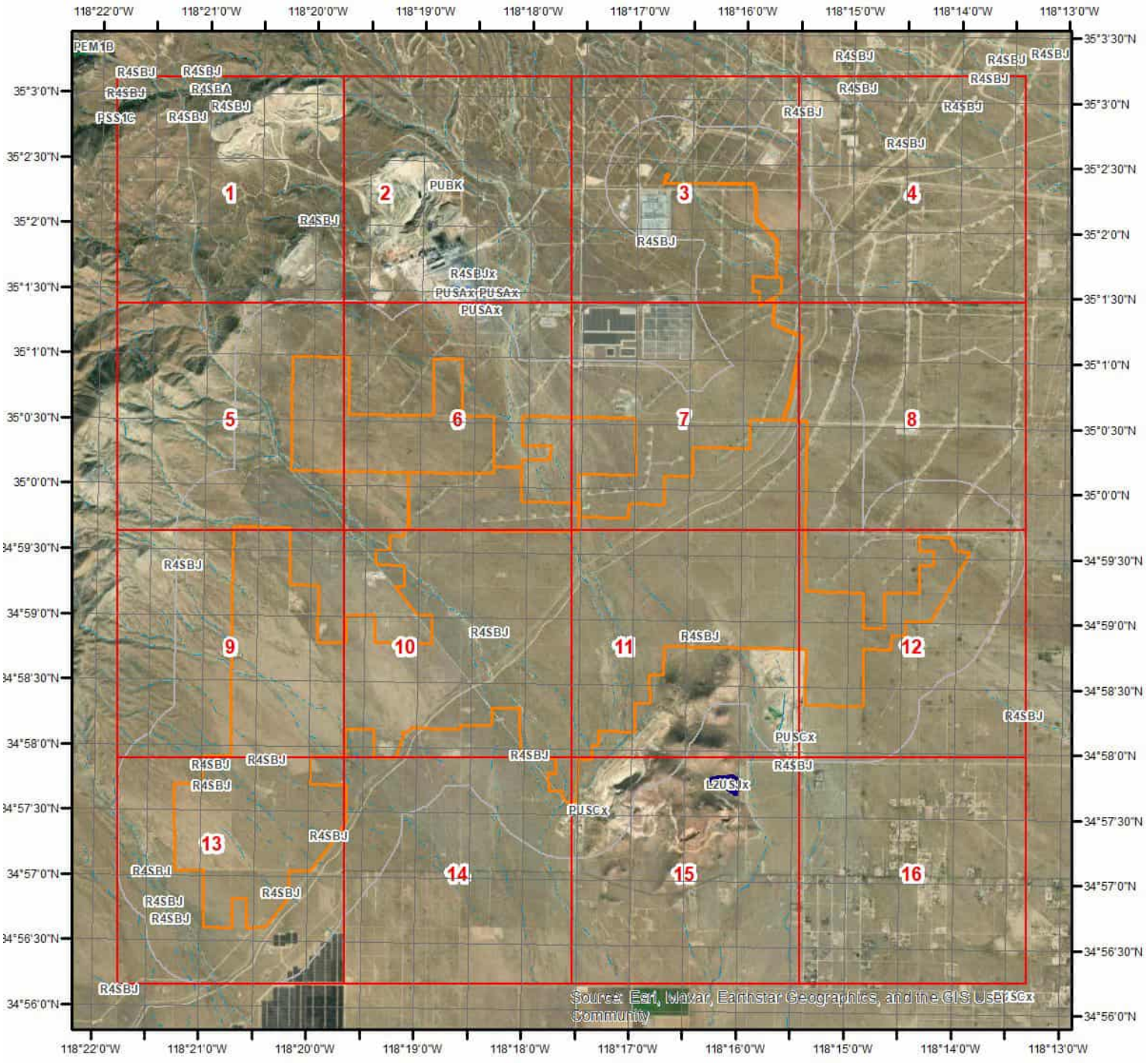


Hydrologic Information



Wetland

0 0.5 1 2 Miles

N

This map shows wetland existence using data from US Fish & Wildlife.
Data coverage is shown to the right. Gray indicates no data available in the area.

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

ERIS

Hydrologic Information



Wetland Type - Page 1

0 0.125 0.25 0.5 Miles

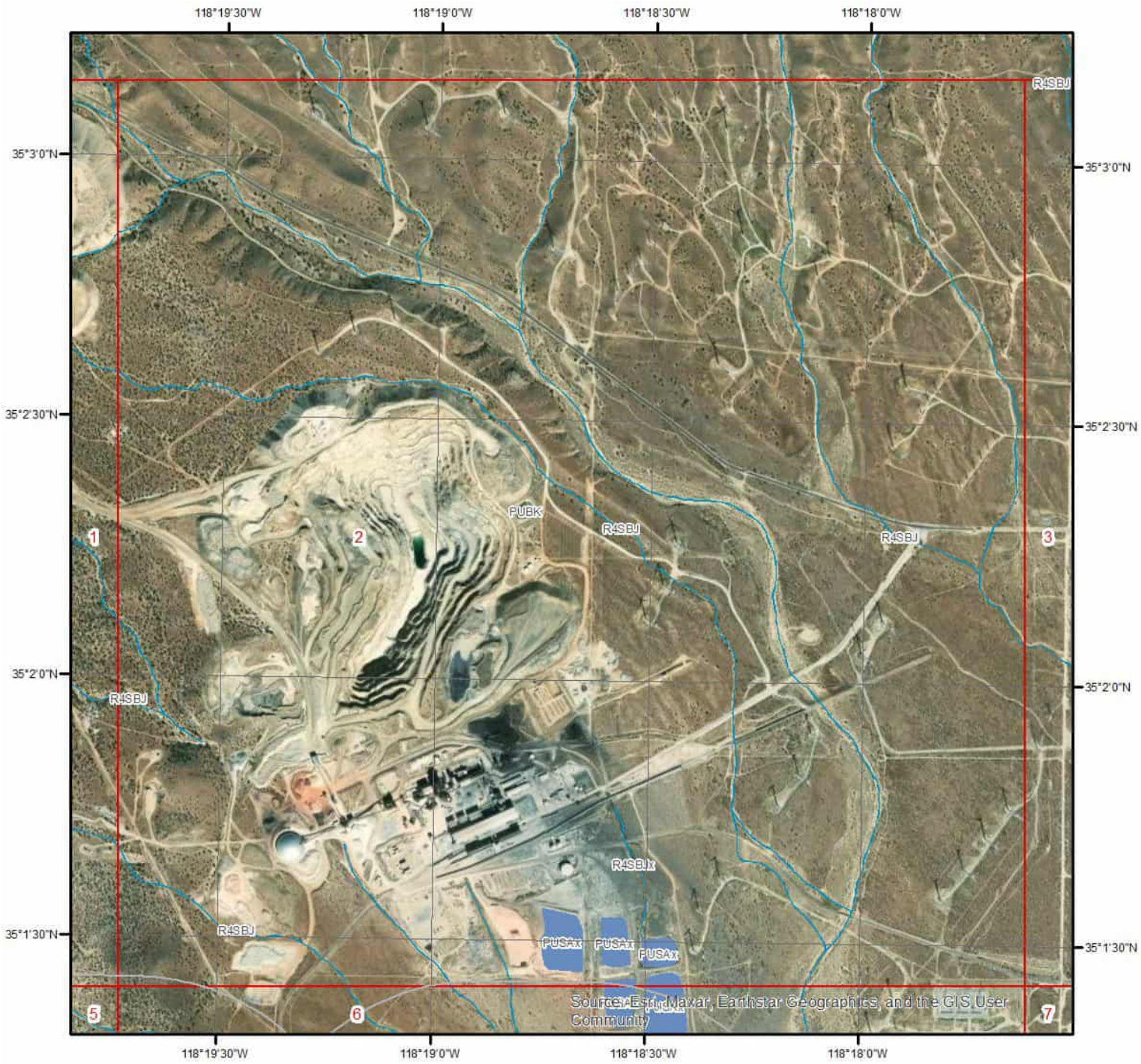
This map shows wetland existence using data from US Fish & Wildlife.
Data coverage is shown to the right. Gray indicates no data available in the area.

N

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

ERIS

Hydrologic Information



Wetland Type - Page 2

Miles
0 0.125 0.25 0.5

N

This map shows wetland existence using data from US Fish & Wildlife.
Data coverage is shown to the right. Gray indicates no data available in the area.

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

ERIS

Hydrologic Information



Wetland Type - Page 3

0 0.125 0.25 0.5 Miles

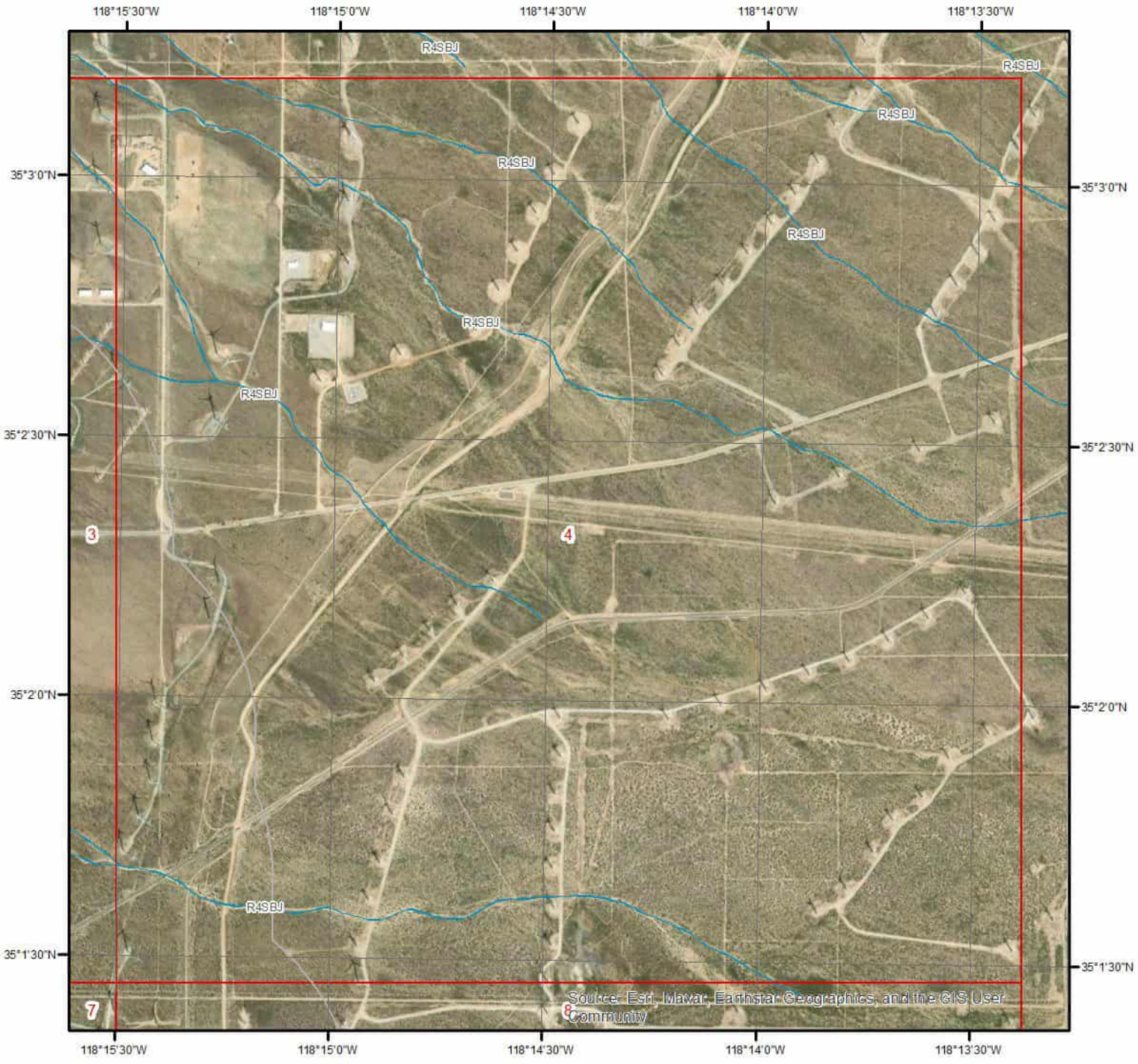
N

This map shows wetland existence using data from US Fish & Wildlife.
Data coverage is shown to the right. Gray indicates no data available in the area.

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

ERIS

Hydrologic Information



Wetland Type - Page 4

Miles
0 0.125 0.25 0.5

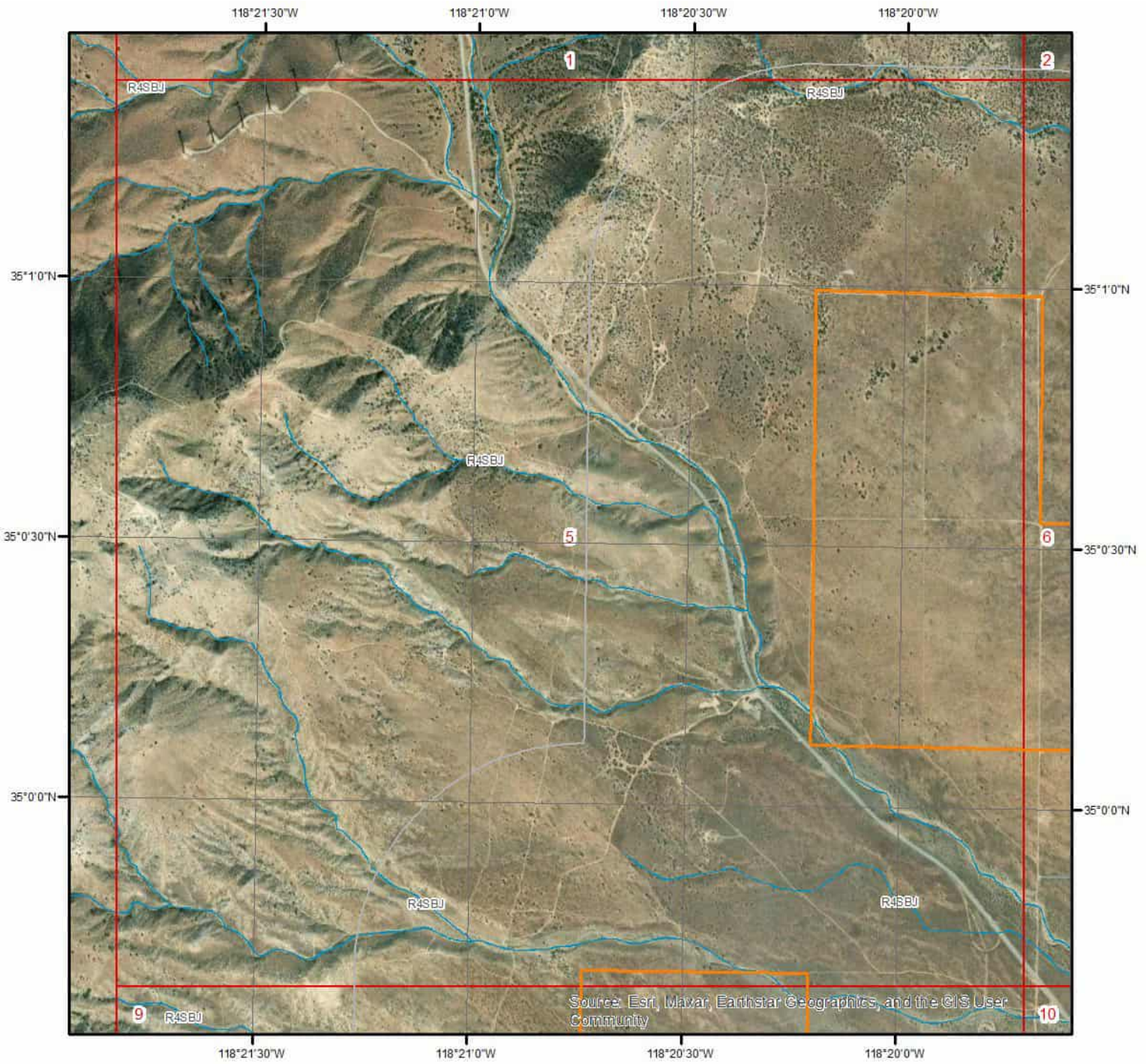
N

This map shows wetland existence using data from US Fish & Wildlife.
Data coverage is shown to the right. Gray indicates no data available in the area.

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

ERIS

Hydrologic Information



Wetland Type - Page 5

0 0.125 0.25 0.5 Miles

This map shows wetland existence using data from US Fish & Wildlife.
Data coverage is shown to the right. Gray indicates no data available in the area.

N

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

ERIS

Hydrologic Information



Wetland Type - Page 6

0 0.125 0.25 0.5 Miles

N

This map shows wetland existence using data from US Fish & Wildlife.
Data coverage is shown to the right. Gray indicates no data available in the area.

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

ERIS

Hydrologic Information



Wetland Type - Page

0 0.125 0.25 0.5 Miles

This map shows wetland existence using data from US Fish & Wildlife.
Data coverage is shown to the right. Gray indicates no data available in the area.

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

N

ERIS

Hydrologic Information



Wetland Type - Page 8

0 0.125 0.25 0.5 Miles

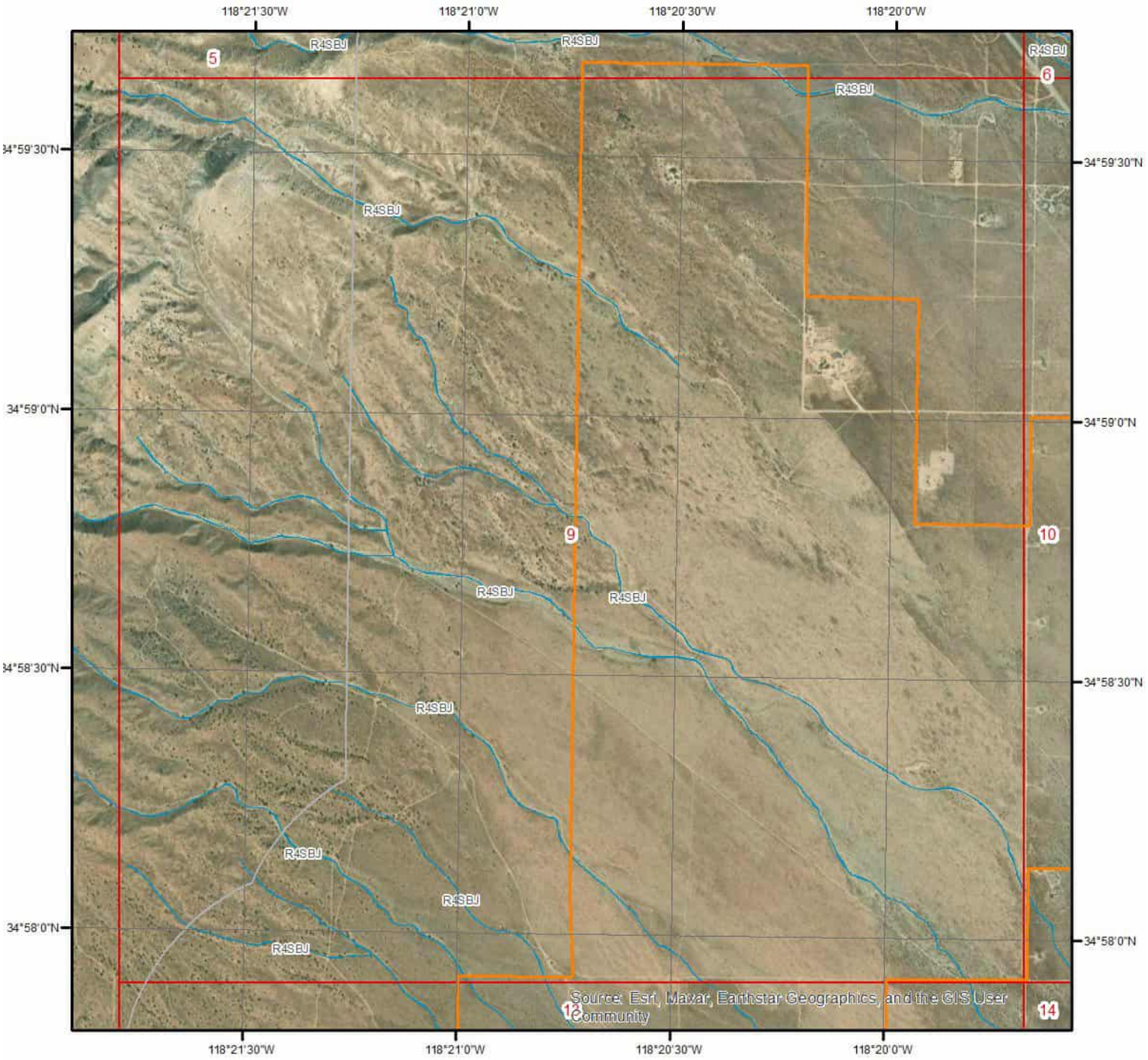
This map shows wetland existence using data from US Fish & Wildlife.
Data coverage is shown to the right. Gray indicates no data available in the area.

N

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

ERIS

Hydrologic Information



Wetland Type - Page 9

0 0.125 0.25 0.5 Miles

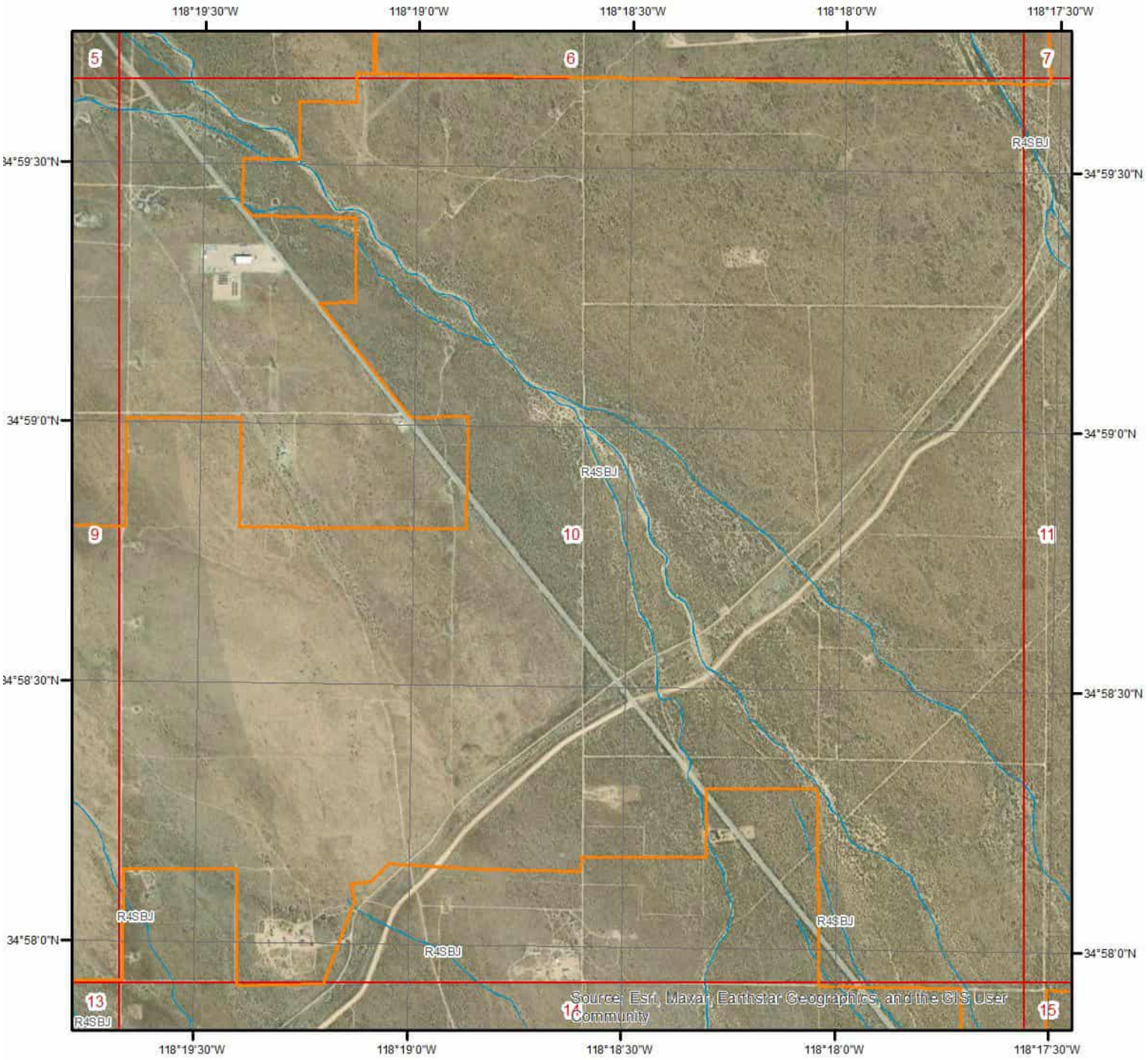
N

This map shows wetland existence using data from US Fish & Wildlife.
Data coverage is shown to the right. Gray indicates no data available in the area.

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

ERIS

Hydrologic Information



Wetland Type - Page 16

Miles
0 0.125 0.25 0.5

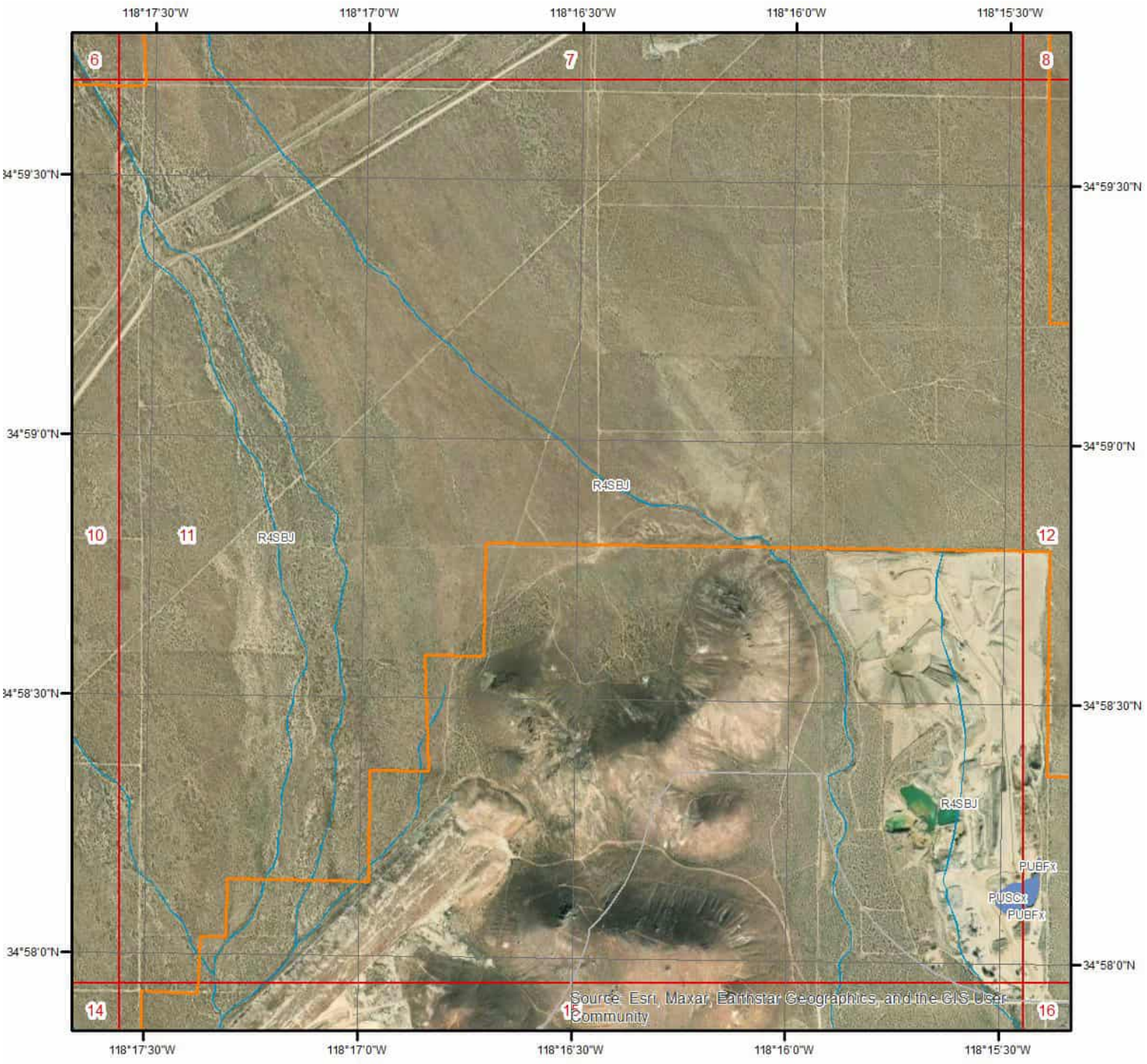
N

This map shows wetland existence using data from US Fish & Wildlife.
Data coverage is shown to the right. Gray indicates no data available in the area.

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

ERIS

Hydrologic Information



Wetland Type - Page 1

0 0.125 0.25 0.5 Miles

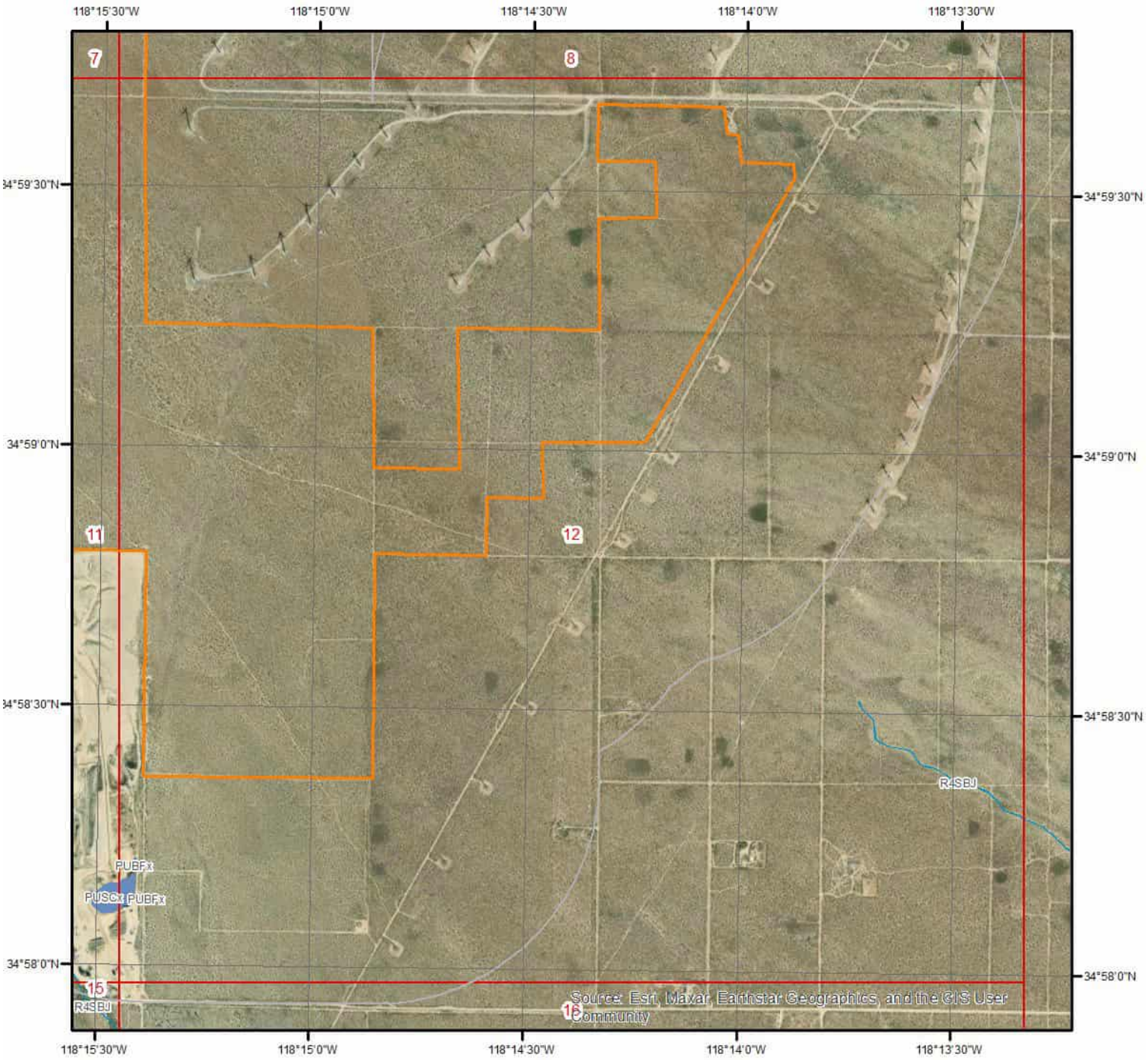
This map shows wetland existence using data from US Fish & Wildlife.
Data coverage is shown to the right. Gray indicates no data available in the area.

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

N

ERIS

Hydrologic Information



Wetland Type - Page 12

Miles
0 0.125 0.25 0.5

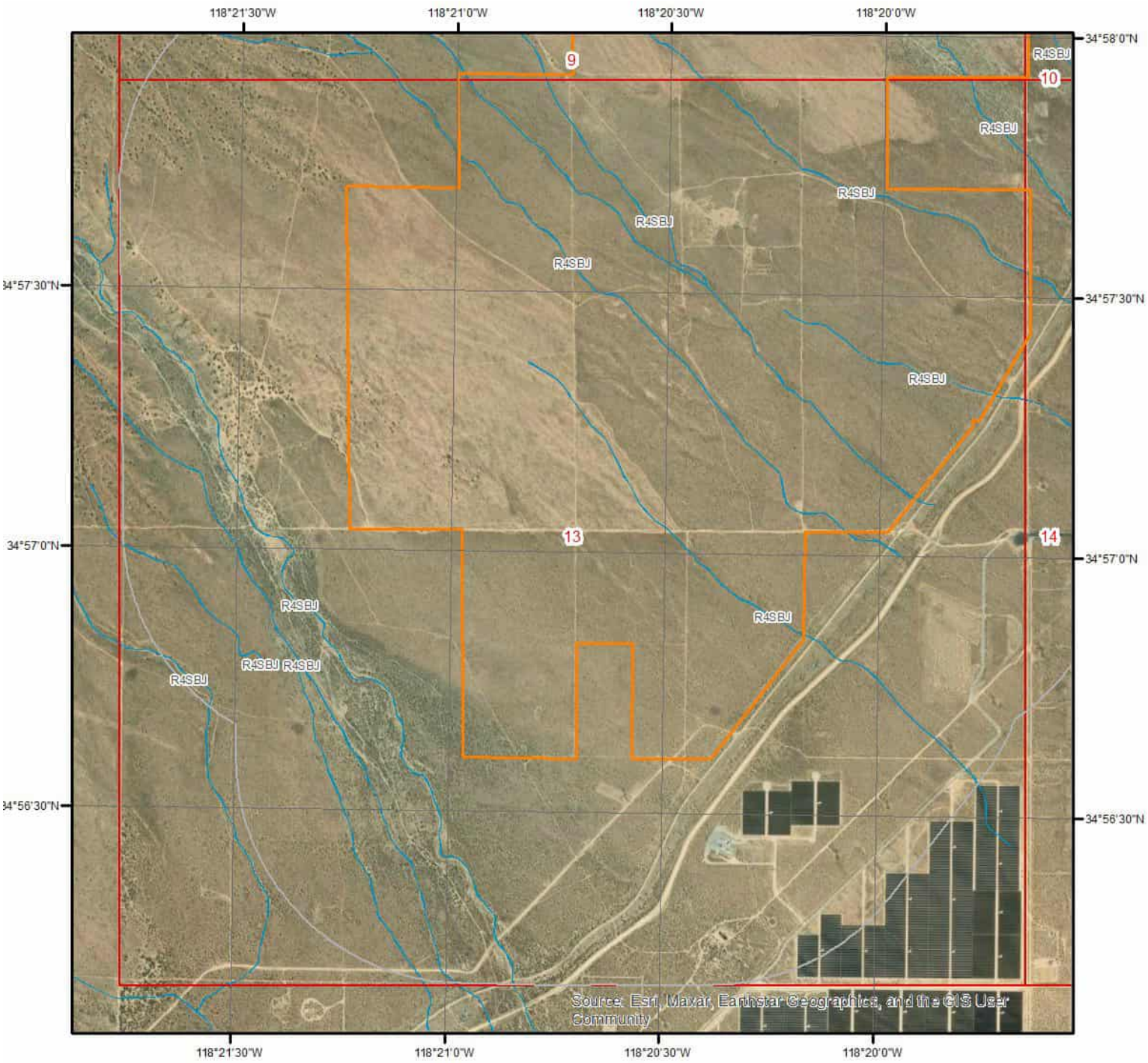
N

This map shows wetland existence using data from US Fish & Wildlife.
Data coverage is shown to the right. Gray indicates no data available in the area.

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

ERIS

Hydrologic Information



Wetland Type - Page 13

Miles
0 0.125 0.25 0.5

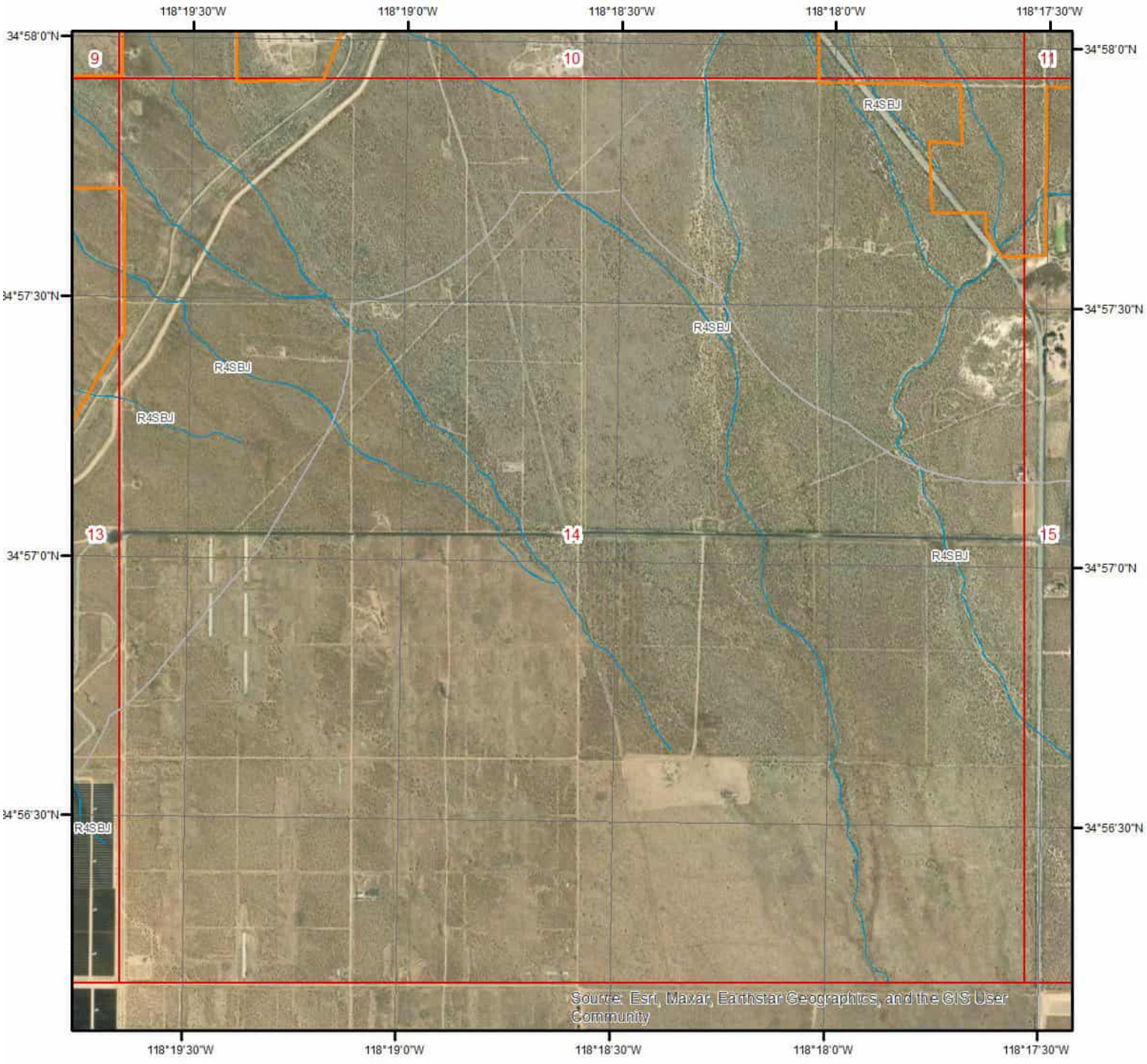
This map shows wetland existence using data from US Fish & Wildlife.
Data coverage is shown to the right. Gray indicates no data available in the area.

