02-Mar-2023

Justin Johnston
Big Pine Consultants
1066 Towervue Drive
Pittsburgh, PA 15227

Re: **East Palestine Water** Work Order: **23021418**

Dear Justin,

ALS Environmental received 9 samples on 18-Feb-2023 11:30 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental - Holland and for only the analyses requested.

Sample results are compliant with industry accepted practices and Quality Control results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 58.

If you have any questions regarding this report, please feel free to contact me:

ADDRESS: 3352 128th Avenue, Holland, MI, USA
PHONE: +1 (616) 399-6070 FAX: +1 (616) 399-6185

Sincerely,

Electronically approved by: Chad Whelton

Chad Whelton
Project Manager

ALS Group, USA

Date: 02-Mar-23

Client: Big Pine Consultants
Project: East Palestine Water
Work Order: **23021418**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
23021418-01	Big Pine 01	Water		2/17/2023 08:15	2/18/2023 11:30	☐
23021418-02	Big Pine 02	Water		2/17/2023 09:00	2/18/2023 11:30	☐
23021418-03	Big Pine 03	Water		2/17/2023 09:45	2/18/2023 11:30	☐
23021418-04	Big Pine 04	Water		2/17/2023 10:15	2/18/2023 11:30	☐
23021418-05	Big Pine 05	Water		2/17/2023 10:50	2/18/2023 11:30	☐
23021418-06	Big Pine 06	Water		2/17/2023 11:20	2/18/2023 11:30	☐
23021418-07	Big Pine 07	Water		2/17/2023 12:00	2/18/2023 11:30	☐
23021418-08	Big Pine 08	Water		2/17/2023 12:30	2/18/2023 11:30	☐
23021418-09	Big Pine 09	Water		2/17/2023 13:00	2/18/2023 11:30	☐

Client: Big Pine Consultants
Project: East Palestine Water
Work Order: 23021418

Case Narrative

Samples for the above noted Work Order were received on 02/18/2023. The attached "Sample Receipt Checklist" documents the status of custody seals, container integrity, preservation, and temperature compliance.

Samples were analyzed according to the analytical methodology previously transmitted in the "Work Order Acknowledgement". Methodologies are also documented in the "Analytical Result" section for each sample. Quality control results are listed in the "QC Report" section. Sample association for the reported quality control is located at the end of each batch summary. If applicable, results are appropriately qualified in the Analytical Result and QC Report sections. The "Qualifiers" section documents the various qualifiers, units, and acronyms utilized in reporting. A copy of the laboratory's scope of accreditation is available upon request.

With the following exceptions, all sample analyses achieved analytical criteria.

Volatile Organics:
No other deviations or anomalies were noted.

Extractable Organics:

Batch 212016, Method SW8015D, Sample Big Pine 06 (23021418-06B): The sample ran outside of the holding time due to quality control failure during the initial extraction. Results should be considered estimated.

Qualifier	Description
*	Value exceeds Regulatory Limit
**	Estimated Value
a	Analyte is non-accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
Hr	BOD/CBOD - Sample was reset outside Hold Time, value should be considered estimated.
J	Analyte is present at an estimated concentration between the MDL and Report Limit
n	Analyte accreditation is not offered
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
X	Analyte was detected in the Method Blank between the MDL and Reporting Limit, sample results may exhibit background or reagent contamination at the observed level.

Acronym	Description
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

Units Reported	Description
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter

ALS Group, USA

Date: *02-Mar-23*

Client: Big Pine Consultants
Project: East Palestine Water
Sample ID: Big Pine 01
Collection Date: 2/17/2023 08:15 AM

Work Order: 23021418
Lab ID: 23021418-01
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID		Method: **SW8015D**			Prep: SW3511 / 2/22/23		Analyst: **SJB**
DRO (C10-C28)	U		0.081	0.10	mg/L	1	2/24/2023 23:27
ORO (C28-C40)	U		0.051	0.10	mg/L	1	2/24/2023 23:27
Surr: 4-Terphenyl-d14	*53.2*			*30-121*	*%REC*	1	2/24/2023 23:27
GASOLINE RANGE ORGANICS BY GC-FID		Method: **SW8015D**					Analyst: **RM**
GRO (C6-C10)	U		76	200	µg/L	1	2/20/2023 21:04
Surr: Toluene-d8	*88.5*			*73-116*	*%REC*	1	2/20/2023 21:04
SEMI-VOLATILE ORGANIC COMPOUNDS		Method: **SW8270E**					Analyst: **EEW**
1,1`-Biphenyl	U		1.7	4.1	µg/L	1	2/28/2023 06:25
1,2,4,5-Tetrachlorobenzene	U		1.4	20	µg/L	1	2/28/2023 06:25
1,4-Dioxane	U		2.9	20	µg/L	1	2/28/2023 06:25
1-Methylnaphthalene	U		0.34	0.41	µg/L	1	2/28/2023 06:25
2,2`-Oxybis(1-chloropropane)	U		0.93	4.1	µg/L	1	2/28/2023 06:25
2,3,4,6-Tetrachlorophenol	U		1.8	4.1	µg/L	1	2/28/2023 06:25
2,4,5-Trichlorophenol	U		0.69	4.1	µg/L	1	2/28/2023 06:25
2,4,6-Trichlorophenol	U		1.0	4.1	µg/L	1	2/28/2023 06:25
2,4-Dichlorophenol	U		1.4	4.1	µg/L	1	2/28/2023 06:25
2,4-Dimethylphenol	U		1.5	4.1	µg/L	1	2/28/2023 06:25
2,4-Dinitrophenol	U		11	20	µg/L	1	2/28/2023 06:25
2,4-Dinitrotoluene	U		1.7	4.1	µg/L	1	2/28/2023 06:25
2,6-Dinitrotoluene	U		1.3	4.1	µg/L	1	2/28/2023 06:25
2-Chloronaphthalene	U		0.30	0.41	µg/L	1	2/28/2023 06:25
2-Chlorophenol	U		0.93	4.1	µg/L	1	2/28/2023 06:25
2-Methylnaphthalene	U		0.26	0.41	µg/L	1	2/28/2023 06:25
2-Methylphenol	U		1.0	4.1	µg/L	1	2/28/2023 06:25
2-Nitroaniline	U		0.85	4.1	µg/L	1	2/28/2023 06:25
2-Nitrophenol	U		1.4	4.1	µg/L	1	2/28/2023 06:25
3&4-Methylphenol	U		0.85	4.1	µg/L	1	2/28/2023 06:25
3,3´-Dichlorobenzidine	U		1.9	20	µg/L	1	2/28/2023 06:25
3-Nitroaniline	U		2.6	4.1	µg/L	1	2/28/2023 06:25
4,6-Dinitro-2-methylphenol	U		1.1	4.1	µg/L	1	2/28/2023 06:25
4-Bromophenyl phenyl ether	U		1.3	4.1	µg/L	1	2/28/2023 06:25
4-Chloro-3-methylphenol	U		1.1	4.1	µg/L	1	2/28/2023 06:25
4-Chloroaniline	U		1.4	4.1	µg/L	1	2/28/2023 06:25
4-Chlorophenyl phenyl ether	U		1.3	4.1	µg/L	1	2/28/2023 06:25
4-Nitroaniline	U		2.3	4.1	µg/L	1	2/28/2023 06:25
4-Nitrophenol	U		0.97	20	µg/L	1	2/28/2023 06:25
Acenaphthene	U		0.33	0.41	µg/L	1	2/28/2023 06:25

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Big Pine Consultants
Project: East Palestine Water
Sample ID: Big Pine 01
Collection Date: 2/17/2023 08:15 AM

Work Order: 23021418
Lab ID: 23021418-01
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Acenaphthylene	U		0.30	0.41	µg/L	1	2/28/2023 06:25
Acetophenone	U		1.5	4.1	µg/L	1	2/28/2023 06:25
Anthracene	U		0.11	0.41	µg/L	1	2/28/2023 06:25
Atrazine	U		1.4	4.1	µg/L	1	2/28/2023 06:25
Benzaldehyde	U		2.1	4.1	µg/L	1	2/28/2023 06:25
Benzo(a)anthracene	U		0.40	0.41	µg/L	1	2/28/2023 06:25
Benzo(a)pyrene	U		0.18	0.41	µg/L	1	2/28/2023 06:25
Benzo(b)fluoranthene	U		0.21	0.41	µg/L	1	2/28/2023 06:25
Benzo(g,h,i)perylene	U		0.36	0.41	µg/L	1	2/28/2023 06:25
Benzo(k)fluoranthene	U		0.19	0.41	µg/L	1	2/28/2023 06:25
Bis(2-chloroethoxy)methane	U		1.2	4.1	µg/L	1	2/28/2023 06:25
Bis(2-chloroethyl)ether	U		1.5	4.1	µg/L	1	2/28/2023 06:25
Bis(2-chloroisopropyl)ether	U		0.93	4.1	µg/L	1	2/28/2023 06:25
Bis(2-ethylhexyl)phthalate	U		1.6	4.1	µg/L	1	2/28/2023 06:25
Butyl benzyl phthalate	U		1.2	4.1	µg/L	1	2/28/2023 06:25
Caprolactam	U		3.9	20	µg/L	1	2/28/2023 06:25
Carbazole	U		0.97	4.1	µg/L	1	2/28/2023 06:25
Chrysene	U		0.19	0.41	µg/L	1	2/28/2023 06:25
Dibenzo(a,h)anthracene	U		0.30	0.41	µg/L	1	2/28/2023 06:25
Dibenzofuran	U		0.93	4.1	µg/L	1	2/28/2023 06:25
Diethyl phthalate	U		0.69	4.1	µg/L	1	2/28/2023 06:25
Dimethyl phthalate	U		0.73	4.1	µg/L	1	2/28/2023 06:25
Di-n-butyl phthalate	U		0.85	4.1	µg/L	1	2/28/2023 06:25
Di-n-octyl phthalate	U		2.1	4.1	µg/L	1	2/28/2023 06:25
Fluoranthene	U		0.15	0.41	µg/L	1	2/28/2023 06:25
Fluorene	U		0.21	0.41	µg/L	1	2/28/2023 06:25
Hexachlorobenzene	U		1.8	4.1	µg/L	1	2/28/2023 06:25
Hexachlorobutadiene	U		2.6	4.1	µg/L	1	2/28/2023 06:25
Hexachlorocyclopentadiene	U		4.4	20	µg/L	1	2/28/2023 06:25
Hexachloroethane	U		2.5	4.1	µg/L	1	2/28/2023 06:25
Indeno(1,2,3-cd)pyrene	U		0.27	0.41	µg/L	1	2/28/2023 06:25
Isophorone	U		1.4	20	µg/L	1	2/28/2023 06:25
Naphthalene	U		0.27	0.41	µg/L	1	2/28/2023 06:25
Nitrobenzene	U		1.1	4.1	µg/L	1	2/28/2023 06:25
N-Nitrosodi-n-propylamine	U		1.4	4.1	µg/L	1	2/28/2023 06:25
N-Nitrosodiphenylamine	U		2.0	4.1	µg/L	1	2/28/2023 06:25
Pentachlorophenol	U		3.9	20	µg/L	1	2/28/2023 06:25
Phenanthrene	U		0.33	0.41	µg/L	1	2/28/2023 06:25
Phenol	U		0.85	4.1	µg/L	1	2/28/2023 06:25
Pyrene	U		0.15	0.41	µg/L	1	2/28/2023 06:25

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Big Pine Consultants
Project: East Palestine Water
Sample ID: Big Pine 01
Collection Date: 2/17/2023 08:15 AM

Work Order: 23021418
Lab ID: 23021418-01
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Pyridine	U		2.3	41	µg/L	1	2/28/2023 06:25
Surr: 2,4,6-Tribromophenol	*77.1*			*38-103*	*%REC*	1	2/28/2023 06:25
Surr: 2-Fluorobiphenyl	*78.0*			*36-96*	*%REC*	1	2/28/2023 06:25
Surr: 2-Fluorophenol	*47.8*			*20-73*	*%REC*	1	2/28/2023 06:25
Surr: 4-Terphenyl-d14	*86.2*			*44-114*	*%REC*	1	2/28/2023 06:25
Surr: Nitrobenzene-d5	*71.3*			*33-100*	*%REC*	1	2/28/2023 06:25
Surr: Phenol-d6	*30.3*			*10-48*	*%REC*	1	2/28/2023 06:25
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260D**					Analyst: **HJ**
1,1,1-Trichloroethane	U		0.46	1.0	µg/L	1	2/21/2023 18:14
1,1,2,2-Tetrachloroethane	U		0.40	1.0	µg/L	1	2/21/2023 18:14
1,1,2-Trichloroethane	U		0.46	1.0	µg/L	1	2/21/2023 18:14
1,1,2-Trichlorotrifluoroethane	U		0.52	1.0	µg/L	1	2/21/2023 18:14
1,1-Dichloroethane	U		0.44	1.0	µg/L	1	2/21/2023 18:14
1,1-Dichloroethene	U		0.40	1.0	µg/L	1	2/21/2023 18:14
1,2,3-Trichlorobenzene	U		0.42	1.0	µg/L	1	2/21/2023 18:14
1,2,3-Trichloropropane	U		0.40	1.0	µg/L	1	2/21/2023 18:14
1,2,4-Trichlorobenzene	U		0.45	1.0	µg/L	1	2/21/2023 18:14
1,2,4-Trimethylbenzene	U		0.45	1.0	µg/L	1	2/21/2023 18:14
1,2-Dibromo-3-chloropropane	U		0.43	1.0	µg/L	1	2/21/2023 18:14
1,2-Dibromoethane	U		0.41	1.0	µg/L	1	2/21/2023 18:14
1,2-Dichlorobenzene	U		0.32	1.0	µg/L	1	2/21/2023 18:14
1,2-Dichloroethane	U		0.44	1.0	µg/L	1	2/21/2023 18:14
1,2-Dichloropropane	U		0.48	1.0	µg/L	1	2/21/2023 18:14
1,3,5-Trimethylbenzene	U		0.65	1.0	µg/L	1	2/21/2023 18:14
1,3-Dichlorobenzene	U		0.33	1.0	µg/L	1	2/21/2023 18:14
1,4-Dichlorobenzene	U		0.35	1.0	µg/L	1	2/21/2023 18:14
2-Butanone	U		0.52	5.0	µg/L	1	2/21/2023 18:14
2-Hexanone	U		0.59	5.0	µg/L	1	2/21/2023 18:14
4-Methyl-2-pentanone	U		0.52	1.0	µg/L	1	2/21/2023 18:14
Acetone	**1.1**	J	**1.1**	**10**	**µg/L**	1	2/21/2023 18:14
Benzene	U		0.46	1.0	µg/L	1	2/21/2023 18:14
Bromochloromethane	U		0.45	1.0	µg/L	1	2/21/2023 18:14
Bromodichloromethane	U		0.49	1.0	µg/L	1	2/21/2023 18:14
Bromoform	U		0.56	1.0	µg/L	1	2/21/2023 18:14
Bromomethane	U		0.90	1.0	µg/L	1	2/21/2023 18:14
Carbon disulfide	U		0.49	1.0	µg/L	1	2/21/2023 18:14
Carbon tetrachloride	U		0.40	1.0	µg/L	1	2/21/2023 18:14
Chlorobenzene	U		0.40	1.0	µg/L	1	2/21/2023 18:14
Chloroethane	U		0.68	1.0	µg/L	1	2/21/2023 18:14

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Big Pine Consultants
Project: East Palestine Water
Sample ID: Big Pine 01
Collection Date: 2/17/2023 08:15 AM

Work Order: 23021418
Lab ID: 23021418-01
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Chloroform	U		0.46	1.0	µg/L	1	2/21/2023 18:14
Chloromethane	U		0.83	1.0	µg/L	1	2/21/2023 18:14
cis-1,2-Dichloroethene	U		0.42	1.0	µg/L	1	2/21/2023 18:14
cis-1,3-Dichloropropene	U		0.57	1.0	µg/L	1	2/21/2023 18:14
Cyclohexane	U		0.63	2.0	µg/L	1	2/21/2023 18:14
Dibromochloromethane	U		0.40	1.0	µg/L	1	2/21/2023 18:14
Dichlorodifluoromethane	U		0.68	1.0	µg/L	1	2/21/2023 18:14
Ethylbenzene	U		0.34	1.0	µg/L	1	2/21/2023 18:14
Isopropylbenzene	U		0.35	1.0	µg/L	1	2/21/2023 18:14
m,p-Xylene	U		0.81	2.0	µg/L	1	2/21/2023 18:14
Methyl acetate	U		0.59	2.0	µg/L	1	2/21/2023 18:14
Methyl tert-butyl ether	U		0.45	1.0	µg/L	1	2/21/2023 18:14
Methylcyclohexane	U		0.35	1.0	µg/L	1	2/21/2023 18:14
Methylene chloride	U		0.86	5.0	µg/L	1	2/21/2023 18:14
o-Xylene	U		0.31	1.0	µg/L	1	2/21/2023 18:14
Styrene	U		0.33	1.0	µg/L	1	2/21/2023 18:14
Tetrachloroethene	U		0.39	1.0	µg/L	1	2/21/2023 18:14
Toluene	U		0.45	1.0	µg/L	1	2/21/2023 18:14
trans-1,2-Dichloroethene	U		0.48	1.0	µg/L	1	2/21/2023 18:14
trans-1,3-Dichloropropene	U		0.38	1.0	µg/L	1	2/21/2023 18:14
Trichloroethene	U		0.43	1.0	µg/L	1	2/21/2023 18:14
Trichlorofluoromethane	U		0.52	1.0	µg/L	1	2/21/2023 18:14
Vinyl chloride	U		0.53	1.0	µg/L	1	2/21/2023 18:14
Xylenes, Total	U		0.81	2.0	µg/L	1	2/21/2023 18:14
Surr: 1,2-Dichloroethane-d4	*106*			*80-120*	*%REC*	1	2/21/2023 18:14
Surr: 4-Bromofluorobenzene	*97.4*			*80-120*	*%REC*	1	2/21/2023 18:14
Surr: Dibromofluoromethane	*97.8*			*80-120*	*%REC*	1	2/21/2023 18:14
Surr: Toluene-d8	*95.0*			*80-120*	*%REC*	1	2/21/2023 18:14

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Big Pine Consultants
Project: East Palestine Water
Sample ID: Big Pine 02
Collection Date: 2/17/2023 09:00 AM

Work Order: 23021418
Lab ID: 23021418-02
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID		Method: **SW8015D**			Prep: SW3511 / 2/22/23		Analyst: **SJB**
DRO (C10-C28)	U		0.080	0.099	mg/L	1	2/25/2023 00:04
ORO (C28-C40)	U		0.051	0.099	mg/L	1	2/25/2023 00:04
Surr: 4-Terphenyl-d14	*50.0*			*30-121*	*%REC*	1	2/25/2023 00:04
GASOLINE RANGE ORGANICS BY GC-FID		Method: **SW8015D**					Analyst: **RM**
GRO (C6-C10)	U		76	200	µg/L	1	2/20/2023 21:26
Surr: Toluene-d8	*89.1*			*73-116*	*%REC*	1	2/20/2023 21:26
SEMI-VOLATILE ORGANIC COMPOUNDS		Method: **SW8270E**					Analyst: **EEW**
1,1`-Biphenyl	U		1.7	4.1	µg/L	1	2/28/2023 06:52
1,2,4,5-Tetrachlorobenzene	U		1.4	20	µg/L	1	2/28/2023 06:52
1,4-Dioxane	U		2.9	20	µg/L	1	2/28/2023 06:52
1-Methylnaphthalene	U		0.34	0.41	µg/L	1	2/28/2023 06:52
2,2`-Oxybis(1-chloropropane)	U		0.94	4.1	µg/L	1	2/28/2023 06:52
2,3,4,6-Tetrachlorophenol	U		1.8	4.1	µg/L	1	2/28/2023 06:52
2,4,5-Trichlorophenol	U		0.69	4.1	µg/L	1	2/28/2023 06:52
2,4,6-Trichlorophenol	U		1.0	4.1	µg/L	1	2/28/2023 06:52
2,4-Dichlorophenol	U		1.4	4.1	µg/L	1	2/28/2023 06:52
2,4-Dimethylphenol	U		1.5	4.1	µg/L	1	2/28/2023 06:52
2,4-Dinitrophenol	U		11	20	µg/L	1	2/28/2023 06:52
2,4-Dinitrotoluene	U		1.7	4.1	µg/L	1	2/28/2023 06:52
2,6-Dinitrotoluene	U		1.3	4.1	µg/L	1	2/28/2023 06:52
2-Chloronaphthalene	U		0.31	0.41	µg/L	1	2/28/2023 06:52
2-Chlorophenol	U		0.94	4.1	µg/L	1	2/28/2023 06:52
2-Methylnaphthalene	U		0.27	0.41	µg/L	1	2/28/2023 06:52
2-Methylphenol	U		1.0	4.1	µg/L	1	2/28/2023 06:52
2-Nitroaniline	U		0.86	4.1	µg/L	1	2/28/2023 06:52
2-Nitrophenol	U		1.4	4.1	µg/L	1	2/28/2023 06:52
3&4-Methylphenol	U		0.86	4.1	µg/L	1	2/28/2023 06:52
3,3´-Dichlorobenzidine	U		1.9	20	µg/L	1	2/28/2023 06:52
3-Nitroaniline	U		2.6	4.1	µg/L	1	2/28/2023 06:52
4,6-Dinitro-2-methylphenol	U		1.1	4.1	µg/L	1	2/28/2023 06:52
4-Bromophenyl phenyl ether	U		1.3	4.1	µg/L	1	2/28/2023 06:52
4-Chloro-3-methylphenol	U		1.1	4.1	µg/L	1	2/28/2023 06:52
4-Chloroaniline	U		1.4	4.1	µg/L	1	2/28/2023 06:52
4-Chlorophenyl phenyl ether	U		1.3	4.1	µg/L	1	2/28/2023 06:52
4-Nitroaniline	U		2.3	4.1	µg/L	1	2/28/2023 06:52
4-Nitrophenol	U		0.98	20	µg/L	1	2/28/2023 06:52
Acenaphthene	U		0.33	0.41	µg/L	1	2/28/2023 06:52

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *02-Mar-23*

Client: Big Pine Consultants
Project: East Palestine Water
Sample ID: Big Pine 02
Collection Date: 2/17/2023 09:00 AM

Work Order: 23021418
Lab ID: 23021418-02
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Acenaphthylene	U		0.31	0.41	µg/L	1	2/28/2023 06:52
Acetophenone	U		1.5	4.1	µg/L	1	2/28/2023 06:52
Anthracene	**0.29**	J	**0.11**	**0.41**	**µg/L**	1	2/28/2023 06:52
Atrazine	U		1.4	4.1	µg/L	1	2/28/2023 06:52
Benzaldehyde	U		2.1	4.1	µg/L	1	2/28/2023 06:52
Benzo(a)anthracene	U		0.40	0.41	µg/L	1	2/28/2023 06:52
Benzo(a)pyrene	U		0.18	0.41	µg/L	1	2/28/2023 06:52
Benzo(b)fluoranthene	**0.45**		**0.21**	**0.41**	**µg/L**	1	2/28/2023 06:52
Benzo(g,h,i)perylene	U		0.36	0.41	µg/L	1	2/28/2023 06:52
Benzo(k)fluoranthene	**0.37**	J	**0.20**	**0.41**	**µg/L**	1	2/28/2023 06:52
Bis(2-chloroethoxy)methane	U		1.2	4.1	µg/L	1	2/28/2023 06:52
Bis(2-chloroethyl)ether	U		1.5	4.1	µg/L	1	2/28/2023 06:52
Bis(2-chloroisopropyl)ether	U		0.94	4.1	µg/L	1	2/28/2023 06:52
Bis(2-ethylhexyl)phthalate	**2.5**	J	**1.6**	**4.1**	**µg/L**	1	2/28/2023 06:52
Butyl benzyl phthalate	U		1.2	4.1	µg/L	1	2/28/2023 06:52
Caprolactam	U		3.9	20	µg/L	1	2/28/2023 06:52
Carbazole	U		0.98	4.1	µg/L	1	2/28/2023 06:52
Chrysene	U		0.20	0.41	µg/L	1	2/28/2023 06:52
Dibenzo(a,h)anthracene	U		0.30	0.41	µg/L	1	2/28/2023 06:52
Dibenzofuran	U		0.94	4.1	µg/L	1	2/28/2023 06:52
Diethyl phthalate	U		0.69	4.1	µg/L	1	2/28/2023 06:52
Dimethyl phthalate	U		0.73	4.1	µg/L	1	2/28/2023 06:52
Di-n-butyl phthalate	U		0.86	4.1	µg/L	1	2/28/2023 06:52
Di-n-octyl phthalate	U		2.2	4.1	µg/L	1	2/28/2023 06:52
Fluoranthene	**0.49**		**0.16**	**0.41**	**µg/L**	1	2/28/2023 06:52
Fluorene	U		0.21	0.41	µg/L	1	2/28/2023 06:52
Hexachlorobenzene	U		1.8	4.1	µg/L	1	2/28/2023 06:52
Hexachlorobutadiene	U		2.6	4.1	µg/L	1	2/28/2023 06:52
Hexachlorocyclopentadiene	U		4.5	20	µg/L	1	2/28/2023 06:52
Hexachloroethane	U		2.5	4.1	µg/L	1	2/28/2023 06:52
Indeno(1,2,3-cd)pyrene	U		0.27	0.41	µg/L	1	2/28/2023 06:52
Isophorone	U		1.4	20	µg/L	1	2/28/2023 06:52
Naphthalene	U		0.27	0.41	µg/L	1	2/28/2023 06:52
Nitrobenzene	U		1.1	4.1	µg/L	1	2/28/2023 06:52
N-Nitrosodi-n-propylamine	U		1.4	4.1	µg/L	1	2/28/2023 06:52
N-Nitrosodiphenylamine	U		2.0	4.1	µg/L	1	2/28/2023 06:52
Pentachlorophenol	U		4.0	20	µg/L	1	2/28/2023 06:52
Phenanthrene	U		0.33	0.41	µg/L	1	2/28/2023 06:52
Phenol	U		0.86	4.1	µg/L	1	2/28/2023 06:52
Pyrene	**0.49**		**0.15**	**0.41**	**µg/L**	1	2/28/2023 06:52

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Big Pine Consultants
Project: East Palestine Water
Sample ID: Big Pine 02
Collection Date: 2/17/2023 09:00 AM