N

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

ERIS

Hydrologic Information



Wetland Type - Page 14

0 0.125 0.25 0.5 Miles

N

This map shows wetland existence using data from US Fish & Wildlife.
Data coverage is shown to the right. Gray indicates no data available in the area.

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

ERIS

Hydrologic Information



Wetland Type - Page 15

0 0.125 0.25 0.5 Miles

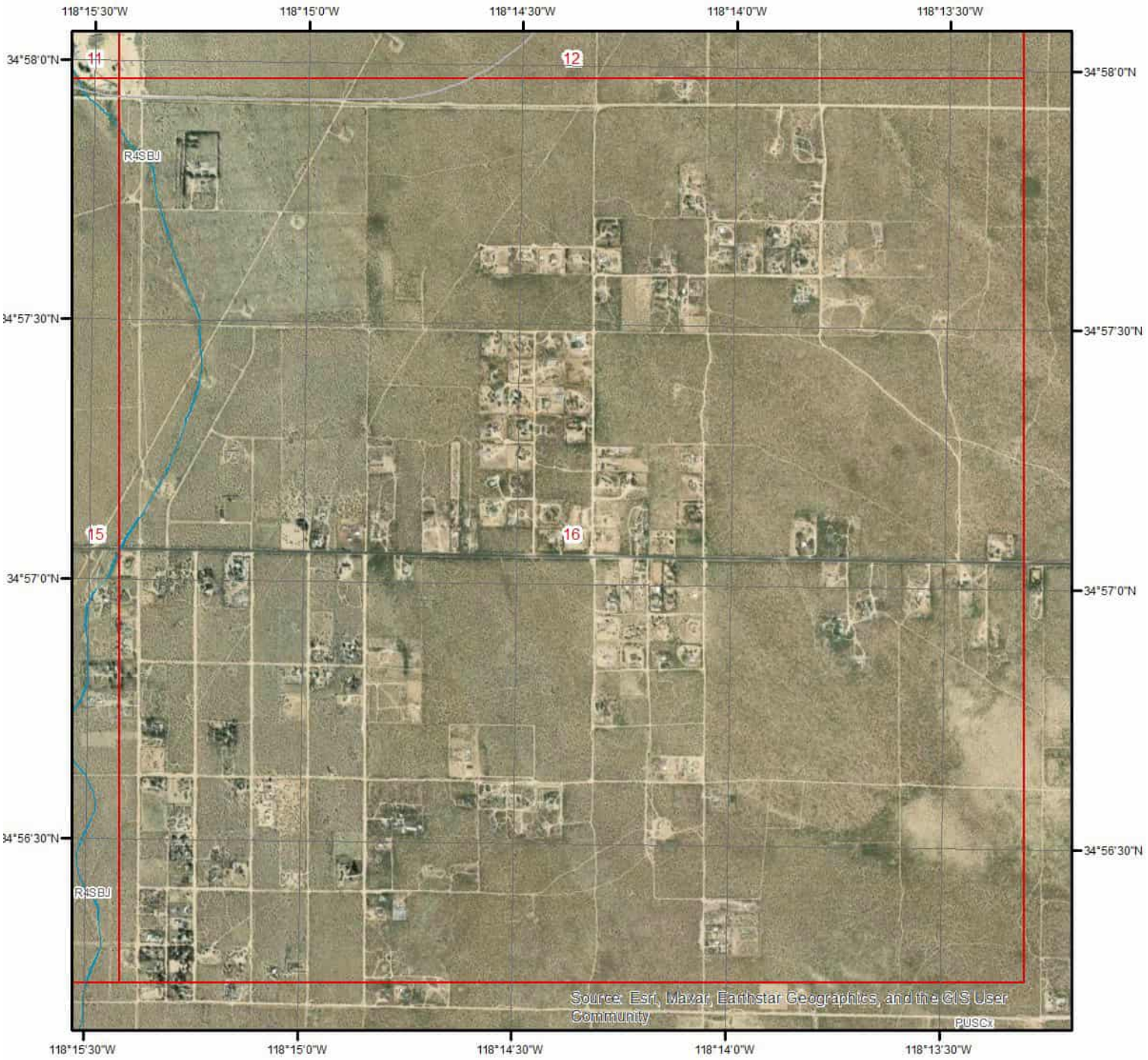
N

This map shows wetland existence using data from US Fish & Wildlife.
Data coverage is shown to the right. Gray indicates no data available in the area.

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

ERIS

Hydrologic Information



Wetland Type - Page 16

Miles
0 0.125 0.25 0.5

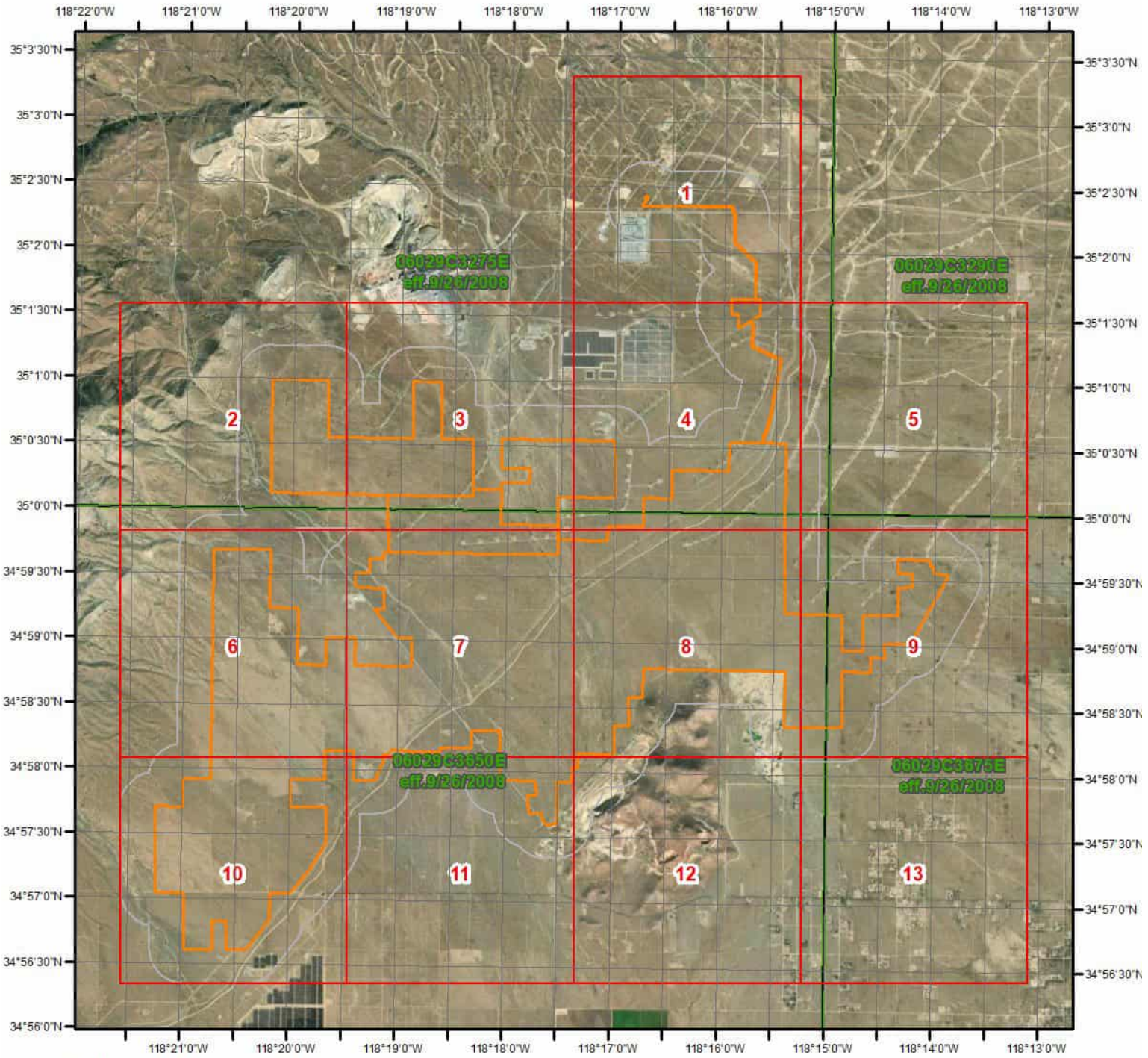
N

This map shows wetland existence using data from US Fish & Wildlife.
Data coverage is shown to the right. Gray indicates no data available in the area.

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

ERIS

Hydrologic Information



Flood Hazard Zones

This map shows FEMA flood hazard zones based on FEMA's National Flood Hazard Layer. FIRM Panels are overlayed. An absent FIRM panel represents no data available.

Miles
0 0.2 0.4 0.8 1.2

N

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee
- Area with Risk Due to Levee
- Open Water

Quadrangle(s): Soledad Mountain,CA; Tehachapi South,CA; Fairmont Butte,CA;

ERIS

Hydrologic Information

The Wetland Type map shows wetland existence overlaid on an aerial imagery. The Flood Hazard Zones map shows FEMA flood hazard zones overlaid on an aerial imagery. Relevant FIRM panels and detailed zone information is provided below.
For detailed Zone descriptions please click the link: https://floodadvocate.com/fema-zone-definitions

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Available FIRM Panels in area:	06029C3650E(effective:2008-09-26) 06029C3675E(effective:2008-09-26) 06029C3275E(effective:2008-09-26)

Hydrologic Information

FEMA Flood Zone Definitions

Special Flood Hazard Areas – High Risk

Special Flood Hazard Areas represent the area subject to inundation by 1-percent-annual chance flood. Structures located within the SFHA have a 26-percent chance of flooding during the life of a standard 30-year mortgage. Federal floodplain management regulations and mandatory flood insurance purchase requirements apply in these zones.

ZONE	DESCRIPTION
A	Areas subject to inundation by the 1-percent-annual-chance flood event. Because detailed hydraulic analyses have not been performed, no Base Flood Elevations (BFEs) or flood depths are shown.
AE, A1-A30	Areas subject to inundation by the 1-percent-annual-chance flood event determined by detailed methods. BFEs are shown within these zones. (Zone AE is used on new and revised maps in place of Zones A1–A30.)
AH	Areas subject to inundation by 1-percent-annual-chance shallow flooding (usually areas of ponding) where average depths are 1–3 feet. BFEs derived from detailed hydraulic analyses are shown in this zone.
AO	Areas subject to inundation by 1-percent-annual-chance shallow flooding (usually sheet flow on sloping terrain) where average depths are 1–3 feet. Average flood depths derived from detailed hydraulic analyses are shown within this zone.
AR	Areas that result from the decertification of a previously accredited flood protection system that is determined to be in the process of being restored to provide base flood protection.
A99	Areas subject to inundation by the 1-percent-annual-chance flood event, but which will ultimately be protected upon completion of an under-construction Federal flood protection system. These are areas of special flood hazard where enough progress has been made on the construction of a protection system, such as dikes, dams, and levees, to consider it complete for insurance rating purposes. Zone A99 may be used only when the flood protection system has reached specified statutory progress toward completion. No BFEs or flood depths are shown.

Coastal High Hazard Areas – High Risk

Coastal High Hazard Areas (CHHA) represent the area subject to inundation by 1-percent-annual chance flood, extending from offshore to the inland limit of a primary front al dune along an open coast and any other area subject to high velocity wave action from storms or seismic sources. Structures located within the CHHA have a 26-percent chance of flooding during the life of a standard 30-year mortgage. Federal floodplain management regulations and mandatory purchase requirements apply in these zones.

ZONE	DESCRIPTION
V	Areas along coasts subject to inundation by the 1-percent-annual-chance flood event with additional hazards associated with storm-induced waves. Because detailed coastal analyses have not been performed, no BFEs or flood depths are shown.
VE, V1-V30	Areas along coasts subject to inundation by the 1-percent-annual-chance flood event with additional hazards due to storm-induced velocity wave action. BFEs derived from detailed hydraulic coastal analyses are shown within these zones. (Zone VE is used on new and revised maps in place of Zones V1–V30.)

Hydrologic Information

Moderate and Minimal Risk Areas

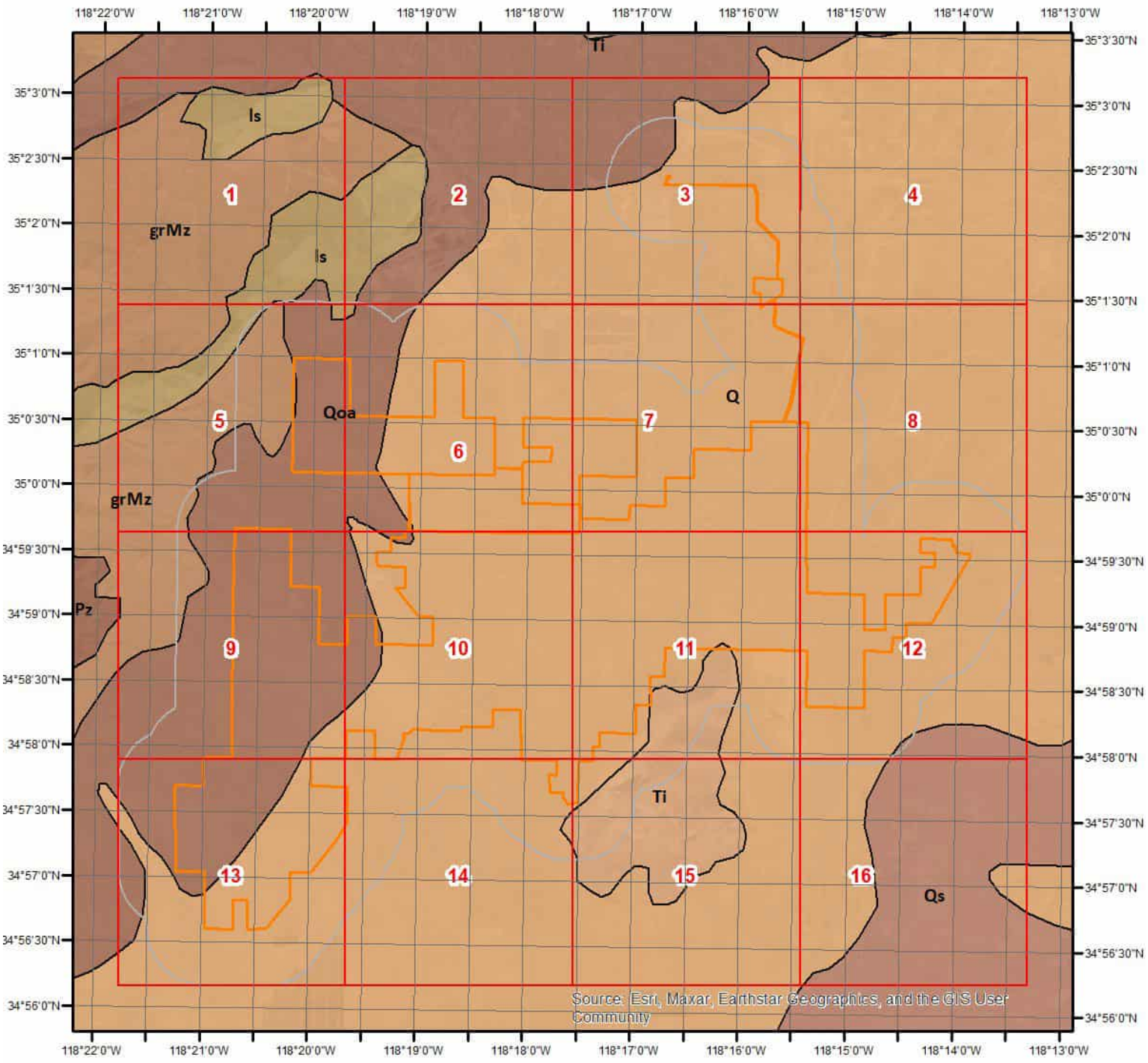
Areas of moderate or minimal hazard are studied based upon the principal source of flood in the area. However, buildings in these zones could be flooded by severe, concentrated rainfall coupled with inadequate local drainage systems. Local stormwater drainage systems are not normally considered in a community's flood insurance study. The failure of a local drainage system can create areas of high flood risk within these zones. Flood insurance is available in participating communities, but is not required by regulation in these zones. Nearly 25-percent of all flood claims filed are for structures located within these zones.

ZONE	DESCRIPTION
B, X (shaded)	Moderate risk areas within the 0.2-percent-annual-chance floodplain, areas of 1-percent-annual-chance flooding where average depths are less than 1 foot, areas of 1-percent-annual-chance flooding where the contributing drainage area is less than 1 square mile, and areas protected from the 1-percent-annual-chance flood by a levee. No BFEs or base flood depths are shown within these zones. (Zone X (shaded) is used on new and revised maps in place of Zone B.)
C, X (unshaded)	Minimal risk areas outside the 1-percent and .2-percent-annual-chance floodplains. No BFEs or base flood depths are shown within these zones. (Zone X (unshaded) is used on new and revised maps in place of Zone C.)

Undetermined Risk Areas

ZONE	DESCRIPTION
D	Unstudied areas where flood hazards are undetermined, but flooding is possible. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.

Geologic Information



Geologic Units

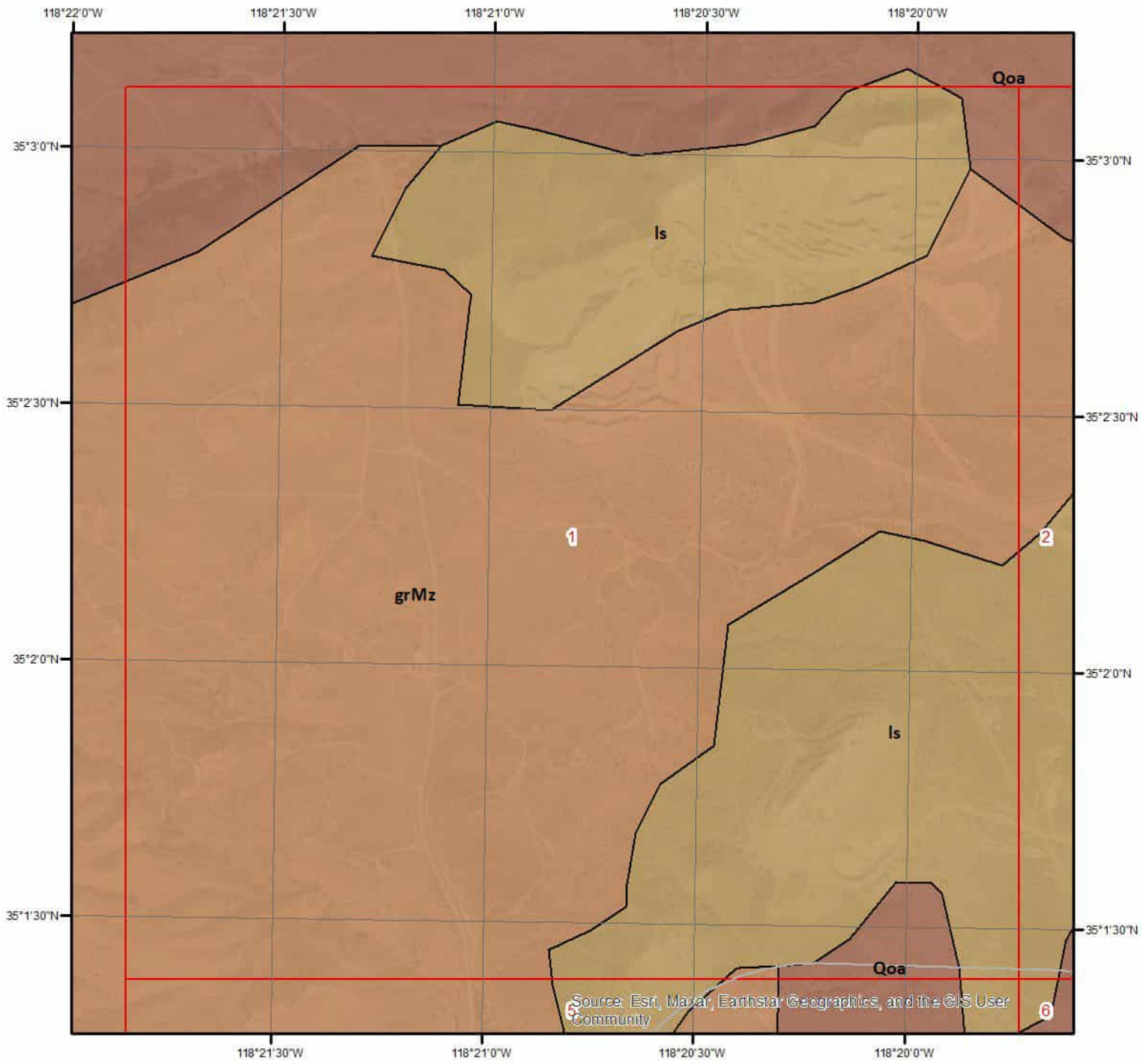
This maps shows geologic units in the area. Please refer to the report for detailed descriptions.

N

0 1 2 Miles

ERIS

Geologic Information



Geologic Units - Page 1

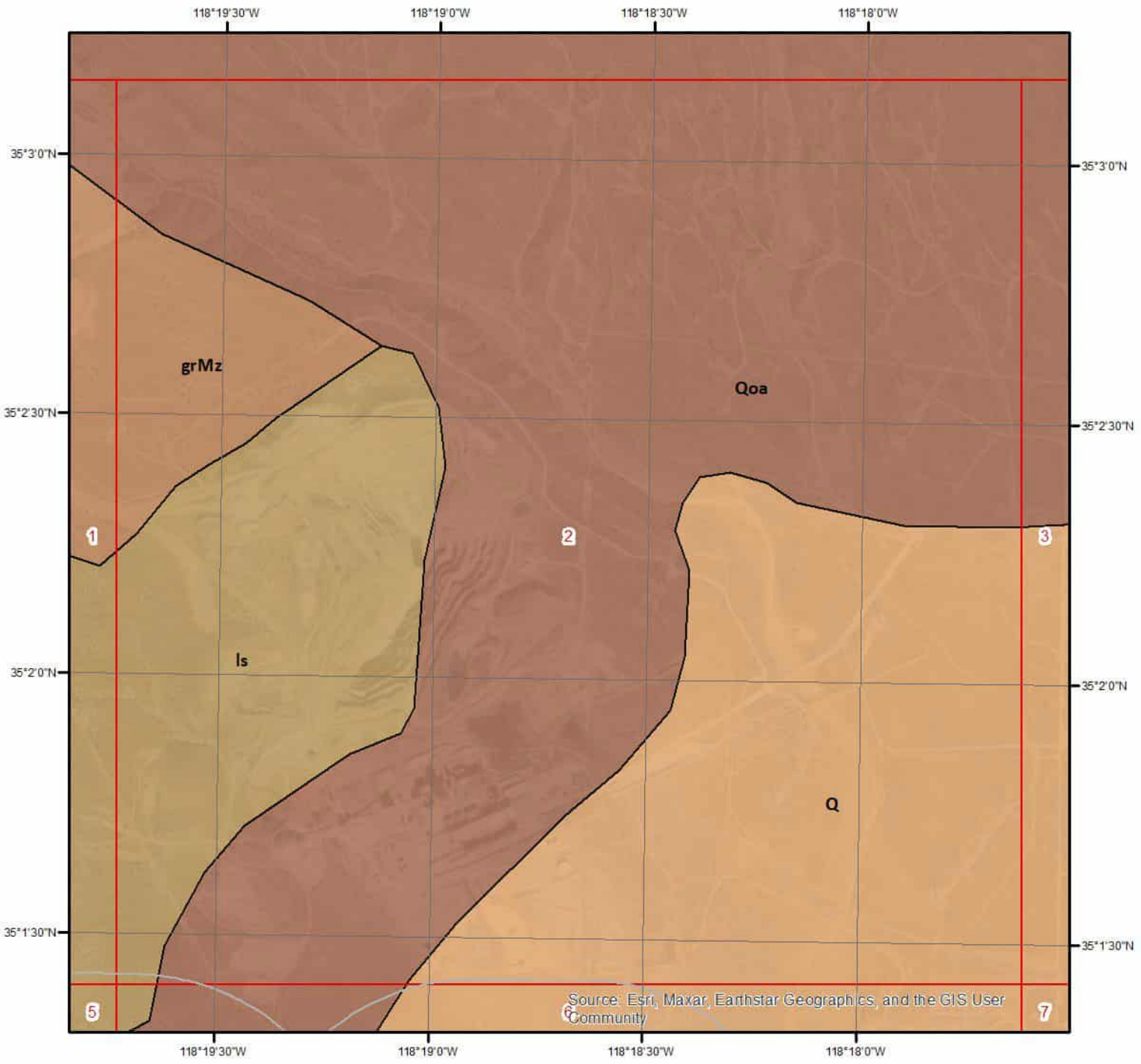
N

0 0.275 0.55 Miles

This maps shows geologic units in the area. Please refer to the report for detailed descriptions.

ERIS

Geologic Information



Geologic Units - Page 2

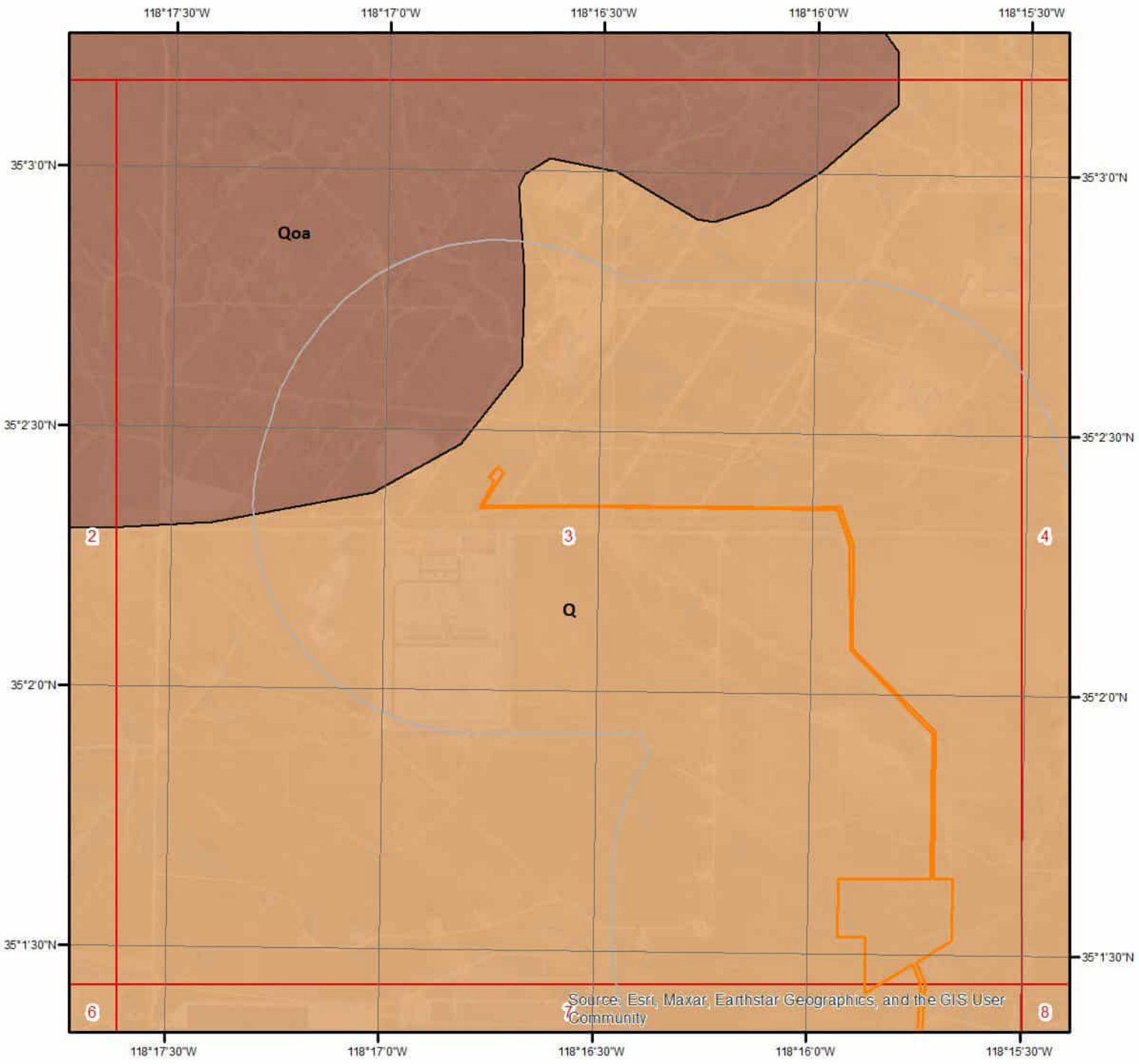
N

0 0.25 0.5 Miles

This maps shows geologic units in the area. Please refer to the report for detailed descriptions.

ERIS

Geologic Information



Geologic Units - Page 3

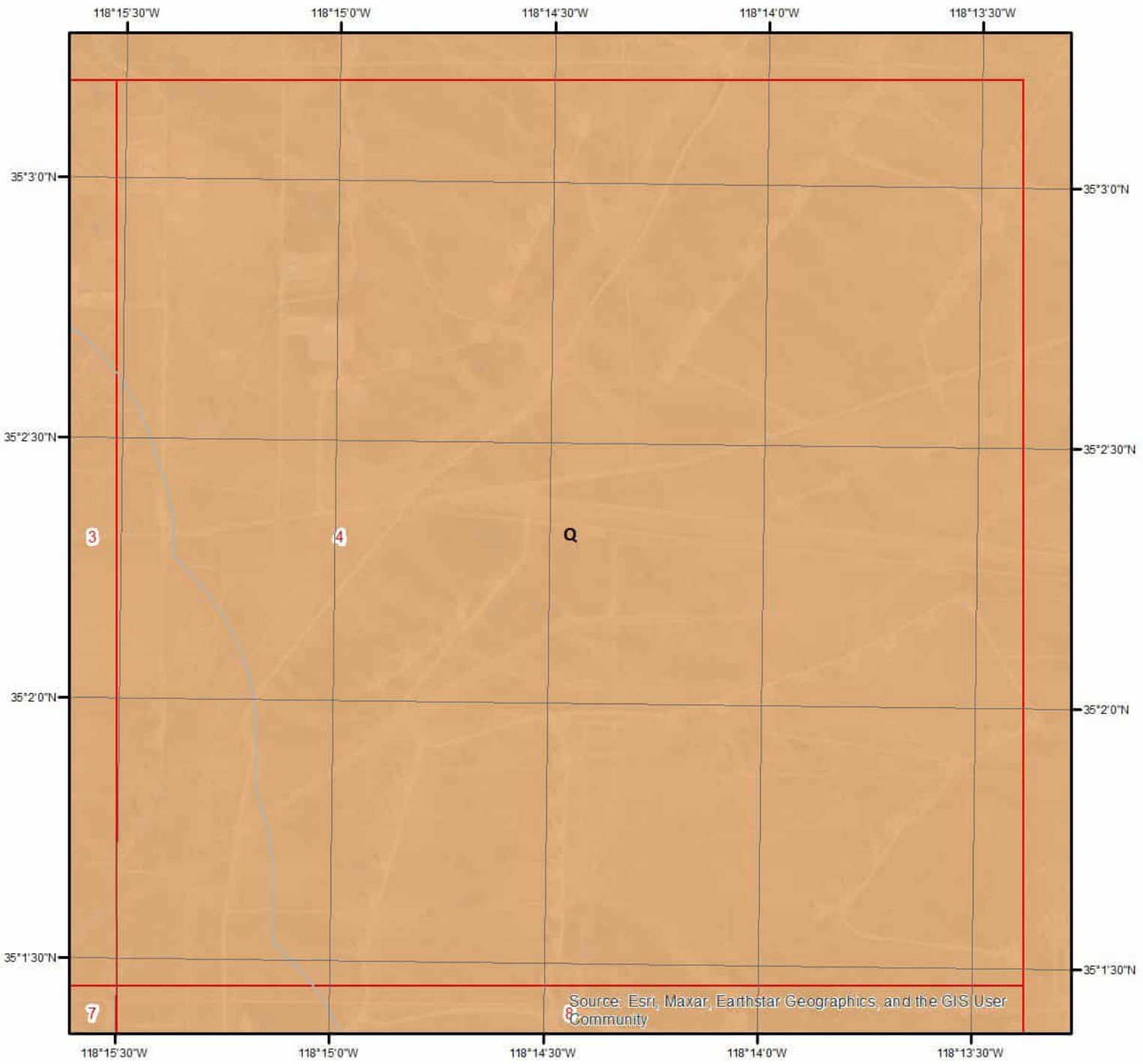
N

0 0.25 0.5 Miles

This maps shows geologic units in the area. Please refer to the report for detailed descriptions.

ERIS

Geologic Information



Geologic Units - Page 4

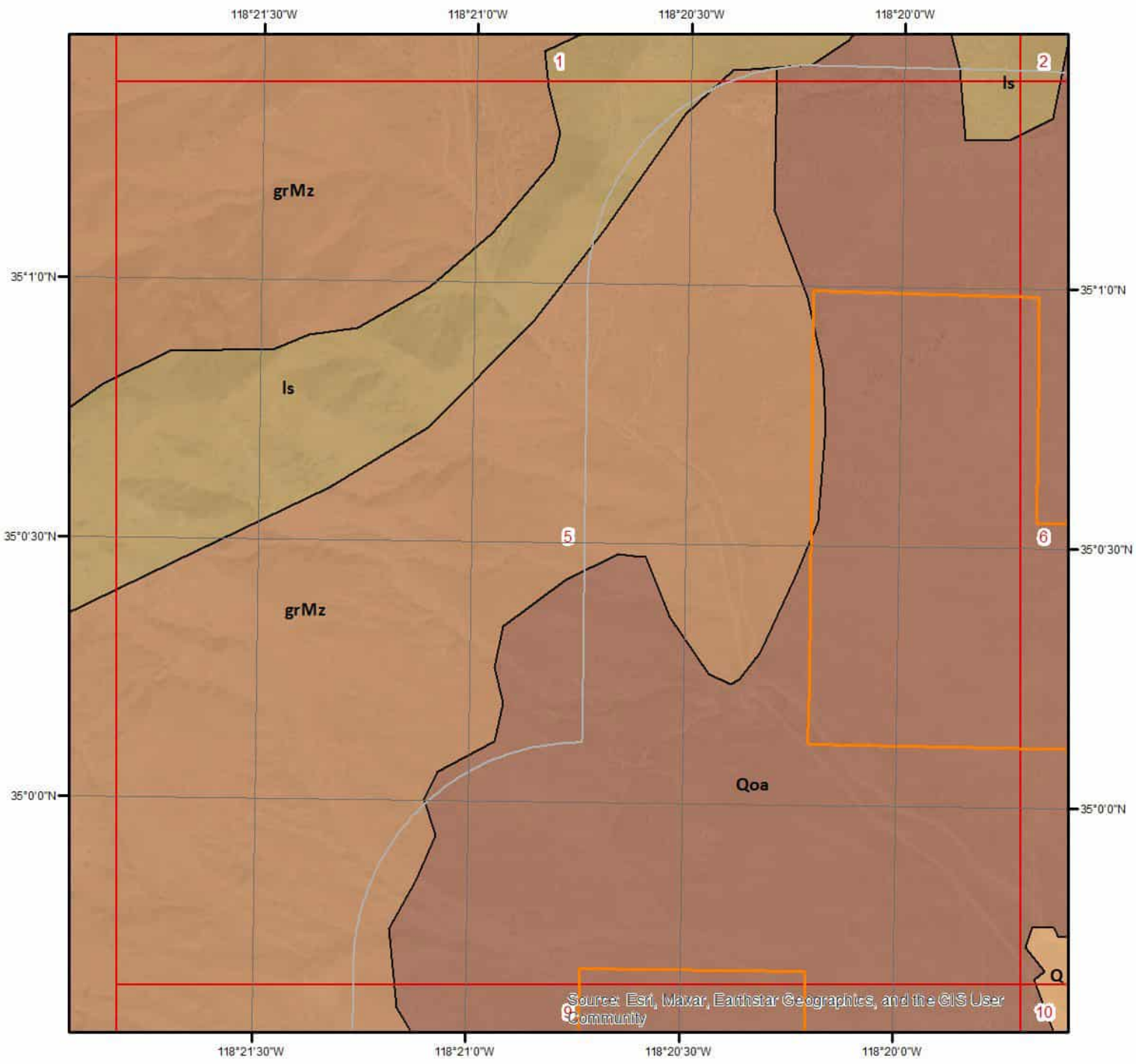
This maps shows geologic units in the area. Please refer to the report for detailed descriptions.

N

0 0.25 0.5 Miles

ERIS

Geologic Information



Geologic Units - Page 5

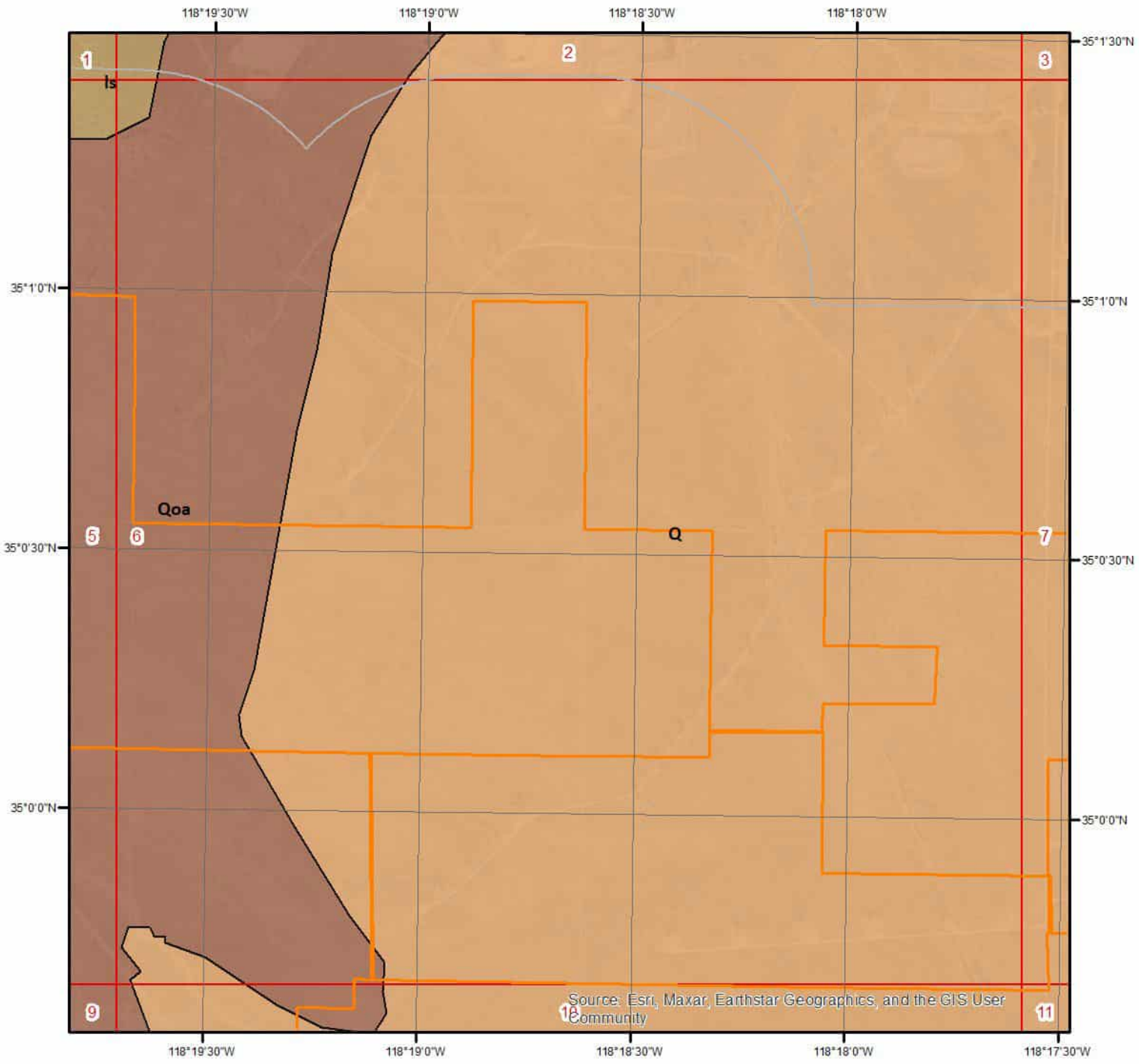
This maps shows geologic units in the area. Please refer to the report for detailed descriptions.

N

Miles
0 0.25 0.5

ERIS

Geologic Information



Geologic Units - Page 6

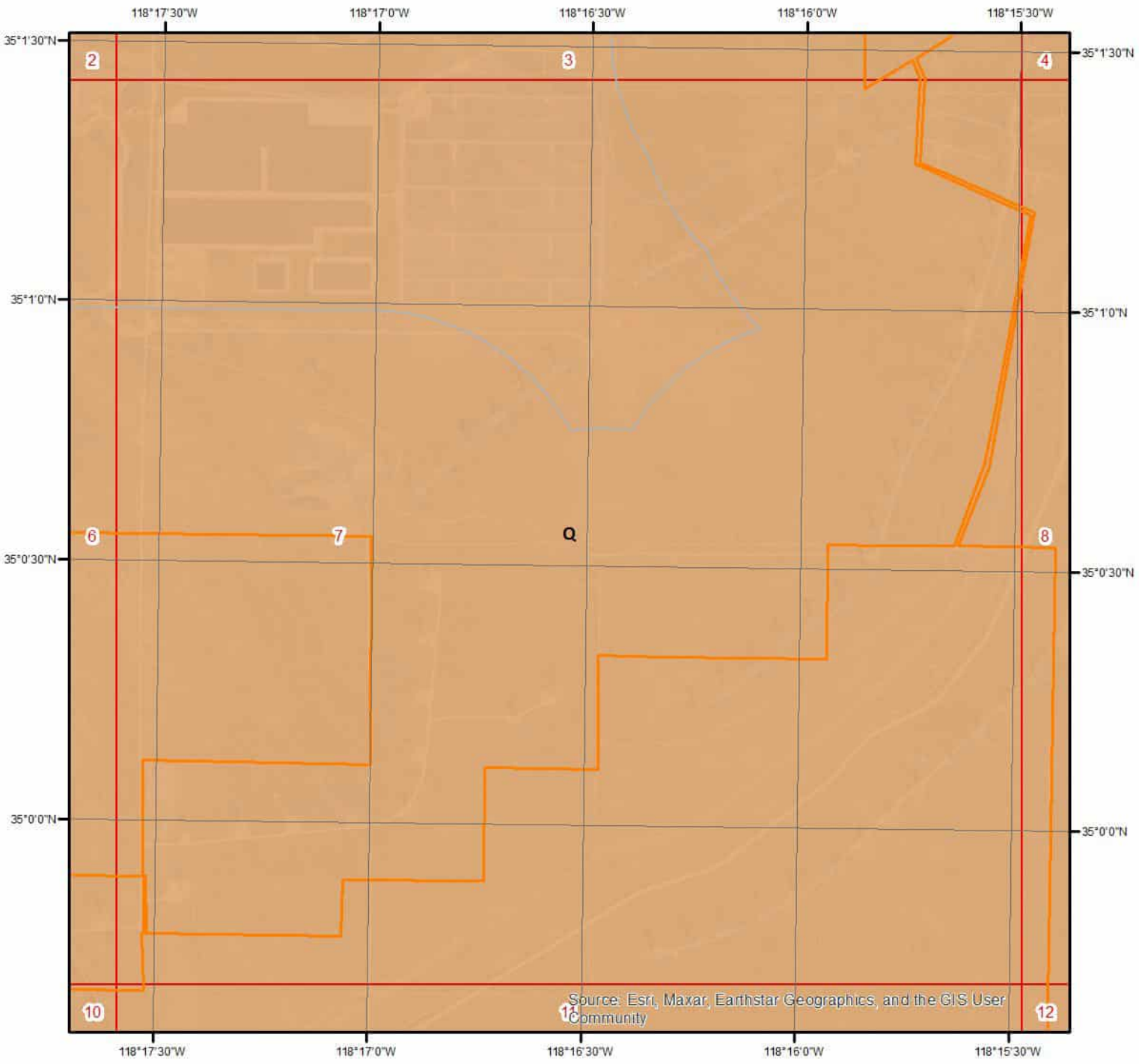
This maps shows geologic units in the area. Please refer to the report for detailed descriptions.

N

0 0.25 0.5 Miles

ERIS

Geologic Information



Geologic Units - Page 7

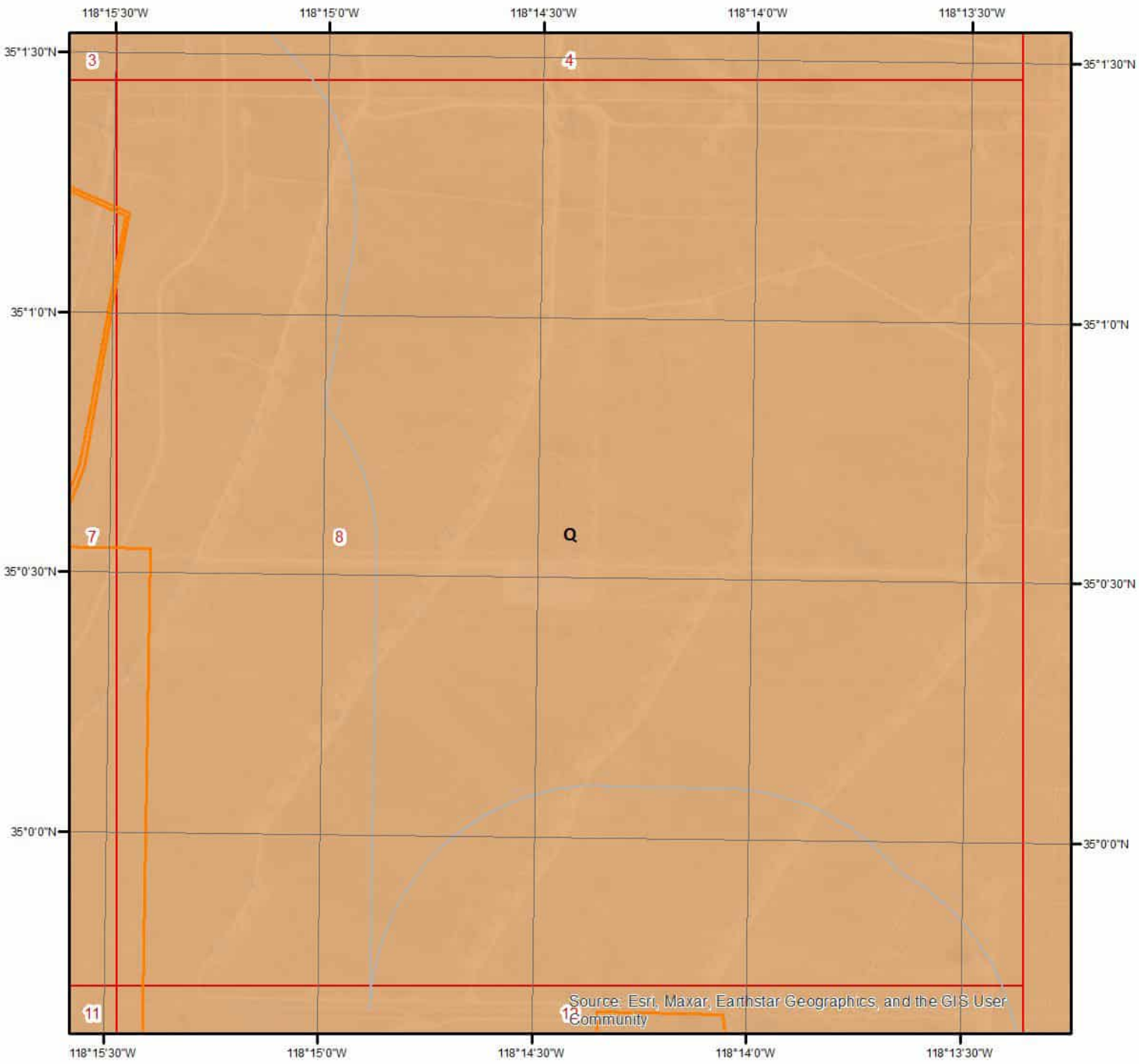
This maps shows geologic units in the area. Please refer to the report for detailed descriptions.

N

0 0.25 0.5 Miles

ERIS

Geologic Information



Geologic Units - Page 8

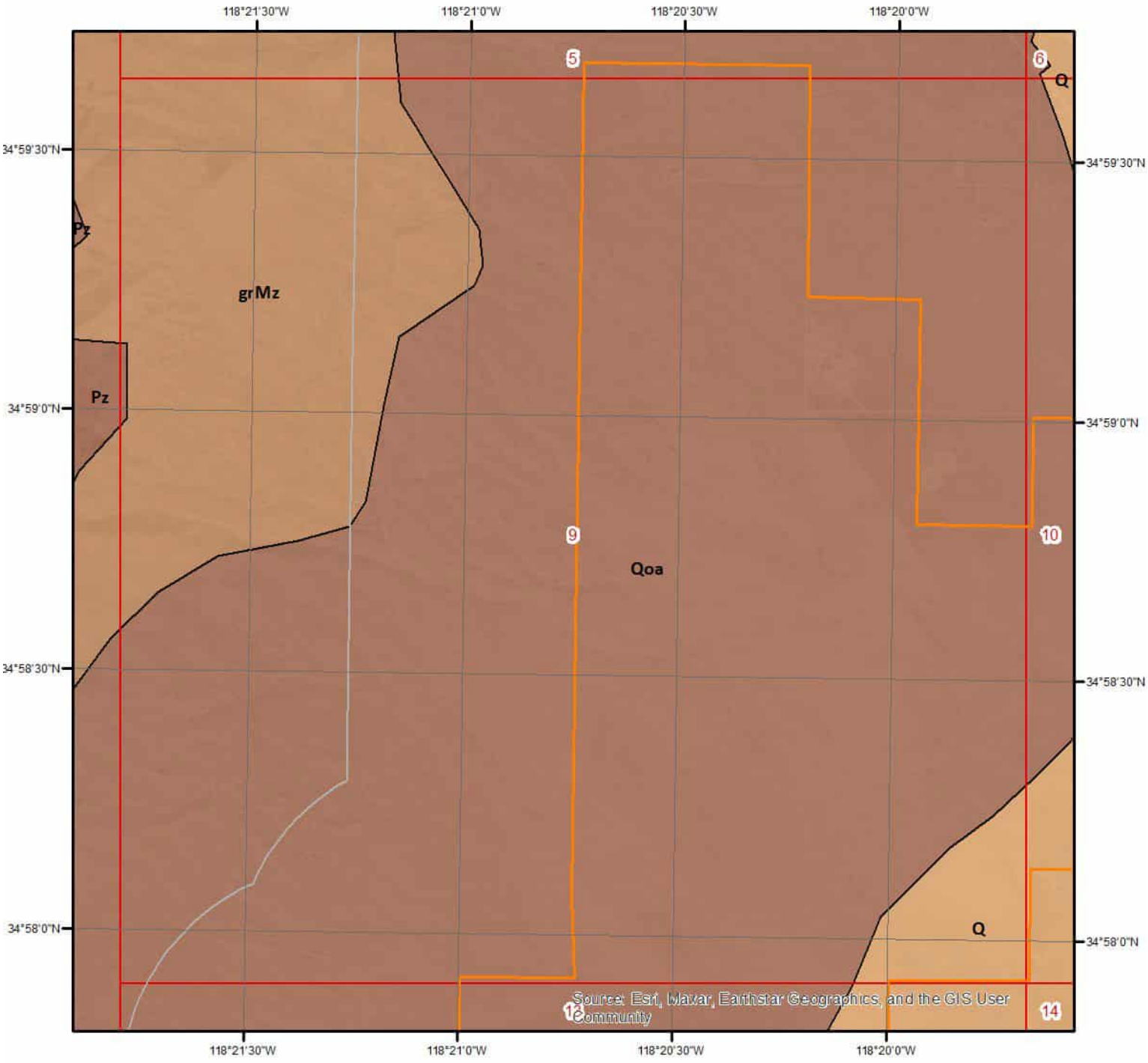
This maps shows geologic units in the area. Please refer to the report for detailed descriptions.

N

Miles
0 0.25 0.5

ERIS

Geologic Information



Geologic Units - Page 9

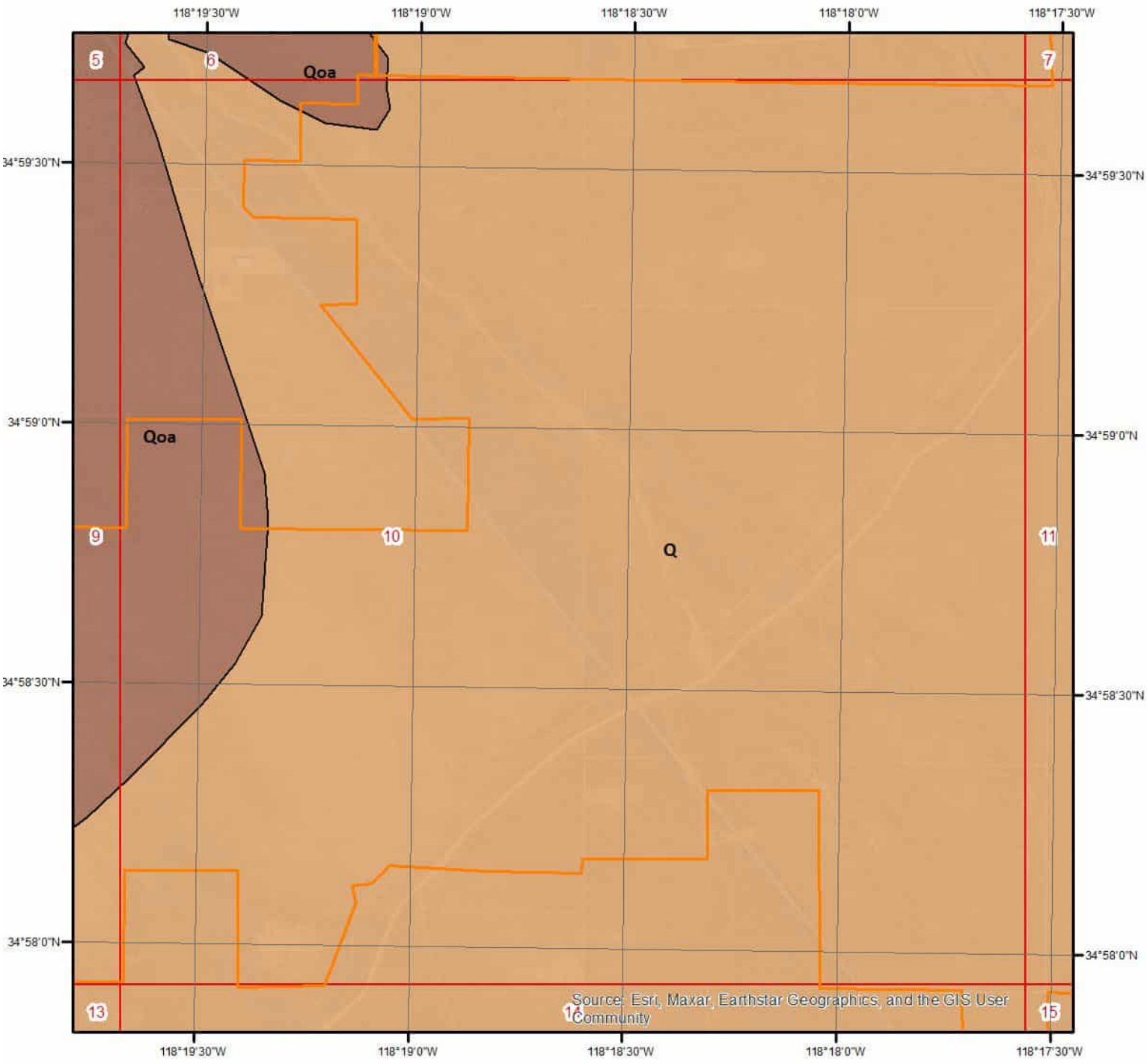
This maps shows geologic units in the area. Please refer to the report for detailed descriptions.

N

0 0.25 0.5 Miles

ERIS

Geologic Information



Geologic Units - Page 10

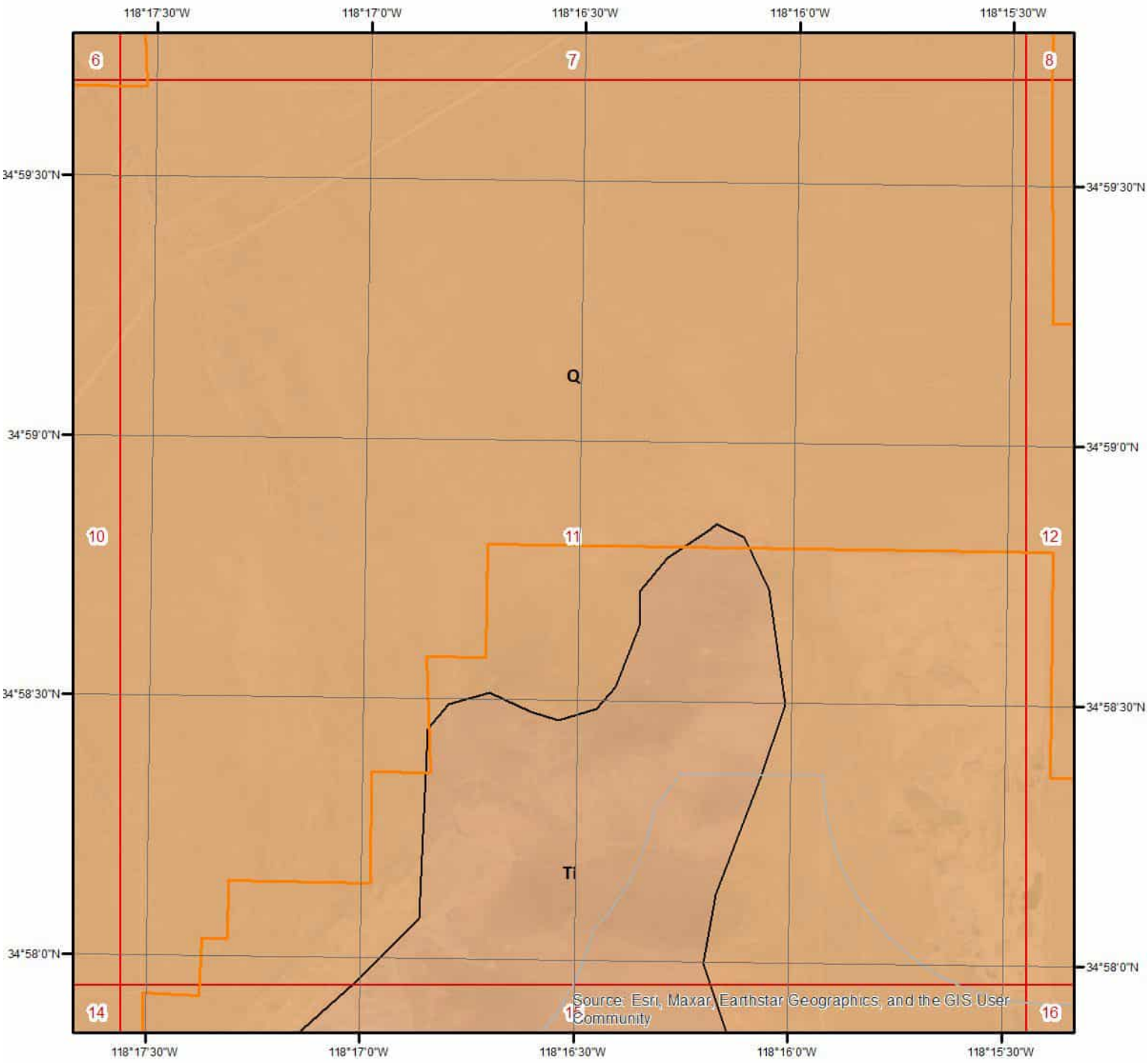
This maps shows geologic units in the area. Please refer to the report for detailed descriptions.

N

0 0.25 0.5 Miles

ERIS

Geologic Information



Geologic Units - Page 11

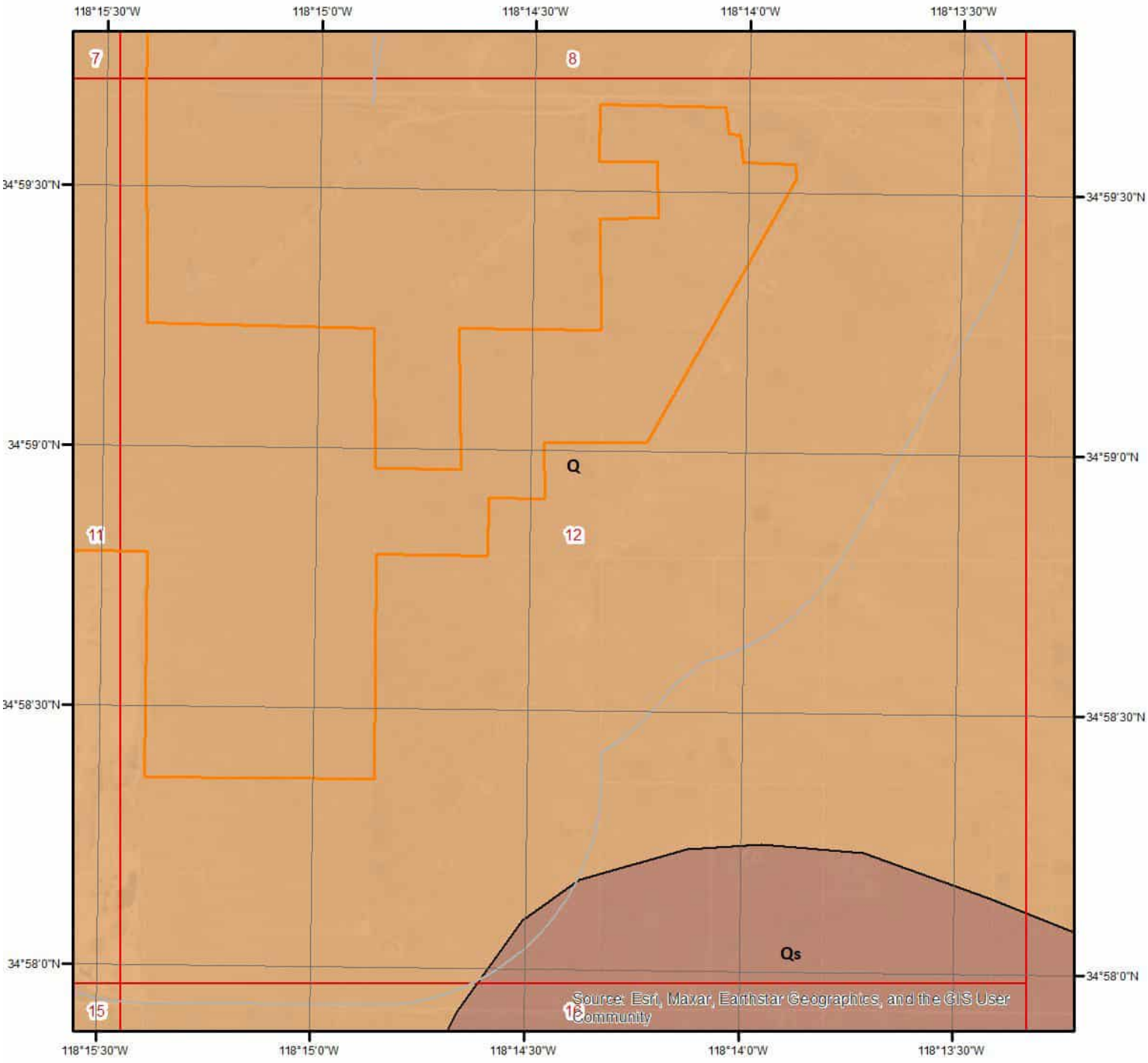
This maps shows geologic units in the area. Please refer to the report for detailed descriptions.

N

0 0.25 0.5 Miles

ERIS

Geologic Information



Geologic Units - Page 12

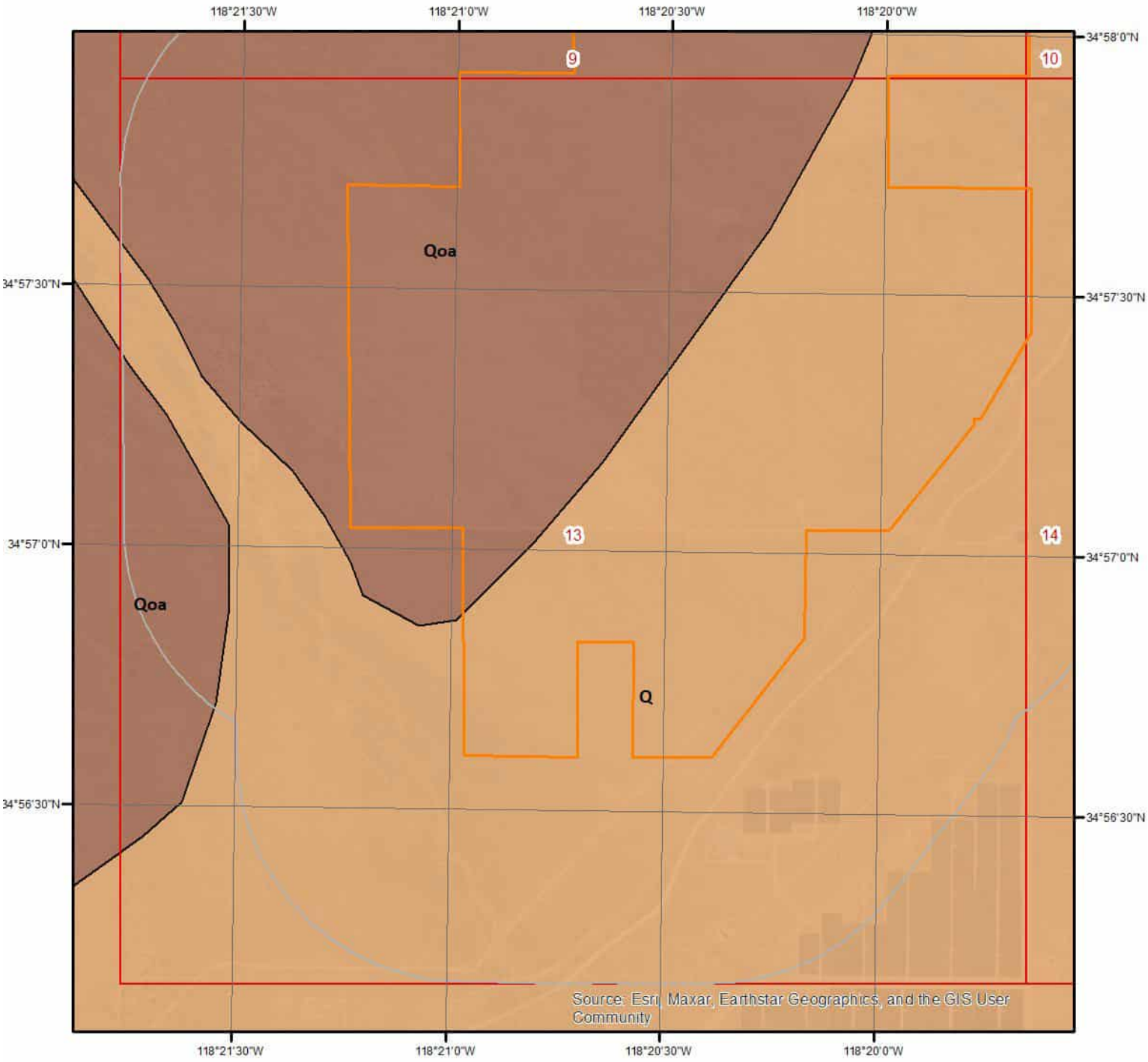
This maps shows geologic units in the area. Please refer to the report for detailed descriptions.

N

0 0.25 0.5 Miles

ERIS

Geologic Information



Geologic Units - Page 13

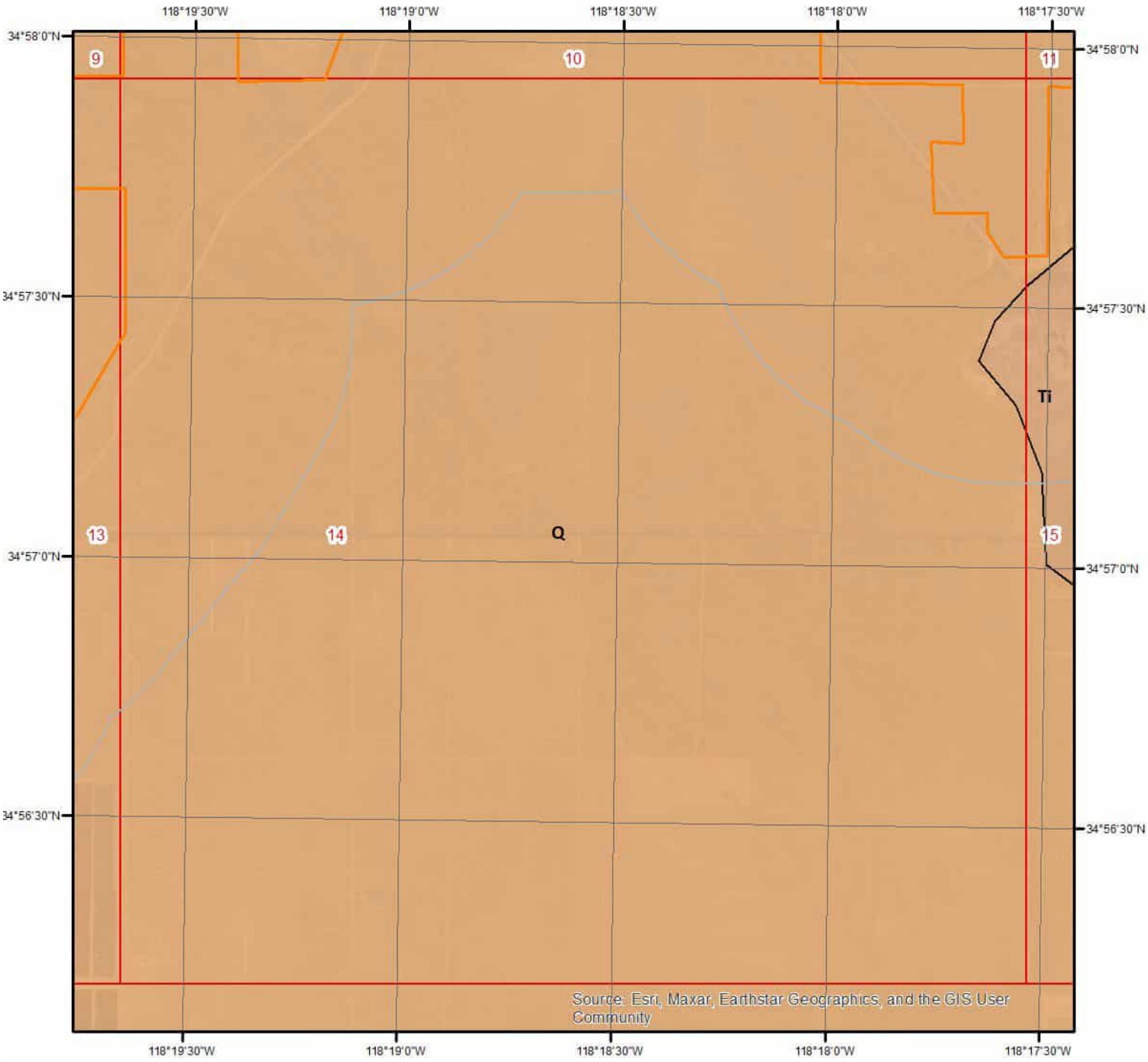
This maps shows geologic units in the area. Please refer to the report for detailed descriptions.

N

0 0.25 0.5 Miles

ERIS

Geologic Information



Geologic Units - Page 14

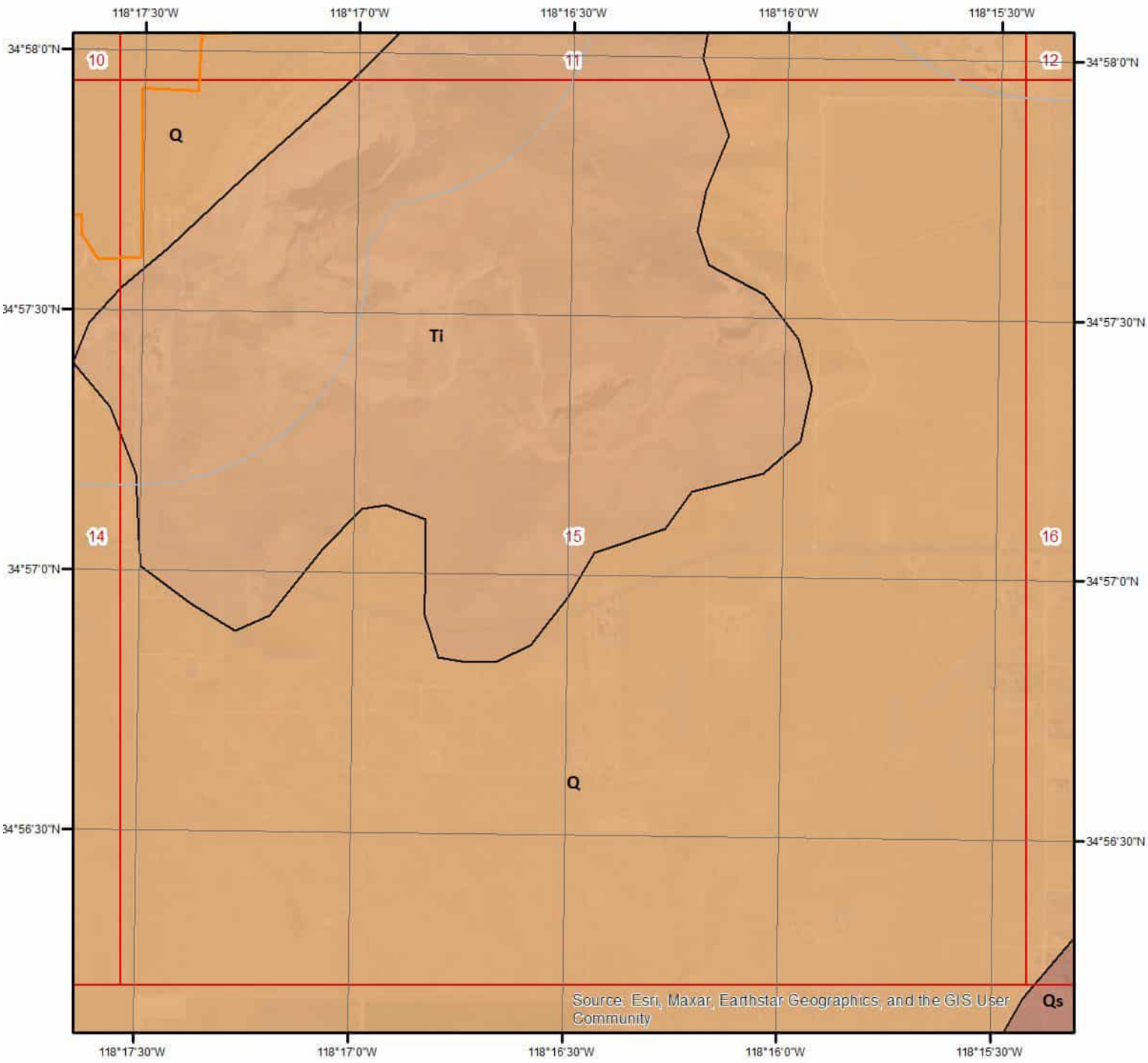
This maps shows geologic units in the area. Please refer to the report for detailed descriptions.

N

0 0.25 0.5 Miles

ERIS

Geologic Information



Geologic Units - Page 15

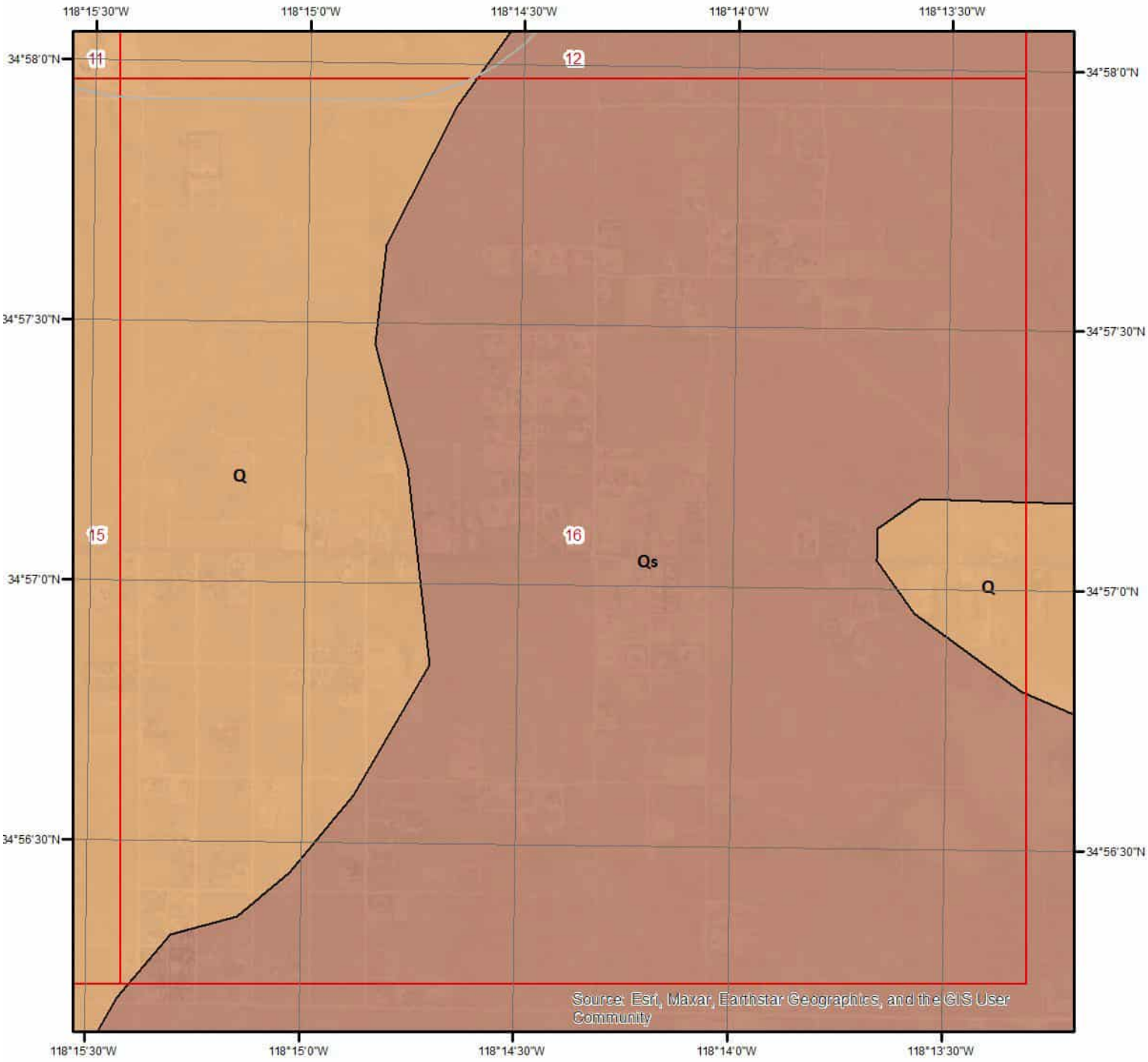
This maps shows geologic units in the area. Please refer to the report for detailed descriptions.

N

Miles
0 0.25 0.5

ERIS

Geologic Information



Geologic Units - Page 16

N

0 0.25 0.5 Miles

This maps shows geologic units in the area. Please refer to the report for detailed descriptions.

ERIS

Geologic Information

The previous page shows USGS geology information. Detailed information about each unit is provided below.

Geologic Unit grMz

Unit Name:	Mesozoic granitic rocks, unit 3 (Sierra Nevada, Death Valley area, Northern Mojave Desert and Transverse Ranges)
Unit Age:	Permian to Tertiary; most Mesozoic
Primary Rock Type:	Granodiorite
Secondary Rock Type:	
Unit Description:	Mesozoic granite, quartz monzonite, granodiorite, and quartz diorite

Geologic Unit ls

Unit Name:	Limestone of probable Paleozoic or Mesozoic age
Unit Age:	Paleozoic to Mesozoic
Primary Rock Type:	Limestone
Secondary Rock Type:	Marble
Unit Description:	Limestone, dolomite, and marble whose age is uncertain but probably Paleozoic or Mesozoic

Geologic Unit Q

Unit Name:	Quaternary alluvium and marine deposits
Unit Age:	Pleistocene to Holocene
Primary Rock Type:	Coarse-detrital
Secondary Rock Type:	
Unit Description:	Alluvium, lake, playa, and terrace deposits; unconsolidated and semi-consolidated. Mostly nonmarine, but includes marine deposits near the coast.