Work Order: 23021418
Lab ID: 23021418-02
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Pyridine	U		2.3	41	µg/L	1	2/28/2023 06:52
Surr: 2,4,6-Tribromophenol	*70.8*			*38-103*	*%REC*	1	2/28/2023 06:52
Surr: 2-Fluorobiphenyl	*75.6*			*36-96*	*%REC*	1	2/28/2023 06:52
Surr: 2-Fluorophenol	*43.5*			*20-73*	*%REC*	1	2/28/2023 06:52
Surr: 4-Terphenyl-d14	*85.2*			*44-114*	*%REC*	1	2/28/2023 06:52
Surr: Nitrobenzene-d5	*69.2*			*33-100*	*%REC*	1	2/28/2023 06:52
Surr: Phenol-d6	*27.4*			*10-48*	*%REC*	1	2/28/2023 06:52
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260D**					Analyst: **HJ**
1,1,1-Trichloroethane	U		0.46	1.0	µg/L	1	2/21/2023 18:38
1,1,2,2-Tetrachloroethane	U		0.40	1.0	µg/L	1	2/21/2023 18:38
1,1,2-Trichloroethane	U		0.46	1.0	µg/L	1	2/21/2023 18:38
1,1,2-Trichlorotrifluoroethane	U		0.52	1.0	µg/L	1	2/21/2023 18:38
1,1-Dichloroethane	U		0.44	1.0	µg/L	1	2/21/2023 18:38
1,1-Dichloroethene	U		0.40	1.0	µg/L	1	2/21/2023 18:38
1,2,3-Trichlorobenzene	U		0.42	1.0	µg/L	1	2/21/2023 18:38
1,2,3-Trichloropropane	U		0.40	1.0	µg/L	1	2/21/2023 18:38
1,2,4-Trichlorobenzene	U		0.45	1.0	µg/L	1	2/21/2023 18:38
1,2,4-Trimethylbenzene	U		0.45	1.0	µg/L	1	2/21/2023 18:38
1,2-Dibromo-3-chloropropane	U		0.43	1.0	µg/L	1	2/21/2023 18:38
1,2-Dibromoethane	U		0.41	1.0	µg/L	1	2/21/2023 18:38
1,2-Dichlorobenzene	U		0.32	1.0	µg/L	1	2/21/2023 18:38
1,2-Dichloroethane	U		0.44	1.0	µg/L	1	2/21/2023 18:38
1,2-Dichloropropane	U		0.48	1.0	µg/L	1	2/21/2023 18:38
1,3,5-Trimethylbenzene	U		0.65	1.0	µg/L	1	2/21/2023 18:38
1,3-Dichlorobenzene	U		0.33	1.0	µg/L	1	2/21/2023 18:38
1,4-Dichlorobenzene	U		0.35	1.0	µg/L	1	2/21/2023 18:38
2-Butanone	U		0.52	5.0	µg/L	1	2/21/2023 18:38
2-Hexanone	U		0.59	5.0	µg/L	1	2/21/2023 18:38
4-Methyl-2-pentanone	U		0.52	1.0	µg/L	1	2/21/2023 18:38
Acetone	U		1.1	10	µg/L	1	2/21/2023 18:38
Benzene	U		0.46	1.0	µg/L	1	2/21/2023 18:38
Bromochloromethane	U		0.45	1.0	µg/L	1	2/21/2023 18:38
Bromodichloromethane	U		0.49	1.0	µg/L	1	2/21/2023 18:38
Bromoform	U		0.56	1.0	µg/L	1	2/21/2023 18:38
Bromomethane	U		0.90	1.0	µg/L	1	2/21/2023 18:38
Carbon disulfide	U		0.49	1.0	µg/L	1	2/21/2023 18:38
Carbon tetrachloride	U		0.40	1.0	µg/L	1	2/21/2023 18:38
Chlorobenzene	U		0.40	1.0	µg/L	1	2/21/2023 18:38
Chloroethane	U		0.68	1.0	µg/L	1	2/21/2023 18:38

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Big Pine Consultants
Project: East Palestine Water
Sample ID: Big Pine 02
Collection Date: 2/17/2023 09:00 AM

Work Order: 23021418
Lab ID: 23021418-02
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Chloroform	U		0.46	1.0	µg/L	1	2/21/2023 18:38
Chloromethane	U		0.83	1.0	µg/L	1	2/21/2023 18:38
cis-1,2-Dichloroethene	U		0.42	1.0	µg/L	1	2/21/2023 18:38
cis-1,3-Dichloropropene	U		0.57	1.0	µg/L	1	2/21/2023 18:38
Cyclohexane	U		0.63	2.0	µg/L	1	2/21/2023 18:38
Dibromochloromethane	U		0.40	1.0	µg/L	1	2/21/2023 18:38
Dichlorodifluoromethane	U		0.68	1.0	µg/L	1	2/21/2023 18:38
Ethylbenzene	U		0.34	1.0	µg/L	1	2/21/2023 18:38
Isopropylbenzene	U		0.35	1.0	µg/L	1	2/21/2023 18:38
m,p-Xylene	U		0.81	2.0	µg/L	1	2/21/2023 18:38
Methyl acetate	U		0.59	2.0	µg/L	1	2/21/2023 18:38
Methyl tert-butyl ether	U		0.45	1.0	µg/L	1	2/21/2023 18:38
Methylcyclohexane	U		0.35	1.0	µg/L	1	2/21/2023 18:38
Methylene chloride	U		0.86	5.0	µg/L	1	2/21/2023 18:38
o-Xylene	U		0.31	1.0	µg/L	1	2/21/2023 18:38
Styrene	U		0.33	1.0	µg/L	1	2/21/2023 18:38
Tetrachloroethene	U		0.39	1.0	µg/L	1	2/21/2023 18:38
Toluene	U		0.45	1.0	µg/L	1	2/21/2023 18:38
trans-1,2-Dichloroethene	U		0.48	1.0	µg/L	1	2/21/2023 18:38
trans-1,3-Dichloropropene	U		0.38	1.0	µg/L	1	2/21/2023 18:38
Trichloroethene	U		0.43	1.0	µg/L	1	2/21/2023 18:38
Trichlorofluoromethane	U		0.52	1.0	µg/L	1	2/21/2023 18:38
Vinyl chloride	U		0.53	1.0	µg/L	1	2/21/2023 18:38
Xylenes, Total	U		0.81	2.0	µg/L	1	2/21/2023 18:38
Surr: 1,2-Dichloroethane-d4	*108*			*80-120*	*%REC*	1	2/21/2023 18:38
Surr: 4-Bromofluorobenzene	*98.7*			*80-120*	*%REC*	1	2/21/2023 18:38
Surr: Dibromofluoromethane	*100*			*80-120*	*%REC*	1	2/21/2023 18:38
Surr: Toluene-d8	*94.3*			*80-120*	*%REC*	1	2/21/2023 18:38

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *02-Mar-23*

Client: Big Pine Consultants
Project: East Palestine Water
Sample ID: Big Pine 03
Collection Date: 2/17/2023 09:45 AM

Work Order: 23021418
Lab ID: 23021418-03
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID		Method: **SW8015D**			Prep: SW3511 / 2/22/23		Analyst: **SJB**
DRO (C10-C28)	U		0.080	0.099	mg/L	1	2/25/2023 00:40
ORO (C28-C40)	U		0.050	0.099	mg/L	1	2/25/2023 00:40
Surr: 4-Terphenyl-d14	*47.2*			*30-121*	*%REC*	1	2/25/2023 00:40
GASOLINE RANGE ORGANICS BY GC-FID		Method: **SW8015D**					Analyst: **RM**
GRO (C6-C10)	U		76	200	µg/L	1	2/20/2023 21:47
Surr: Toluene-d8	*88.8*			*73-116*	*%REC*	1	2/20/2023 21:47
SEMI-VOLATILE ORGANIC COMPOUNDS		Method: **SW8270E**					Analyst: **EEW**
1,1`-Biphenyl	U		1.7	4.1	µg/L	1	2/28/2023 07:19
1,2,4,5-Tetrachlorobenzene	U		1.4	21	µg/L	1	2/28/2023 07:19
1,4-Dioxane	U		3.0	21	µg/L	1	2/28/2023 07:19
1-Methylnaphthalene	U		0.34	0.41	µg/L	1	2/28/2023 07:19
2,2`-Oxybis(1-chloropropane)	U		0.95	4.1	µg/L	1	2/28/2023 07:19
2,3,4,6-Tetrachlorophenol	U		1.9	4.1	µg/L	1	2/28/2023 07:19
2,4,5-Trichlorophenol	U		0.70	4.1	µg/L	1	2/28/2023 07:19
2,4,6-Trichlorophenol	U		1.0	4.1	µg/L	1	2/28/2023 07:19
2,4-Dichlorophenol	U		1.4	4.1	µg/L	1	2/28/2023 07:19
2,4-Dimethylphenol	U		1.5	4.1	µg/L	1	2/28/2023 07:19
2,4-Dinitrophenol	U		11	21	µg/L	1	2/28/2023 07:19
2,4-Dinitrotoluene	U		1.7	4.1	µg/L	1	2/28/2023 07:19
2,6-Dinitrotoluene	U		1.4	4.1	µg/L	1	2/28/2023 07:19
2-Chloronaphthalene	U		0.31	0.41	µg/L	1	2/28/2023 07:19
2-Chlorophenol	U		0.95	4.1	µg/L	1	2/28/2023 07:19
2-Methylnaphthalene	U		0.27	0.41	µg/L	1	2/28/2023 07:19
2-Methylphenol	U		1.0	4.1	µg/L	1	2/28/2023 07:19
2-Nitroaniline	U		0.87	4.1	µg/L	1	2/28/2023 07:19
2-Nitrophenol	U		1.4	4.1	µg/L	1	2/28/2023 07:19
3&4-Methylphenol	U		0.87	4.1	µg/L	1	2/28/2023 07:19
3,3´-Dichlorobenzidine	U		1.9	21	µg/L	1	2/28/2023 07:19
3-Nitroaniline	U		2.6	4.1	µg/L	1	2/28/2023 07:19
4,6-Dinitro-2-methylphenol	U		1.1	4.1	µg/L	1	2/28/2023 07:19
4-Bromophenyl phenyl ether	U		1.4	4.1	µg/L	1	2/28/2023 07:19
4-Chloro-3-methylphenol	U		1.1	4.1	µg/L	1	2/28/2023 07:19
4-Chloroaniline	U		1.4	4.1	µg/L	1	2/28/2023 07:19
4-Chlorophenyl phenyl ether	U		1.3	4.1	µg/L	1	2/28/2023 07:19
4-Nitroaniline	U		2.4	4.1	µg/L	1	2/28/2023 07:19
4-Nitrophenol	U		0.99	21	µg/L	1	2/28/2023 07:19
Acenaphthene	U		0.34	0.41	µg/L	1	2/28/2023 07:19

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Big Pine Consultants
Project: East Palestine Water
Sample ID: Big Pine 03
Collection Date: 2/17/2023 09:45 AM

Work Order: 23021418
Lab ID: 23021418-03
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Acenaphthylene	U		0.31	0.41	µg/L	1	2/28/2023 07:19
Acetophenone	U		1.5	4.1	µg/L	1	2/28/2023 07:19
Anthracene	**0.25**	J	**0.12**	**0.41**	**µg/L**	1	2/28/2023 07:19
Atrazine	U		1.4	4.1	µg/L	1	2/28/2023 07:19
Benzaldehyde	U		2.2	4.1	µg/L	1	2/28/2023 07:19
Benzo(a)anthracene	U		0.41	0.41	µg/L	1	2/28/2023 07:19
Benzo(a)pyrene	U		0.18	0.41	µg/L	1	2/28/2023 07:19
Benzo(b)fluoranthene	U		0.21	0.41	µg/L	1	2/28/2023 07:19
Benzo(g,h,i)perylene	U		0.37	0.41	µg/L	1	2/28/2023 07:19
Benzo(k)fluoranthene	U		0.20	0.41	µg/L	1	2/28/2023 07:19
Bis(2-chloroethoxy)methane	U		1.2	4.1	µg/L	1	2/28/2023 07:19
Bis(2-chloroethyl)ether	U		1.5	4.1	µg/L	1	2/28/2023 07:19
Bis(2-chloroisopropyl)ether	U		0.95	4.1	µg/L	1	2/28/2023 07:19
Bis(2-ethylhexyl)phthalate	U		1.7	4.1	µg/L	1	2/28/2023 07:19
Butyl benzyl phthalate	U		1.2	4.1	µg/L	1	2/28/2023 07:19
Caprolactam	U		4.0	21	µg/L	1	2/28/2023 07:19
Carbazole	U		0.99	4.1	µg/L	1	2/28/2023 07:19
Chrysene	U		0.20	0.41	µg/L	1	2/28/2023 07:19
Dibenzo(a,h)anthracene	U		0.30	0.41	µg/L	1	2/28/2023 07:19
Dibenzofuran	U		0.95	4.1	µg/L	1	2/28/2023 07:19
Diethyl phthalate	U		0.70	4.1	µg/L	1	2/28/2023 07:19
Dimethyl phthalate	U		0.74	4.1	µg/L	1	2/28/2023 07:19
Di-n-butyl phthalate	U		0.87	4.1	µg/L	1	2/28/2023 07:19
Di-n-octyl phthalate	U		2.2	4.1	µg/L	1	2/28/2023 07:19
Fluoranthene	U		0.16	0.41	µg/L	1	2/28/2023 07:19
Fluorene	U		0.21	0.41	µg/L	1	2/28/2023 07:19
Hexachlorobenzene	U		1.8	4.1	µg/L	1	2/28/2023 07:19
Hexachlorobutadiene	U		2.6	4.1	µg/L	1	2/28/2023 07:19
Hexachlorocyclopentadiene	U		4.5	21	µg/L	1	2/28/2023 07:19
Hexachloroethane	U		2.6	4.1	µg/L	1	2/28/2023 07:19
Indeno(1,2,3-cd)pyrene	U		0.28	0.41	µg/L	1	2/28/2023 07:19
Isophorone	U		1.4	21	µg/L	1	2/28/2023 07:19
Naphthalene	U		0.28	0.41	µg/L	1	2/28/2023 07:19
Nitrobenzene	U		1.1	4.1	µg/L	1	2/28/2023 07:19
N-Nitrosodi-n-propylamine	U		1.4	4.1	µg/L	1	2/28/2023 07:19
N-Nitrosodiphenylamine	U		2.0	4.1	µg/L	1	2/28/2023 07:19
Pentachlorophenol	U		4.0	21	µg/L	1	2/28/2023 07:19
Phenanthrene	U		0.34	0.41	µg/L	1	2/28/2023 07:19
Phenol	U		0.87	4.1	µg/L	1	2/28/2023 07:19
Pyrene	U		0.15	0.41	µg/L	1	2/28/2023 07:19