Geologic Unit Qoa

Unit Name:	Older Quaternary alluvium and marine deposits
Unit Age:	Pleistocene
Primary Rock Type:	Coarse-detrital
Secondary Rock Type:	
Unit Description:	Older alluvium, lake, playa, and terrace deposits.

Geologic Unit Qs

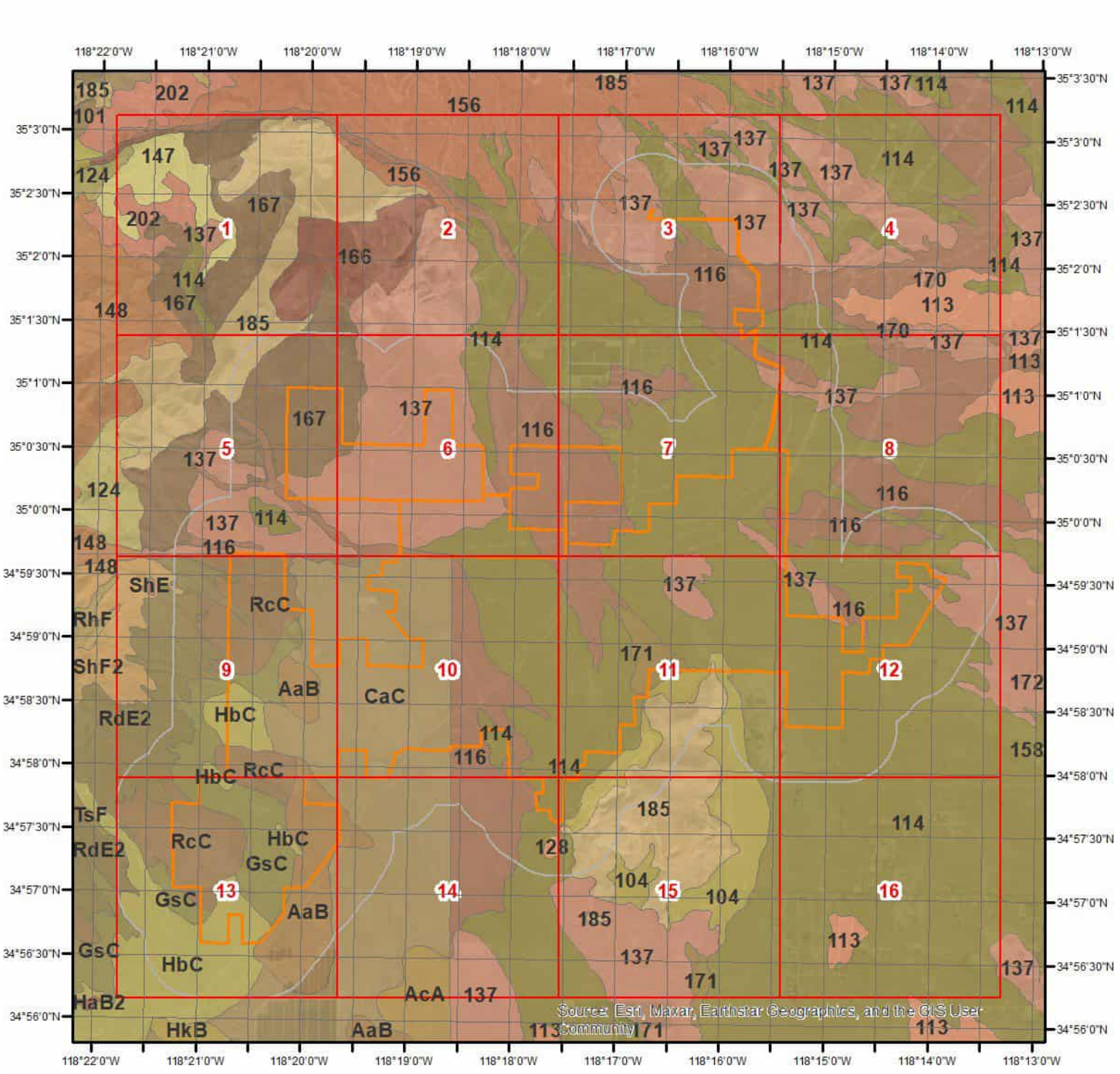
Unit Name:	Quaternary sand deposits, unit 2 (inland)
Unit Age:	Quaternary
Primary Rock Type:	Sand
Secondary Rock Type:	
Unit Description:	Extensive marine and nonmarine sand deposits, generally near the coast or desert playas

Geologic Information

Geologic Unit Ti

Unit Name:	Tertiary intrusive rocks (hypabyssal), unit 7 (Northern Mojave Desert)
Unit Age:	Tertiary
Primary Rock Type:	Hypabyssal-rhyolite
Secondary Rock Type:	
Unit Description:	Tertiary intrusive rocks; mostly shallow (hypabyssal) plugs and dikes. Includes some Mesozoic rocks.

Soil Information



SSURGO Soils

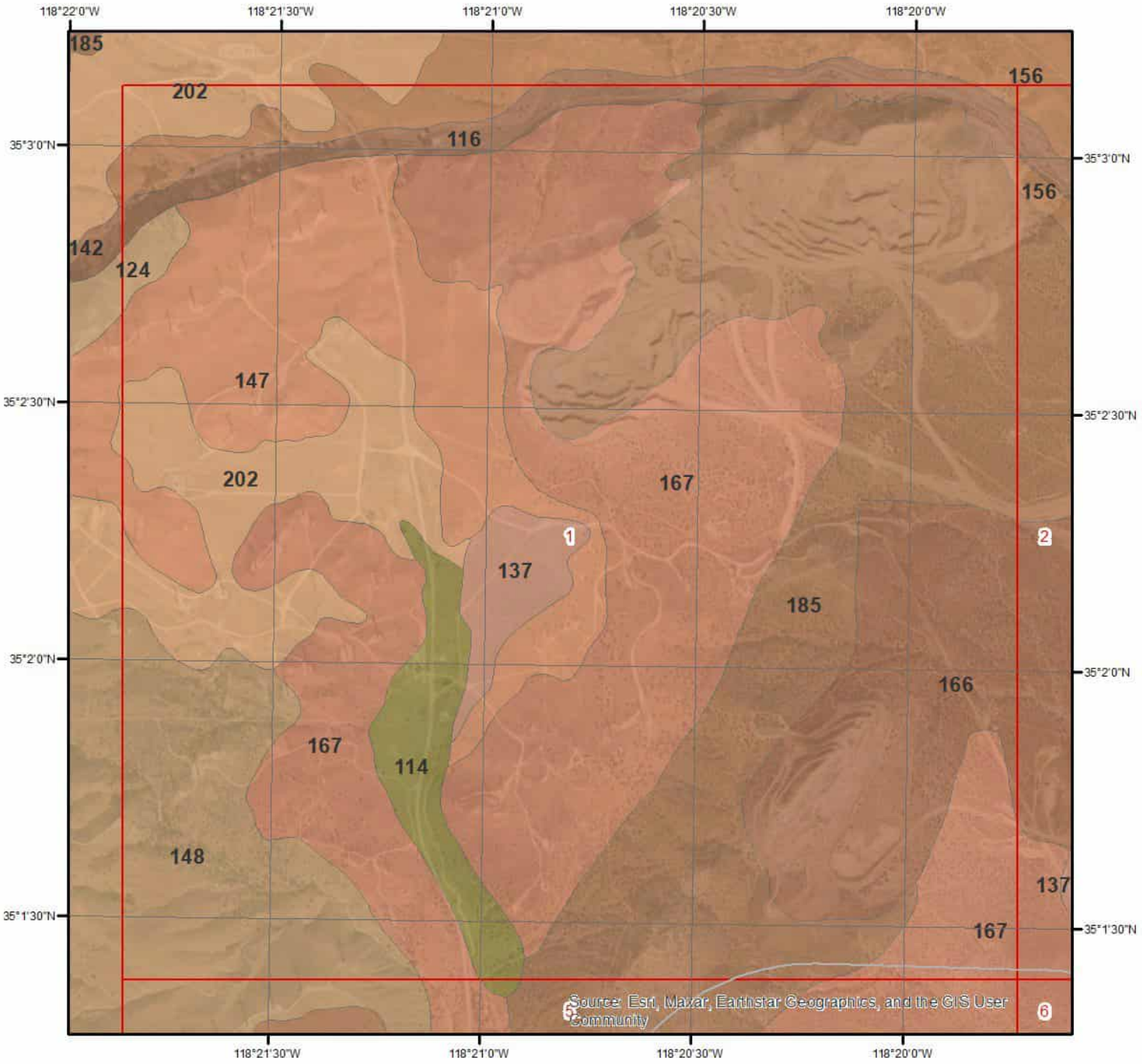
N

0 1 2 Miles

This maps shows SSURGO soil units around the target property. Please refer to the report for detailed soil descriptions.

ERIS

Soil Information



SSURGO Soils - Page 1

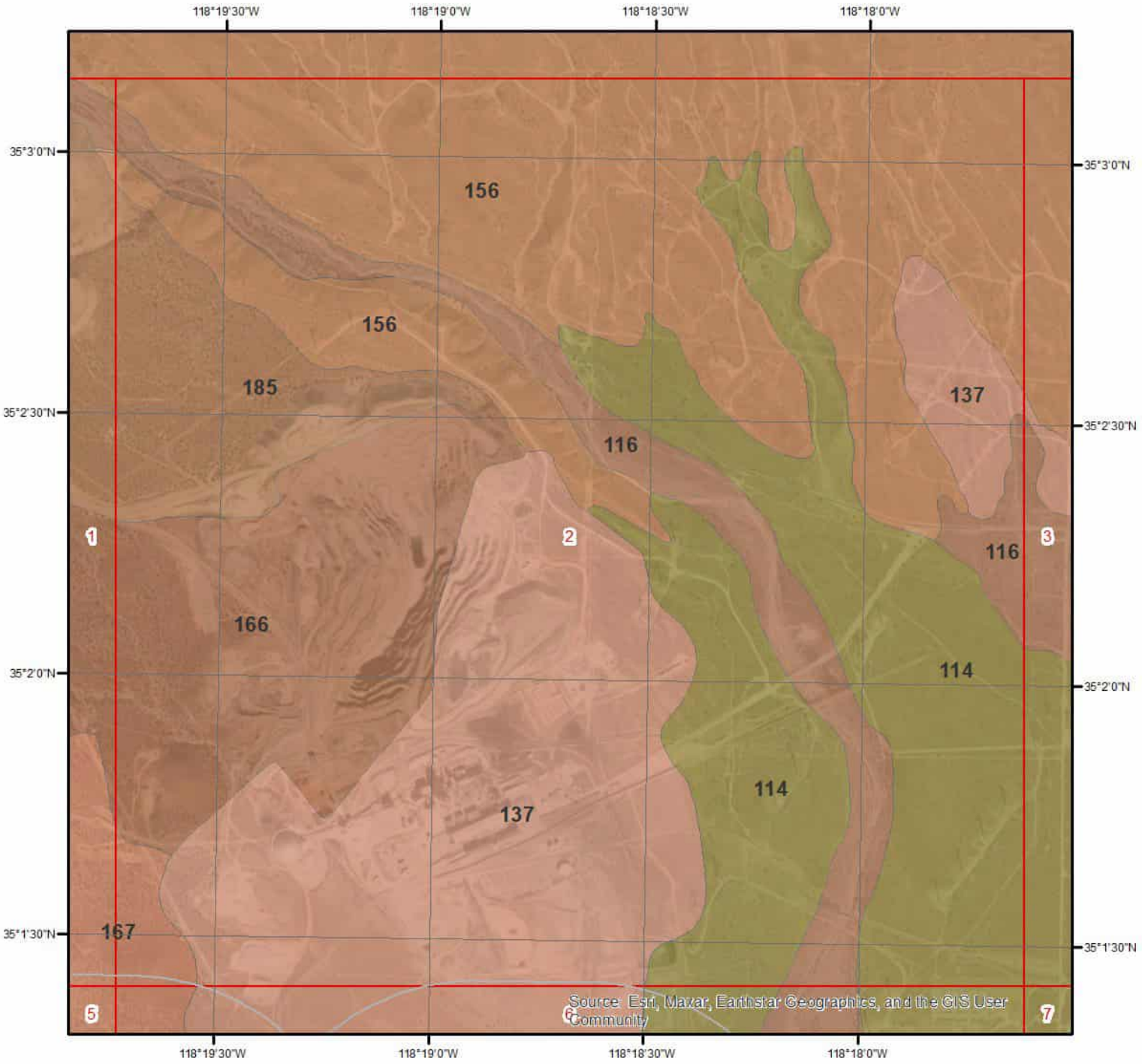
N

0 0.275 0.55 Miles

This maps shows SSURGO soil units around the target property. Please refer to the report for detailed soil descriptions.

ERIS

Soil Information



SSURGO Soils - Page 2

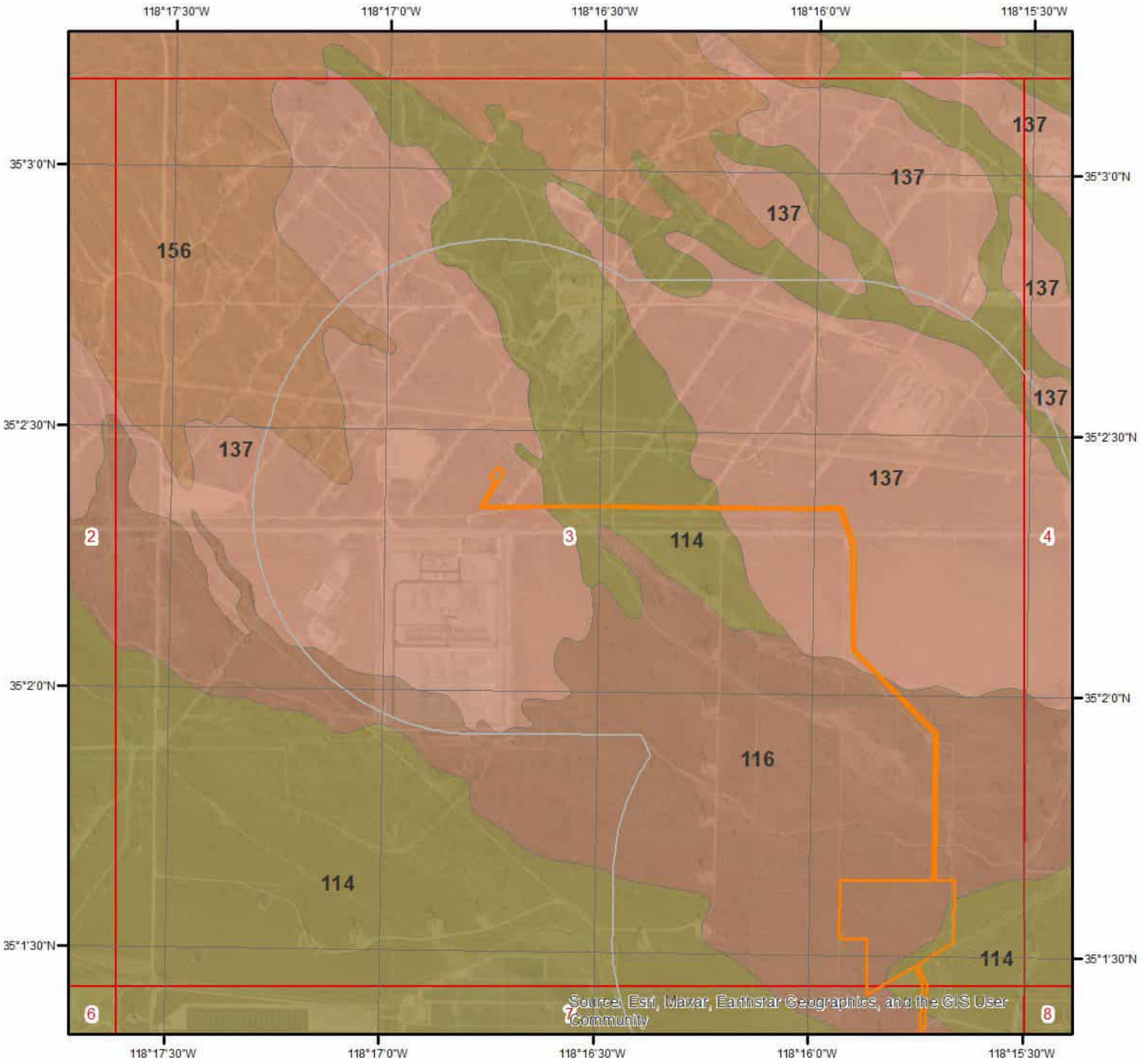
N

0 0.25 0.5 Miles

This maps shows SSURGO soil units around the target property. Please refer to the report for detailed soil descriptions.

ERIS

Soil Information



SSURGO Soils - Page 3

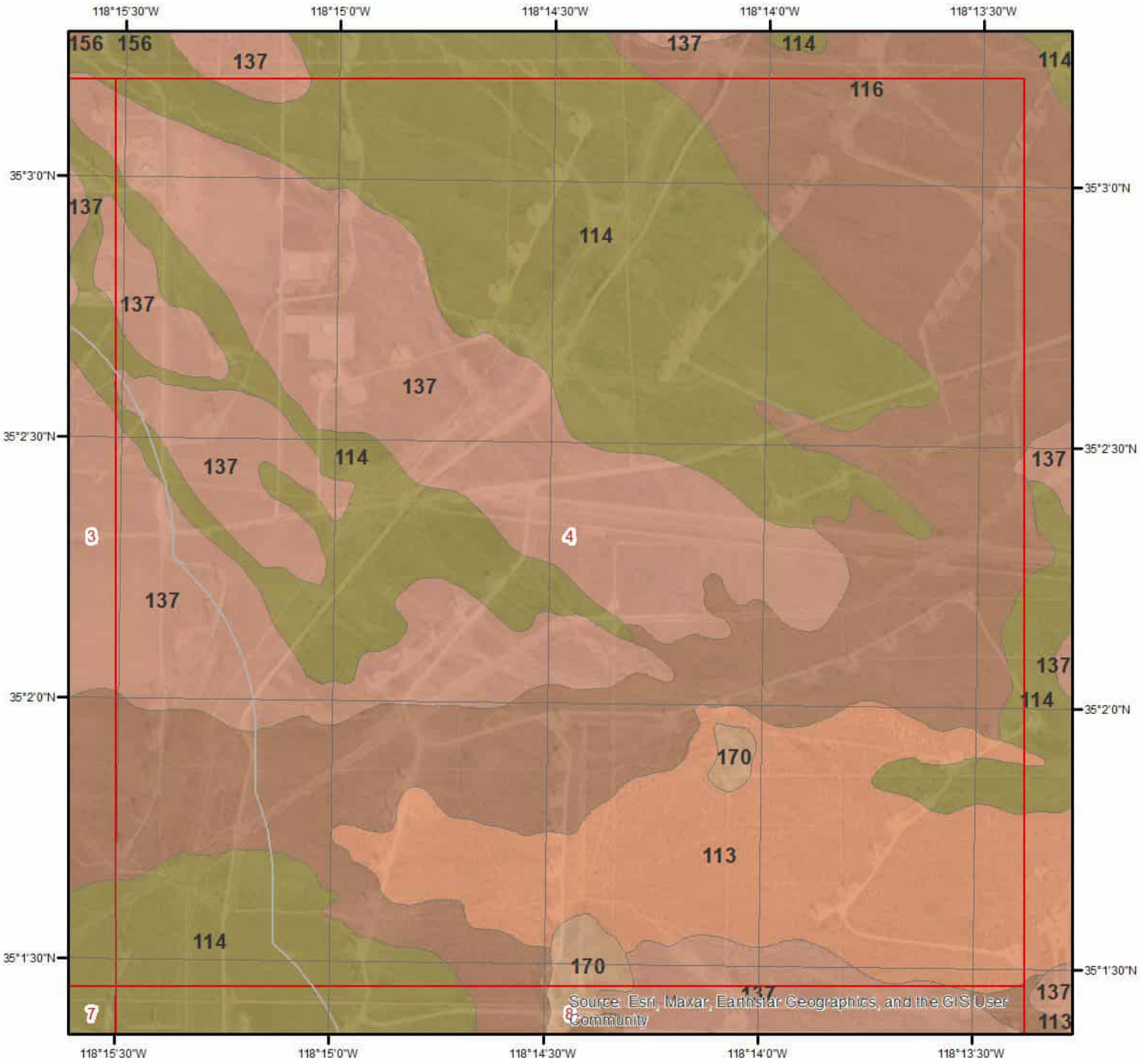
N

0 0.25 0.5 Miles

This maps shows SSURGO soil units around the target property. Please refer to the report for detailed soil descriptions.

ERIS

Soil Information



SSURGO Soils - Page 4

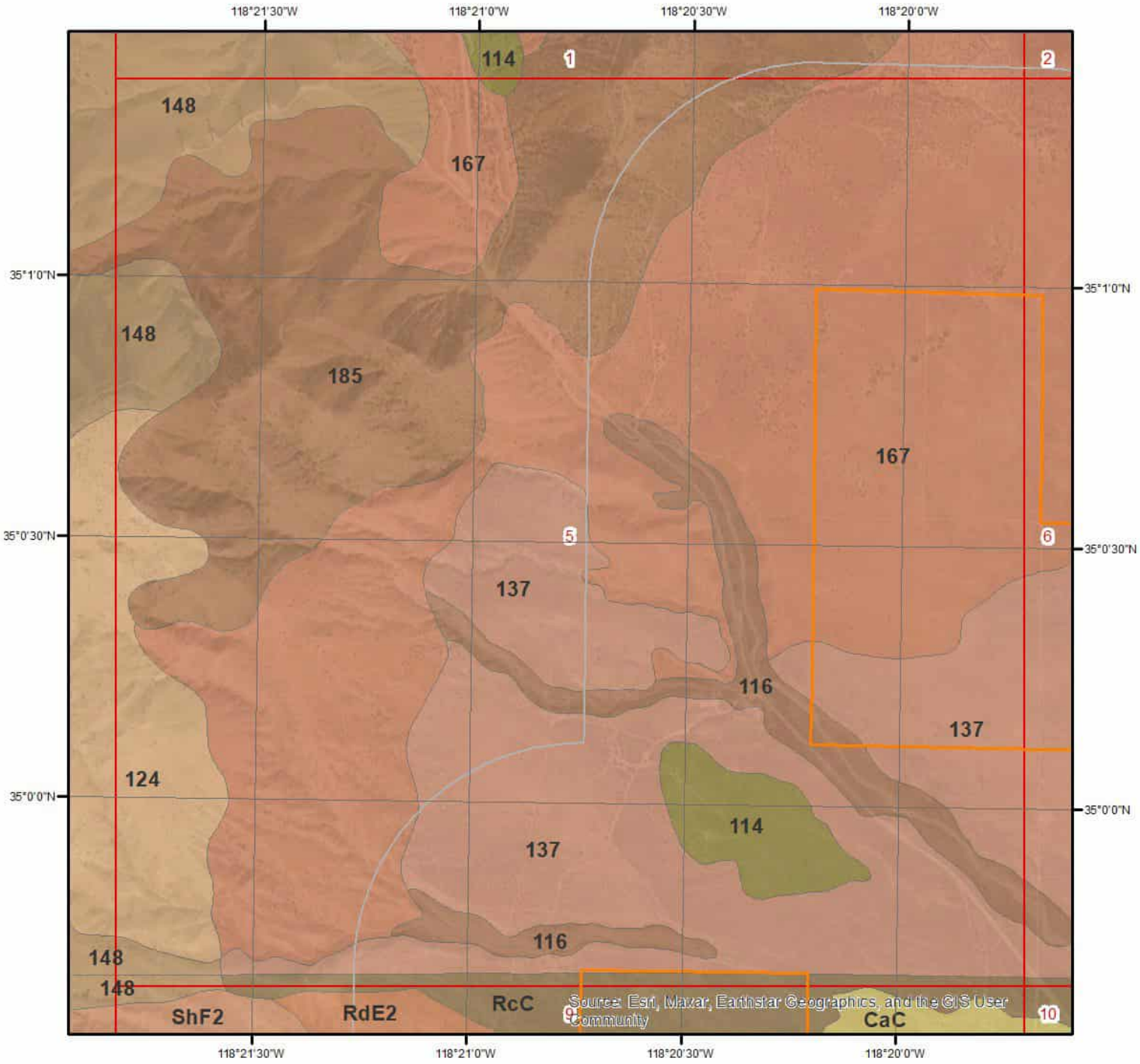
N

0 0.25 0.5 Miles

This maps shows SSURGO soil units around the target property. Please refer to the report for detailed soil descriptions.

ERIS

Soil Information



SSURGO Soils - Page 5

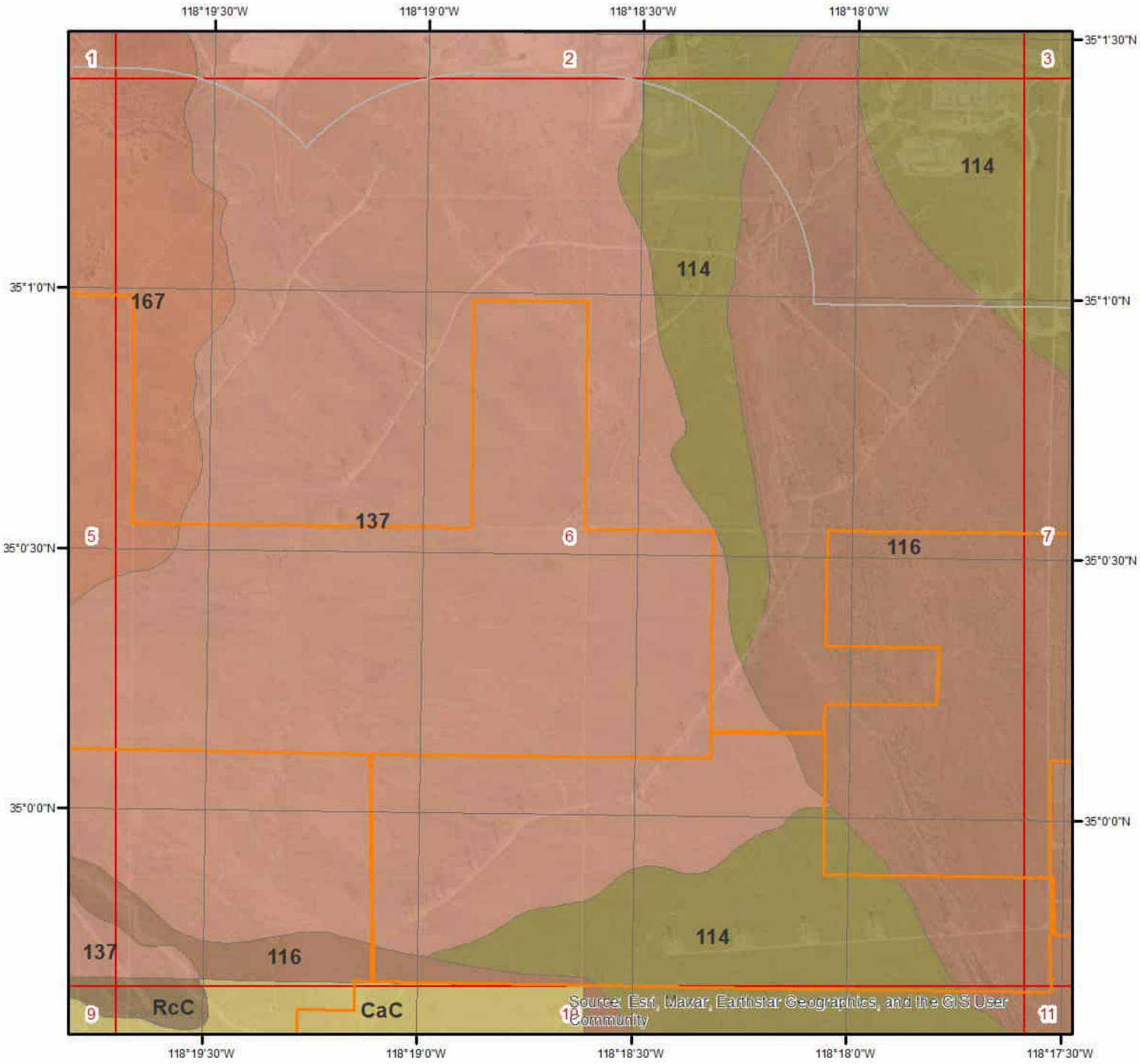
N

0 0.25 0.5 Miles

This maps shows SSURGO soil units around the target property. Please refer to the report for detailed soil descriptions.

ERIS

Soil Information



SSURGO Soils - Page 6

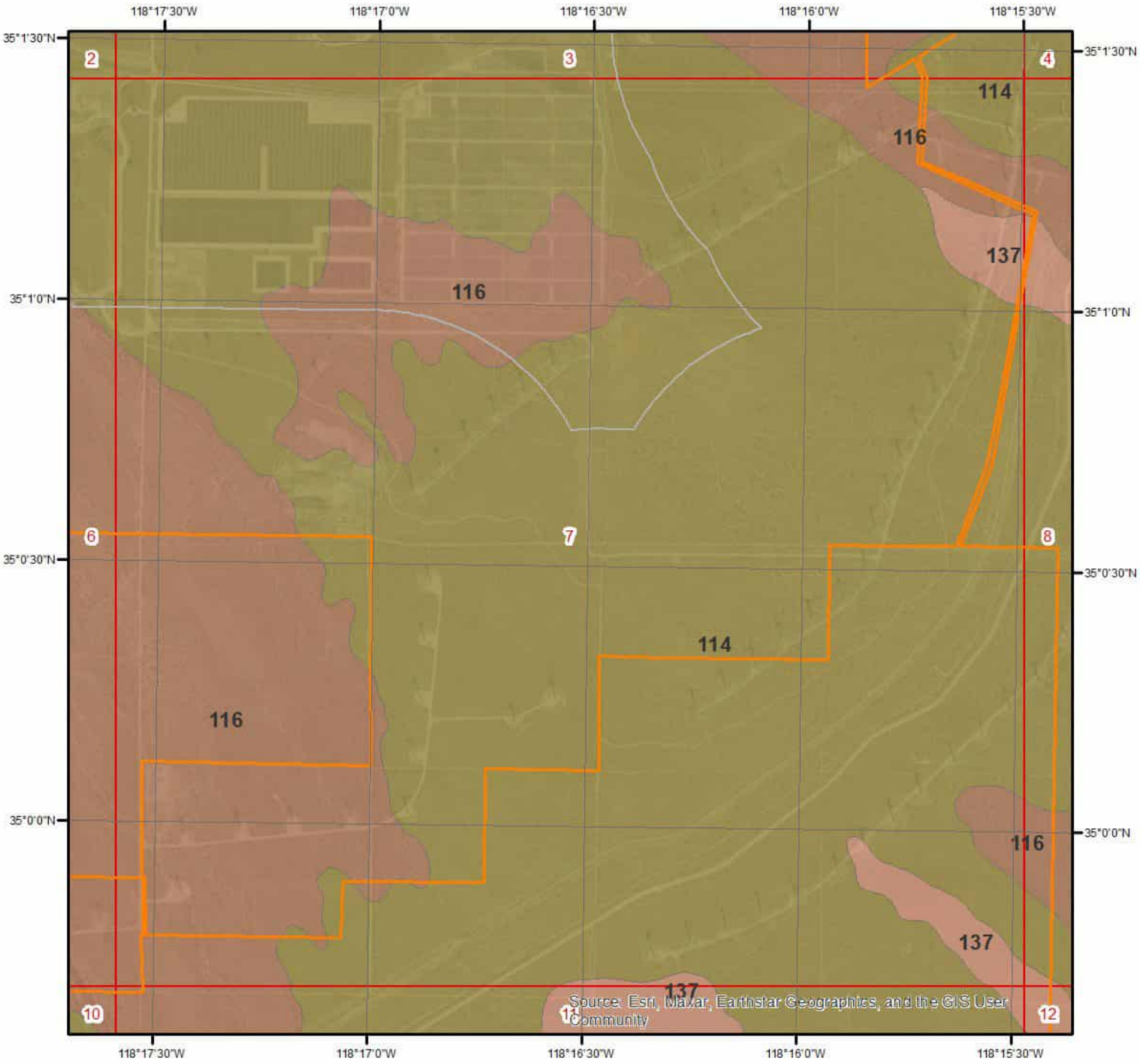
N

0 0.25 0.5 Miles

This maps shows SSURGO soil units around the target property. Please refer to the report for detailed soil descriptions.

ERIS

Soil Information



SSURGO Soils - Page 7

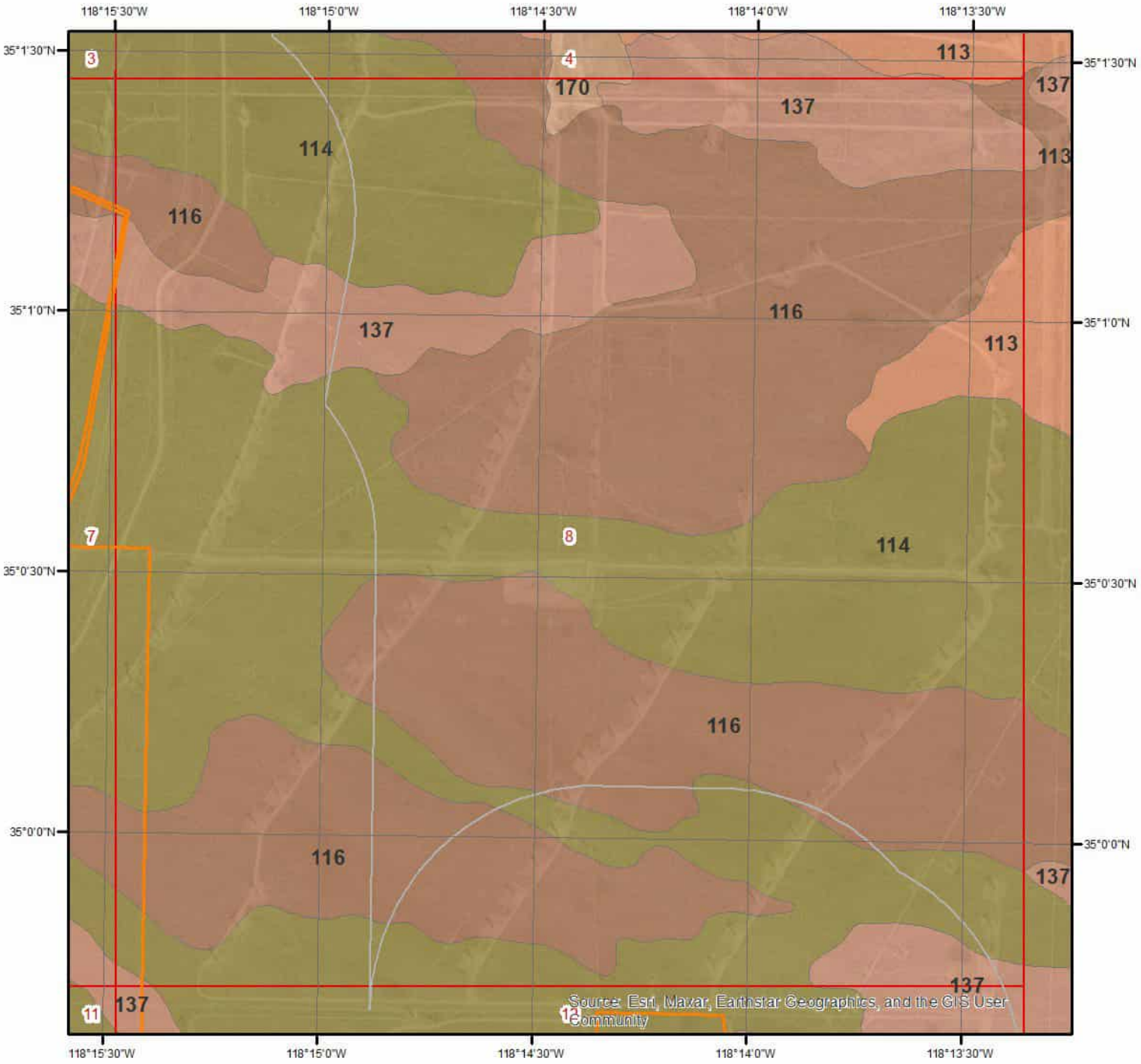
N

0 0.25 0.5 Miles

This maps shows SSURGO soil units around the target property. Please refer to the report for detailed soil descriptions.

ERIS

Soil Information



SSURGO Soils - Page 8

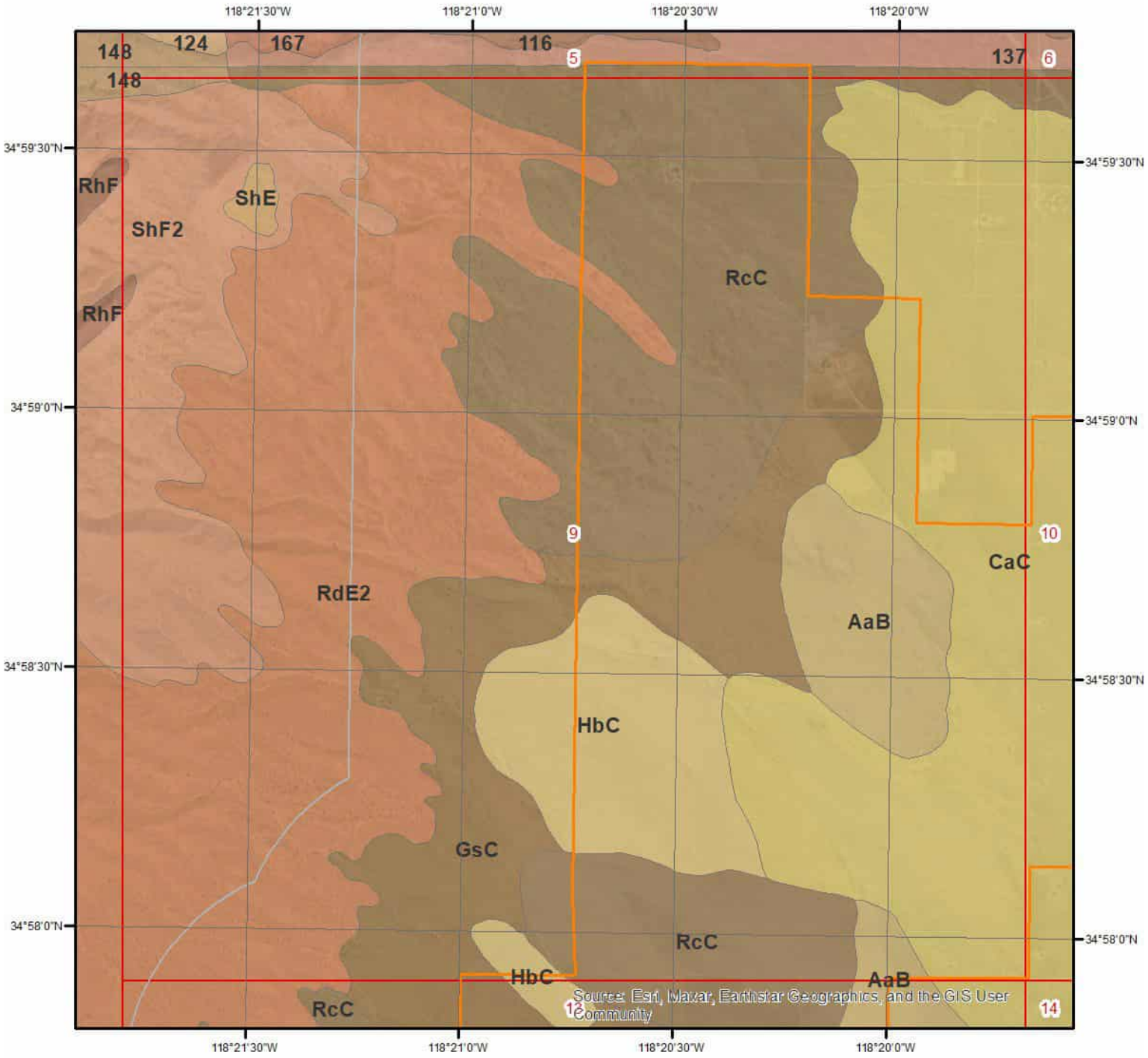
N

Miles
0 0.25 0.5

This maps shows SSURGO soil units around the target property. Please refer to the report for detailed soil descriptions.

ERIS

Soil Information



SSURGO Soils - Page 9

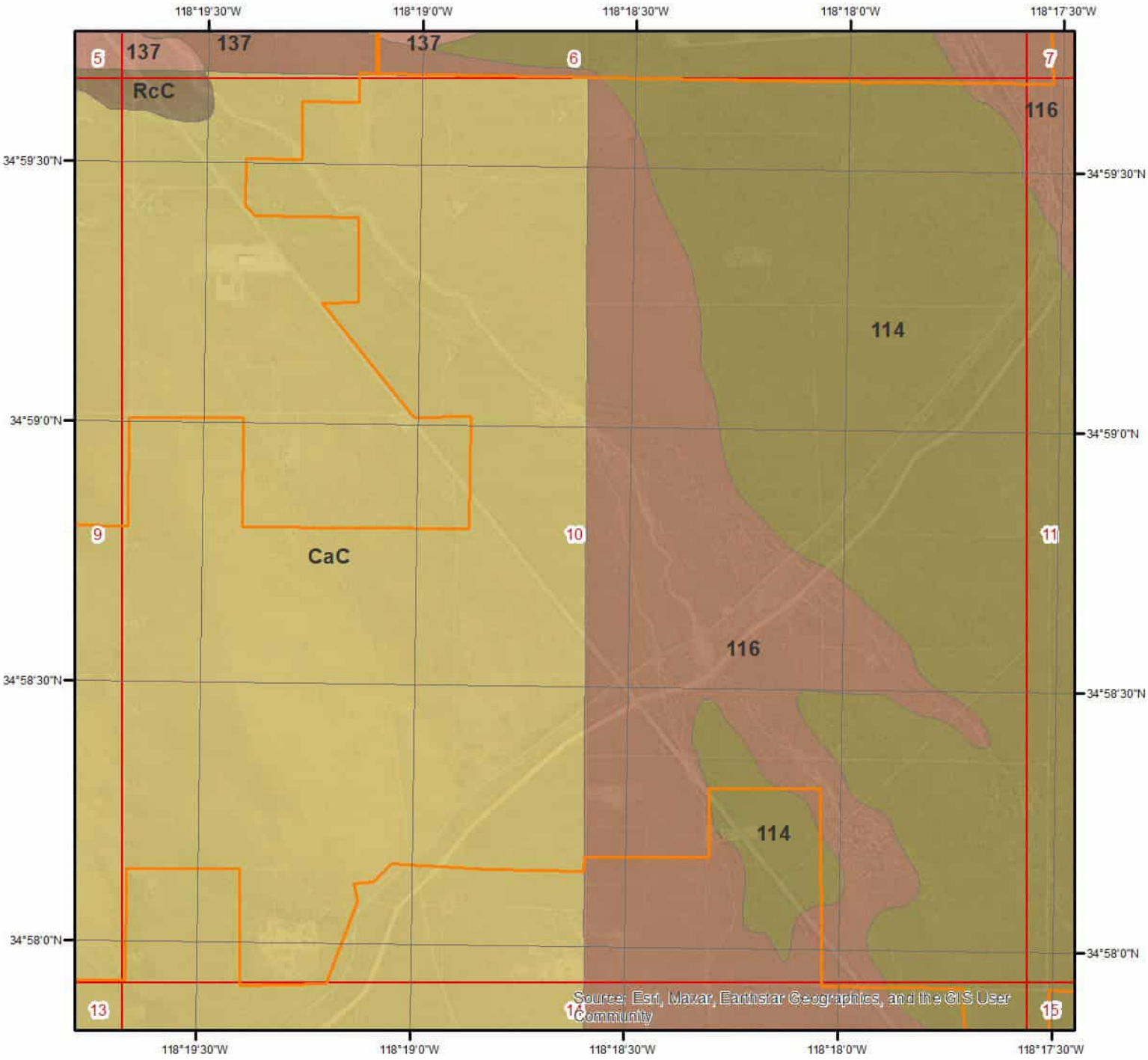
N

0 0.25 0.5 Miles

This maps shows SSURGO soil units around the target property. Please refer to the report for detailed soil descriptions.

ERIS

Soil Information



SSURGO Soils - Page 10

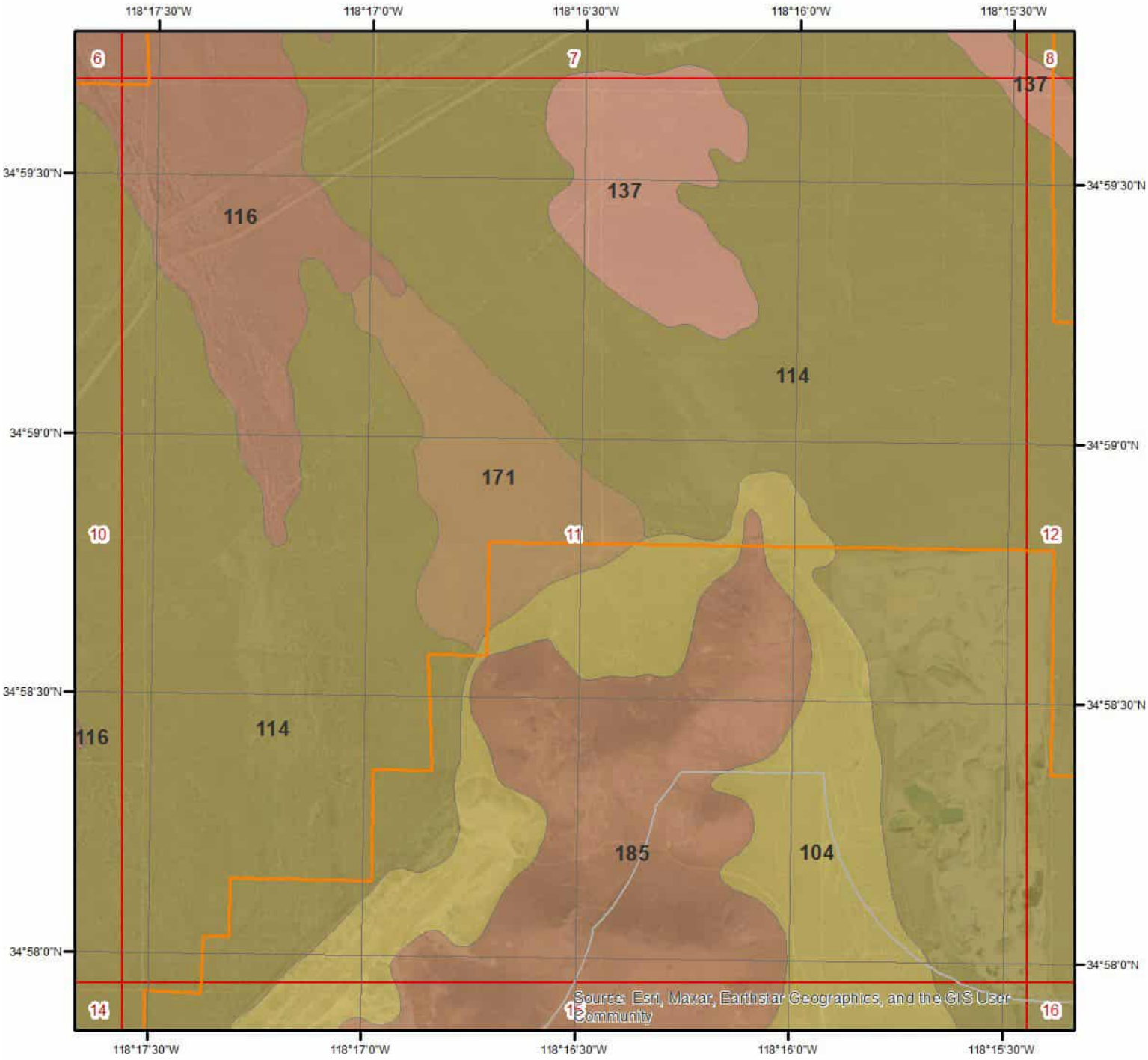
N

0 0.25 0.5 Miles

This maps shows SSURGO soil units around the target property. Please refer to the report for detailed soil descriptions.

ERIS

Soil Information



SSURGO Soils - Page 11

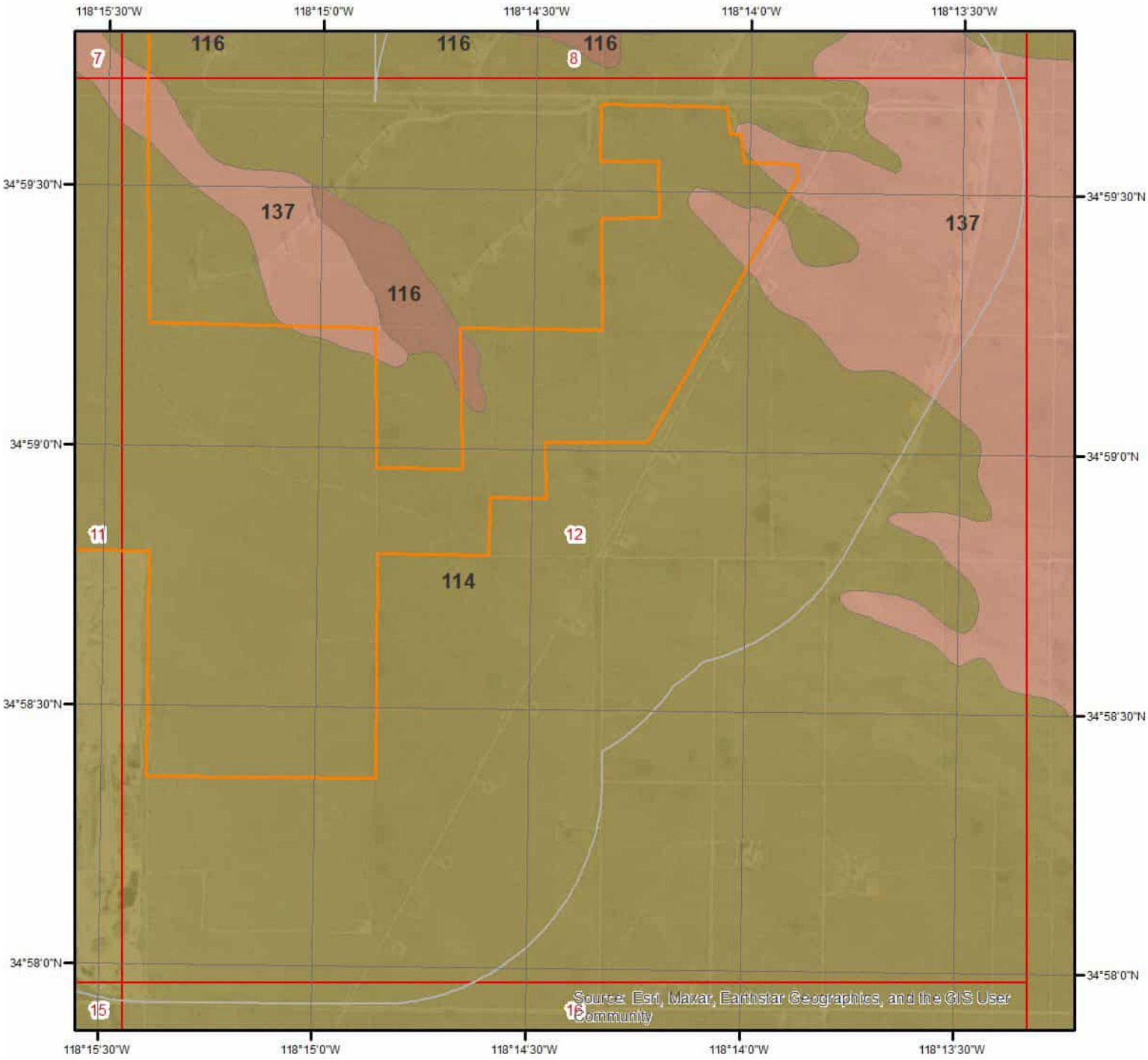
N

0 0.25 0.5 Miles

This maps shows SSURGO soil units around the target property. Please refer to the report for detailed soil descriptions.

ERIS

Soil Information



SSURGO Soils - Page 12

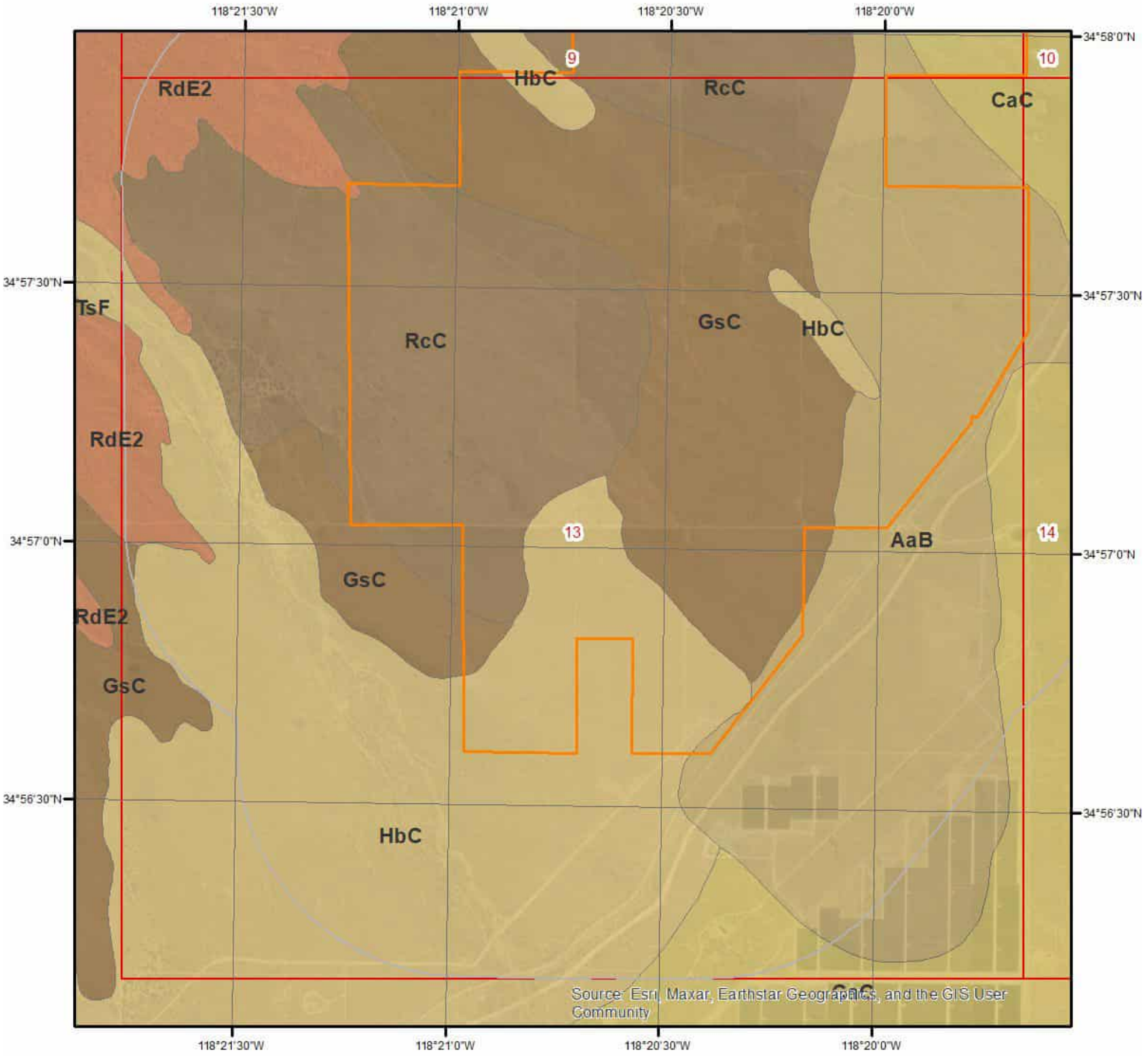
N

0 0.25 0.5 Miles

This maps shows SSURGO soil units around the target property. Please refer to the report for detailed soil descriptions.

ERIS

Soil Information



SSURGO Soils - Page 13

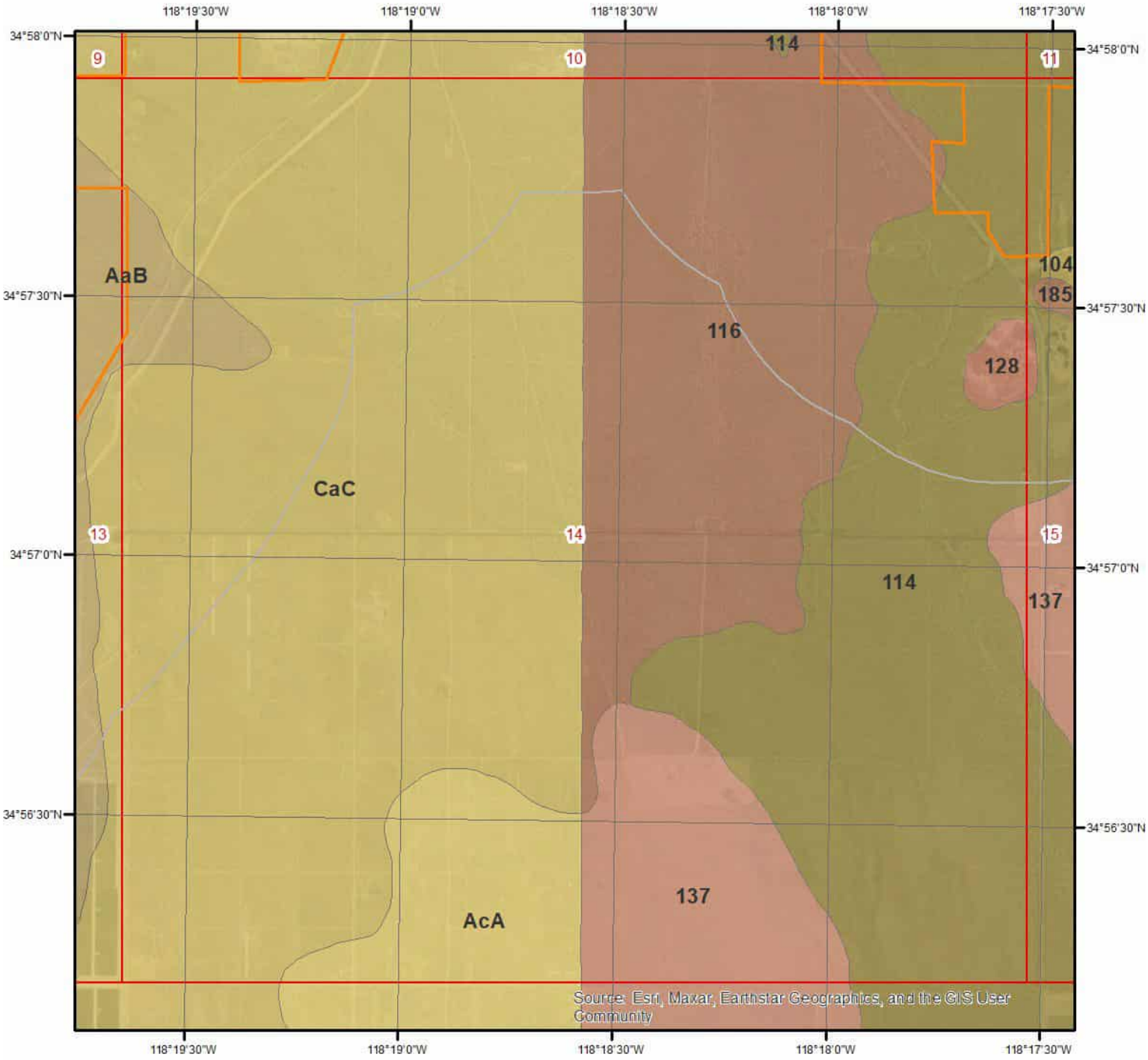
N

0 0.25 0.5 Miles

This maps shows SSURGO soil units around the target property. Please refer to the report for detailed soil descriptions.

ERIS

Soil Information



SSURGO Soils - Page 14

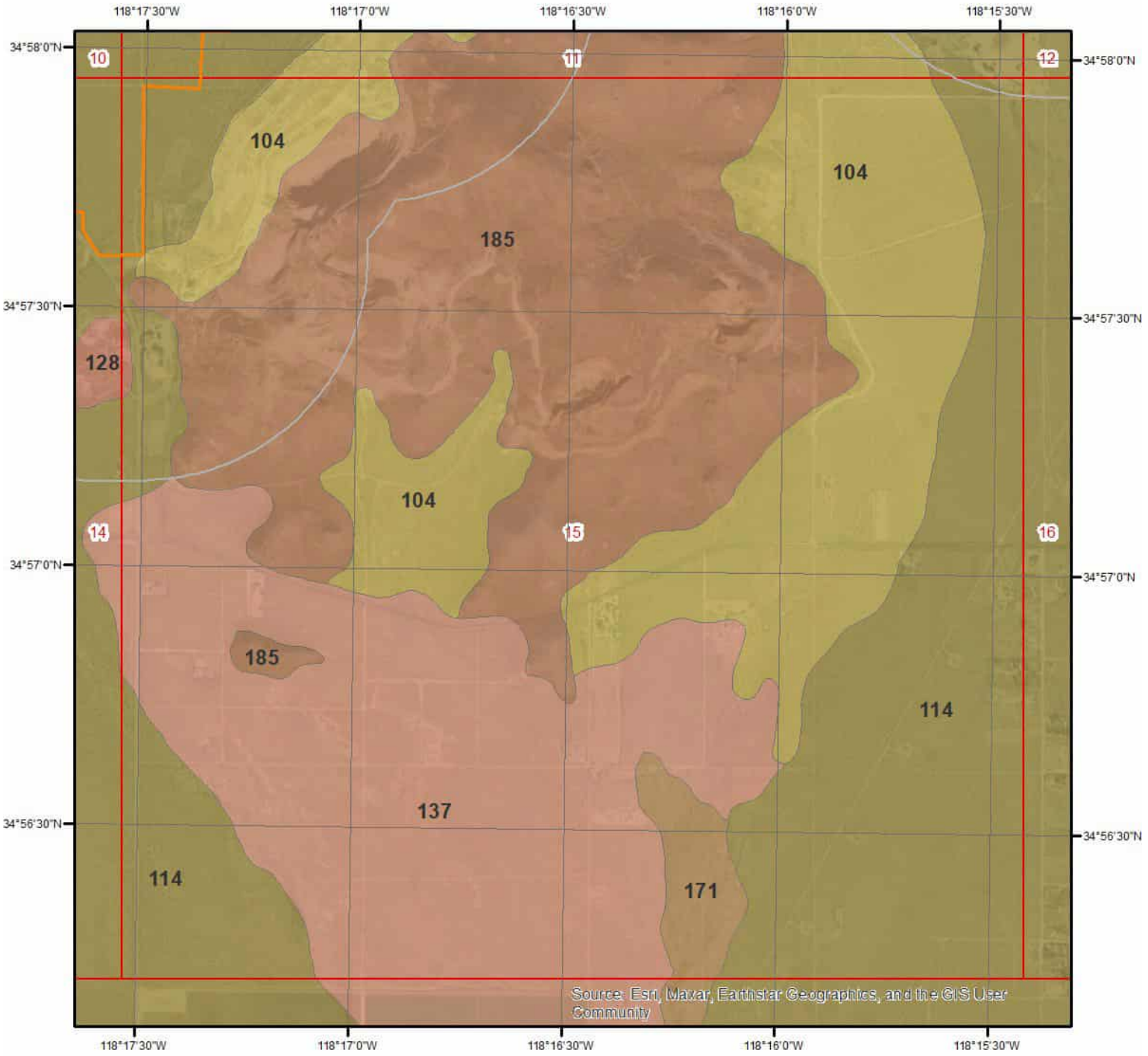
N

0 0.25 0.5 Miles

This maps shows SSURGO soil units around the target property. Please refer to the report for detailed soil descriptions.

ERIS

Soil Information



SSURGO Soils - Page 15

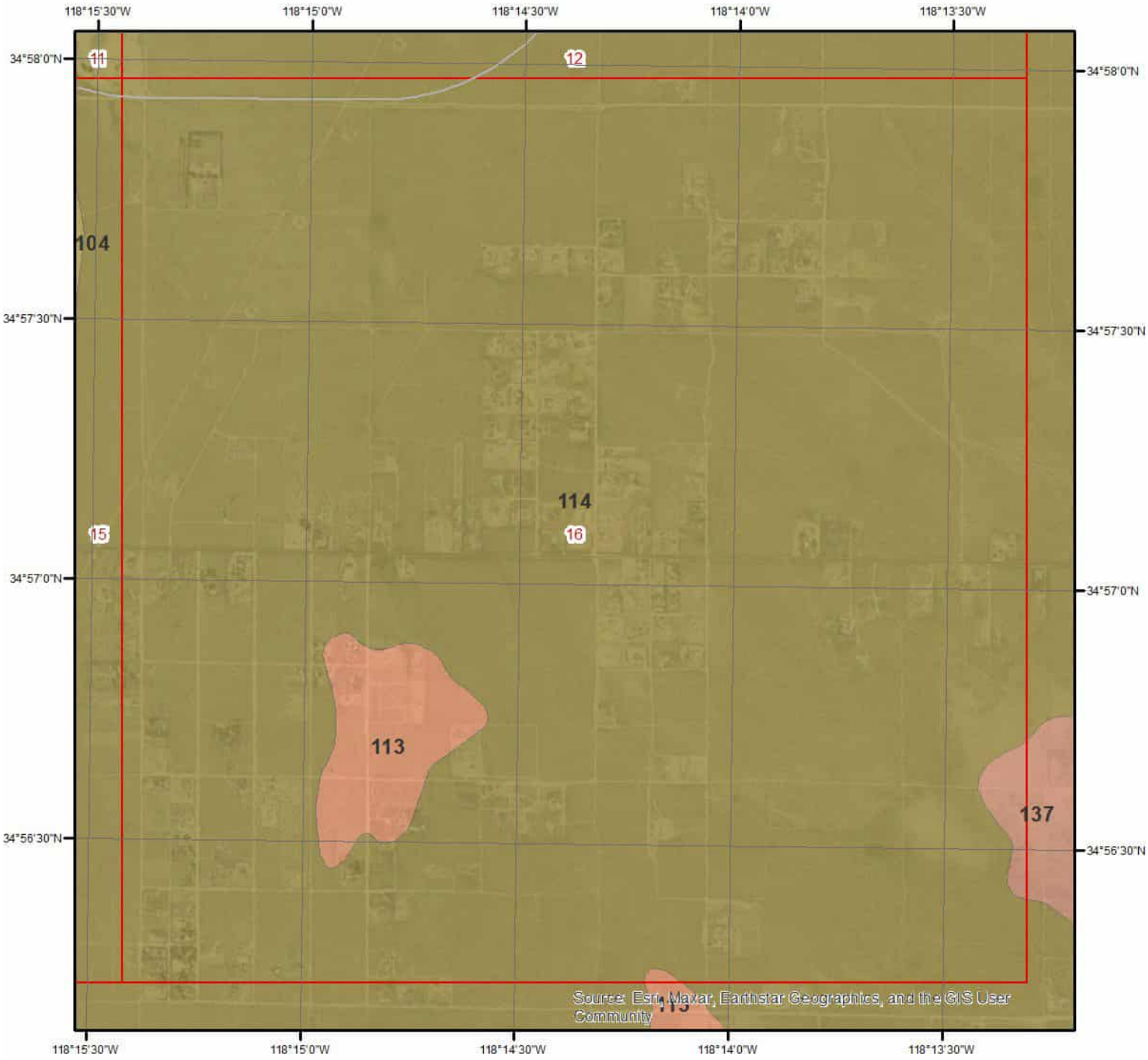
N

0 0.25 0.5 Miles

This maps shows SSURGO soil units around the target property. Please refer to the report for detailed soil descriptions.

ERIS

Soil Information



SSURGO Soils - Page 16

N

0 0.25 0.5 Miles

This maps shows SSURGO soil units around the target property. Please refer to the report for detailed soil descriptions.

ERIS

Soil Information

The previous page shows a soil map using SSURGO data from USDA Natural Resources Conservation Service. Detailed information about each unit is provided below.

Map Unit 104 (1.14%)

Map Unit Name:	Arizo gravelly loamy sand, 2 to 9 percent slopes
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Excessively drained
Hydrologic Group - Dominant:	A - Soils in this group have low runoff potential when thoroughly wet. Water is transmitted freely through the soil.

Major components are printed below

Arizo(85%)

horizon H1(0cm to 8cm)	Gravelly loamy sand
horizon H2(8cm to 165cm)	Stratified very gravelly coarse sand to very gravelly loamy sand

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 104 - Arizo gravelly loamy sand, 2 to 9 percent slopes

Component: Arizo (85%)
The Arizo component makes up 85 percent of the map unit. Slopes are 2 to 9 percent. This component is on alluvial fans, flood plains. The parent material consists of alluvium derived from granite. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is excessively drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is occasionally flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 0 percent. This component is in the R030XF012CA Sandy ecological site. Nonirrigated land capability classification is 7w. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent. There are no saline horizons within 30 inches of the soil surface.

Component: Cajon (15%)
Generated brief soil descriptions are created for major soil components. The Cajon soil is a minor component.

Map Unit 114 (37.17%)

Map Unit Name:	Cajon loamy sand, 0 to 5 percent slopes
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Somewhat excessively drained
Hydrologic Group - Dominant:	A - Soils in this group have low runoff potential when thoroughly wet. Water is transmitted freely through the soil.

Major components are printed below

Cajon(85%)

horizon H1(0cm to 51cm)	Loamy sand
horizon H2(51cm to 152cm)	Gravelly loamy sand

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 114 - Cajon loamy sand, 0 to 5 percent slopes

Component: Cajon (85%)
The Cajon component makes up 85 percent of the map unit. Slopes are 0 to 5 percent. This component is on alluvial fans, flood

plains. The parent material consists of alluvium derived from granite. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R030XF012CA Sandy ecological site. Nonirrigated land capability classification is 7e. Irrigated land capability classification is 3e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent. There are no saline horizons within 30 inches of the soil surface.

Component: Unnamed soils (3%)
Generated brief soil descriptions are created for major soil components. The Unnamed soils soil is a minor component.

Component: DeStazo (3%)
Generated brief soil descriptions are created for major soil components. The DeStazo soil is a minor component.

Component: Arizo (3%)
Generated brief soil descriptions are created for major soil components. The Arizo soil is a minor component.

Component: Neuralia (3%)
Generated brief soil descriptions are created for major soil components. The Neuralia soil is a minor component.

Component: Garlock (3%)
Generated brief soil descriptions are created for major soil components. The Garlock soil is a minor component.

Map Unit 116 (8.87%)

Map Unit Name:	Cajon gravelly loamy sand, 0 to 9 percent slopes
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Excessively drained
Hydrologic Group - Dominant:	A - Soils in this group have low runoff potential when thoroughly wet. Water is transmitted freely through the soil.

Major components are printed below

Cajon(85%)

horizon H1(0cm to 91cm)	Gravelly loamy sand
horizon H2(91cm to 152cm)	Gravelly sand

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 116 - Cajon gravelly loamy sand, 0 to 9 percent slopes

Component: Cajon (85%)
The Cajon component makes up 85 percent of the map unit. Slopes are 0 to 9 percent. This component is on alluvial fans, flood plains. The parent material consists of alluvium derived from granite. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is excessively drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R030XF012CA Sandy ecological site. Nonirrigated land capability classification is 7e. Irrigated land capability classification is 4s. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent. There are no saline horizons within 30 inches of the soil surface.

Component: Arizo (10%)
Generated brief soil descriptions are created for major soil components. The Arizo soil is a minor component.

Component: Garlock (5%)
Generated brief soil descriptions are created for major soil components. The Garlock soil is a minor component.

Map Unit 128 (0.03%)

Soil Information

Map Unit Name:	Dumps, mine

No more attributes available for this map unit

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 128 - Dumps, mine

Component: Dumps (100%)
Generated brief soil descriptions are created for major soil components. The Dumps is a miscellaneous area.

Map Unit 137 (17.97%)

Map Unit Name:	Garlock loamy sand, 2 to 9 percent slopes
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	C - Soils in this group have moderately high runoff potential when thoroughly wet. Water transmission through the soil is somewhat restricted.

Major components are printed below

Garlock(85%)

horizon H1(0cm to 30cm)	Loamy sand
horizon H2(30cm to 61cm)	Sandy clay loam
horizon H3(61cm to 84cm)	Sandy loam
horizon H4(84cm to 130cm)	Gravelly loamy sand
horizon H5(130cm to 152cm)	Very gravelly loamy sand

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 137 - Garlock loamy sand, 2 to 9 percent slopes

Component: Garlock (85%)
The Garlock component makes up 85 percent of the map unit. Slopes are 2 to 9 percent. This component is on alluvial fans, terraces. The parent material consists of alluvium derived from granite. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 0 percent. This component is in the R030XF012CA Sandy ecological site. Nonirrigated land capability classification is 7e. Irrigated land capability classification is 3e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent. There are no saline horizons within 30 inches of the soil surface.

Component: Unnamed soils (5%)
Generated brief soil descriptions are created for major soil components. The Unnamed soils soil is a minor component.

Component: Neuralia (5%)
Generated brief soil descriptions are created for major soil components. The Neuralia soil is a minor component.

Component: Cajon (5%)
Generated brief soil descriptions are created for major soil components. The Cajon soil is a minor component.

Map Unit 156 (8.43%)

Map Unit Name:	Pajuela-Whitewolf association, steep
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null

Soil Information

Drainage Class - Dominant:	Somewhat excessively drained
Hydrologic Group - Dominant:	A - Soils in this group have low runoff potential when thoroughly wet. Water is transmitted freely through the soil.

Major components are printed below

Pajuela(60%)

horizon H1(0cm to 30cm)	Gravelly sandy loam
horizon H2(30cm to 56cm)	Gravelly loamy sand
horizon H3(56cm to 152cm)	Very gravelly loamy sand

Whitewolf(35%)

horizon H1(0cm to 81cm)	Loamy sand
horizon H2(81cm to 178cm)	Loamy sand

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 156 - Pajuela-Whitewolf association, steep

Component: Pajuela (60%)
The Pajuela component makes up 60 percent of the map unit. Slopes are 30 to 50 percent. This component is on eroded stream terraces. The parent material consists of alluvium derived from granite. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R029XF010CA Gravelly Sandy ecological site. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 10 percent. There are no saline horizons within 30 inches of the soil surface.

Component: Whitewolf (35%)
The Whitewolf component makes up 35 percent of the map unit. Slopes are 4 to 5 percent. This component is on eroded stream terraces. The parent material consists of alluvium derived from granite. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. This component is in the R030XF012CA Sandy ecological site. Nonirrigated land capability classification is 7e. Irrigated land capability classification is 3s. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface.

Component: Wasioja (3%)
Generated brief soil descriptions are created for major soil components. The Wasioja soil is a minor component.

Component: Unnamed (2%)
Generated brief soil descriptions are created for major soil components. The Unnamed, very gravelly scl soil is a minor component.

Map Unit 167 (1.84%)

Map Unit Name:	Randsburg sandy loam, 2 to 15 percent slopes
Bedrock Depth - Min:	30cm
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	D - Soils in this group have high runoff potential when thoroughly wet. Water movement through the soil is restricted or very restricted.

Major components are printed below

Randsburg(85%)

horizon H1(0cm to 30cm)	Sandy loam
horizon H2(30cm to 41cm)	Weathered bedrock

Component Description:

Minor map unit components are excluded from this report.

Soil Information

Map Unit: 167 - Randsburg sandy loam, 2 to 15 percent slopes

Component: Randsburg (85%)
The Randsburg component makes up 85 percent of the map unit. Slopes are 2 to 15 percent. This component is on rock pediments. The parent material consists of residuum weathered from granite. Depth to a root restrictive layer, bedrock, paralithic, is 8 to 20 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 0 percent. This component is in the R030XF012CA Sandy ecological site. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 1 percent. There are no saline horizons within 30 inches of the soil surface.

Component: Randsburg (3%)
Generated brief soil descriptions are created for major soil components. The Randsburg, steeper slopes soil is a minor component.

Component: Hi Vista (3%)
Generated brief soil descriptions are created for major soil components. The Hi Vista soil is a minor component.

Component: Cajon (3%)
Generated brief soil descriptions are created for major soil components. The Cajon soil is a minor component.

Component: Alko (3%)
Generated brief soil descriptions are created for major soil components. The Alko soil is a minor component.

Component: Muroc (3%)
Generated brief soil descriptions are created for major soil components. The Muroc soil is a minor component.

Map Unit 171 (0.23%)

Map Unit Name:	Rosamond clay loam
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	C - Soils in this group have moderately high runoff potential when thoroughly wet. Water transmission through the soil is somewhat restricted.

Major components are printed below

Rosamond(85%)

horizon H1(0cm to 5cm)	Sandy loam
horizon H2(5cm to 36cm)	Clay loam
horizon H3(36cm to 152cm)	Stratified loam to silty clay loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 171 - Rosamond clay loam

Component: Rosamond (85%)
The Rosamond component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains. The parent material consists of alluvium derived from granite. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R030XF003CA Coarse Loamy ecological site. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 4 percent. The soil has a very slightly saline horizon within 30 inches of the soil surface.

Component: DeStazo (5%)
Generated brief soil descriptions are created for major soil components. The DeStazo soil is a minor component.

Component: Cajon (5%)

Soil Information

Generated brief soil descriptions are created for major soil components. The Cajon soil is a minor component.

Component: Garlock (5%)
Generated brief soil descriptions are created for major soil components. The Garlock soil is a minor component.

Map Unit 185 (3.69%)

Map Unit Name:	Torriorthents-Rock outcrop complex, very steep
Bedrock Depth - Min:	0cm
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	null

Major components are printed below

Torriorthents(50%)

horizon H1(0cm to 51cm)	Variable
horizon H2(51cm to 61cm)	Unweathered bedrock

Rock outcrop(30%)

horizon H1(0cm to 152cm)	Unweathered bedrock

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 185 - Torriorthents-Rock outcrop complex, very steep

Component: Torriorthents (50%)
The Torriorthents component makes up 50 percent of the map unit. Slopes are 50 to 75 percent. This component is on hills, mountains, hills, mountains. The parent material consists of residuum weathered from basalt, granite, and sandstone. Depth to a root restrictive layer, bedrock, lithic, is 10 to 20 inches. The natural drainage class is well drained. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria.

Component: Rock outcrop (30%)
Generated brief soil descriptions are created for major soil components. The Rock outcrop is a miscellaneous area.

Component: Unnamed soils (10%)
Generated brief soil descriptions are created for major soil components. The Unnamed soils soil is a minor component.

Component: Unnamed (5%)
Generated brief soil descriptions are created for major soil components. The Unnamed, gravelly to stony surface soil is a minor component.

Component: Unnamed (5%)
Generated brief soil descriptions are created for major soil components. The Unnamed, soils on gentler slopes soil is a minor component.

Map Unit AaB (1.12%)

Map Unit Name:	Adelanto loamy sand, 2 to 5 percent slopes
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	A - Soils in this group have low runoff potential when thoroughly wet. Water is transmitted freely through the soil.

Major components are printed below

Adelanto(85%)

horizon H1(0cm to 41cm)	Loamy sand

horizon H2(41cm to 104cm)	Sandy loam
horizon H3(104cm to 203cm)	Sandy loam
horizon H4(203cm to 218cm)	Stratified loamy sand to coarse sandy loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: AaB - Adelanto loamy sand, 2 to 5 percent slopes

Component: Adelanto (85%)
The Adelanto component makes up 85 percent of the map unit. Slopes are 2 to 5 percent. This component is on terraces, alluvial fans. The parent material consists of alluvium derived from granite. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 0 percent. This component is in the R030XG022CA Sandy 4-9" ecological site. Nonirrigated land capability classification is 7e. Irrigated land capability classification is 2e. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface.

Component: Cajon (10%)
Generated brief soil descriptions are created for major soil components. The Cajon soil is a minor component.

Component: Mojave (5%)
Generated brief soil descriptions are created for major soil components. The Mojave soil is a minor component.

Map Unit CaC (8.2%)

Map Unit Name:	Cajon loamy sand, 2 to 9 percent slopes
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Excessively drained
Hydrologic Group - Dominant:	A - Soils in this group have low runoff potential when thoroughly wet. Water is transmitted freely through the soil.