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Big Pine Consultants
Project: East Palestine Water
Sample ID: Big Pine 03
Collection Date: 2/17/2023 09:45 AM

Work Order: 23021418
Lab ID: 23021418-03
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Pyridine	U		2.4	41	µg/L	1	2/28/2023 07:19
Surr: 2,4,6-Tribromophenol	*81.7*			*38-103*	*%REC*	1	2/28/2023 07:19
Surr: 2-Fluorobiphenyl	*76.1*			*36-96*	*%REC*	1	2/28/2023 07:19
Surr: 2-Fluorophenol	*48.1*			*20-73*	*%REC*	1	2/28/2023 07:19
Surr: 4-Terphenyl-d14	*98.2*			*44-114*	*%REC*	1	2/28/2023 07:19
Surr: Nitrobenzene-d5	*71.4*			*33-100*	*%REC*	1	2/28/2023 07:19
Surr: Phenol-d6	*31.6*			*10-48*	*%REC*	1	2/28/2023 07:19
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260D**					Analyst: **HJ**
1,1,1-Trichloroethane	U		0.46	1.0	µg/L	1	2/21/2023 19:02
1,1,2,2-Tetrachloroethane	U		0.40	1.0	µg/L	1	2/21/2023 19:02
1,1,2-Trichloroethane	U		0.46	1.0	µg/L	1	2/21/2023 19:02
1,1,2-Trichlorotrifluoroethane	U		0.52	1.0	µg/L	1	2/21/2023 19:02
1,1-Dichloroethane	U		0.44	1.0	µg/L	1	2/21/2023 19:02
1,1-Dichloroethene	U		0.40	1.0	µg/L	1	2/21/2023 19:02
1,2,3-Trichlorobenzene	U		0.42	1.0	µg/L	1	2/21/2023 19:02
1,2,3-Trichloropropane	U		0.40	1.0	µg/L	1	2/21/2023 19:02
1,2,4-Trichlorobenzene	U		0.45	1.0	µg/L	1	2/21/2023 19:02
1,2,4-Trimethylbenzene	U		0.45	1.0	µg/L	1	2/21/2023 19:02
1,2-Dibromo-3-chloropropane	U		0.43	1.0	µg/L	1	2/21/2023 19:02
1,2-Dibromoethane	U		0.41	1.0	µg/L	1	2/21/2023 19:02
1,2-Dichlorobenzene	U		0.32	1.0	µg/L	1	2/21/2023 19:02
1,2-Dichloroethane	U		0.44	1.0	µg/L	1	2/21/2023 19:02
1,2-Dichloropropane	U		0.48	1.0	µg/L	1	2/21/2023 19:02
1,3,5-Trimethylbenzene	U		0.65	1.0	µg/L	1	2/21/2023 19:02
1,3-Dichlorobenzene	U		0.33	1.0	µg/L	1	2/21/2023 19:02
1,4-Dichlorobenzene	U		0.35	1.0	µg/L	1	2/21/2023 19:02
2-Butanone	U		0.52	5.0	µg/L	1	2/21/2023 19:02
2-Hexanone	U		0.59	5.0	µg/L	1	2/21/2023 19:02
4-Methyl-2-pentanone	U		0.52	1.0	µg/L	1	2/21/2023 19:02
Acetone	U		1.1	10	µg/L	1	2/21/2023 19:02
Benzene	U		0.46	1.0	µg/L	1	2/21/2023 19:02
Bromochloromethane	U		0.45	1.0	µg/L	1	2/21/2023 19:02
Bromodichloromethane	U		0.49	1.0	µg/L	1	2/21/2023 19:02
Bromoform	U		0.56	1.0	µg/L	1	2/21/2023 19:02
Bromomethane	U		0.90	1.0	µg/L	1	2/21/2023 19:02
Carbon disulfide	U		0.49	1.0	µg/L	1	2/21/2023 19:02
Carbon tetrachloride	U		0.40	1.0	µg/L	1	2/21/2023 19:02
Chlorobenzene	U		0.40	1.0	µg/L	1	2/21/2023 19:02
Chloroethane	U		0.68	1.0	µg/L	1	2/21/2023 19:02

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Big Pine Consultants
Project: East Palestine Water
Sample ID: Big Pine 03
Collection Date: 2/17/2023 09:45 AM

Work Order: 23021418
Lab ID: 23021418-03
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Chloroform	U		0.46	1.0	µg/L	1	2/21/2023 19:02
Chloromethane	U		0.83	1.0	µg/L	1	2/21/2023 19:02
cis-1,2-Dichloroethene	U		0.42	1.0	µg/L	1	2/21/2023 19:02
cis-1,3-Dichloropropene	U		0.57	1.0	µg/L	1	2/21/2023 19:02
Cyclohexane	U		0.63	2.0	µg/L	1	2/21/2023 19:02
Dibromochloromethane	U		0.40	1.0	µg/L	1	2/21/2023 19:02
Dichlorodifluoromethane	U		0.68	1.0	µg/L	1	2/21/2023 19:02
Ethylbenzene	U		0.34	1.0	µg/L	1	2/21/2023 19:02
Isopropylbenzene	U		0.35	1.0	µg/L	1	2/21/2023 19:02
m,p-Xylene	U		0.81	2.0	µg/L	1	2/21/2023 19:02
Methyl acetate	U		0.59	2.0	µg/L	1	2/21/2023 19:02
Methyl tert-butyl ether	U		0.45	1.0	µg/L	1	2/21/2023 19:02
Methylcyclohexane	U		0.35	1.0	µg/L	1	2/21/2023 19:02
Methylene chloride	U		0.86	5.0	µg/L	1	2/21/2023 19:02
o-Xylene	U		0.31	1.0	µg/L	1	2/21/2023 19:02
Styrene	U		0.33	1.0	µg/L	1	2/21/2023 19:02
Tetrachloroethene	U		0.39	1.0	µg/L	1	2/21/2023 19:02
Toluene	U		0.45	1.0	µg/L	1	2/21/2023 19:02
trans-1,2-Dichloroethene	U		0.48	1.0	µg/L	1	2/21/2023 19:02
trans-1,3-Dichloropropene	U		0.38	1.0	µg/L	1	2/21/2023 19:02
Trichloroethene	U		0.43	1.0	µg/L	1	2/21/2023 19:02
Trichlorofluoromethane	U		0.52	1.0	µg/L	1	2/21/2023 19:02
Vinyl chloride	U		0.53	1.0	µg/L	1	2/21/2023 19:02
Xylenes, Total	U		0.81	2.0	µg/L	1	2/21/2023 19:02
Surr: 1,2-Dichloroethane-d4	*105*			*80-120*	*%REC*	1	2/21/2023 19:02
Surr: 4-Bromofluorobenzene	*99.2*			*80-120*	*%REC*	1	2/21/2023 19:02
Surr: Dibromofluoromethane	*99.6*			*80-120*	*%REC*	1	2/21/2023 19:02
Surr: Toluene-d8	*96.1*			*80-120*	*%REC*	1	2/21/2023 19:02

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *02-Mar-23*

Client: Big Pine Consultants
Project: East Palestine Water
Sample ID: Big Pine 04
Collection Date: 2/17/2023 10:15 AM

Work Order: 23021418
Lab ID: 23021418-04
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID		Method: **SW8015D**			Prep: SW3511 / 2/22/23		Analyst: **SJB**
DRO (C10-C28)	U		0.081	0.10	mg/L	1	2/25/2023 01:17
ORO (C28-C40)	U		0.051	0.10	mg/L	1	2/25/2023 01:17
Surr: 4-Terphenyl-d14	*66.3*			*30-121*	*%REC*	1	2/25/2023 01:17
GASOLINE RANGE ORGANICS BY GC-FID		Method: **SW8015D**					Analyst: **RM**
GRO (C6-C10)	U		76	200	µg/L	1	2/20/2023 22:09
Surr: Toluene-d8	*87.6*			*73-116*	*%REC*	1	2/20/2023 22:09
SEMI-VOLATILE ORGANIC COMPOUNDS		Method: **SW8270E**					Analyst: **EEW**
1,1`-Biphenyl	U		1.7	4.1	µg/L	1	2/28/2023 07:46
1,2,4,5-Tetrachlorobenzene	U		1.4	20	µg/L	1	2/28/2023 07:46
1,4-Dioxane	U		2.9	20	µg/L	1	2/28/2023 07:46
1-Methylnaphthalene	U		0.34	0.41	µg/L	1	2/28/2023 07:46
2,2`-Oxybis(1-chloropropane)	U		0.93	4.1	µg/L	1	2/28/2023 07:46
2,3,4,6-Tetrachlorophenol	U		1.8	4.1	µg/L	1	2/28/2023 07:46
2,4,5-Trichlorophenol	U		0.69	4.1	µg/L	1	2/28/2023 07:46
2,4,6-Trichlorophenol	U		1.0	4.1	µg/L	1	2/28/2023 07:46
2,4-Dichlorophenol	U		1.4	4.1	µg/L	1	2/28/2023 07:46
2,4-Dimethylphenol	U		1.5	4.1	µg/L	1	2/28/2023 07:46
2,4-Dinitrophenol	U		11	20	µg/L	1	2/28/2023 07:46
2,4-Dinitrotoluene	U		1.7	4.1	µg/L	1	2/28/2023 07:46
2,6-Dinitrotoluene	U		1.3	4.1	µg/L	1	2/28/2023 07:46
2-Chloronaphthalene	U		0.30	0.41	µg/L	1	2/28/2023 07:46
2-Chlorophenol	U		0.93	4.1	µg/L	1	2/28/2023 07:46
2-Methylnaphthalene	U		0.26	0.41	µg/L	1	2/28/2023 07:46
2-Methylphenol	U		1.0	4.1	µg/L	1	2/28/2023 07:46
2-Nitroaniline	U		0.85	4.1	µg/L	1	2/28/2023 07:46
2-Nitrophenol	U		1.4	4.1	µg/L	1	2/28/2023 07:46
3&4-Methylphenol	U		0.85	4.1	µg/L	1	2/28/2023 07:46
3,3´-Dichlorobenzidine	U		1.9	20	µg/L	1	2/28/2023 07:46
3-Nitroaniline	U		2.6	4.1	µg/L	1	2/28/2023 07:46
4,6-Dinitro-2-methylphenol	U		1.1	4.1	µg/L	1	2/28/2023 07:46
4-Bromophenyl phenyl ether	U		1.3	4.1	µg/L	1	2/28/2023 07:46
4-Chloro-3-methylphenol	U		1.1	4.1	µg/L	1	2/28/2023 07:46
4-Chloroaniline	U		1.4	4.1	µg/L	1	2/28/2023 07:46
4-Chlorophenyl phenyl ether	U		1.3	4.1	µg/L	1	2/28/2023 07:46
4-Nitroaniline	U		2.3	4.1	µg/L	1	2/28/2023 07:46
4-Nitrophenol	U		0.97	20	µg/L	1	2/28/2023 07:46
Acenaphthene	U		0.33	0.41	µg/L	1	2/28/2023 07:46

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *02-Mar-23*

Client: Big Pine Consultants
Project: East Palestine Water
Sample ID: Big Pine 04
Collection Date: 2/17/2023 10:15 AM