Major components are printed below

Cajon(85%)

horizon H1(0cm to 23cm)	Loamy sand
horizon H2(23cm to 152cm)	Sand

Component Description:

Minor map unit components are excluded from this report.

Map Unit: CaC - Cajon loamy sand, 2 to 9 percent slopes

Component: Cajon (85%)
The Cajon component makes up 85 percent of the map unit. Slopes are 2 to 9 percent. This component is on alluvial fans. The parent material consists of alluvium derived from granite. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is excessively drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R030XG022CA Sandy 4-9" ecological site. Nonirrigated land capability classification is 7e. Irrigated land capability classification is 3e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent. There are no saline horizons within 30 inches of the soil surface.

Component: Arizo (5%)
Generated brief soil descriptions are created for major soil components. The Arizo soil is a minor component.

Component: Unnamed (5%)
Generated brief soil descriptions are created for major soil components. The Unnamed soil is a minor component.

Component: Hesperia (5%)

Soil Information

Generated brief soil descriptions are created for major soil components. The Hesperia soil is a minor component.

Map Unit GsC (1.86%)

Map Unit Name:	Greenfield sandy loam, 2 to 9 percent slopes
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	A - Soils in this group have low runoff potential when thoroughly wet. Water is transmitted freely through the soil.

Major components are printed below

Greenfield(85%)

horizon H1(0cm to 51cm)	Sandy loam
horizon H2(51cm to 152cm)	Sandy loam
horizon H3(152cm to 203cm)	Stratified loamy sand to coarse sandy loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: GsC - Greenfield sandy loam, 2 to 9 percent slopes

Component: Greenfield (85%)
The Greenfield component makes up 85 percent of the map unit. Slopes are 2 to 9 percent. This component is on terraces, alluvial fans. The parent material consists of alluvium derived from granite. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R019XD064CA Loamy 9-20" ecological site. Nonirrigated land capability classification is 4e. Irrigated land capability classification is 2e. This soil does not meet hydric criteria.

Component: Hanford (8%)
Generated brief soil descriptions are created for major soil components. The Hanford soil is a minor component.

Component: Ramona (5%)
Generated brief soil descriptions are created for major soil components. The Ramona soil is a minor component.

Component: Unnamed (1%)
Generated brief soil descriptions are created for major soil components. The Unnamed soil is a minor component.

Component: Unnamed (1%)
Generated brief soil descriptions are created for major soil components. The Unnamed soil is a minor component.

Map Unit HbC (4.42%)

Map Unit Name:	Hanford coarse sandy loam, 2 to 9 percent slopes
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	A - Soils in this group have low runoff potential when thoroughly wet. Water is transmitted freely through the soil.

Major components are printed below

Hanford(85%)

horizon H1(0cm to 20cm)	Coarse sandy loam
horizon H2(20cm to 99cm)	Sandy loam
horizon H3(99cm to 178cm)	Gravelly loamy coarse sand

Soil Information

Component Description:

Minor map unit components are excluded from this report.

Map Unit: HbC - Hanford coarse sandy loam, 2 to 9 percent slopes

Component: Hanford (85%)
The Hanford component makes up 85 percent of the map unit. Slopes are 2 to 9 percent. This component is on alluvial fans. The parent material consists of alluvium derived from granite. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R019XD064CA Loamy 9-20" ecological site. Nonirrigated land capability classification is 4e. Irrigated land capability classification is 2e. This soil does not meet hydric criteria.

Component: Greenfield (8%)
Generated brief soil descriptions are created for major soil components. The Greenfield soil is a minor component.

Component: Ramona (5%)
Generated brief soil descriptions are created for major soil components. The Ramona soil is a minor component.

Component: Unnamed (2%)
Generated brief soil descriptions are created for major soil components. The Unnamed soil is a minor component.

Map Unit RcC (1.78%)

Map Unit Name:	Ramona coarse sandy loam, 5 to 9 percent slopes
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	C - Soils in this group have moderately high runoff potential when thoroughly wet. Water transmission through the soil is somewhat restricted.

Major components are printed below

Ramona(85%)

horizon H1(0cm to 51cm)	Coarse sandy loam
horizon H2(51cm to 79cm)	Fine sandy loam
horizon H3(79cm to 229cm)	Sandy clay loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: RcC - Ramona coarse sandy loam, 5 to 9 percent slopes

Component: Ramona (85%)
The Ramona component makes up 85 percent of the map unit. Slopes are 5 to 9 percent. This component is on terraces. The parent material consists of alluvium derived from granite. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R019XD064CA Loamy 9-20" ecological site. Nonirrigated land capability classification is 4e. Irrigated land capability classification is 2e. This soil does not meet hydric criteria.

Component: Hanford (5%)
Generated brief soil descriptions are created for major soil components. The Hanford soil is a minor component.

Component: Greenfield (5%)
Generated brief soil descriptions are created for major soil components. The Greenfield soil is a minor component.

Component: Unnamed (5%)
Generated brief soil descriptions are created for major soil components. The Unnamed soil is a minor component.

Soil Information

Map Unit RdE2 (2.37%)

Map Unit Name:	Ramona sandy loam, 9 to 30 percent slopes, eroded
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	C - Soils in this group have moderately high runoff potential when thoroughly wet. Water transmission through the soil is somewhat restricted.

Major components are printed below

Ramona(85%)

horizon H1(0cm to 30cm)	Sandy loam
horizon H2(30cm to 58cm)	Fine sandy loam
horizon H3(58cm to 229cm)	Sandy clay loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: RdE2 - Ramona sandy loam, 9 to 30 percent slopes, eroded

Component: Ramona (85%)
The Ramona component makes up 85 percent of the map unit. Slopes are 9 to 30 percent. This component is on terraces. The parent material consists of alluvium derived from granite. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R019XD064CA Loamy 9-20" ecological site. Nonirrigated land capability classification is 6e. Irrigated land capability classification is 4e. This soil does not meet hydric criteria.

Component: Gullied land (5%)
Generated brief soil descriptions are created for major soil components. The Gullied land soil is a minor component.

Component: Vernalis (5%)
Generated brief soil descriptions are created for major soil components. The Vernalis soil is a minor component.

Component: Unnamed (4%)
Generated brief soil descriptions are created for major soil components. The Unnamed soil is a minor component.

Component: Unnamed (1%)
Generated brief soil descriptions are created for major soil components. The Unnamed soil is a minor component.

Map Unit ShF2 (0.88%)

Map Unit Name:	Sheridan sandy loam, 30 to 50 percent slopes, eroded
Bedrock Depth - Min:	66cm
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	B - Soils in this group have moderately low runoff potential when thoroughly wet. Water transmission through the soil is unimpeded.

Major components are printed below

Sheridan(85%)

horizon H1(0cm to 38cm)	Sandy loam
horizon H2(38cm to 66cm)	Gravelly coarse sandy loam
horizon H3(66cm to 76cm)	Weathered bedrock

Component Description:

Soil Information

Minor map unit components are excluded from this report.

Map Unit: ShF2 - Sheridan sandy loam, 30 to 50 percent slopes, eroded

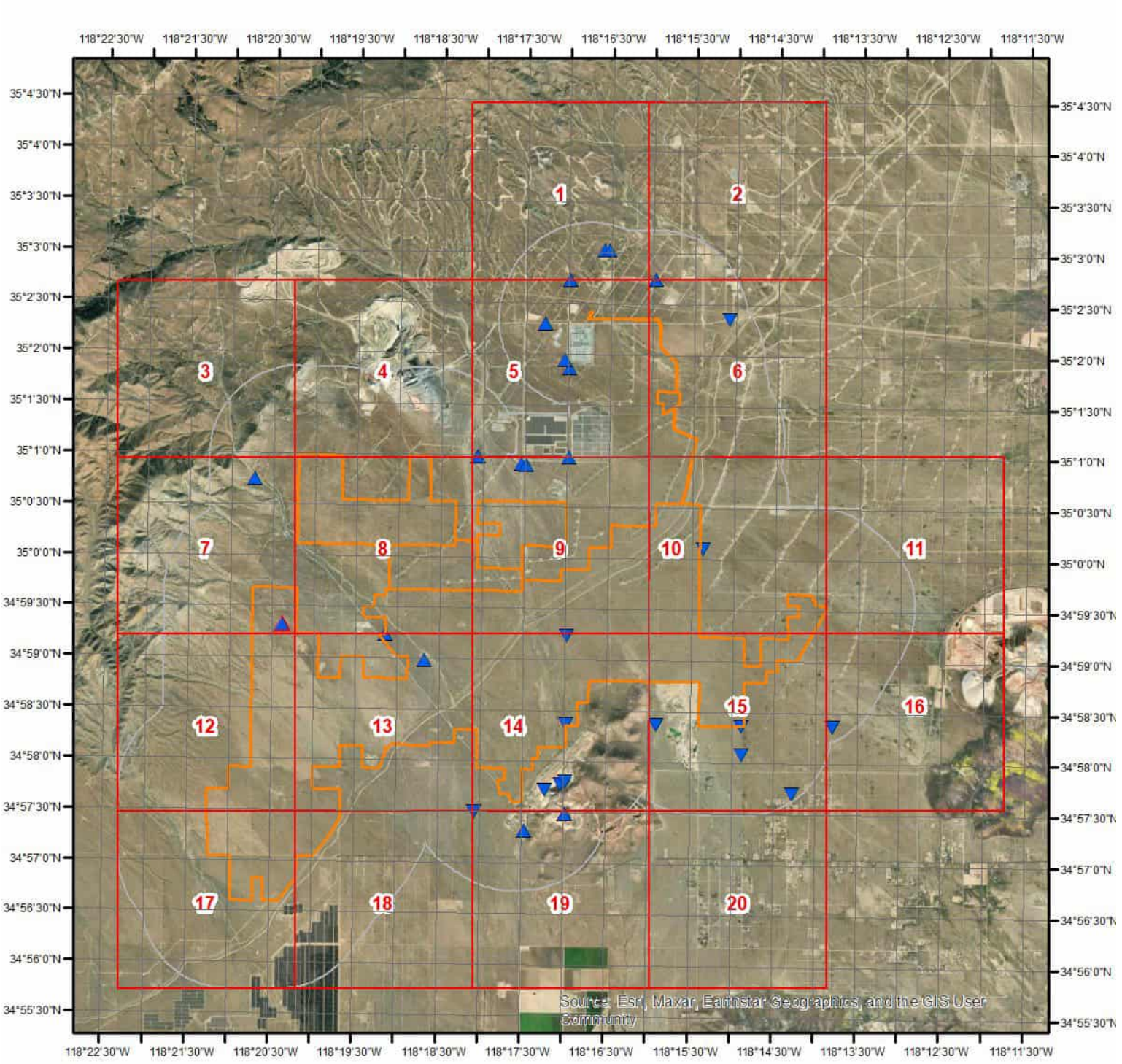
Component: Sheridan (85%)
The Sheridan component makes up 85 percent of the map unit. Slopes are 30 to 50 percent. This component is on mountains, mountains. The parent material consists of residuum weathered from granite. Depth to a root restrictive layer, bedrock, paralithic, is 25 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is very low. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 3 percent. This component is in the R020XE024CA Loamy 9-20" ecological site. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria.

Component: Unnamed (5%)
Generated brief soil descriptions are created for major soil components. The Unnamed soil is a minor component.

Component: Anaverde (5%)
Generated brief soil descriptions are created for major soil components. The Anaverde soil is a minor component.

Component: Gorman (5%)
Generated brief soil descriptions are created for major soil components. The Gorman soil is a minor component.

Wells and Additional Sources



Wells & Additional Sources

N

0 0.75 1.5 3 Miles

- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- OGW Sites with Higher Elevation
- OGW Sites with Same Elevation
- OGW Sites with Lower Elevation
- OGW Sites with Unknown Elevation

ERIS

Wells and Additional Sources



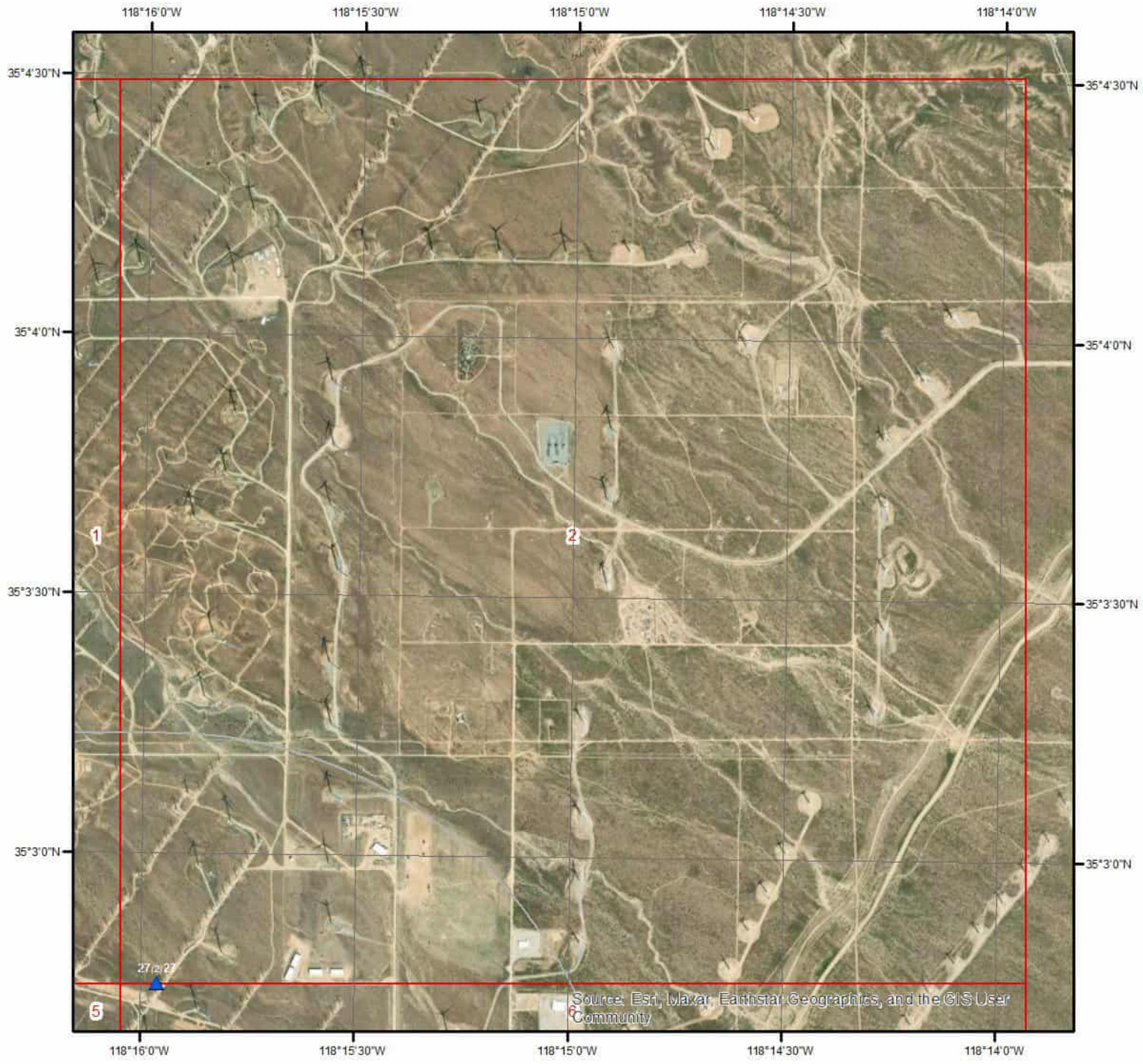
Wells & Additional Sources - Page 1

Miles
0 0.15 0.3 0.6

- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- OGW Sites with Higher Elevation
- OGW Sites with Same Elevation
- OGW Sites with Lower Elevation
- OGW Sites with Unknown Elevation

ERIS

Wells and Additional Sources



Wells & Additional Sources - Page 2

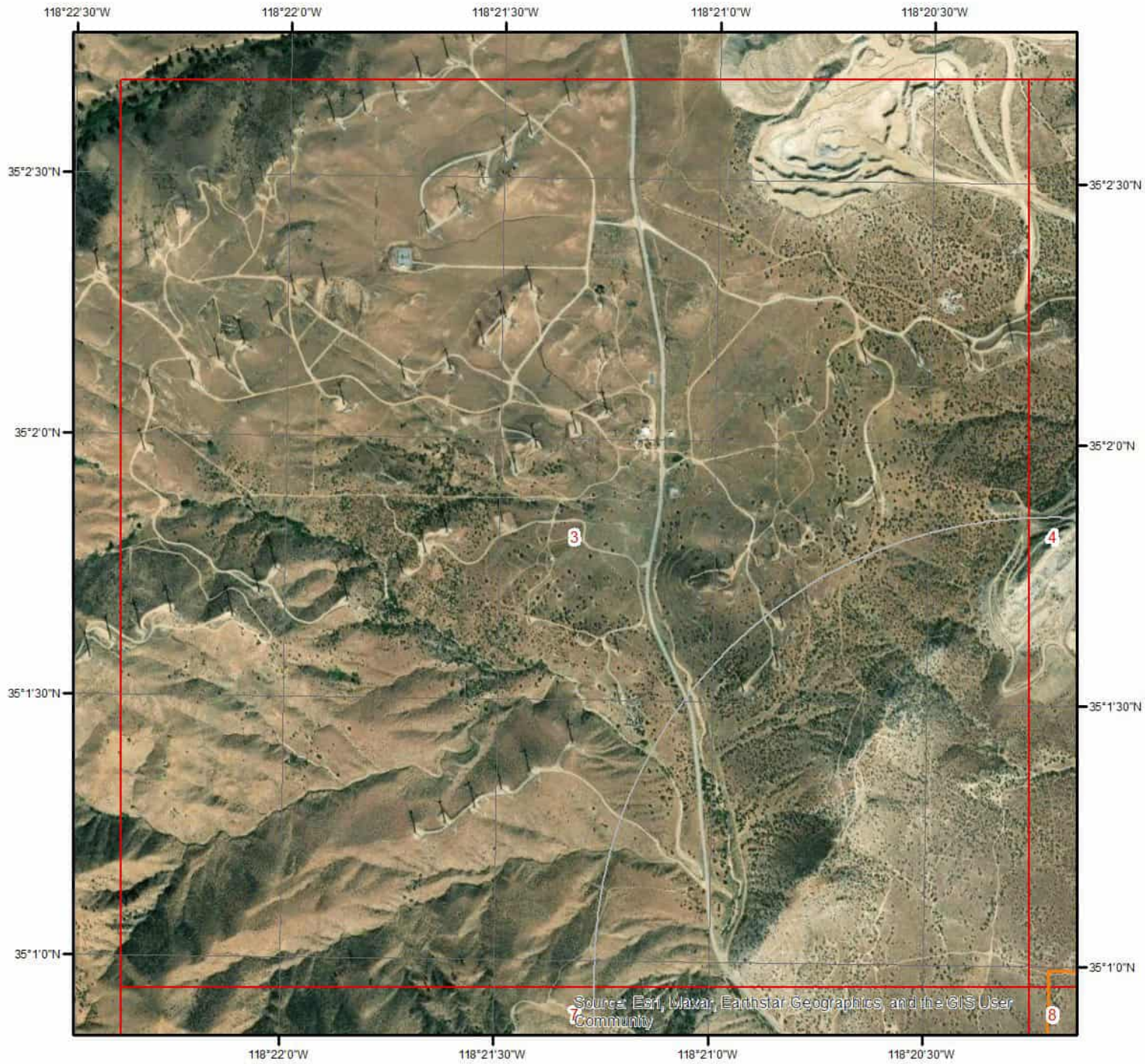
N

0 0.15 0.3 0.6 Miles

- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- OGW Sites with Higher Elevation
- OGW Sites with Same Elevation
- OGW Sites with Lower Elevation
- OGW Sites with Unknown Elevation

ERIS

Wells and Additional Sources



Wells & Additional Sources - Page 3

N

0 0.15 0.3 0.6 Miles

- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- OGW Sites with Higher Elevation
- OGW Sites with Same Elevation
- OGW Sites with Lower Elevation
- OGW Sites with Unknown Elevation

ERIS

Wells and Additional Sources



Wells & Additional Sources - Page 4

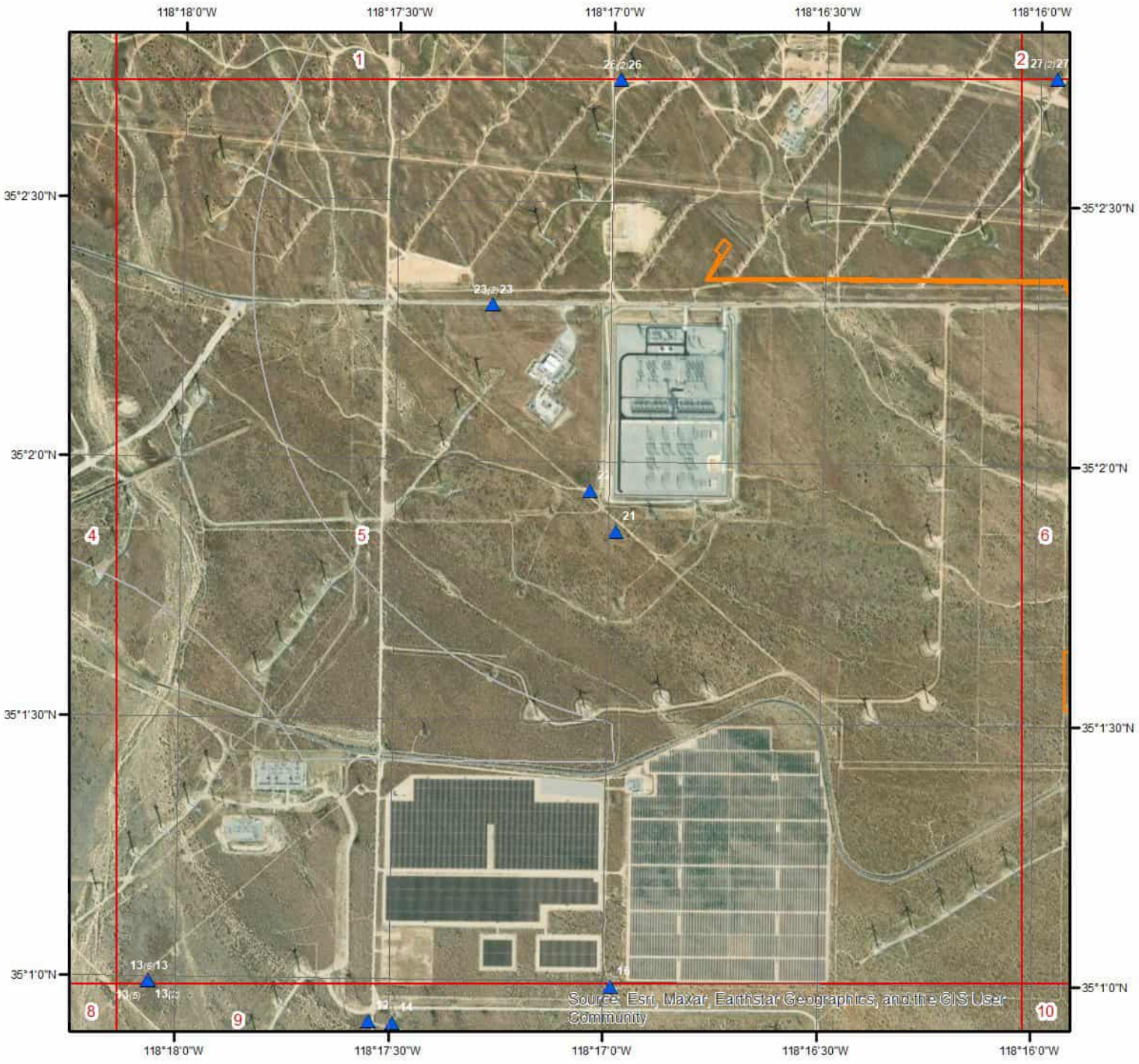
N

0 0.15 0.3 0.6 Miles

- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- OGW Sites with Higher Elevation
- OGW Sites with Same Elevation
- OGW Sites with Lower Elevation
- OGW Sites with Unknown Elevation

ERIS

Wells and Additional Sources



Wells & Additional Sources - Page 5

Miles
0 0.15 0.3 0.6

- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- OGW Sites with Higher Elevation
- OGW Sites with Same Elevation
- OGW Sites with Lower Elevation
- OGW Sites with Unknown Elevation

ERIS

Wells and Additional Sources



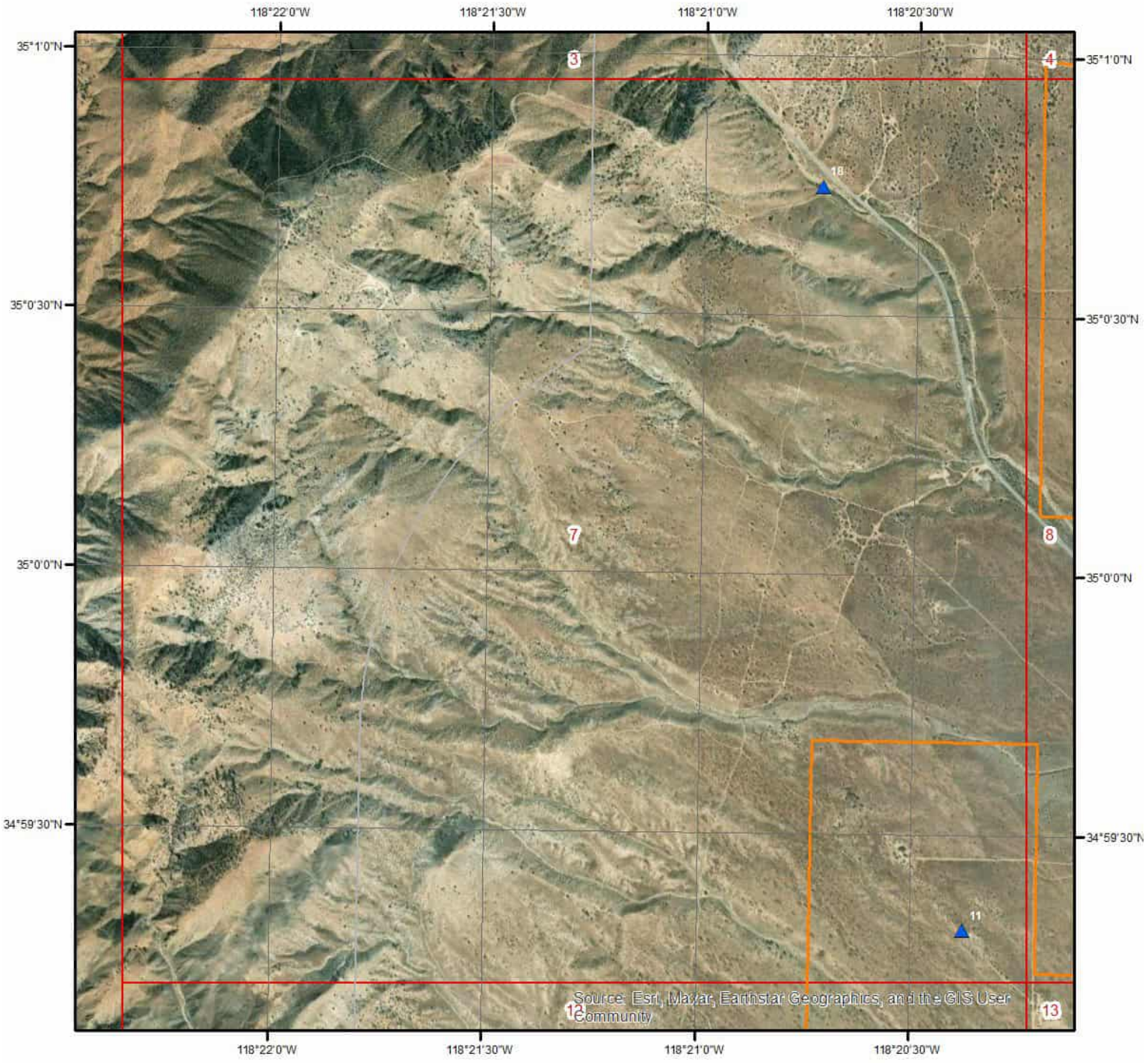
Wells & Additional Sources - Page 6

0 0.15 0.3 0.6 Miles

- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- OGW Sites with Higher Elevation
- OGW Sites with Same Elevation
- OGW Sites with Lower Elevation
- OGW Sites with Unknown Elevation

ERIS

Wells and Additional Sources



Wells & Additional Sources - Page 7

N

0 0.15 0.3 0.6 Miles

- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- OGW Sites with Higher Elevation
- OGW Sites with Same Elevation
- OGW Sites with Lower Elevation
- OGW Sites with Unknown Elevation

ERIS

Wells and Additional Sources



Wells & Additional Sources - Page 8

Miles
0 0.15 0.3 0.6

- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- OGW Sites with Higher Elevation
- OGW Sites with Same Elevation
- OGW Sites with Lower Elevation
- OGW Sites with Unknown Elevation

ERIS

Wells and Additional Sources



Wells & Additional Sources - Page 9

N

0 0.15 0.3 0.6 Miles

- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- OGW Sites with Higher Elevation
- OGW Sites with Same Elevation
- OGW Sites with Lower Elevation
- OGW Sites with Unknown Elevation

ERIS

Wells and Additional Sources



Wells & Additional Sources - Page 10

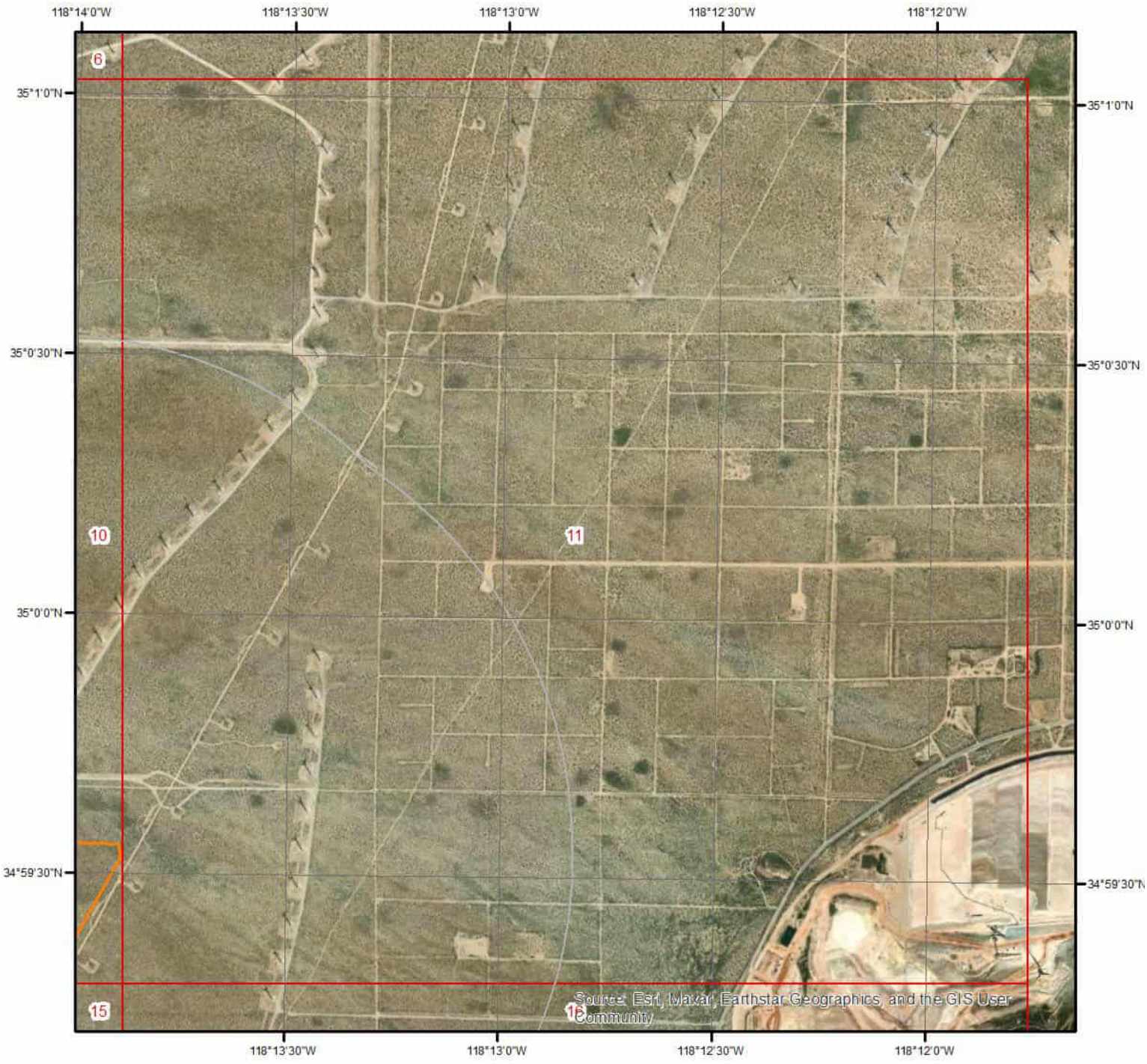
N

0 0.15 0.3 0.6 Miles

- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- OGW Sites with Higher Elevation
- OGW Sites with Same Elevation
- OGW Sites with Lower Elevation
- OGW Sites with Unknown Elevation

ERIS

Wells and Additional Sources



Wells & Additional Sources - Page 11

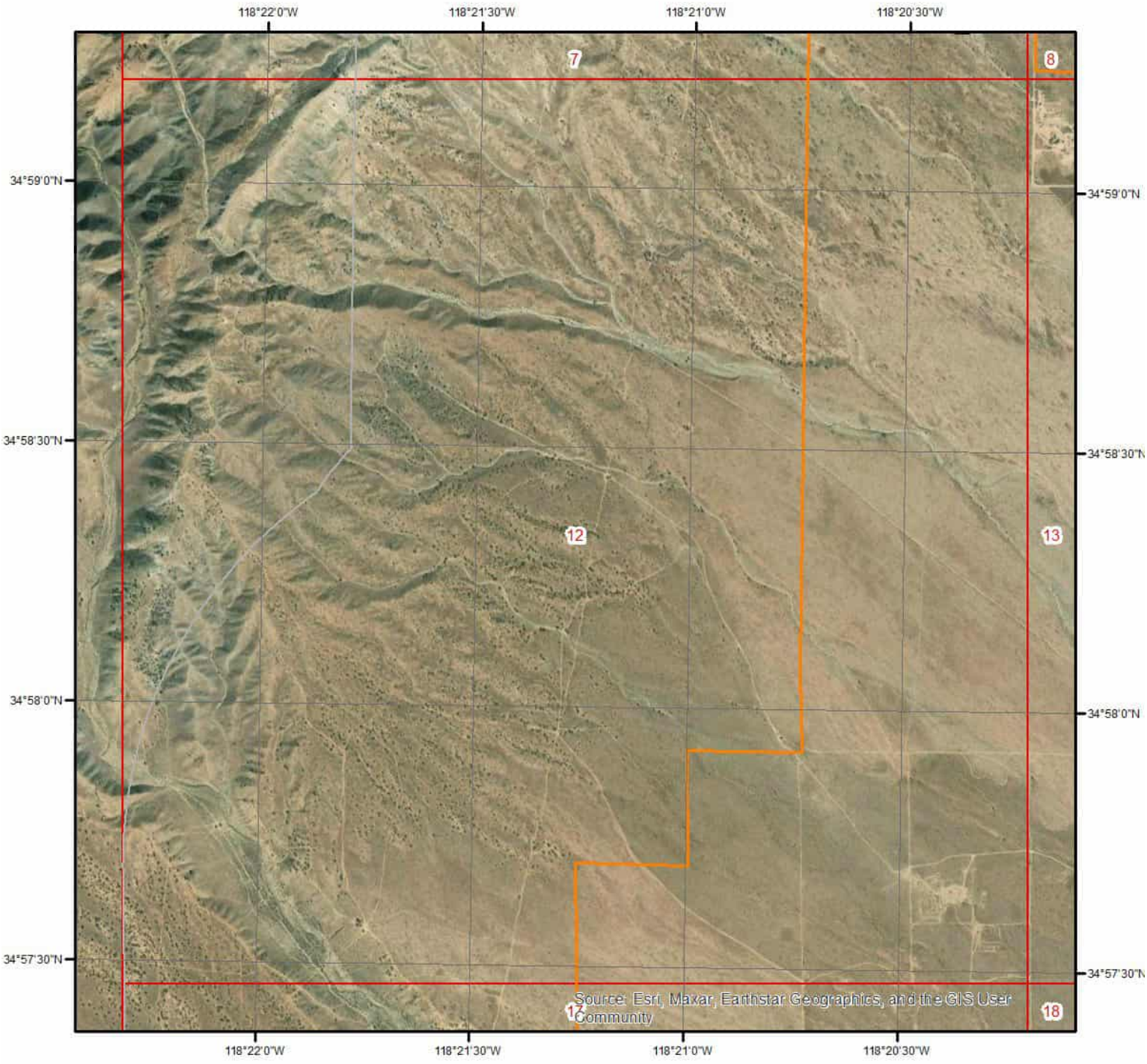
N

0 0.15 0.3 0.6 Miles

- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- OGW Sites with Higher Elevation
- OGW Sites with Same Elevation
- OGW Sites with Lower Elevation
- OGW Sites with Unknown Elevation

ERIS

Wells and Additional Sources



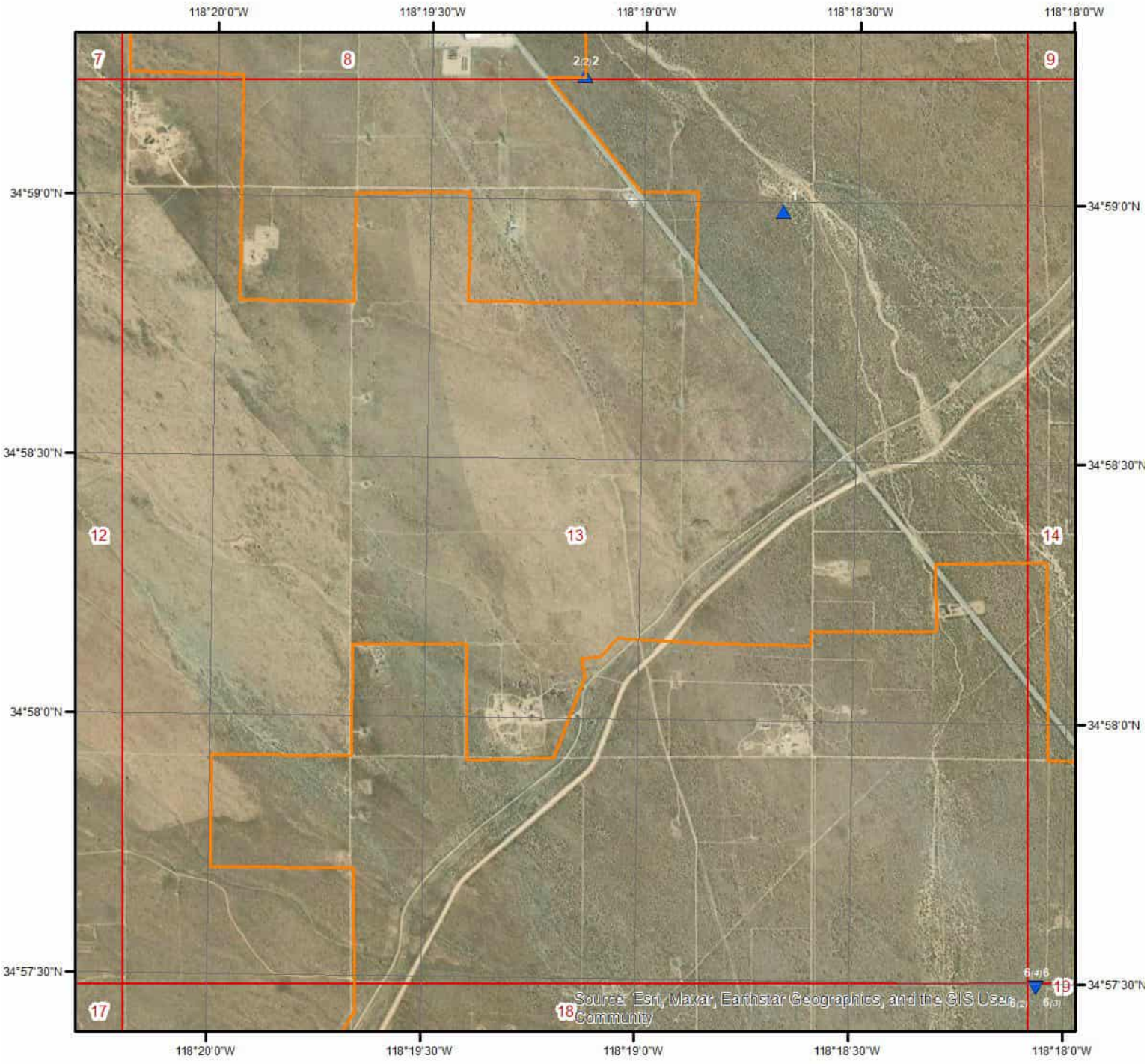
Wells & Additional Sources - Page 12

Miles
0 0.15 0.3 0.6

- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- OGW Sites with Higher Elevation
- OGW Sites with Same Elevation
- OGW Sites with Lower Elevation
- OGW Sites with Unknown Elevation

ERIS

Wells and Additional Sources



Wells & Additional Sources - Page 13

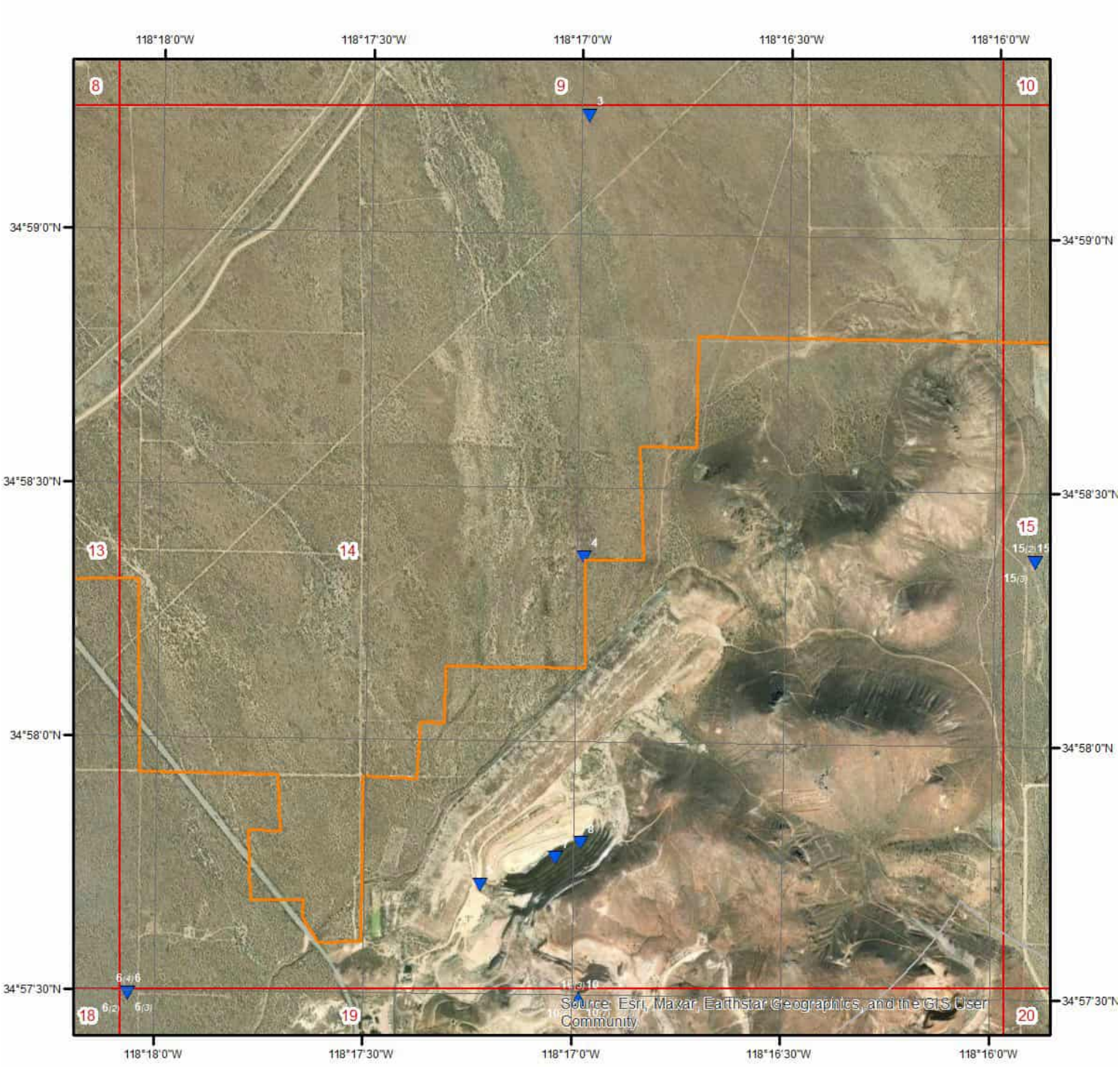
N

0 0.15 0.3 0.6 Miles

- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- OGW Sites with Higher Elevation
- OGW Sites with Same Elevation
- OGW Sites with Lower Elevation
- OGW Sites with Unknown Elevation

ERIS

Wells and Additional Sources



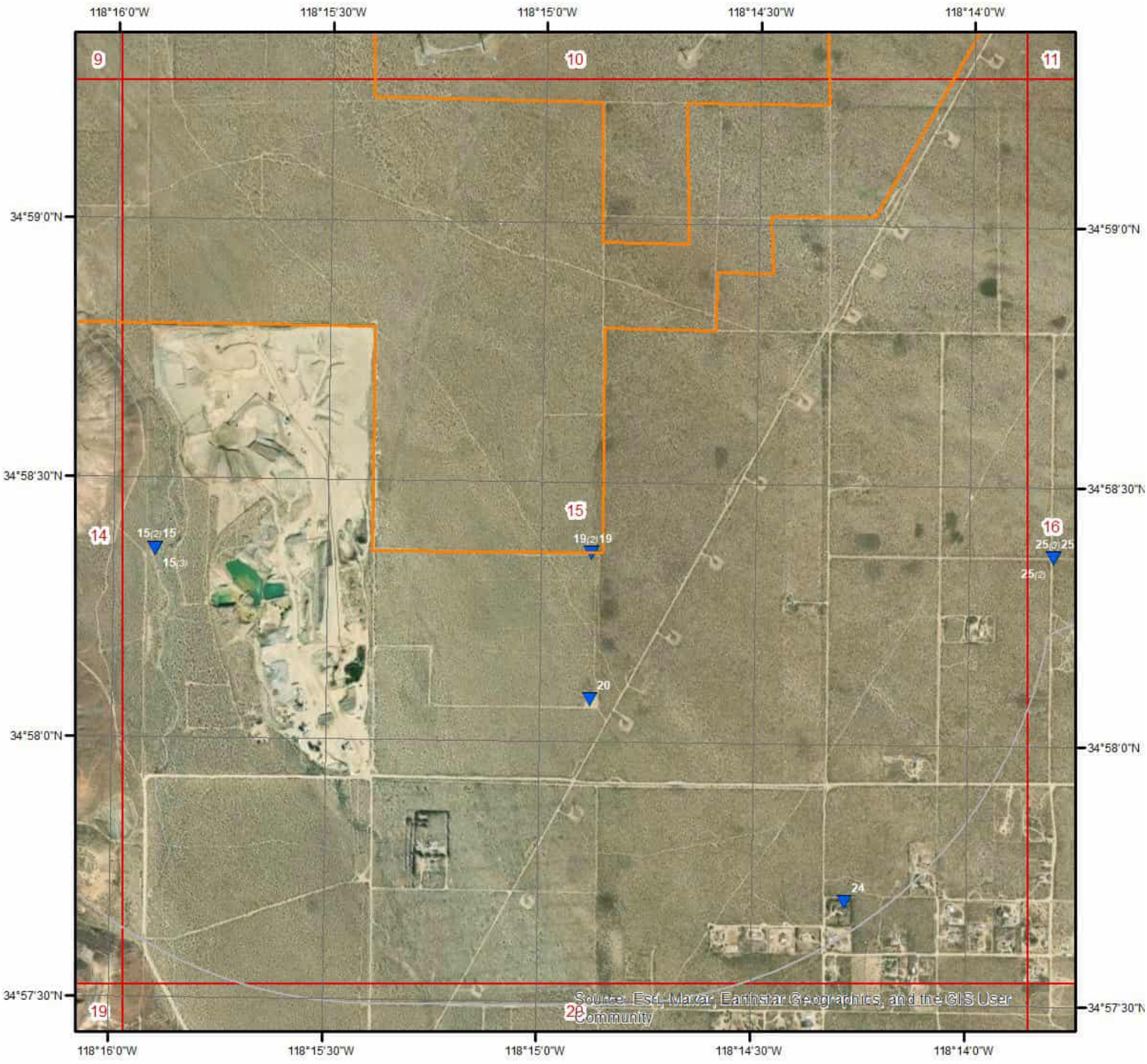
Wells & Additional Sources - Page 14

Miles
0 0.15 0.3 0.6

- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- OGW Sites with Higher Elevation
- OGW Sites with Same Elevation
- OGW Sites with Lower Elevation
- OGW Sites with Unknown Elevation

ERIS

Wells and Additional Sources



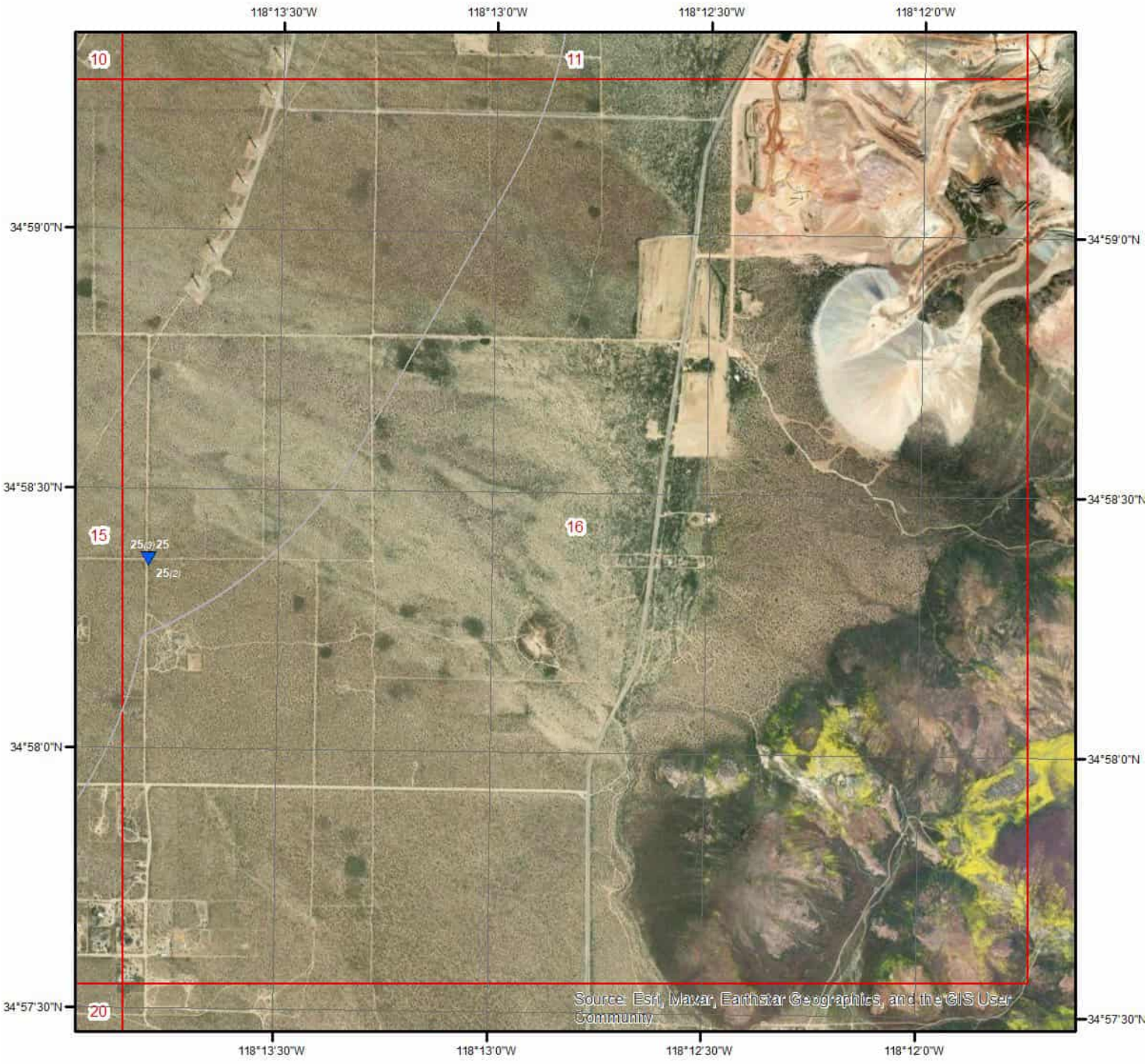
Wells & Additional Sources - Page 15

Miles
0 0.15 0.3 0.6

- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- OGW Sites with Higher Elevation
- OGW Sites with Same Elevation
- OGW Sites with Lower Elevation
- OGW Sites with Unknown Elevation

ERIS

Wells and Additional Sources



Wells & Additional Sources - Page 16

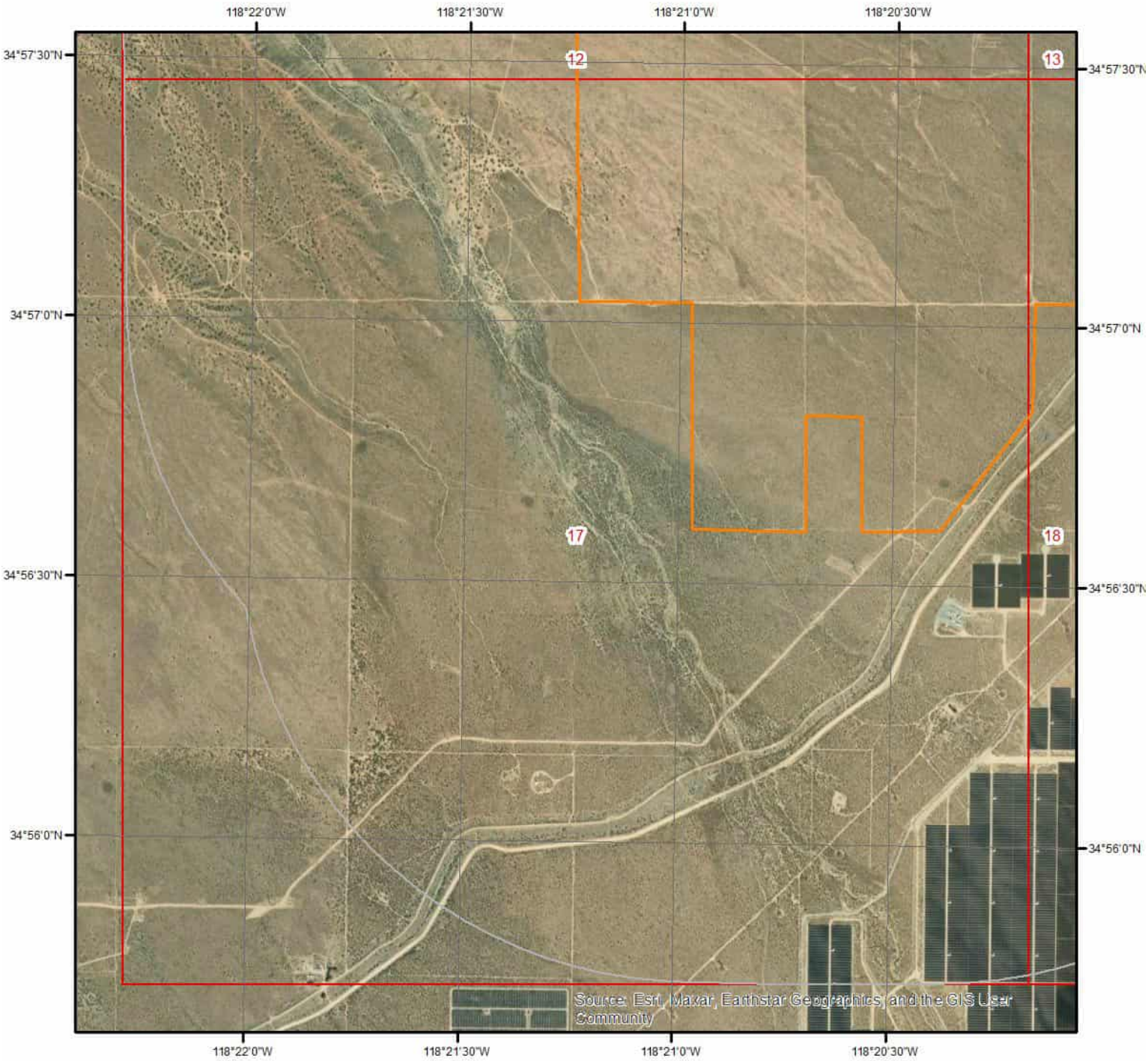
N

0 0.15 0.3 0.6 Miles

- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- OGW Sites with Higher Elevation
- OGW Sites with Same Elevation
- OGW Sites with Lower Elevation
- OGW Sites with Unknown Elevation

ERIS

Wells and Additional Sources



Wells & Additional Sources - Page 17

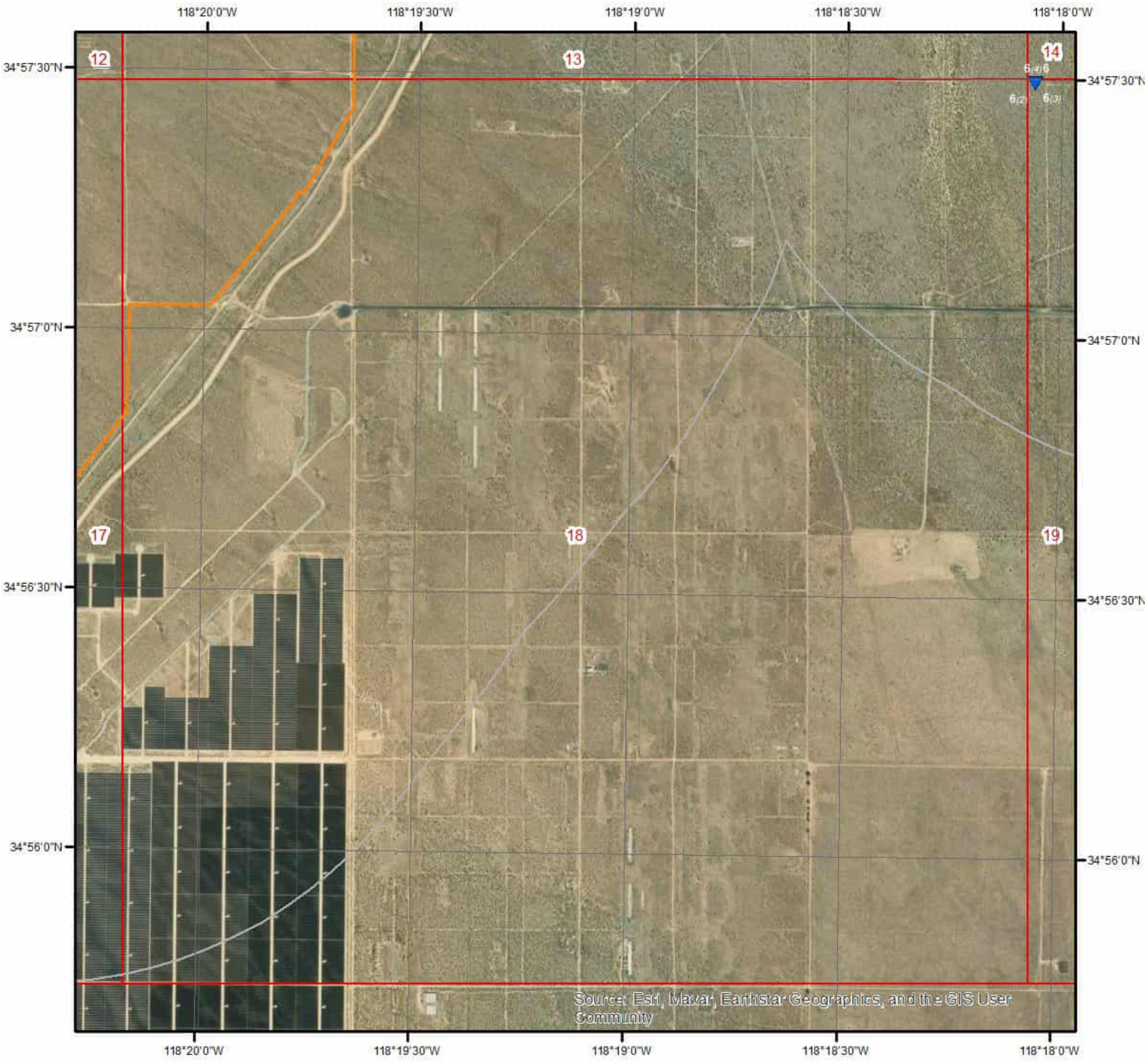
N

0 0.15 0.3 0.6 Miles

- ▲ Sites with Higher Elevation
- ■ Sites with Same Elevation
- ▼ Sites with Lower Elevation
- ○ Sites with Unknown Elevation
- ▲ OGW Sites with Higher Elevation
- ■ OGW Sites with Same Elevation
- ▼ OGW Sites with Lower Elevation
- ● OGW Sites with Unknown Elevation

ERIS

Wells and Additional Sources



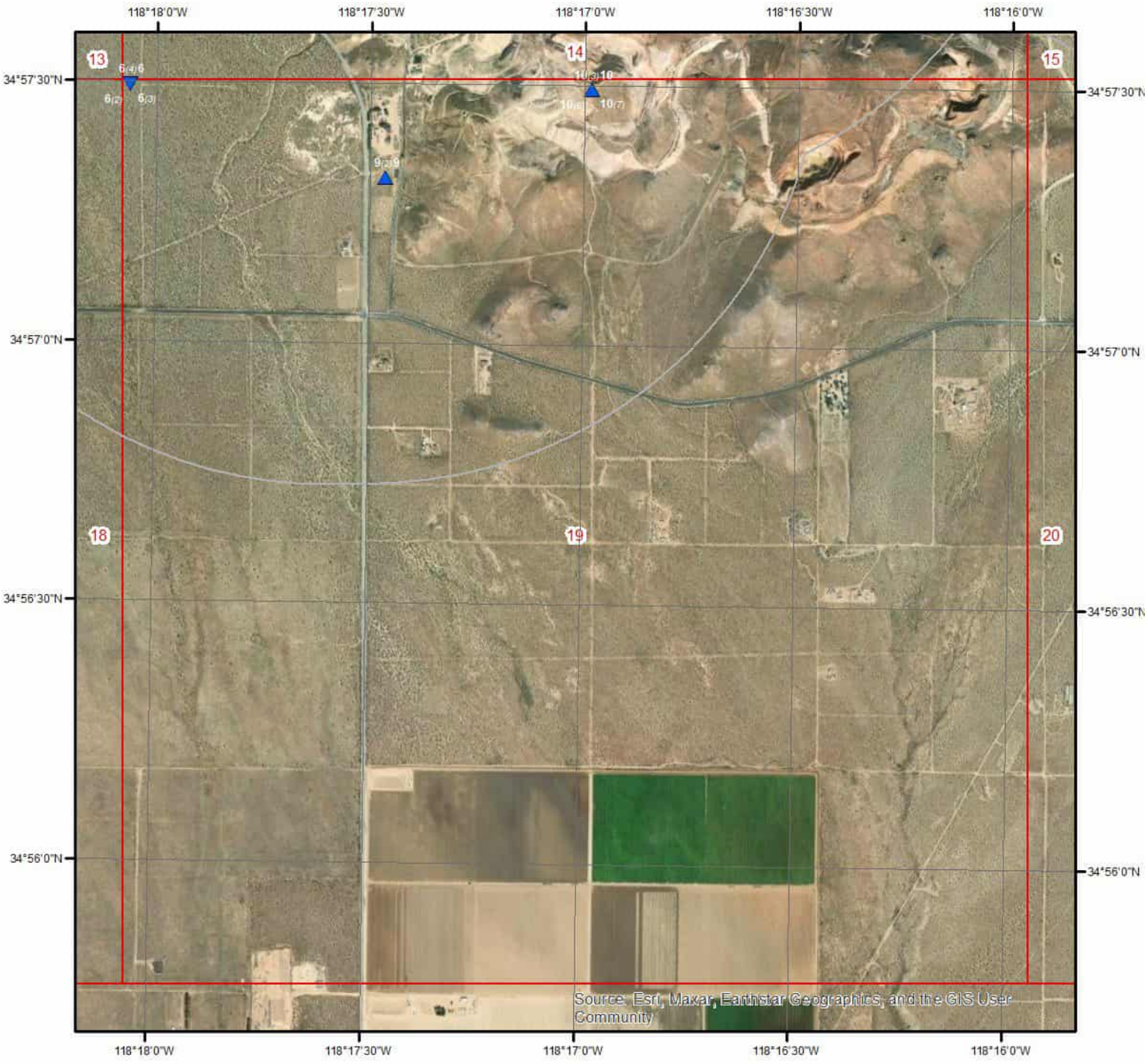
Wells & Additional Sources - Page 18

Miles
0 0.15 0.3 0.6

- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- OGW Sites with Higher Elevation
- OGW Sites with Same Elevation
- OGW Sites with Lower Elevation
- OGW Sites with Unknown Elevation

ERIS

Wells and Additional Sources



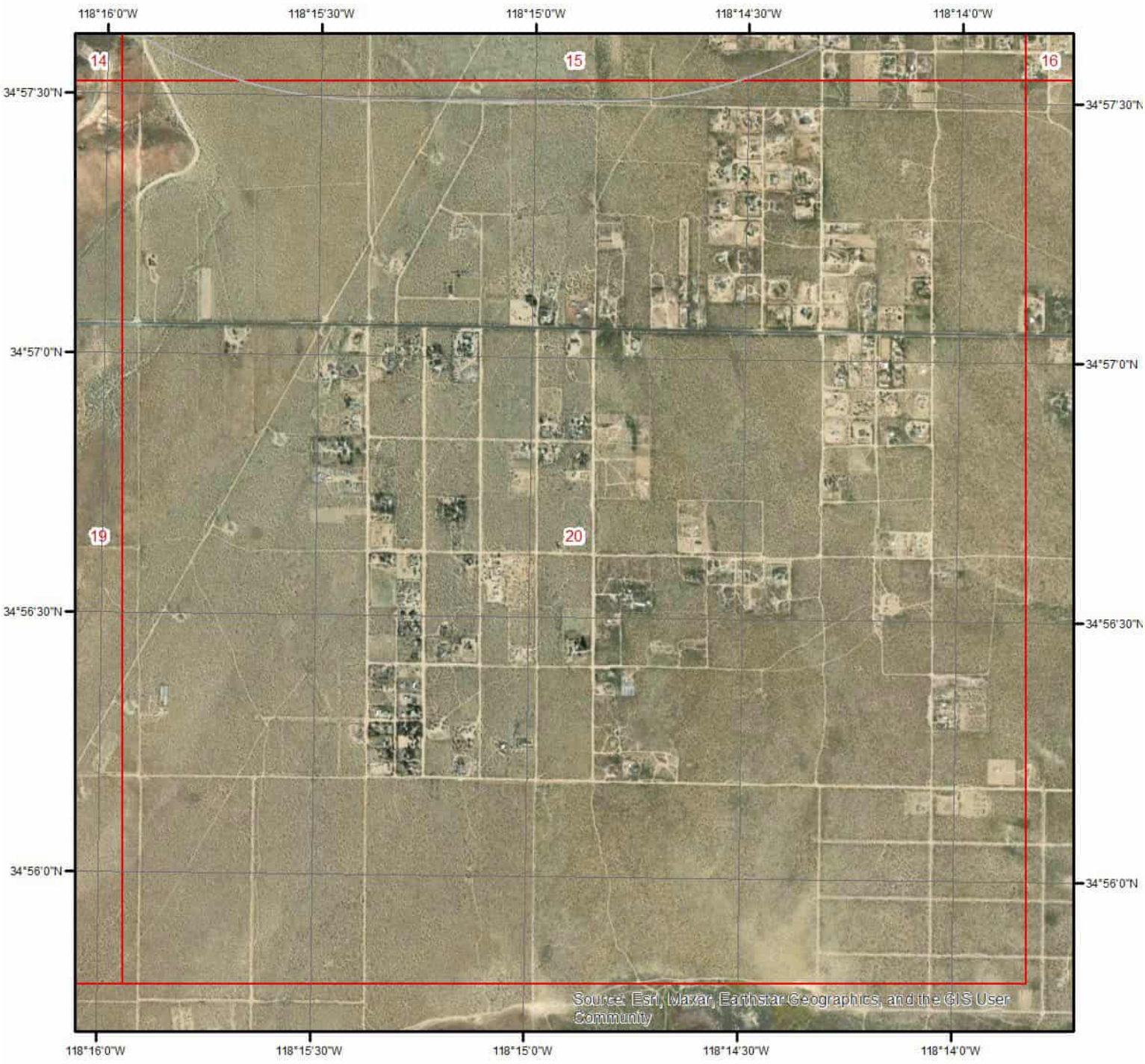
Wells & Additional Sources - Page 19

0 0.15 0.3 0.6 Miles

- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- OGW Sites with Higher Elevation
- OGW Sites with Same Elevation
- OGW Sites with Lower Elevation
- OGW Sites with Unknown Elevation

ERIS

Wells and Additional Sources



Wells & Additional Sources - Page 20

N

0 0.15 0.3 0.6 Miles

- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- OGW Sites with Higher Elevation
- OGW Sites with Same Elevation
- OGW Sites with Lower Elevation
- OGW Sites with Unknown Elevation

ERIS

Wells and Additional Sources Summary

Federal Sources

Public Water Systems Violations and Enforcement Data

Map Key	PWS ID	Distance (ft)	Direction
23	CA1503662	2501.07	NNE

Safe Drinking Water Information System (SDWIS)

Map Key	PWS ID	Distance (ft)	Direction
23	CA1503662	2501.07	NNE
28	CA1503675	4072.59	NE

USGS National Water Information System

Map Key	Site No	Distance (ft)	Direction
1	USGS-345859118183701	0.00	-
14	USGS-350055118172601	2203.94	NNE
18	USGS-10264605	2575.87	NW
30	USGS-350302118162801	3797.42	NNE

State Sources

Oil and Gas Wells

Map Key	API No	Distance (ft)	Direction
11	0402989961	0.00	-

Periodic Groundwater Level Measurement Locations

Map Key	Site Code	Distance (ft)	Direction
12	350153N1182924W001	2222.52	NNE
29	350505N1182763W001	3718.52	NNE

Well Completion Reports

Map Key	WCR No	Distance (ft)	Direction
2	WCR2012-008829	0.29	WNW
2	WCR0031880	0.29	WNW
3	WCR2008-010418	0.00	-
4	WCR1991-021186	0.00	-
5	WCR0268795	1414.53	SSE
6	WCR1988-015136	1849.12	S
6	WCR1991-020583	1849.12	S
6	WCR1988-015105	1849.12	S
6	WCR0091247	1849.12	S
7	WCR0144310	1914.17	SE
8	WCR0224490	2099.15	SE
9	WCR0313002	1728.91	SSE

Wells and Additional Sources Summary

9	WCR0174844	1728.91	SSE
10	WCR2004-015886	2693.14	SSE
10	WCR2004-015904	2693.14	SSE
10	WCR2013-011979	2693.14	SSE
10	WCR2013-011978	2693.14	SSE
10	WCR2013-009668	2693.14	SSE
10	WCR2004-015902	2693.14	SSE
10	WCR2013-011980	2693.14	SSE
10	WCR0120690	2693.14	SSE
10	WCR2012-008735	2693.14	SSE
10	WCR2005-015953	2693.14	SSE
10	WCR2004-015903	2693.14	SSE
13	WCR0276371	2658.75	N
13	WCR1993-011804	2658.75	N
13	WCR0286283	2658.75	N
13	WCR1987-014073	2658.75	N
13	WCR0057186	2658.75	N
13	WCR0142998	2658.75	N
13	WCR1993-011803	2658.75	N
15	WCR1971-002111	2536.01	ESE
15	WCR2007-010486	2536.01	ESE
15	WCR0308464	2536.01	ESE
16	WCR1954-002047	2662.60	NNE
17	WCR1971-002104	226.23	ENE
19	WCR0195600	12.32	ESE
19	WCR1988-015122	12.32	ESE
20	WCR2018-005280	1722.60	ESE
21	WCR2009-010394	3111.56	NNE
22	WCR0295700	2796.02	NNE
24	WCR2022-011715	4964.39	ESE
25	WCR2007-009889	4507.57	E
25	WCR1982-005418	4507.57	E
25	WCR0019538	4507.57	E
26	WCR1989-016622	2213.44	NNE
26	WCR1989-016621	2213.44	NNE
27	WCR1993-011931	2348.83	NNE
27	WCR1998-010517	2348.83	NNE

Public Water Systems Violations and Enforcement Data

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
23	NNE	0.47	2,501.07	3,532.62	PWSV

PWS ID:	CA1503662
PWS Type Code:	NTNCWS
PWS Type Description:	Non-Transient non-community system
Primary Source Code:	GW
Primary Source Desc:	Ground water
PWS Activity Code:	A
PWS Activity Description:	Active
PWS Deactivation Date:	
Zip Code:	93501
Phone No:	661-822-2949
Phone Ext No:	
Admin Name:	COOLEY, KRISTIN
Alt Phone No:	
Email Addr:	Kristin.Cooley@clearwayenergy.com
Fax No:	
Cds ID:	
Population Served Count:	47
Epa Region Desc:	Region 9
Epa Region:	09
First Reported Date:	06/30/2011
Gw or Sw:	Groundwater
Gw Sw Code:	GW
Is Grant Eligible Ind:	Yes
Outstanding Performer:	
Is School or Daycare Ind:	No
Is Source Water Protection:	
Is Wholesaler Ind:	No
Lt2 Schedule Cat:	
Lt2 Schedule Cat Code:	
Last Reported Date:	10/02/2023
Org Name:	COOLEY, KRISTIN
Outstanding Perform Begin Date:	
Owner Type:	Private
Pop Cat 11:	<=100
Pop Cat 2:	<10,000
Pop Cat 3:	<=3300
Pop Cat 4:	<10K
Pop Cat 5:	<=500
Primacy Agency:	California
Season Begin Date:	01-01

Season End Date:	12-31
Service Connections Count:	1
Submission Status Code:	Y
Submissionyearquarter:	2023Q3
Primacy Type:	State
Dbpr Schedule Category:	
Submission Status:	Reported and accepted
Reduced Monitoring Begin Date:	
Reduced Monitoring End Date:	
Reduced Rtcr Monitoring:	
Seasonal Startup System:	
Source Protection Begin Date:	
City Served:	
County Served:	Kern

Safe Drinking Water Information System (SDWIS)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
23	NNE	0.47	2,501.07	3,532.62	SDWIS

PWS ID:	CA1503662
PWS Type Code:	NTNCWS
PSW Type:	Non-Transient non-community system
Primary Source Code:	GW
Primary Source:	Ground water
Pws Activity Code:	A
Activity:	Active
PWS Deactivation Dt:	
Phone No:	661-822-2949
Phone Ext No:	
Admin Name:	COOLEY, KRISTIN
Alt Phone No:	
Email Addr:	Kristin.Cooley@clearwayenergy.com
Fax No:	
Cds ID:	
Population Served Count:	47
Epa Region Desc:	Region 9
Epa Region:	09
First Reported Date:	06/30/2011
Gw or Sw:	Groundwater
Is Grant Eligible Ind:	Yes
Outstanding Performer:	
Is School or Daycare Ind:	No
Is Wholesaler Ind:	No
Lt2 Schedule Cat:	
Last Reported Date:	10/02/2023

Wells and Additional Sources Detail Report

Org Name:	COOLEY, KRISTIN
Outstanding Perform Begin Date:	
Owner Type:	Private
Pop Cat 11:	<=100
Pop Cat 2:	<10,000
Pop Cat 3:	<=3300
Pop Cat 4:	<10K
Pop Cat 5:	<=500
Primacy Agency:	California
Primacy Agency Code:	CA
Season Begin Date:	01-01
Season End Date:	12-31
Service Connections Count:	1
Submission Yr Qtr:	2023Q3
Primacy Type:	State
Dbpr Schedule Category:	
Submission Status:	Reported and accepted
Reduced Monitoring Begin:	
Reduced Monitoring End Date:	
Reduced Rtcr Monitoring:	
Seasonal Startup System:	
Source Protection Begin Date:	
City Served:	
County Served:	Kern

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
28	NE	0.77	4,072.59	3,193.19	SDWIS

PWS ID:	CA1503675
PWS Type Code:	NTNCWS
PSW Type:	Non-Transient non-community system
Primary Source Code:	GW
Primary Source:	Ground water
Pws Activity Code:	N
Activity:	Changed from public to non-public
PWS Deactivation Dt:	02/12/2016
Phone No:	661-823-2101
Phone Ext No:	
Admin Name:	MISIURA, KIM
Alt Phone No:	
Email Addr:	kim.misiura@brookfieldrenewable.com
Fax No:	661-749-7227
Cds ID:	
Population Served Count:	11

Epa Region Desc:	Region 9
Epa Region:	09
First Reported Date:	08/19/2014
Gw or Sw:	Groundwater
Is Grant Eligible Ind:	No
Outstanding Performer:	
Is School or Daycare Ind:	No
Is Wholesaler Ind:	No
Lt2 Schedule Cat:	
Last Reported Date:	10/02/2023
Org Name:	MISIURA, KIM
Outstanding Perform Begin Date:	
Owner Type:	Private
Pop Cat 11:	<=100
Pop Cat 2:	<10,000
Pop Cat 3:	<=3300
Pop Cat 4:	<10K
Pop Cat 5:	<=500
Primacy Agency:	California
Primacy Agency Code:	CA
Season Begin Date:	01-01
Season End Date:	12-31
Service Connections Count:	1
Submission Yr Qtr:	2023Q3
Primacy Type:	State
Dbpr Schedule Category:	
Submission Status:	Reported and accepted
Reduced Monitoring Begin:	
Reduced Monitoring End Date:	
Reduced Rtcr Monitoring:	
Seasonal Startup System:	
Source Protection Begin Date:	
City Served:	
County Served:	Kern

USGS National Water Information System

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
1	-	0.00	0.00	3,241.50	FED USGS

Site No:	USGS-345859118183701
Site Type:	Well
Formation Type:	
Date Drilled:	
Well Depth:	586

Well Depth Unit: ft
Well Hole Depth:
Well Hole Depth Unit:
Reporting Agency: USGS California Water Science Center
Station Name: 002S014W23H012S
Latitude: 34.98302776000000
Longitude: -118.3111907000000

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
14	NNE	0.42	2,203.94	3,321.23	FED USGS

Site No: USGS-350055118172601
Site Type: Well
Formation Type:
Date Drilled: 19540206
Well Depth: 759.1
Well Depth Unit: ft
Well Hole Depth:
Well Hole Depth Unit:
Reporting Agency: USGS California Water Science Center
Station Name: 011N013W29M001S
Latitude: 35.01524874000000
Longitude: -118.2914680000000

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
18	NW	0.49	2,575.87	3,809.39	FED USGS

Site No: USGS-10264605
Site Type: Stream
Formation Type:
Date Drilled:
Well Depth:
Well Depth Unit:
Well Hole Depth:
Well Hole Depth Unit:
Reporting Agency: USGS California Water Science Center
Station Name: JOSHUA C NR MOJAVE CA
Latitude: 35.01247080000000
Longitude: -118.3453587000000

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
30	NNE	0.72	3,797.42	3,600.09	FED USGS

Site No: USGS-350302118162801
Site Type: Well

Wells and Additional Sources Detail Report

Formation Type:	
Date Drilled:	19821110
Well Depth:	218
Well Depth Unit:	ft
Well Hole Depth:	218
Well Hole Depth Unit:	ft
Reporting Agency:	USGS California Water Science Center
Station Name:	009N013W20A001S
Latitude:	35.05052519000000
Longitude:	-118.2753563000000

Oil and Gas Wells

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
11	-	0.00	0.00	3,611.95	OGW