Work Order: 23021418
Lab ID: 23021418-04
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Acenaphthylene	U		0.30	0.41	µg/L	1	2/28/2023 07:46
Acetophenone	U		1.5	4.1	µg/L	1	2/28/2023 07:46
Anthracene	**0.32**	J	**0.11**	**0.41**	**µg/L**	1	2/28/2023 07:46
Atrazine	U		1.4	4.1	µg/L	1	2/28/2023 07:46
Benzaldehyde	U		2.1	4.1	µg/L	1	2/28/2023 07:46
Benzo(a)anthracene	U		0.40	0.41	µg/L	1	2/28/2023 07:46
Benzo(a)pyrene	**0.41**	J	**0.18**	**0.41**	**µg/L**	1	2/28/2023 07:46
Benzo(b)fluoranthene	**0.49**		**0.21**	**0.41**	**µg/L**	1	2/28/2023 07:46
Benzo(g,h,i)perylene	**0.36**	J	**0.36**	**0.41**	**µg/L**	1	2/28/2023 07:46
Benzo(k)fluoranthene	**0.45**		**0.19**	**0.41**	**µg/L**	1	2/28/2023 07:46
Bis(2-chloroethoxy)methane	U		1.2	4.1	µg/L	1	2/28/2023 07:46
Bis(2-chloroethyl)ether	U		1.5	4.1	µg/L	1	2/28/2023 07:46
Bis(2-chloroisopropyl)ether	U		0.93	4.1	µg/L	1	2/28/2023 07:46
Bis(2-ethylhexyl)phthalate	U		1.6	4.1	µg/L	1	2/28/2023 07:46
Butyl benzyl phthalate	**1.4**	J	**1.2**	**4.1**	**µg/L**	1	2/28/2023 07:46
Caprolactam	U		3.9	20	µg/L	1	2/28/2023 07:46
Carbazole	U		0.97	4.1	µg/L	1	2/28/2023 07:46
Chrysene	**0.28**	J	**0.19**	**0.41**	**µg/L**	1	2/28/2023 07:46
Dibenzo(a,h)anthracene	**0.45**		**0.30**	**0.41**	**µg/L**	1	2/28/2023 07:46
Dibenzofuran	U		0.93	4.1	µg/L	1	2/28/2023 07:46
Diethyl phthalate	U		0.69	4.1	µg/L	1	2/28/2023 07:46
Dimethyl phthalate	U		0.73	4.1	µg/L	1	2/28/2023 07:46
Di-n-butyl phthalate	U		0.85	4.1	µg/L	1	2/28/2023 07:46
Di-n-octyl phthalate	U		2.1	4.1	µg/L	1	2/28/2023 07:46
Fluoranthene	**0.41**	J	**0.15**	**0.41**	**µg/L**	1	2/28/2023 07:46
Fluorene	U		0.21	0.41	µg/L	1	2/28/2023 07:46
Hexachlorobenzene	U		1.8	4.1	µg/L	1	2/28/2023 07:46
Hexachlorobutadiene	U		2.6	4.1	µg/L	1	2/28/2023 07:46
Hexachlorocyclopentadiene	U		4.4	20	µg/L	1	2/28/2023 07:46
Hexachloroethane	U		2.5	4.1	µg/L	1	2/28/2023 07:46
Indeno(1,2,3-cd)pyrene	**0.41**	J	**0.27**	**0.41**	**µg/L**	1	2/28/2023 07:46
Isophorone	U		1.4	20	µg/L	1	2/28/2023 07:46
Naphthalene	U		0.27	0.41	µg/L	1	2/28/2023 07:46
Nitrobenzene	U		1.1	4.1	µg/L	1	2/28/2023 07:46
N-Nitrosodi-n-propylamine	U		1.4	4.1	µg/L	1	2/28/2023 07:46
N-Nitrosodiphenylamine	U		2.0	4.1	µg/L	1	2/28/2023 07:46
Pentachlorophenol	U		3.9	20	µg/L	1	2/28/2023 07:46
Phenanthrene	U		0.33	0.41	µg/L	1	2/28/2023 07:46
Phenol	U		0.85	4.1	µg/L	1	2/28/2023 07:46
Pyrene	**0.41**	J	**0.15**	**0.41**	**µg/L**	1	2/28/2023 07:46

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Big Pine Consultants
Project: East Palestine Water
Sample ID: Big Pine 04
Collection Date: 2/17/2023 10:15 AM

Work Order: 23021418
Lab ID: 23021418-04
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Pyridine	U		2.3	41	µg/L	1	2/28/2023 07:46
Surr: 2,4,6-Tribromophenol	*85.3*			*38-103*	*%REC*	1	2/28/2023 07:46
Surr: 2-Fluorobiphenyl	*83.5*			*36-96*	*%REC*	1	2/28/2023 07:46
Surr: 2-Fluorophenol	*50.2*			*20-73*	*%REC*	1	2/28/2023 07:46
Surr: 4-Terphenyl-d14	*86.9*			*44-114*	*%REC*	1	2/28/2023 07:46
Surr: Nitrobenzene-d5	*74.0*			*33-100*	*%REC*	1	2/28/2023 07:46
Surr: Phenol-d6	*31.3*			*10-48*	*%REC*	1	2/28/2023 07:46
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260D**					Analyst: **HJ**
1,1,1-Trichloroethane	U		0.46	1.0	µg/L	1	2/21/2023 19:25
1,1,2,2-Tetrachloroethane	U		0.40	1.0	µg/L	1	2/21/2023 19:25
1,1,2-Trichloroethane	U		0.46	1.0	µg/L	1	2/21/2023 19:25
1,1,2-Trichlorotrifluoroethane	U		0.52	1.0	µg/L	1	2/21/2023 19:25
1,1-Dichloroethane	U		0.44	1.0	µg/L	1	2/21/2023 19:25
1,1-Dichloroethene	U		0.40	1.0	µg/L	1	2/21/2023 19:25
1,2,3-Trichlorobenzene	U		0.42	1.0	µg/L	1	2/21/2023 19:25
1,2,3-Trichloropropane	U		0.40	1.0	µg/L	1	2/21/2023 19:25
1,2,4-Trichlorobenzene	U		0.45	1.0	µg/L	1	2/21/2023 19:25
1,2,4-Trimethylbenzene	U		0.45	1.0	µg/L	1	2/21/2023 19:25
1,2-Dibromo-3-chloropropane	U		0.43	1.0	µg/L	1	2/21/2023 19:25
1,2-Dibromoethane	U		0.41	1.0	µg/L	1	2/21/2023 19:25
1,2-Dichlorobenzene	U		0.32	1.0	µg/L	1	2/21/2023 19:25
1,2-Dichloroethane	U		0.44	1.0	µg/L	1	2/21/2023 19:25
1,2-Dichloropropane	U		0.48	1.0	µg/L	1	2/21/2023 19:25
1,3,5-Trimethylbenzene	U		0.65	1.0	µg/L	1	2/21/2023 19:25
1,3-Dichlorobenzene	U		0.33	1.0	µg/L	1	2/21/2023 19:25
1,4-Dichlorobenzene	U		0.35	1.0	µg/L	1	2/21/2023 19:25
2-Butanone	U		0.52	5.0	µg/L	1	2/21/2023 19:25
2-Hexanone	U		0.59	5.0	µg/L	1	2/21/2023 19:25
4-Methyl-2-pentanone	U		0.52	1.0	µg/L	1	2/21/2023 19:25
Acetone	U		1.1	10	µg/L	1	2/21/2023 19:25
Benzene	U		0.46	1.0	µg/L	1	2/21/2023 19:25
Bromochloromethane	U		0.45	1.0	µg/L	1	2/21/2023 19:25
Bromodichloromethane	U		0.49	1.0	µg/L	1	2/21/2023 19:25
Bromoform	U		0.56	1.0	µg/L	1	2/21/2023 19:25
Bromomethane	U		0.90	1.0	µg/L	1	2/21/2023 19:25
Carbon disulfide	U		0.49	1.0	µg/L	1	2/21/2023 19:25
Carbon tetrachloride	U		0.40	1.0	µg/L	1	2/21/2023 19:25
Chlorobenzene	U		0.40	1.0	µg/L	1	2/21/2023 19:25
Chloroethane	U		0.68	1.0	µg/L	1	2/21/2023 19:25

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *02-Mar-23*

Client: Big Pine Consultants
Project: East Palestine Water
Sample ID: Big Pine 04
Collection Date: 2/17/2023 10:15 AM

Work Order: 23021418
Lab ID: 23021418-04
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Chloroform	U		0.46	1.0	µg/L	1	2/21/2023 19:25
Chloromethane	U		0.83	1.0	µg/L	1	2/21/2023 19:25
cis-1,2-Dichloroethene	U		0.42	1.0	µg/L	1	2/21/2023 19:25
cis-1,3-Dichloropropene	U		0.57	1.0	µg/L	1	2/21/2023 19:25
Cyclohexane	U		0.63	2.0	µg/L	1	2/21/2023 19:25
Dibromochloromethane	U		0.40	1.0	µg/L	1	2/21/2023 19:25
Dichlorodifluoromethane	U		0.68	1.0	µg/L	1	2/21/2023 19:25
Ethylbenzene	U		0.34	1.0	µg/L	1	2/21/2023 19:25
Isopropylbenzene	U		0.35	1.0	µg/L	1	2/21/2023 19:25
m,p-Xylene	U		0.81	2.0	µg/L	1	2/21/2023 19:25
Methyl acetate	U		0.59	2.0	µg/L	1	2/21/2023 19:25
Methyl tert-butyl ether	U		0.45	1.0	µg/L	1	2/21/2023 19:25
Methylcyclohexane	U		0.35	1.0	µg/L	1	2/21/2023 19:25
Methylene chloride	U		0.86	5.0	µg/L	1	2/21/2023 19:25
o-Xylene	U		0.31	1.0	µg/L	1	2/21/2023 19:25
Styrene	U		0.33	1.0	µg/L	1	2/21/2023 19:25
Tetrachloroethene	U		0.39	1.0	µg/L	1	2/21/2023 19:25
Toluene	U		0.45	1.0	µg/L	1	2/21/2023 19:25
trans-1,2-Dichloroethene	U		0.48	1.0	µg/L	1	2/21/2023 19:25
trans-1,3-Dichloropropene	U		0.38	1.0	µg/L	1	2/21/2023 19:25
Trichloroethene	U		0.43	1.0	µg/L	1	2/21/2023 19:25
Trichlorofluoromethane	U		0.52	1.0	µg/L	1	2/21/2023 19:25
Vinyl chloride	U		0.53	1.0	µg/L	1	2/21/2023 19:25
Xylenes, Total	U		0.81	2.0	µg/L	1	2/21/2023 19:25
Surr: 1,2-Dichloroethane-d4	*106*			*80-120*	*%REC*	1	2/21/2023 19:25
Surr: 4-Bromofluorobenzene	*99.1*			*80-120*	*%REC*	1	2/21/2023 19:25
Surr: Dibromofluoromethane	*100*			*80-120*	*%REC*	1	2/21/2023 19:25
Surr: Toluene-d8	*95.4*			*80-120*	*%REC*	1	2/21/2023 19:25

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *02-Mar-23*

Client: Big Pine Consultants
Project: East Palestine Water
Sample ID: Big Pine 05
Collection Date: 2/17/2023 10:50 AM

Work Order: 23021418
Lab ID: 23021418-05
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID		Method: **SW8015D**			Prep: SW3511 / 2/22/23		Analyst: **SJB**
DRO (C10-C28)	U		0.082	0.10	mg/L	1	2/25/2023 01:54
ORO (C28-C40)	**0.39**		**0.052**	**0.10**	**mg/L**	1	2/25/2023 01:54
Surr: 4-Terphenyl-d14	*48.4*			*30-121*	*%REC*	1	2/25/2023 01:54
GASOLINE RANGE ORGANICS BY GC-FID		Method: **SW8015D**					Analyst: **RM**
GRO (C6-C10)	U		76	200	µg/L	1	2/20/2023 22:31
Surr: Toluene-d8	*90.9*			*73-116*	*%REC*	1	2/20/2023 22:31
SEMI-VOLATILE ORGANIC COMPOUNDS		Method: **SW8270E**					Analyst: **EEW**
1,1`-Biphenyl	U		1.7	4.0	µg/L	1	2/28/2023 08:14
1,2,4,5-Tetrachlorobenzene	U		1.4	20	µg/L	1	2/28/2023 08:14
1,4-Dioxane	U		2.9	20	µg/L	1	2/28/2023 08:14
1-Methylnaphthalene	U		0.34	0.40	µg/L	1	2/28/2023 08:14
2,2`-Oxybis(1-chloropropane)	U		0.93	4.0	µg/L	1	2/28/2023 08:14
2,3,4,6-Tetrachlorophenol	U		1.8	4.0	µg/L	1	2/28/2023 08:14
2,4,5-Trichlorophenol	U		0.69	4.0	µg/L	1	2/28/2023 08:14
2,4,6-Trichlorophenol	U		1.0	4.0	µg/L	1	2/28/2023 08:14
2,4-Dichlorophenol	U		1.4	4.0	µg/L	1	2/28/2023 08:14
2,4-Dimethylphenol	U		1.5	4.0	µg/L	1	2/28/2023 08:14
2,4-Dinitrophenol	U		11	20	µg/L	1	2/28/2023 08:14
2,4-Dinitrotoluene	U		1.7	4.0	µg/L	1	2/28/2023 08:14
2,6-Dinitrotoluene	U		1.3	4.0	µg/L	1	2/28/2023 08:14
2-Chloronaphthalene	U		0.30	0.40	µg/L	1	2/28/2023 08:14
2-Chlorophenol	U		0.93	4.0	µg/L	1	2/28/2023 08:14
2-Methylnaphthalene	U		0.26	0.40	µg/L	1	2/28/2023 08:14
2-Methylphenol	U		1.0	4.0	µg/L	1	2/28/2023 08:14
2-Nitroaniline	U		0.85	4.0	µg/L	1	2/28/2023 08:14
2-Nitrophenol	U		1.4	4.0	µg/L	1	2/28/2023 08:14
3&4-Methylphenol	U		0.85	4.0	µg/L	1	2/28/2023 08:14
3,3´-Dichlorobenzidine	U		1.9	20	µg/L	1	2/28/2023 08:14
3-Nitroaniline	U		2.6	4.0	µg/L	1	2/28/2023 08:14
4,6-Dinitro-2-methylphenol	U		1.1	4.0	µg/L	1	2/28/2023 08:14
4-Bromophenyl phenyl ether	U		1.3	4.0	µg/L	1	2/28/2023 08:14
4-Chloro-3-methylphenol	U		1.1	4.0	µg/L	1	2/28/2023 08:14
4-Chloroaniline	U		1.4	4.0	µg/L	1	2/28/2023 08:14
4-Chlorophenyl phenyl ether	U		1.3	4.0	µg/L	1	2/28/2023 08:14
4-Nitroaniline	U		2.3	4.0	µg/L	1	2/28/2023 08:14
4-Nitrophenol	U		0.97	20	µg/L	1	2/28/2023 08:14
Acenaphthene	U		0.33	0.40	µg/L	1	2/28/2023 08:14

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Big Pine Consultants
Project: East Palestine Water
Sample ID: Big Pine 05
Collection Date: 2/17/2023 10:50 AM

Work Order: 23021418
Lab ID: 23021418-05
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Acenaphthylene	U		0.30	0.40	µg/L	1	2/28/2023 08:14
Acetophenone	U		1.5	4.0	µg/L	1	2/28/2023 08:14
Anthracene	U		0.11	0.40	µg/L	1	2/28/2023 08:14
Atrazine	U		1.4	4.0	µg/L	1	2/28/2023 08:14
Benzaldehyde	U		2.1	4.0	µg/L	1	2/28/2023 08:14
Benzo(a)anthracene	U		0.40	0.40	µg/L	1	2/28/2023 08:14
Benzo(a)pyrene	U		0.18	0.40	µg/L	1	2/28/2023 08:14
Benzo(b)fluoranthene	U		0.21	0.40	µg/L	1	2/28/2023 08:14
Benzo(g,h,i)perylene	U		0.36	0.40	µg/L	1	2/28/2023 08:14
Benzo(k)fluoranthene	U		0.19	0.40	µg/L	1	2/28/2023 08:14
Bis(2-chloroethoxy)methane	U		1.2	4.0	µg/L	1	2/28/2023 08:14
Bis(2-chloroethyl)ether	U		1.5	4.0	µg/L	1	2/28/2023 08:14
Bis(2-chloroisopropyl)ether	U		0.93	4.0	µg/L	1	2/28/2023 08:14
Bis(2-ethylhexyl)phthalate	U		1.6	4.0	µg/L	1	2/28/2023 08:14
Butyl benzyl phthalate	U		1.2	4.0	µg/L	1	2/28/2023 08:14
Caprolactam	U		3.9	20	µg/L	1	2/28/2023 08:14
Carbazole	U		0.97	4.0	µg/L	1	2/28/2023 08:14
Chrysene	U		0.19	0.40	µg/L	1	2/28/2023 08:14
Dibenzo(a,h)anthracene	U		0.30	0.40	µg/L	1	2/28/2023 08:14
Dibenzofuran	U		0.93	4.0	µg/L	1	2/28/2023 08:14
Diethyl phthalate	U		0.69	4.0	µg/L	1	2/28/2023 08:14
Dimethyl phthalate	U		0.73	4.0	µg/L	1	2/28/2023 08:14
Di-n-butyl phthalate	U		0.85	4.0	µg/L	1	2/28/2023 08:14
Di-n-octyl phthalate	U		2.1	4.0	µg/L	1	2/28/2023 08:14
Fluoranthene	U		0.15	0.40	µg/L	1	2/28/2023 08:14
Fluorene	U		0.21	0.40	µg/L	1	2/28/2023 08:14
Hexachlorobenzene	U		1.8	4.0	µg/L	1	2/28/2023 08:14
Hexachlorobutadiene	U		2.6	4.0	µg/L	1	2/28/2023 08:14
Hexachlorocyclopentadiene	U		4.4	20	µg/L	1	2/28/2023 08:14
Hexachloroethane	U		2.5	4.0	µg/L	1	2/28/2023 08:14
Indeno(1,2,3-cd)pyrene	U		0.27	0.40	µg/L	1	2/28/2023 08:14
Isophorone	**2.1**	J	**1.4**	**20**	**µg/L**	1	2/28/2023 08:14
Naphthalene	U		0.27	0.40	µg/L	1	2/28/2023 08:14
Nitrobenzene	U		1.1	4.0	µg/L	1	2/28/2023 08:14
N-Nitrosodi-n-propylamine	U		1.4	4.0	µg/L	1	2/28/2023 08:14
N-Nitrosodiphenylamine	U		2.0	4.0	µg/L	1	2/28/2023 08:14
Pentachlorophenol	U		3.9	20	µg/L	1	2/28/2023 08:14
Phenanthrene	U		0.33	0.40	µg/L	1	2/28/2023 08:14
Phenol	U		0.85	4.0	µg/L	1	2/28/2023 08:14
Pyrene	U		0.15	0.40	µg/L	1	2/28/2023 08:14

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Big Pine Consultants
Project: East Palestine Water
Sample ID: Big Pine 05
Collection Date: 2/17/2023 10:50 AM

Work Order: 23021418
Lab ID: 23021418-05
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Pyridine	U		2.3	40	µg/L	1	2/28/2023 08:14
Surr: 2,4,6-Tribromophenol	*75.0*			*38-103*	*%REC*	1	2/28/2023 08:14
Surr: 2-Fluorobiphenyl	*76.6*			*36-96*	*%REC*	1	2/28/2023 08:14
Surr: 2-Fluorophenol	*48.8*			*20-73*	*%REC*	1	2/28/2023 08:14
Surr: 4-Terphenyl-d14	*86.0*			*44-114*	*%REC*	1	2/28/2023 08:14
Surr: Nitrobenzene-d5	*73.5*			*33-100*	*%REC*	1	2/28/2023 08:14
Surr: Phenol-d6	*31.8*			*10-48*	*%REC*	1	2/28/2023 08:14
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260D**					Analyst: **HJ**
1,1,1-Trichloroethane	U		0.46	1.0	µg/L	1	2/21/2023 19:49
1,1,2,2-Tetrachloroethane	U		0.40	1.0	µg/L	1	2/21/2023 19:49
1,1,2-Trichloroethane	U		0.46	1.0	µg/L	1	2/21/2023 19:49
1,1,2-Trichlorotrifluoroethane	U		0.52	1.0	µg/L	1	2/21/2023 19:49
1,1-Dichloroethane	U		0.44	1.0	µg/L	1	2/21/2023 19:49
1,1-Dichloroethene	U		0.40	1.0	µg/L	1	2/21/2023 19:49
1,2,3-Trichlorobenzene	U		0.42	1.0	µg/L	1	2/21/2023 19:49
1,2,3-Trichloropropane	U		0.40	1.0	µg/L	1	2/21/2023 19:49
1,2,4-Trichlorobenzene	U		0.45	1.0	µg/L	1	2/21/2023 19:49
1,2,4-Trimethylbenzene	U		0.45	1.0	µg/L	1	2/21/2023 19:49
1,2-Dibromo-3-chloropropane	U		0.43	1.0	µg/L	1	2/21/2023 19:49
1,2-Dibromoethane	U		0.41	1.0	µg/L	1	2/21/2023 19:49
1,2-Dichlorobenzene	U		0.32	1.0	µg/L	1	2/21/2023 19:49
1,2-Dichloroethane	U		0.44	1.0	µg/L	1	2/21/2023 19:49
1,2-Dichloropropane	U		0.48	1.0	µg/L	1	2/21/2023 19:49
1,3,5-Trimethylbenzene	U		0.65	1.0	µg/L	1	2/21/2023 19:49
1,3-Dichlorobenzene	U		0.33	1.0	µg/L	1	2/21/2023 19:49
1,4-Dichlorobenzene	U		0.35	1.0	µg/L	1	2/21/2023 19:49
2-Butanone	U		0.52	5.0	µg/L	1	2/21/2023 19:49
2-Hexanone	U		0.59	5.0	µg/L	1	2/21/2023 19:49
4-Methyl-2-pentanone	U		0.52	1.0	µg/L	1	2/21/2023 19:49
Acetone	**1.7**	J	**1.1**	**10**	**µg/L**	1	2/21/2023 19:49
Benzene	U		0.46	1.0	µg/L	1	2/21/2023 19:49
Bromochloromethane	U		0.45	1.0	µg/L	1	2/21/2023 19:49
Bromodichloromethane	U		0.49	1.0	µg/L	1	2/21/2023 19:49
Bromoform	U		0.56	1.0	µg/L	1	2/21/2023 19:49
Bromomethane	U		0.90	1.0	µg/L	1	2/21/2023 19:49
Carbon disulfide	U		0.49	1.0	µg/L	1	2/21/2023 19:49
Carbon tetrachloride	U		0.40	1.0	µg/L	1	2/21/2023 19:49
Chlorobenzene	U		0.40	1.0	µg/L	1	2/21/2023 19:49
Chloroethane	U		0.68	1.0	µg/L	1	2/21/2023 19:49

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Big Pine Consultants
Project: East Palestine Water
Sample ID: Big Pine 05
Collection Date: 2/17/2023 10:50 AM

Work Order: 23021418
Lab ID: 23021418-05
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Chloroform	U		0.46	1.0	µg/L	1	2/21/2023 19:49
Chloromethane	U		0.83	1.0	µg/L	1	2/21/2023 19:49
cis-1,2-Dichloroethene	U		0.42	1.0	µg/L	1	2/21/2023 19:49
cis-1,3-Dichloropropene	U		0.57	1.0	µg/L	1	2/21/2023 19:49
Cyclohexane	U		0.63	2.0	µg/L	1	2/21/2023 19:49
Dibromochloromethane	U		0.40	1.0	µg/L	1	2/21/2023 19:49
Dichlorodifluoromethane	U		0.68	1.0	µg/L	1	2/21/2023 19:49
Ethylbenzene	U		0.34	1.0	µg/L	1	2/21/2023 19:49
Isopropylbenzene	U		0.35	1.0	µg/L	1	2/21/2023 19:49
m,p-Xylene	U		0.81	2.0	µg/L	1	2/21/2023 19:49
Methyl acetate	U		0.59	2.0	µg/L	1	2/21/2023 19:49
Methyl tert-butyl ether	U		0.45	1.0	µg/L	1	2/21/2023 19:49
Methylcyclohexane	U		0.35	1.0	µg/L	1	2/21/2023 19:49
Methylene chloride	U		0.86	5.0	µg/L	1	2/21/2023 19:49
o-Xylene	U		0.31	1.0	µg/L	1	2/21/2023 19:49
Styrene	U		0.33	1.0	µg/L	1	2/21/2023 19:49
Tetrachloroethene	U		0.39	1.0	µg/L	1	2/21/2023 19:49
Toluene	U		0.45	1.0	µg/L	1	2/21/2023 19:49
trans-1,2-Dichloroethene	U		0.48	1.0	µg/L	1	2/21/2023 19:49
trans-1,3-Dichloropropene	U		0.38	1.0	µg/L	1	2/21/2023 19:49
Trichloroethene	U		0.43	1.0	µg/L	1	2/21/2023 19:49
Trichlorofluoromethane	U		0.52	1.0	µg/L	1	2/21/2023 19:49
Vinyl chloride	U		0.53	1.0	µg/L	1	2/21/2023 19:49
Xylenes, Total	U		0.81	2.0	µg/L	1	2/21/2023 19:49
Surr: 1,2-Dichloroethane-d4	*109*			*80-120*	*%REC*	1	2/21/2023 19:49
Surr: 4-Bromofluorobenzene	*98.4*			*80-120*	*%REC*	1	2/21/2023 19:49
Surr: Dibromofluoromethane	*100*			*80-120*	*%REC*	1	2/21/2023 19:49
Surr: Toluene-d8	*95.2*			*80-120*	*%REC*	1	2/21/2023 19:49

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *02-Mar-23*

Client: Big Pine Consultants
Project: East Palestine Water
Sample ID: Big Pine 06
Collection Date: 2/17/2023 11:20 AM

Work Order: 23021418
Lab ID: 23021418-06
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID		Method: **SW8015D**			Prep: SW3511 / 2/28/23		Analyst: **SJB**
DRO (C10-C28)	U	H	0.081	0.10	mg/L	1	3/1/2023 21:07
ORO (C28-C40)	**0.074**	JH	**0.051**	**0.10**	**mg/L**	1	3/1/2023 21:07
Surr: 4-Terphenyl-d14	*60.8*			*30-121*	*%REC*	1	3/1/2023 21:07
GASOLINE RANGE ORGANICS BY GC-FID		Method: **SW8015D**					Analyst: **RM**
GRO (C6-C10)	U		76	200	µg/L	1	2/20/2023 22:53
Surr: Toluene-d8	*88.0*			*73-116*	*%REC*	1	2/20/2023 22:53
SEMI-VOLATILE ORGANIC COMPOUNDS		Method: **SW8270E**					Analyst: **EEW**
1,1`-Biphenyl	U		1.7	4.0	µg/L	1	2/28/2023 08:41
1,2,4,5-Tetrachlorobenzene	U		1.4	20	µg/L	1	2/28/2023 08:41
1,4-Dioxane	U		2.9	20	µg/L	1	2/28/2023 08:41
1-Methylnaphthalene	U		0.34	0.40	µg/L	1	2/28/2023 08:41
2,2`-Oxybis(1-chloropropane)	U		0.93	4.0	µg/L	1	2/28/2023 08:41
2,3,4,6-Tetrachlorophenol	U		1.8	4.0	µg/L	1	2/28/2023 08:41
2,4,5-Trichlorophenol	U		0.69	4.0	µg/L	1	2/28/2023 08:41
2,4,6-Trichlorophenol	U		1.0	4.0	µg/L	1	2/28/2023 08:41
2,4-Dichlorophenol	U		1.4	4.0	µg/L	1	2/28/2023 08:41
2,4-Dimethylphenol	U		1.5	4.0	µg/L	1	2/28/2023 08:41
2,4-Dinitrophenol	U		11	20	µg/L	1	2/28/2023 08:41
2,4-Dinitrotoluene	U		1.7	4.0	µg/L	1	2/28/2023 08:41
2,6-Dinitrotoluene	U		1.3	4.0	µg/L	1	2/28/2023 08:41
2-Chloronaphthalene	U		0.30	0.40	µg/L	1	2/28/2023 08:41
2-Chlorophenol	U		0.93	4.0	µg/L	1	2/28/2023 08:41
2-Methylnaphthalene	U		0.26	0.40	µg/L	1	2/28/2023 08:41
2-Methylphenol	U		1.0	4.0	µg/L	1	2/28/2023 08:41
2-Nitroaniline	U		0.85	4.0	µg/L	1	2/28/2023 08:41
2-Nitrophenol	U		1.4	4.0	µg/L	1	2/28/2023 08:41
3&4-Methylphenol	U		0.85	4.0	µg/L	1	2/28/2023 08:41
3,3´-Dichlorobenzidine	U		1.9	20	µg/L	1	2/28/2023 08:41
3-Nitroaniline	U		2.6	4.0	µg/L	1	2/28/2023 08:41
4,6-Dinitro-2-methylphenol	U		1.1	4.0	µg/L	1	2/28/2023 08:41
4-Bromophenyl phenyl ether	U		1.3	4.0	µg/L	1	2/28/2023 08:41
4-Chloro-3-methylphenol	U		1.1	4.0	µg/L	1	2/28/2023 08:41
4-Chloroaniline	U		1.4	4.0	µg/L	1	2/28/2023 08:41
4-Chlorophenyl phenyl ether	U		1.3	4.0	µg/L	1	2/28/2023 08:41
4-Nitroaniline	U		2.3	4.0	µg/L	1	2/28/2023 08:41
4-Nitrophenol	U		0.97	20	µg/L	1	2/28/2023 08:41
Acenaphthene	U		0.33	0.40	µg/L	1	2/28/2023 08:41