API No:	0402989961	Directional:	
All Well Key:		BLM Well:	
OP Well ID:		EPA Well:	
OID:		Operator Code:	M0425
Well No:	3	Operator Name:	M. K. Energy
Well Status:	Plugged	Operator St:	
Well Stat Desc:	Plugged	County APIC:	
Well Type:	OG	District:	Inland
Well Type Desc:	Oil & Gas	Geo District:	
Well Symbol:	PluggedOG	Field Code:	
Well Sym Desc:		Field Name:	Any Field
Release Date:		Area Code:	
Completion Date:		Area Name:	Any Area
Abandoned Date:		County Name:	Kern
Lease Name:	M. K.	Section:	02
Elevation:		Township:	10N
Total Depth:		Range:	14W
Redrilled Depth:		Lat27:	
Redrill Cancel Flag:		Long27:	
Dryhole:		Lat83:	34.98861694
Confidential:		Long83:	-118.33956146
Confidential Well:	No	Base Meridian:	SB
Directional Drilled:	No	GIS Source Code:	mip
Hydr Fractured:		INHPZ:	Potentially HPZ
Well Design:	M. K. 3		
Location:			
Place:	Kern County		
Source83 Desc:	Map-Info Plotted - Custom tool in MapInfo used to generate coordinates from corner call locations		
URL:			

Periodic Groundwater Level Measurement Locations

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
12	NNE	0.42	2,222.52	3,326.20	MONITOR WELLS

Station ID:	10701	Basin Region Desc:	San Joaquin River
Site Code:	350153N1182924W001	Basin Region Actv:	Y
WCR No:		Basin Region Order:	6
State Well No:	11N13W29M001S	WLM Method:	
Well Depth:		WLM Accuracy:	
Well Use:	Unknown	Ground Surf Elevtn:	3352.94000
Monitoring Program:	VOLUNTARY	GSE Method:	Unknown
RPE:	3352.94000	GSE Accuracy:	Unknown
Basin ID:	433	County Name:	Kern
Basin Code:	6-046	Latitude:	35.01530
Basin Name:	Fremont Valley	Longitude:	-118.29240
Basin Region Code:	6		
Continuous Data Station No:			
Well Name:	11N13W29M001S		
Well Type:	Unknown		

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
29	NNE	0.70	3,718.52	3,619.06	MONITOR WELLS

Station ID:	12096	Basin Region Desc:	San Joaquin River
Site Code:	350505N1182763W001	Basin Region Actv:	Y
WCR No:		Basin Region Order:	6
State Well No:	09N13W20A001S	WLM Method:	
Well Depth:		WLM Accuracy:	
Well Use:	Unknown	Ground Surf Elevtn:	2442.93000
Monitoring Program:	VOLUNTARY	GSE Method:	Unknown
RPE:	2442.93000	GSE Accuracy:	Unknown
Basin ID:	433	County Name:	Kern
Basin Code:	6-046	Latitude:	35.05050
Basin Name:	Fremont Valley	Longitude:	-118.27630
Basin Region Code:	6		
Continuous Data Station No:			
Well Name:	09N13W20A001S		
Well Type:	Unknown		

Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
2	WNW	0.00	0.29	3,342.50	WATER WELLS

WCR No:	WCR2012-008829
Location:	11585 Tehachapi Willow Springs Road
City:	Rosamond

County:	Kern
Decimal Latitude:	34.9873
Decimal Longitude:	-118.319
Location(OSWCR):	11585 Tehachapi Willow Springs Road
City(OSWCR):	Rosamond
County(OSWCR):	Kern
Decimal Lat(OSWCR):	34.9873
Decim Long(OSWCR):	-118.319
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
2	WNW	0.00	0.29	3,342.50	WATER WELLS

WCR No:	WCR0031880
Location:	11585 TEHACHAPI WILLOW SPRINGS RD
City:	ROSAMOND
County:	Kern
Decimal Latitude:	34.9873
Decimal Longitude:	-118.319
Location(OSWCR):	11585 TEHACHAPI WILLOW SPRINGS RD
City(OSWCR):	ROSAMOND
County(OSWCR):	Kern
Decimal Lat(OSWCR):	34.9873
Decim Long(OSWCR):	-118.319
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	-	0.00	0.00	3,115.56	WATER WELLS

WCR No:	WCR2008-010418
Location:	11100 90th Street West
City:	Willow Springs
County:	Kern
Decimal Latitude:	34.9872
Decimal Longitude:	-118.283
Location(OSWCR):	11100 90th Street West
City(OSWCR):	Willow Springs
County(OSWCR):	Kern
Decimal Lat(OSWCR):	34.9872
Decim Long(OSWCR):	-118.283
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	-	0.00	0.00	3,043.47	WATER WELLS

WCR No:	WCR1991-021186
Location:	8941 W Backus Road
City:	Mojave
County:	Kern
Decimal Latitude:	34.9727
Decimal Longitude:	-118.283
Location(OSWCR):	8941 W Backus Road
City(OSWCR):	Mojave
County(OSWCR):	Kern
Decimal Lat(OSWCR):	34.9727
Decim Long(OSWCR):	-118.283
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
5	SSE	0.27	1,414.53	3,022.54	WATER WELLS

WCR No:	WCR0268795
Location:	SHUMAKE PIT OPEN MINE-BACKUS ROAD-SEE MA
City:	ROSAMOND
County:	Kern
Decimal Latitude:	34.9619
Decimal Longitude:	-118.287
Location(OSWCR):	SHUMAKE PIT OPEN MINE-BACKUS ROAD-SEE MA
City(OSWCR):	ROSAMOND
County(OSWCR):	Kern
Decimal Lat(OSWCR):	34.9619
Decim Long(OSWCR):	-118.287
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
6	S	0.35	1,849.12	2,984.11	WATER WELLS

WCR No:	WCR1988-015136
Location:	Backus Road
City:	Mojave
County:	Kern
Decimal Latitude:	34.9582
Decimal Longitude:	-118.301
Location(OSWCR):	Backus Road
City(OSWCR):	Mojave
County(OSWCR):	Kern
Decimal Lat(OSWCR):	34.9582
Decim Long(OSWCR):	-118.301
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water

Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
6	S	0.35	1,849.12	2,984.11	WATER WELLS

WCR No: WCR1991-020583
Location:
City:
County: Kern
Decimal Latitude: 34.9582
Decimal Longitude: -118.301
Location(OSWCR):
City(OSWCR):
County(OSWCR): Kern
Decimal Lat(OSWCR): 34.9582
Decim Long(OSWCR): -118.301
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
6	S	0.35	1,849.12	2,984.11	WATER WELLS

WCR No: WCR1988-015105
Location:
City:
County: Kern
Decimal Latitude: 34.9582
Decimal Longitude: -118.301
Location(OSWCR):
City(OSWCR):
County(OSWCR): Kern
Decimal Lat(OSWCR): 34.9582
Decim Long(OSWCR): -118.301
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
6	S	0.35	1,849.12	2,984.11	WATER WELLS

WCR No: WCR0091247
Location:
City:
County: Kern
Decimal Latitude: 34.9582
Decimal Longitude: -118.301
Location(OSWCR):

City(OSWCR):
County(OSWCR): Kern
Decimal Lat(OSWCR): 34.9582
Decim Long(OSWCR): -118.301
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
7	SE	0.36	1,914.17	3,191.82	WATER WELLS

WCR No: WCR0144310
Location: SHUMAKE PIT OPEN MINE-BACKUS ROAD-SEE MA
City: ROSAMOND
County: Kern
Decimal Latitude: 34.9628
Decimal Longitude: -118.284
Location(OSWCR): SHUMAKE PIT OPEN MINE-BACKUS ROAD-SEE MA
City(OSWCR): ROSAMOND
County(OSWCR): Kern
Decimal Lat(OSWCR): 34.9628
Decim Long(OSWCR): -118.284
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
8	SE	0.40	2,099.15	3,169.25	WATER WELLS

WCR No: WCR0224490
Location: SHUMAKE PIT OPEN MINE-BACKUS RD-SEE MAP
City: ROSAMOND
County: Kern
Decimal Latitude: 34.9633
Decimal Longitude: -118.283
Location(OSWCR): SHUMAKE PIT OPEN MINE-BACKUS RD-SEE MAP
City(OSWCR): ROSAMOND
County(OSWCR): Kern
Decimal Lat(OSWCR): 34.9633
Decim Long(OSWCR): -118.283
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
9	SSE	0.33	1,728.91	3,787.93	WATER WELLS

WCR No: WCR0313002
Location: 8941 BACKUS RD
City: MOJAVE

County:	Kern
Decimal Latitude:	34.9553
Decimal Longitude:	-118.291
Location(OSWCR):	8941 BACKUS RD
City(OSWCR):	MOJAVE
County(OSWCR):	Kern
Decimal Lat(OSWCR):	34.9553
Decim Long(OSWCR):	-118.291
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
9	SSE	0.33	1,728.91	3,787.93	WATER WELLS

WCR No:	WCR0174844
Location:	8941 BACKUS ROAD
City:	MOJAVE
County:	Kern
Decimal Latitude:	34.9553
Decimal Longitude:	-118.291
Location(OSWCR):	8941 BACKUS ROAD
City(OSWCR):	MOJAVE
County(OSWCR):	Kern
Decimal Lat(OSWCR):	34.9553
Decim Long(OSWCR):	-118.291
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
10	SSE	0.51	2,693.14	3,343.86	WATER WELLS

WCR No:	WCR2004-015886
Location:	Willow Springs Road
City:	Rosamond
County:	Kern
Decimal Latitude:	34.9582
Decimal Longitude:	-118.283
Location(OSWCR):	Willow Springs Road
City(OSWCR):	Rosamond
County(OSWCR):	Kern
Decimal Lat(OSWCR):	34.9582
Decim Long(OSWCR):	-118.283
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
10	SSE	0.51	2,693.14	3,343.86	WATER WELLS

Wells and Additional Sources Detail Report

WCR No:	WCR2004-015904
Location:	Willow Springs Road
City:	Rosamond
County:	Kern
Decimal Latitude:	34.9582
Decimal Longitude:	-118.283
Location(OSWCR):	Willow Springs Road
City(OSWCR):	Rosamond
County(OSWCR):	Kern
Decimal Lat(OSWCR):	34.9582
Decim Long(OSWCR):	-118.283
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
10	SSE	0.51	2,693.14	3,343.86	WATER WELLS

WCR No:	WCR2013-011979
Location:	Trotter Avenue & 90th Street West
City:	Rosamond
County:	Kern
Decimal Latitude:	34.9582
Decimal Longitude:	-118.283
Location(OSWCR):	Trotter Avenue & 90th Street West
City(OSWCR):	Rosamond
County(OSWCR):	Kern
Decimal Lat(OSWCR):	34.9582
Decim Long(OSWCR):	-118.283
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
10	SSE	0.51	2,693.14	3,343.86	WATER WELLS

WCR No:	WCR2013-011978
Location:	Trotter Avenue & 90th Street West
City:	Rosamond
County:	Kern
Decimal Latitude:	34.9582
Decimal Longitude:	-118.283
Location(OSWCR):	Trotter Avenue & 90th Street West
City(OSWCR):	Rosamond
County(OSWCR):	Kern
Decimal Lat(OSWCR):	34.9582
Decim Long(OSWCR):	-118.283
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water

Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
10	SSE	0.51	2,693.14	3,343.86	WATER WELLS

WCR No:	WCR2013-009668
Location:	8941 Backus Road
City:	Mojave
County:	Kern
Decimal Latitude:	34.9582
Decimal Longitude:	-118.283
Location(OSWCR):	8941 Backus Road
City(OSWCR):	Mojave
County(OSWCR):	Kern
Decimal Lat(OSWCR):	34.9582
Decim Long(OSWCR):	-118.283
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
10	SSE	0.51	2,693.14	3,343.86	WATER WELLS

WCR No:	WCR2004-015902
Location:	Willow Springs Road
City:	Rosamond
County:	Kern
Decimal Latitude:	34.9582
Decimal Longitude:	-118.283
Location(OSWCR):	Willow Springs Road
City(OSWCR):	Rosamond
County(OSWCR):	Kern
Decimal Lat(OSWCR):	34.9582
Decim Long(OSWCR):	-118.283
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
10	SSE	0.51	2,693.14	3,343.86	WATER WELLS

WCR No:	WCR2013-011980
Location:	Trotter Avenue & 90th Street West
City:	Rosamond
County:	Kern
Decimal Latitude:	34.9582
Decimal Longitude:	-118.283
Location(OSWCR):	Trotter Avenue & 90th Street West

City(OSWCR): Rosamond
County(OSWCR): Kern
Decimal Lat(OSWCR): 34.9582
Decim Long(OSWCR): -118.283
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
10	SSE	0.51	2,693.14	3,343.86	WATER WELLS

WCR No: WCR0120690
Location:
City:
County: Kern
Decimal Latitude: 34.9582
Decimal Longitude: -118.283
Location(OSWCR):
City(OSWCR):
County(OSWCR): Kern
Decimal Lat(OSWCR): 34.9582
Decim Long(OSWCR): -118.283
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
10	SSE	0.51	2,693.14	3,343.86	WATER WELLS

WCR No: WCR2012-008735
Location: 8941 Backus Road
City: Mojave
County: Kern
Decimal Latitude: 34.9582
Decimal Longitude: -118.283
Location(OSWCR): 8941 Backus Road
City(OSWCR): Mojave
County(OSWCR): Kern
Decimal Lat(OSWCR): 34.9582
Decim Long(OSWCR): -118.283
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
10	SSE	0.51	2,693.14	3,343.86	WATER WELLS

WCR No: WCR2005-015953
Location: Backus Road
City: Mojave

County:	Kern
Decimal Latitude:	34.9582
Decimal Longitude:	-118.283
Location(OSWCR):	Backus Road
City(OSWCR):	Mojave
County(OSWCR):	Kern
Decimal Lat(OSWCR):	34.9582
Decim Long(OSWCR):	-118.283
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
10	SSE	0.51	2,693.14	3,343.86	WATER WELLS

WCR No:	WCR2004-015903
Location:	Willow Springs Road
City:	Rosamond
County:	Kern
Decimal Latitude:	34.9582
Decimal Longitude:	-118.283
Location(OSWCR):	Willow Springs Road
City(OSWCR):	Rosamond
County(OSWCR):	Kern
Decimal Lat(OSWCR):	34.9582
Decim Long(OSWCR):	-118.283
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
13	N	0.50	2,658.75	3,373.19	WATER WELLS

WCR No:	WCR0276371
Location:	
City:	
County:	Kern
Decimal Latitude:	35.0165
Decimal Longitude:	-118.301
Location(OSWCR):	
City(OSWCR):	
County(OSWCR):	Kern
Decimal Lat(OSWCR):	35.0165
Decim Long(OSWCR):	-118.301
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
13	N	0.50	2,658.75	3,373.19	WATER WELLS

WCR No:	WCR1993-011804
Location:	Oak Creek Road
City:	Mojave
County:	Kern
Decimal Latitude:	35.0165
Decimal Longitude:	-118.301
Location(OSWCR):	Oak Creek Road
City(OSWCR):	Mojave
County(OSWCR):	Kern
Decimal Lat(OSWCR):	35.0165
Decim Long(OSWCR):	-118.301
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
13	N	0.50	2,658.75	3,373.19	WATER WELLS

WCR No:	WCR0286283
Location:	
City:	
County:	Kern
Decimal Latitude:	35.0165
Decimal Longitude:	-118.301
Location(OSWCR):	
City(OSWCR):	
County(OSWCR):	Kern
Decimal Lat(OSWCR):	35.0165
Decim Long(OSWCR):	-118.301
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
13	N	0.50	2,658.75	3,373.19	WATER WELLS

WCR No:	WCR1987-014073
Location:	
City:	
County:	Kern
Decimal Latitude:	35.0165
Decimal Longitude:	-118.301
Location(OSWCR):	
City(OSWCR):	
County(OSWCR):	Kern
Decimal Lat(OSWCR):	35.0165
Decim Long(OSWCR):	-118.301
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water

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Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
13	N	0.50	2,658.75	3,373.19	WATER WELLS

WCR No:	WCR0057186
Location:	
City:	
County:	Kern
Decimal Latitude:	35.0165
Decimal Longitude:	-118.301
Location(OSWCR):	
City(OSWCR):	
County(OSWCR):	Kern
Decimal Lat(OSWCR):	35.0165
Decim Long(OSWCR):	-118.301
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
13	N	0.50	2,658.75	3,373.19	WATER WELLS

WCR No:	WCR0142998
Location:	
City:	
County:	Kern
Decimal Latitude:	35.0165
Decimal Longitude:	-118.301
Location(OSWCR):	
City(OSWCR):	
County(OSWCR):	Kern
Decimal Lat(OSWCR):	35.0165
Decim Long(OSWCR):	-118.301
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
13	N	0.50	2,658.75	3,373.19	WATER WELLS

WCR No:	WCR1993-011803
Location:	Oak Creek Road
City:	Mojave
County:	Kern
Decimal Latitude:	35.0165
Decimal Longitude:	-118.301
Location(OSWCR):	Oak Creek Road

City(OSWCR): Mojave
County(OSWCR): Kern
Decimal Lat(OSWCR): 35.0165
Decim Long(OSWCR): -118.301
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
15	ESE	0.48	2,536.01	2,994.58	WATER WELLS

WCR No: WCR1971-002111
Location: NORTH OF BACKUS RD
City: Actis
County: Kern
Decimal Latitude: 34.9727
Decimal Longitude: -118.265
Location(OSWCR): NORTH OF BACKUS RD
City(OSWCR): Actis
County(OSWCR): Kern
Decimal Lat(OSWCR): 34.9727
Decim Long(OSWCR): -118.265
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
15	ESE	0.48	2,536.01	2,994.58	WATER WELLS

WCR No: WCR2007-010486
Location: 75th Street West & Trotter
City: Mojave
County: Kern
Decimal Latitude: 34.9727
Decimal Longitude: -118.265
Location(OSWCR): 75th Street West & Trotter
City(OSWCR): Mojave
County(OSWCR): Kern
Decimal Lat(OSWCR): 34.9727
Decim Long(OSWCR): -118.265
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
15	ESE	0.48	2,536.01	2,994.58	WATER WELLS

WCR No: WCR0308464
Location:
City:

County: Kern
Decimal Latitude: 34.9727
Decimal Longitude: -118.265
Location(OSWCR):
City(OSWCR):
County(OSWCR): Kern
Decimal Lat(OSWCR): 34.9727
Decim Long(OSWCR): -118.265
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
16	NNE	0.50	2,662.60	3,312.78	WATER WELLS

WCR No: WCR1954-002047
Location:
City: Mojave
County: Kern
Decimal Latitude: 35.0165
Decimal Longitude: -118.283
Location(OSWCR):
City(OSWCR): Mojave
County(OSWCR): Kern
Decimal Lat(OSWCR): 35.0165
Decim Long(OSWCR): -118.283
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
17	ENE	0.04	226.23	3,113.74	WATER WELLS

WCR No: WCR1971-002104
Location: 70th Street West & Rosamond Blvd
City:
County: Kern
Decimal Latitude: 35.0016
Decimal Longitude: -118.256
Location(OSWCR): 70th Street West & Rosamond Blvd
City(OSWCR):
County(OSWCR): Kern
Decimal Lat(OSWCR): 35.0016
Decim Long(OSWCR): -118.256
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
19	ESE	0.00	12.32	2,974.65	WATER WELLS

WCR No:	WCR0195600
Location:	
City:	
County:	Kern
Decimal Latitude:	34.9727
Decimal Longitude:	-118.248
Location(OSWCR):	
City(OSWCR):	
County(OSWCR):	Kern
Decimal Lat(OSWCR):	34.9727
Decim Long(OSWCR):	-118.248
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
19	ESE	0.00	12.32	2,974.65	WATER WELLS

WCR No:	WCR1988-015122
Location:	60th Street West
City:	Actis
County:	Kern
Decimal Latitude:	34.9727
Decimal Longitude:	-118.248
Location(OSWCR):	60th Street West
City(OSWCR):	Actis
County(OSWCR):	Kern
Decimal Lat(OSWCR):	34.9727
Decim Long(OSWCR):	-118.248
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
20	ESE	0.33	1,722.60	2,948.78	WATER WELLS

WCR No:	WCR2018-005280
Location:	
City:	
County:	Kern
Decimal Latitude:	34.968
Decimal Longitude:	-118.248
Location(OSWCR):	
City(OSWCR):	
County(OSWCR):	Kern
Decimal Lat(OSWCR):	34.968
Decim Long(OSWCR):	-118.248
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water

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Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
21	NNE	0.59	3,111.56	3,411.40	WATER WELLS

WCR No:	WCR2009-010394
Location:	8500 Oak Creek Road
City:	Mojave
County:	Kern
Decimal Latitude:	35.0311
Decimal Longitude:	-118.283
Location(OSWCR):	8500 Oak Creek Road
City(OSWCR):	Mojave
County(OSWCR):	Kern
Decimal Lat(OSWCR):	35.0311
Decim Long(OSWCR):	-118.283
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
22	NNE	0.53	2,796.02	3,419.29	WATER WELLS

WCR No:	WCR0295700
Location:	8500 OAK CREEK RD/WIND HUB PROJECT
City:	MOJAVE
County:	Kern
Decimal Latitude:	35.0324
Decimal Longitude:	-118.284
Location(OSWCR):	8500 OAK CREEK RD/WIND HUB PROJECT
City(OSWCR):	MOJAVE
County(OSWCR):	Kern
Decimal Lat(OSWCR):	35.0324
Decim Long(OSWCR):	-118.284
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
24	ESE	0.94	4,964.39	2,903.32	WATER WELLS

WCR No:	WCR2022-011715
Location:	9730 60th ST
City:	Mojave
County:	Kern
Decimal Latitude:	34.9616
Decimal Longitude:	-118.238
Location(OSWCR):	9730 60th ST

City(OSWCR): Mojave
County(OSWCR): Kern
Decimal Lat(OSWCR): 34.9616
Decim Long(OSWCR): -118.238
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
25	E	0.85	4,507.57	2,897.90	WATER WELLS

WCR No: WCR2007-009889
Location: 10031 58th Street West
City: Mojave
County: Kern
Decimal Latitude: 34.9727
Decimal Longitude: -118.23
Location(OSWCR): 10031 58th Street West
City(OSWCR): Mojave
County(OSWCR): Kern
Decimal Lat(OSWCR): 34.9727
Decim Long(OSWCR): -118.23
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
25	E	0.85	4,507.57	2,897.90	WATER WELLS

WCR No: WCR1982-005418
Location: Mojave Tropico Road
City: Rosamond
County: Kern
Decimal Latitude: 34.9727
Decimal Longitude: -118.23
Location(OSWCR): Mojave Tropico Road
City(OSWCR): Rosamond
County(OSWCR): Kern
Decimal Lat(OSWCR): 34.9727
Decim Long(OSWCR): -118.23
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
25	E	0.85	4,507.57	2,897.90	WATER WELLS

WCR No: WCR0019538
Location:
City:

County: Kern
Decimal Latitude: 34.9727
Decimal Longitude: -118.23
Location(OSWCR):
City(OSWCR):
County(OSWCR): Kern
Decimal Lat(OSWCR): 34.9727
Decim Long(OSWCR): -118.23
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
26	NNE	0.42	2,213.44	3,586.44	WATER WELLS

WCR No: WCR1989-016622
Location:
City: Mojave
County: Kern
Decimal Latitude: 35.0456
Decimal Longitude: -118.283
Location(OSWCR):
City(OSWCR): Mojave
County(OSWCR): Kern
Decimal Lat(OSWCR): 35.0456
Decim Long(OSWCR): -118.283
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
26	NNE	0.42	2,213.44	3,586.44	WATER WELLS

WCR No: WCR1989-016621
Location:
City: Mojave
County: Kern
Decimal Latitude: 35.0456
Decimal Longitude: -118.283
Location(OSWCR):
City(OSWCR): Mojave
County(OSWCR): Kern
Decimal Lat(OSWCR): 35.0456
Decim Long(OSWCR): -118.283
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
27	NNE	0.44	2,348.83	3,401.01	WATER WELLS

Wells and Additional Sources Detail Report

WCR No:	WCR1993-011931
Location:	5.5 MI W/O MOJAVE MP 50.4
City:	
County:	Kern
Decimal Latitude:	35.0458
Decimal Longitude:	-118.266
Location(OSWCR):	5.5 MI W/O MOJAVE MP 50.4
City(OSWCR):	
County(OSWCR):	Kern
Decimal Lat(OSWCR):	35.0458
Decim Long(OSWCR):	-118.266
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
27	NNE	0.44	2,348.83	3,401.01	WATER WELLS

WCR No:	WCR1998-010517
Location:	Willow Road
City:	Nipomo
County:	San Luis Obispo
Decimal Latitude:	35.0458
Decimal Longitude:	-118.266
Location(OSWCR):	Willow Road
City(OSWCR):	Nipomo
County(OSWCR):	San Luis Obispo
Decimal Lat(OSWCR):	35.0458
Decim Long(OSWCR):	-118.266
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Radon Information

This section lists any relevant radon information found for the target property.

Federal EPA Radon Zone for *KERN* County: **2**

Zone 1: Counties with predicted average indoor radon screening levels greater than 4 pCi/L
Zone 2: Counties with predicted average indoor radon screening levels from 2 to 4 pCi/L
Zone 3: Counties with predicted average indoor radon screening levels less than 2 pCi/L

Federal Area Radon Information for *KERN* County

No Measures/Homes:	100
Geometric Mean:	1
Arithmetic Mean:	1.4
Median:	1.3
Standard Deviation:	1.2
Maximum:	8.5
% >4 pCi/L:	2
% >20 pCi/L:	0
Notes on Data Table:	TABLE 1. Screening indoor radon data from the EPA/State Residential Radon Survey of California conducted during 1989-90. Data represent 2-7 day charcoal canister measurements from the lowest level of each home tested.

Appendix

Federal Sources

FEMA National Flood Hazard Layer — **FEMA FLOOD**

The National Flood Hazard Layer (NFHL) data incorporates Flood Insurance Rate Map (FIRM) databases published by the Federal Emergency Management Agency (FEMA), and any Letters Of Map Revision (LOMRs) that have been issued against those databases since their publication date. The FIRM Database is the digital, geospatial version of the flood hazard information shown on the published paper FIRMs. The FIRM Database depicts flood risk information and supporting data used to develop the risk data. The FIRM Database is derived from Flood Insurance Studies (FISs), previously published FIRMs, flood hazard analyses performed in support of the FISs and FIRMs, and new mapping data, where available.

Indoor Radon Data — **INDOOR RADON**

Indoor radon measurements tracked by the Environmental Protection Agency(EPA) and the State Residential Radon Survey.

Public Water Systems Violations and Enforcement Data — **PWSV**

This list of drinking water violations and enforcement actions is sourced from the U.S Environmental Protection Agency's (EPA) Enforcement and Compliance History Online (ECHO) system that incorporates Public Water Systems data from EPA's Safe Drinking Water Information System (SDWIS) database, as part of the national download of Safe Drinking Water Act (SDWA) data. SDWIS contains information on public water systems from the Public Water System Supervision (PWSS) Program, including monitoring, enforcement, and violation data related to requirements established by the SWDA. Address information provided in SWDIS may correspond either with the physical location of the water system, or with a contact address.

Radon Zone Level — **RADON ZONE**

Areas showing the level of Radon Zones (level 1, 2 or 3) by county. This data is maintained by the Environmental Protection Agency (EPA).

Safe Drinking Water Information System (SDWIS) — **SDWIS**

This national download of Safe Drinking Water Act (SDWA) data is sourced from the U.S Environmental Protection Agency's (EPA) Enforcement and Compliance History Online (ECHO) system that incorporates Public Water Systems data from EPA's Safe Drinking Water Information System (SDWIS) database. SDWIS contains information on public water systems from the Public Water System Supervision (PWSS) Program related to requirements established by the Safe Drinking Water Act (SDWA). Address information provided in SWDIS may correspond either with the physical location of the water system, or with a contact address.

Soil Survey Geographic database — **SSURGO**

The Soil Survey Geographic database (SSURGO) contains information about soil as collected by the National Cooperative Soil Survey at the Natural Resources Conservation Service (NRCS). Soil maps outline areas called map units. The map units are linked to soil properties in a database. Each map unit may contain one to three major components and some minor components.

U.S. Fish & Wildlife Service Wetland Data — **US WETLAND**

The U.S. Fish & Wildlife Service Wetland layer represents the approximate location and type of wetlands and deepwater habitats in the United States.

USGS Current Topo — **US TOPO**

US Topo topographic maps are produced by the National Geospatial Program of the U.S. Geological Survey (USGS). The project was launched in late 2009, and the term "US Topo" refers specifically to quadrangle topographic maps published in 2009 and later.

USGS Geology — **US GEOLOGY**

Seamless maps depicting geological information provided by the United States Geological Survey (USGS).

USGS National Water Information System — **FED USGS**

The U.S. Geological Survey's (USGS) National Water Information System (NWIS) is the nation's principal repository of water resources data. The data includes comprehensive information of well-construction details, time-series data for gage height, streamflow, groundwater level, and precipitation and water use data. This NWIS database information is obtained through the Water Quality Data Portal (WQP). The WQP

is a cooperative service sponsored by the USGS, the Environmental Protection Agency (EPA), and the National Water Quality Monitoring Council (NWQMC).

State Sources

Oil and Gas Wells **OGW**

The California Department of Conservation, Geologic Energy Management Division (CalGEM) provides this oil and gas wells dataset. CalGEM makes no warranties, whether expressed or implied, and the data is for informational purposes.

Periodic Groundwater Level Measurement Locations **MONITOR WELLS**

Locations of groundwater level monitoring wells in the Department of Water Resources (DWR)'s Periodic Groundwater Levels dataset. The DWR Periodic Groundwater Levels dataset contains seasonal and long-term groundwater level measurements collected by the Department of Water Resources and cooperating agencies.

Well Completion Reports **WATER WELLS**

List of wells from the Well Completion Reports data made available by the California Department of Water Resources' (DWR) Online System for Well Completion Reports (OSWCR). Please note that the majority of well completion reports have been spatially registered to the center of the 1x1 mile Public Land Survey System section that the well is located in.

Liability Notice

Reliance on information in Report: The Physical Setting Report (PSR) DOES NOT replace a full Phase I Environmental Site Assessment but is solely intended to be used as a review of environmental databases and physical characteristics for the site or adjacent properties.

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APPENDIX D: QUALIFICATIONS/INSURANCE

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PARTNER

Ramiro Vejar
Senior Environmental Project Assessor

Education
Associate of Science, Computer Networking Technology, Westwood College, Upland, CA

Registrations
Asbestos Building Inspector, ABIR0120220016N32808
Radon Measurement Professional, ID Number 113725-RMP

Training
Spruce Environmental Technologies, Inc., Private Radon Measurement Professional Course
Asbestos Building Inspector Course DOSH #: CA-015-06
Compliance Training: Hazard Communicating, Asbestos, Lead, Mold Awareness, Chemical, Inventory, Personal Protective Equipment

Highlights
14 years of experience in the environmental consulting industry
Phase I Environmental Site Assessments
Records Search Risk Assessment Reports

Experience Summary
Mr. Vejar currently serves as an Environmental Professional at Partner Engineering and Science, Inc. (Partner), where he is responsible for conducting various environmental assessments, including Phase I Environmental Site Assessments (ESAs) and Records Search Risk Assessment (RSRA) Reports in accordance with the ASTM E1527 standard, the US Environmental Protection Agency's All Appropriate Inquiry (AAI) regulation, US Small Business Administration environmental policy, as well as customized client formats, as needed.

Mr. Vejar brings over 14 years of experience in the environmental consulting industry, having conducted Database Reviews (DR), Records Search Risk Assessment Reports (RSRA), Historical Records Review (HRR), Historical Records and Database Review (HRDR), Extended Database Search (EDS), Environmental Transaction Screen (ETS), Phase I Environmental Site Assessments (ESA), Asbestos Sampling and Radon Screenings, and several other related environmental assessments. He is knowledgeable with various property types, including apartment buildings/complexes, commercial office buildings, shopping centers, multi-tenant commercial complexes, industrial warehouses, manufacturing facilities, gasoline service stations, and dry cleaning operations.

Project Experience
Phase I ESA, Santa Fe Springs Marketplace, Santa Fe Springs, CA - A 100,133 SF retail center on 13.07 acres including restaurants, retail, and an active drycleaner release site with ongoing remediation.

Phase I ESA, Harbor Auto Care Center, Santa Ana, CA - An eleven tenant automotive repair and service center with storage of hazardous materials and generated hazardous waste.

Phase I ESA, Mass Kansas, Riverside, CA - A 102,742 SF fiberglass and composite manufacturing of below ground enclosures on a 14.42 acre facility. Impacted with volatile organic compounds (VOCs) from historic manufacturing an industrial operations that operated from the facility since the 1940s.

Phase I ESA, Park @ VNY, Van Nuys, CA - A 37.34-acre historic Former Used Defense Site during World War II occupied by the United States Army between 1942 and 1946 and by the CA Air National Guard between 1954 and 1989.

Phase I ESA, Montclair, CA - A 1.24-acre property with a gasoline service station and car wash building. The site was identified with an open release case and ongoing Santa Ana Regional Water Quality Control Board (RWQCB) oversight.

Phase I ESA, Bellflower, CA - A six parcel commercial property with three multistory buildings which was historically occupied by two gasoline stations in the 1920s and 1930s prior to the redevelopment of the retail structures in 1946 and 1957. A Phase II subsurface investigation was recommended which included advancing borings for soil analysis and geophysical surveys to identify potential Underground Storage Tanks (USTs) or backfill anomalies.

Phase I ESA, Moon Valley Nursery, Hemet, CA - An 80 acre nursery property with barns, residential living, pesticide and herbicide storage, and related horticultural activities.

Phase I ESA, Gasser Olds Bronze, Vernon, CA - A 24,375 SF bronze foundry and metal plaque manufacturing facility operating since 1982 from a building which has been historically occupied for industrial use since it was constructed in 1941.

Phase I ESA, Dalton Trucking, Fontana, CA - An active 25 acre trucking facility since the 1970s with onsite truck and trailer maintenance/repair, refueling with associated underground diesel and gasoline tanks, truck and trailer washing with an associated in-ground clarifier, and storage of hazardous substances in aboveground storage tanks with a capacity ranging between 150 and 1,500-gallons. A Phase II subsurface investigation was recommended based on the age of the subsurface features and historical operations.

Phase I ESA, Sierra Aluminum Company, Fontana, CA - A four building aluminum extrusion, anodizing, and thermal treating manufacturing facility with associated in-ground clarifiers, aboveground storage tanks for pre-treating and dipping (including conversion of Chromium VI to Chromium III), paint lines, and wastewater treatment since the early 1980s.

Phase I ESA, Saugus Station Industrial Center, Santa Clarita, CA - A 93.50-acre industrial facility with 24 buildings currently occupied by 39 units which was historically occupied by Thatcher Glass Manufacturing with heavy industrial operations by between 1954 and 1985.

Phase I ESA, Antelope Valley Conservancy, Palmdale, CA – A property consisting of 167 subdivided parcels totaling 1,760-acres along approximately 2.80 linear miles which included a portion of the Palmdale International Airport.

Contact

rvejar@partneresi.com

PARTNER

Laura Mohlenkamp
Project Manager

Education
BS, Environmental Science, University of Nevada, Reno

Training
OSHA 40 Hour Hazwoper

Highlights
Ms. Mohlenkamp qualifies as an Environmental Professional with more than 5 years of environmental consulting and project management experience including preparing, reviewing, and managing all aspects of Phase I Environmental Site Assessments (ESAs) in commercial real estate transactions and large scale commercial and residential developments following the current ASTM (AAI) guidelines.

Experience Summary
Specializing in high volume and large-scale projects, Ms. Mohlenkamp has experience in all stages of environmental projects including Phase I ESAs and Phase II analysis. Ms. Mohlenkamp's technical skills include maintaining and meeting project scope and financial responsibilities; client management and communication; coordinating with professional staff, regulatory agencies, and subcontractors; reviewing and evaluating environmental data; preparing and reviewing technical writing documents; preparing project proposals; preparing presentations; and communicating with senior and junior staff.

- Project Management
- Environmental Due Diligence (Phase I ESA)
- Risk and Data Evaluation
- Client Relations and Business Development

Project Experience
Ms. Mohlenkamp's experience includes agricultural properties, industrial manufacturing facilities, plating facilities, fueling and automobile repair facilities, chemical distribution facilities, aerospace engineering facilities, former military bases, medical facilities, hotels and resorts, multi-family apartment complexes, and multi-tenant retail shopping centers with dry cleaning facilities.

Contact
lmohlenkamp@partneresi.com

PARTNER

Mark Lambson
Principal

Education

Bachelor of Arts Degree, Public Administration & Economics, San Diego State University
Executive MBA Program, 2000-2003

Highlights

Over 25 years of experience in the environmental and engineering consulting industry.
Deep understanding of the Commercial Real Estate business process.
Nationwide capabilities and expertise.
Vast experience in managing and delivering multi-site portfolio projects.

Experience Summary

Mark Lambson is a true veteran of the commercial real estate services industry. He has over 25 years of experience managing and performing environmental and engineering consulting projects on a national level. Mr. Lambson serves as a Principal for PARTNER and is located in PARTNER's San Diego County office. Mr. Lambson's team currently provides client management and consulting to a nationwide client base and specializes in advising "Equity" clients during the acquisition phase of commercial property transactions in the U.S., Mexico, and Canada.

Mr. Lambson has assisted clients on over 25,000 commercial real estate transactions throughout his career. His due diligence resume includes experience at all levels. This includes advising REITs, developers, property managers, retail companies, commercial real estate brokers, mortgage brokers, attorneys, lenders, universities, and real estate investment groups with the following nationwide services:

- Property Condition Assessments (PCAs)
- Individual Building System Inspections for Roof, Mechanical Electrical Plumbing + Fire/Life Safety (MEP+FLS), Elevator, Structure, Façade, Building Technology, and ADA/Accessibility
- Facility Condition Assessments (FCAs)
- Phase I Environmental Site Assessments (ESAs)
- Phase II Subsurface Investigations (Soil, soil-vapor, and groundwater sampling and analysis)
- Phase III Environmental Remediation Services & Cost Estimates
- Asbestos, Lead, Radon, Mold Sampling
- Seismic Risk Assessments and Structural Assessments (Seismic PMLs)
- Energy Audits, Benchmarking, ESG, and LEED-related services
- Hydrology, Water Conservation and Efficiency
- Fannie Mae / Freddie Mac / HUD Due Diligence
- Geotechnical and Soils Reports
- Construction Services (Doc & Cost Review, Progress Monitoring, Funds Control)
- Zoning Reports
- ALTA Surveys

Building Sciences
The One, Bel Air, California – Performed Geotechnical/Soils, Engineering, Environmental and Land Surveying for record-setting 74,000 square foot mega-mansion development that listed for $500 million. The highest residential price tag in Los Angeles County history.

Class A Office Campus Acquisition in the San Francisco Bay Area – Performed Property Condition Assessment, MEP+FLS Report, Roof Report, Elevator Report, Structural and Seismic Assessment.

National Bank Branch Locations - ADA Compliance and Accessibility Reviews.

Environmental Assessments
Phase I and Phase II Environmental Site Assessments for a 75-acre aerospace facility in the Northwest U.S.
Over 500 Phase I Environmental Site Assessments for a national fast-food chain
Dry Cleaner Remediation projects in California, Washington, Hawaii, Arizona, Texas, Nevada, and Florida.
Environmental consulting for over 2 million acres of desert land in California, Nevada, and Arizona

Land Surveys
ALTA Surveys for 2400-unit apartment portfolio in the Midwest

Multi-Site Portfolios
113-site office portfolio acquisition for a national REIT
122-site hotel portfolio for a national lending institution
77-site grocery-anchored shopping center portfolio for prominent retail chain
55-site hotel portfolio acquisition for a private investment group
68-site healthcare portfolio acquisition for a national REIT
50-site country club/golf course portfolio acquisition for a private investment group

Energy and Water Efficiency
Energy Efficiency & Water-use consulting for a national property owner that operates and manages 30 retail and office centers on the West Coast and Texas

Affiliations

National Association of Real Estate Investment Trusts (NAREIT)
International Council of Shopping Centers (ICSC)
U.S Green Building Council (USGBC)
Society of Industrial and Office Realtors, San Diego County (SIOR)
National Association of Industrial & Office Parks, Southern California (NAIOP)
San Diego Habitat Conservancy, Board of Directors. 2010 - 2014

Speaking

Bisnow Conference, Panel Moderator, La Jolla, CA, October 2014. Moderated panel on Southern California Real Estate Trends.

Globestreet, ICSC Western States Conference, San Diego, CA May 2013. Video interview regarding retail real estate trends and due diligence.

Publications

Shopping Centers Today, 2010. Authored article on LEED applications for shopping centers and retail assets.

Contact

mlambson@partneresi.com