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *02-Mar-23*

Client: Big Pine Consultants
Project: East Palestine Water
Sample ID: Big Pine 06
Collection Date: 2/17/2023 11:20 AM

Work Order: 23021418
Lab ID: 23021418-06
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Acenaphthylene	U		0.30	0.40	µg/L	1	2/28/2023 08:41
Acetophenone	U		1.5	4.0	µg/L	1	2/28/2023 08:41
Anthracene	U		0.11	0.40	µg/L	1	2/28/2023 08:41
Atrazine	U		1.4	4.0	µg/L	1	2/28/2023 08:41
Benzaldehyde	U		2.1	4.0	µg/L	1	2/28/2023 08:41
Benzo(a)anthracene	U		0.40	0.40	µg/L	1	2/28/2023 08:41
Benzo(a)pyrene	U		0.18	0.40	µg/L	1	2/28/2023 08:41
Benzo(b)fluoranthene	U		0.21	0.40	µg/L	1	2/28/2023 08:41
Benzo(g,h,i)perylene	U		0.36	0.40	µg/L	1	2/28/2023 08:41
Benzo(k)fluoranthene	U		0.19	0.40	µg/L	1	2/28/2023 08:41
Bis(2-chloroethoxy)methane	U		1.2	4.0	µg/L	1	2/28/2023 08:41
Bis(2-chloroethyl)ether	U		1.5	4.0	µg/L	1	2/28/2023 08:41
Bis(2-chloroisopropyl)ether	U		0.93	4.0	µg/L	1	2/28/2023 08:41
Bis(2-ethylhexyl)phthalate	U		1.6	4.0	µg/L	1	2/28/2023 08:41
Butyl benzyl phthalate	U		1.2	4.0	µg/L	1	2/28/2023 08:41
Caprolactam	U		3.9	20	µg/L	1	2/28/2023 08:41
Carbazole	U		0.97	4.0	µg/L	1	2/28/2023 08:41
Chrysene	U		0.19	0.40	µg/L	1	2/28/2023 08:41
Dibenzo(a,h)anthracene	U		0.29	0.40	µg/L	1	2/28/2023 08:41
Dibenzofuran	U		0.93	4.0	µg/L	1	2/28/2023 08:41
Diethyl phthalate	U		0.69	4.0	µg/L	1	2/28/2023 08:41
Dimethyl phthalate	U		0.73	4.0	µg/L	1	2/28/2023 08:41
Di-n-butyl phthalate	U		0.85	4.0	µg/L	1	2/28/2023 08:41
Di-n-octyl phthalate	U		2.1	4.0	µg/L	1	2/28/2023 08:41
Fluoranthene	U		0.15	0.40	µg/L	1	2/28/2023 08:41
Fluorene	U		0.21	0.40	µg/L	1	2/28/2023 08:41
Hexachlorobenzene	U		1.8	4.0	µg/L	1	2/28/2023 08:41
Hexachlorobutadiene	U		2.5	4.0	µg/L	1	2/28/2023 08:41
Hexachlorocyclopentadiene	U		4.4	20	µg/L	1	2/28/2023 08:41
Hexachloroethane	U		2.5	4.0	µg/L	1	2/28/2023 08:41
Indeno(1,2,3-cd)pyrene	U		0.27	0.40	µg/L	1	2/28/2023 08:41
Isophorone	U		1.4	20	µg/L	1	2/28/2023 08:41
Naphthalene	U		0.27	0.40	µg/L	1	2/28/2023 08:41
Nitrobenzene	U		1.1	4.0	µg/L	1	2/28/2023 08:41
N-Nitrosodi-n-propylamine	U		1.4	4.0	µg/L	1	2/28/2023 08:41
N-Nitrosodiphenylamine	U		2.0	4.0	µg/L	1	2/28/2023 08:41
Pentachlorophenol	U		3.9	20	µg/L	1	2/28/2023 08:41
Phenanthrene	U		0.33	0.40	µg/L	1	2/28/2023 08:41
Phenol	U		0.85	4.0	µg/L	1	2/28/2023 08:41
Pyrene	U		0.15	0.40	µg/L	1	2/28/2023 08:41

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Big Pine Consultants
Project: East Palestine Water
Sample ID: Big Pine 06
Collection Date: 2/17/2023 11:20 AM

Work Order: 23021418
Lab ID: 23021418-06
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Pyridine	U		2.3	40	µg/L	1	2/28/2023 08:41
Surr: 2,4,6-Tribromophenol	*75.0*			*38-103*	*%REC*	1	2/28/2023 08:41
Surr: 2-Fluorobiphenyl	*73.1*			*36-96*	*%REC*	1	2/28/2023 08:41
Surr: 2-Fluorophenol	*45.5*			*20-73*	*%REC*	1	2/28/2023 08:41
Surr: 4-Terphenyl-d14	*83.4*			*44-114*	*%REC*	1	2/28/2023 08:41
Surr: Nitrobenzene-d5	*67.3*			*33-100*	*%REC*	1	2/28/2023 08:41
Surr: Phenol-d6	*29.5*			*10-48*	*%REC*	1	2/28/2023 08:41
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260D**					Analyst: **HJ**
1,1,1-Trichloroethane	U		0.46	1.0	µg/L	1	2/21/2023 20:13
1,1,2,2-Tetrachloroethane	U		0.40	1.0	µg/L	1	2/21/2023 20:13
1,1,2-Trichloroethane	U		0.46	1.0	µg/L	1	2/21/2023 20:13
1,1,2-Trichlorotrifluoroethane	U		0.52	1.0	µg/L	1	2/21/2023 20:13
1,1-Dichloroethane	U		0.44	1.0	µg/L	1	2/21/2023 20:13
1,1-Dichloroethene	U		0.40	1.0	µg/L	1	2/21/2023 20:13
1,2,3-Trichlorobenzene	U		0.42	1.0	µg/L	1	2/21/2023 20:13
1,2,3-Trichloropropane	U		0.40	1.0	µg/L	1	2/21/2023 20:13
1,2,4-Trichlorobenzene	U		0.45	1.0	µg/L	1	2/21/2023 20:13
1,2,4-Trimethylbenzene	U		0.45	1.0	µg/L	1	2/21/2023 20:13
1,2-Dibromo-3-chloropropane	U		0.43	1.0	µg/L	1	2/21/2023 20:13
1,2-Dibromoethane	U		0.41	1.0	µg/L	1	2/21/2023 20:13
1,2-Dichlorobenzene	U		0.32	1.0	µg/L	1	2/21/2023 20:13
1,2-Dichloroethane	U		0.44	1.0	µg/L	1	2/21/2023 20:13
1,2-Dichloropropane	U		0.48	1.0	µg/L	1	2/21/2023 20:13
1,3,5-Trimethylbenzene	U		0.65	1.0	µg/L	1	2/21/2023 20:13
1,3-Dichlorobenzene	U		0.33	1.0	µg/L	1	2/21/2023 20:13
1,4-Dichlorobenzene	U		0.35	1.0	µg/L	1	2/21/2023 20:13
2-Butanone	U		0.52	5.0	µg/L	1	2/21/2023 20:13
2-Hexanone	U		0.59	5.0	µg/L	1	2/21/2023 20:13
4-Methyl-2-pentanone	U		0.52	1.0	µg/L	1	2/21/2023 20:13
Acetone	**1.5**	J	**1.1**	**10**	**µg/L**	1	2/21/2023 20:13
Benzene	U		0.46	1.0	µg/L	1	2/21/2023 20:13
Bromochloromethane	U		0.45	1.0	µg/L	1	2/21/2023 20:13
Bromodichloromethane	U		0.49	1.0	µg/L	1	2/21/2023 20:13
Bromoform	U		0.56	1.0	µg/L	1	2/21/2023 20:13
Bromomethane	U		0.90	1.0	µg/L	1	2/21/2023 20:13
Carbon disulfide	U		0.49	1.0	µg/L	1	2/21/2023 20:13
Carbon tetrachloride	U		0.40	1.0	µg/L	1	2/21/2023 20:13
Chlorobenzene	U		0.40	1.0	µg/L	1	2/21/2023 20:13
Chloroethane	U		0.68	1.0	µg/L	1	2/21/2023 20:13

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Big Pine Consultants
Project: East Palestine Water
Sample ID: Big Pine 06
Collection Date: 2/17/2023 11:20 AM

Work Order: 23021418
Lab ID: 23021418-06
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Chloroform	U		0.46	1.0	µg/L	1	2/21/2023 20:13
Chloromethane	U		0.83	1.0	µg/L	1	2/21/2023 20:13
cis-1,2-Dichloroethene	U		0.42	1.0	µg/L	1	2/21/2023 20:13
cis-1,3-Dichloropropene	U		0.57	1.0	µg/L	1	2/21/2023 20:13
Cyclohexane	U		0.63	2.0	µg/L	1	2/21/2023 20:13
Dibromochloromethane	U		0.40	1.0	µg/L	1	2/21/2023 20:13
Dichlorodifluoromethane	U		0.68	1.0	µg/L	1	2/21/2023 20:13
Ethylbenzene	U		0.34	1.0	µg/L	1	2/21/2023 20:13
Isopropylbenzene	U		0.35	1.0	µg/L	1	2/21/2023 20:13
m,p-Xylene	U		0.81	2.0	µg/L	1	2/21/2023 20:13
Methyl acetate	U		0.59	2.0	µg/L	1	2/21/2023 20:13
Methyl tert-butyl ether	U		0.45	1.0	µg/L	1	2/21/2023 20:13
Methylcyclohexane	U		0.35	1.0	µg/L	1	2/21/2023 20:13
Methylene chloride	U		0.86	5.0	µg/L	1	2/21/2023 20:13
o-Xylene	U		0.31	1.0	µg/L	1	2/21/2023 20:13
Styrene	U		0.33	1.0	µg/L	1	2/21/2023 20:13
Tetrachloroethene	U		0.39	1.0	µg/L	1	2/21/2023 20:13
Toluene	U		0.45	1.0	µg/L	1	2/21/2023 20:13
trans-1,2-Dichloroethene	U		0.48	1.0	µg/L	1	2/21/2023 20:13
trans-1,3-Dichloropropene	U		0.38	1.0	µg/L	1	2/21/2023 20:13
Trichloroethene	U		0.43	1.0	µg/L	1	2/21/2023 20:13
Trichlorofluoromethane	U		0.52	1.0	µg/L	1	2/21/2023 20:13
Vinyl chloride	U		0.53	1.0	µg/L	1	2/21/2023 20:13
Xylenes, Total	U		0.81	2.0	µg/L	1	2/21/2023 20:13
Surr: 1,2-Dichloroethane-d4	*105*			*80-120*	*%REC*	1	2/21/2023 20:13
Surr: 4-Bromofluorobenzene	*101*			*80-120*	*%REC*	1	2/21/2023 20:13
Surr: Dibromofluoromethane	*99.4*			*80-120*	*%REC*	1	2/21/2023 20:13
Surr: Toluene-d8	*97.2*			*80-120*	*%REC*	1	2/21/2023 20:13

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *02-Mar-23*

Client: Big Pine Consultants
Project: East Palestine Water
Sample ID: Big Pine 07
Collection Date: 2/17/2023 12:00 PM

Work Order: 23021418
Lab ID: 23021418-07
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID		Method: **SW8015D**			Prep: SW3511 / 2/22/23		Analyst: **SJB**
DRO (C10-C28)	U		0.082	0.10	mg/L	1	2/25/2023 04:21
ORO (C28-C40)	U		0.051	0.10	mg/L	1	2/25/2023 04:21
Surr: 4-Terphenyl-d14	*35.2*			*30-121*	*%REC*	1	2/25/2023 04:21
GASOLINE RANGE ORGANICS BY GC-FID		Method: **SW8015D**					Analyst: **RM**
GRO (C6-C10)	U		76	200	µg/L	1	2/20/2023 23:15
Surr: Toluene-d8	*89.2*			*73-116*	*%REC*	1	2/20/2023 23:15
SEMI-VOLATILE ORGANIC COMPOUNDS		Method: **SW8270E**					Analyst: **EEW**
1,1`-Biphenyl	U		1.7	4.1	µg/L	1	2/28/2023 09:08
1,2,4,5-Tetrachlorobenzene	U		1.4	20	µg/L	1	2/28/2023 09:08
1,4-Dioxane	U		2.9	20	µg/L	1	2/28/2023 09:08
1-Methylnaphthalene	U		0.34	0.41	µg/L	1	2/28/2023 09:08
2,2`-Oxybis(1-chloropropane)	U		0.93	4.1	µg/L	1	2/28/2023 09:08
2,3,4,6-Tetrachlorophenol	U		1.8	4.1	µg/L	1	2/28/2023 09:08
2,4,5-Trichlorophenol	U		0.69	4.1	µg/L	1	2/28/2023 09:08
2,4,6-Trichlorophenol	U		1.0	4.1	µg/L	1	2/28/2023 09:08
2,4-Dichlorophenol	U		1.4	4.1	µg/L	1	2/28/2023 09:08
2,4-Dimethylphenol	U		1.5	4.1	µg/L	1	2/28/2023 09:08
2,4-Dinitrophenol	U		11	20	µg/L	1	2/28/2023 09:08
2,4-Dinitrotoluene	U		1.7	4.1	µg/L	1	2/28/2023 09:08
2,6-Dinitrotoluene	U		1.3	4.1	µg/L	1	2/28/2023 09:08
2-Chloronaphthalene	U		0.30	0.41	µg/L	1	2/28/2023 09:08
2-Chlorophenol	U		0.93	4.1	µg/L	1	2/28/2023 09:08
2-Methylnaphthalene	U		0.26	0.41	µg/L	1	2/28/2023 09:08
2-Methylphenol	U		1.0	4.1	µg/L	1	2/28/2023 09:08
2-Nitroaniline	U		0.85	4.1	µg/L	1	2/28/2023 09:08
2-Nitrophenol	U		1.4	4.1	µg/L	1	2/28/2023 09:08
3&4-Methylphenol	U		0.85	4.1	µg/L	1	2/28/2023 09:08
3,3´-Dichlorobenzidine	U		1.9	20	µg/L	1	2/28/2023 09:08
3-Nitroaniline	U		2.6	4.1	µg/L	1	2/28/2023 09:08
4,6-Dinitro-2-methylphenol	U		1.1	4.1	µg/L	1	2/28/2023 09:08
4-Bromophenyl phenyl ether	U		1.3	4.1	µg/L	1	2/28/2023 09:08
4-Chloro-3-methylphenol	U		1.1	4.1	µg/L	1	2/28/2023 09:08
4-Chloroaniline	U		1.4	4.1	µg/L	1	2/28/2023 09:08
4-Chlorophenyl phenyl ether	U		1.3	4.1	µg/L	1	2/28/2023 09:08
4-Nitroaniline	U		2.3	4.1	µg/L	1	2/28/2023 09:08
4-Nitrophenol	U		0.97	20	µg/L	1	2/28/2023 09:08
Acenaphthene	U		0.33	0.41	µg/L	1	2/28/2023 09:08

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Big Pine Consultants
Project: East Palestine Water
Sample ID: Big Pine 07
Collection Date: 2/17/2023 12:00 PM

Work Order: 23021418
Lab ID: 23021418-07
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Acenaphthylene	U		0.30	0.41	µg/L	1	2/28/2023 09:08
Acetophenone	U		1.5	4.1	µg/L	1	2/28/2023 09:08
Anthracene	**0.28**	J	**0.11**	**0.41**	**µg/L**	1	2/28/2023 09:08
Atrazine	U		1.4	4.1	µg/L	1	2/28/2023 09:08
Benzaldehyde	U		2.1	4.1	µg/L	1	2/28/2023 09:08
Benzo(a)anthracene	U		0.40	0.41	µg/L	1	2/28/2023 09:08
Benzo(a)pyrene	**0.37**	J	**0.18**	**0.41**	**µg/L**	1	2/28/2023 09:08
Benzo(b)fluoranthene	**0.45**		**0.21**	**0.41**	**µg/L**	1	2/28/2023 09:08
Benzo(g,h,i)perylene	U		0.36	0.41	µg/L	1	2/28/2023 09:08
Benzo(k)fluoranthene	**0.41**	J	**0.19**	**0.41**	**µg/L**	1	2/28/2023 09:08
Bis(2-chloroethoxy)methane	U		1.2	4.1	µg/L	1	2/28/2023 09:08
Bis(2-chloroethyl)ether	U		1.5	4.1	µg/L	1	2/28/2023 09:08
Bis(2-chloroisopropyl)ether	U		0.93	4.1	µg/L	1	2/28/2023 09:08
Bis(2-ethylhexyl)phthalate	U		1.6	4.1	µg/L	1	2/28/2023 09:08
Butyl benzyl phthalate	U		1.2	4.1	µg/L	1	2/28/2023 09:08
Caprolactam	U		3.9	20	µg/L	1	2/28/2023 09:08
Carbazole	U		0.97	4.1	µg/L	1	2/28/2023 09:08
Chrysene	**0.24**	J	**0.19**	**0.41**	**µg/L**	1	2/28/2023 09:08
Dibenzo(a,h)anthracene	**0.37**	J	**0.30**	**0.41**	**µg/L**	1	2/28/2023 09:08
Dibenzofuran	U		0.93	4.1	µg/L	1	2/28/2023 09:08
Diethyl phthalate	U		0.69	4.1	µg/L	1	2/28/2023 09:08
Dimethyl phthalate	U		0.73	4.1	µg/L	1	2/28/2023 09:08
Di-n-butyl phthalate	U		0.85	4.1	µg/L	1	2/28/2023 09:08
Di-n-octyl phthalate	U		2.2	4.1	µg/L	1	2/28/2023 09:08
Fluoranthene	**0.41**	J	**0.15**	**0.41**	**µg/L**	1	2/28/2023 09:08
Fluorene	U		0.21	0.41	µg/L	1	2/28/2023 09:08
Hexachlorobenzene	U		1.8	4.1	µg/L	1	2/28/2023 09:08
Hexachlorobutadiene	U		2.6	4.1	µg/L	1	2/28/2023 09:08
Hexachlorocyclopentadiene	U		4.4	20	µg/L	1	2/28/2023 09:08
Hexachloroethane	U		2.5	4.1	µg/L	1	2/28/2023 09:08
Indeno(1,2,3-cd)pyrene	**0.28**	J	**0.27**	**0.41**	**µg/L**	1	2/28/2023 09:08
Isophorone	U		1.4	20	µg/L	1	2/28/2023 09:08
Naphthalene	U		0.27	0.41	µg/L	1	2/28/2023 09:08
Nitrobenzene	U		1.1	4.1	µg/L	1	2/28/2023 09:08
N-Nitrosodi-n-propylamine	U		1.4	4.1	µg/L	1	2/28/2023 09:08
N-Nitrosodiphenylamine	U		2.0	4.1	µg/L	1	2/28/2023 09:08
Pentachlorophenol	U		3.9	20	µg/L	1	2/28/2023 09:08
Phenanthrene	U		0.33	0.41	µg/L	1	2/28/2023 09:08
Phenol	U		0.85	4.1	µg/L	1	2/28/2023 09:08
Pyrene	**0.41**	J	**0.15**	**0.41**	**µg/L**	1	2/28/2023 09:08

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Big Pine Consultants
Project: East Palestine Water
Sample ID: Big Pine 07
Collection Date: 2/17/2023 12:00 PM

Work Order: 23021418
Lab ID: 23021418-07
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Pyridine	U		2.3	41	µg/L	1	2/28/2023 09:08
Surr: 2,4,6-Tribromophenol	*75.7*			*38-103*	*%REC*	1	2/28/2023 09:08
Surr: 2-Fluorobiphenyl	*74.4*			*36-96*	*%REC*	1	2/28/2023 09:08
Surr: 2-Fluorophenol	*45.0*			*20-73*	*%REC*	1	2/28/2023 09:08
Surr: 4-Terphenyl-d14	*85.7*			*44-114*	*%REC*	1	2/28/2023 09:08
Surr: Nitrobenzene-d5	*68.6*			*33-100*	*%REC*	1	2/28/2023 09:08
Surr: Phenol-d6	*29.8*			*10-48*	*%REC*	1	2/28/2023 09:08
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260D**					Analyst: **HJ**
1,1,1-Trichloroethane	U		0.46	1.0	µg/L	1	2/21/2023 20:36
1,1,2,2-Tetrachloroethane	U		0.40	1.0	µg/L	1	2/21/2023 20:36
1,1,2-Trichloroethane	U		0.46	1.0	µg/L	1	2/21/2023 20:36
1,1,2-Trichlorotrifluoroethane	U		0.52	1.0	µg/L	1	2/21/2023 20:36
1,1-Dichloroethane	U		0.44	1.0	µg/L	1	2/21/2023 20:36
1,1-Dichloroethene	U		0.40	1.0	µg/L	1	2/21/2023 20:36
1,2,3-Trichlorobenzene	U		0.42	1.0	µg/L	1	2/21/2023 20:36
1,2,3-Trichloropropane	U		0.40	1.0	µg/L	1	2/21/2023 20:36
1,2,4-Trichlorobenzene	U		0.45	1.0	µg/L	1	2/21/2023 20:36
1,2,4-Trimethylbenzene	U		0.45	1.0	µg/L	1	2/21/2023 20:36
1,2-Dibromo-3-chloropropane	U		0.43	1.0	µg/L	1	2/21/2023 20:36
1,2-Dibromoethane	U		0.41	1.0	µg/L	1	2/21/2023 20:36
1,2-Dichlorobenzene	U		0.32	1.0	µg/L	1	2/21/2023 20:36
1,2-Dichloroethane	U		0.44	1.0	µg/L	1	2/21/2023 20:36
1,2-Dichloropropane	U		0.48	1.0	µg/L	1	2/21/2023 20:36
1,3,5-Trimethylbenzene	U		0.65	1.0	µg/L	1	2/21/2023 20:36
1,3-Dichlorobenzene	U		0.33	1.0	µg/L	1	2/21/2023 20:36
1,4-Dichlorobenzene	U		0.35	1.0	µg/L	1	2/21/2023 20:36
2-Butanone	U		0.52	5.0	µg/L	1	2/21/2023 20:36
2-Hexanone	U		0.59	5.0	µg/L	1	2/21/2023 20:36
4-Methyl-2-pentanone	U		0.52	1.0	µg/L	1	2/21/2023 20:36
Acetone	**1.6**	J	**1.1**	**10**	**µg/L**	1	2/21/2023 20:36
Benzene	U		0.46	1.0	µg/L	1	2/21/2023 20:36
Bromochloromethane	U		0.45	1.0	µg/L	1	2/21/2023 20:36
Bromodichloromethane	U		0.49	1.0	µg/L	1	2/21/2023 20:36
Bromoform	U		0.56	1.0	µg/L	1	2/21/2023 20:36
Bromomethane	U		0.90	1.0	µg/L	1	2/21/2023 20:36
Carbon disulfide	U		0.49	1.0	µg/L	1	2/21/2023 20:36
Carbon tetrachloride	U		0.40	1.0	µg/L	1	2/21/2023 20:36
Chlorobenzene	U		0.40	1.0	µg/L	1	2/21/2023 20:36
Chloroethane	U		0.68	1.0	µg/L	1	2/21/2023 20:36

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *02-Mar-23*

Client: Big Pine Consultants
Project: East Palestine Water
Sample ID: Big Pine 07
Collection Date: 2/17/2023 12:00 PM

Work Order: 23021418
Lab ID: 23021418-07
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Chloroform	U		0.46	1.0	µg/L	1	2/21/2023 20:36
Chloromethane	U		0.83	1.0	µg/L	1	2/21/2023 20:36
cis-1,2-Dichloroethene	U		0.42	1.0	µg/L	1	2/21/2023 20:36
cis-1,3-Dichloropropene	U		0.57	1.0	µg/L	1	2/21/2023 20:36
Cyclohexane	U		0.63	2.0	µg/L	1	2/21/2023 20:36
Dibromochloromethane	U		0.40	1.0	µg/L	1	2/21/2023 20:36
Dichlorodifluoromethane	U		0.68	1.0	µg/L	1	2/21/2023 20:36
Ethylbenzene	U		0.34	1.0	µg/L	1	2/21/2023 20:36
Isopropylbenzene	U		0.35	1.0	µg/L	1	2/21/2023 20:36
m,p-Xylene	U		0.81	2.0	µg/L	1	2/21/2023 20:36
Methyl acetate	U		0.59	2.0	µg/L	1	2/21/2023 20:36
Methyl tert-butyl ether	U		0.45	1.0	µg/L	1	2/21/2023 20:36
Methylcyclohexane	U		0.35	1.0	µg/L	1	2/21/2023 20:36
Methylene chloride	U		0.86	5.0	µg/L	1	2/21/2023 20:36
o-Xylene	U		0.31	1.0	µg/L	1	2/21/2023 20:36
Styrene	U		0.33	1.0	µg/L	1	2/21/2023 20:36
Tetrachloroethene	U		0.39	1.0	µg/L	1	2/21/2023 20:36
Toluene	U		0.45	1.0	µg/L	1	2/21/2023 20:36
trans-1,2-Dichloroethene	U		0.48	1.0	µg/L	1	2/21/2023 20:36
trans-1,3-Dichloropropene	U		0.38	1.0	µg/L	1	2/21/2023 20:36
Trichloroethene	U		0.43	1.0	µg/L	1	2/21/2023 20:36
Trichlorofluoromethane	U		0.52	1.0	µg/L	1	2/21/2023 20:36
Vinyl chloride	U		0.53	1.0	µg/L	1	2/21/2023 20:36
Xylenes, Total	U		0.81	2.0	µg/L	1	2/21/2023 20:36
Surr: 1,2-Dichloroethane-d4	*105*			*80-120*	*%REC*	1	2/21/2023 20:36
Surr: 4-Bromofluorobenzene	*100*			*80-120*	*%REC*	1	2/21/2023 20:36
Surr: Dibromofluoromethane	*97.8*			*80-120*	*%REC*	1	2/21/2023 20:36
Surr: Toluene-d8	*97.3*			*80-120*	*%REC*	1	2/21/2023 20:36

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Big Pine Consultants
Project: East Palestine Water
Sample ID: Big Pine 08
Collection Date: 2/17/2023 12:30 PM

Work Order: 23021418
Lab ID: 23021418-08
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID		Method: **SW8015D**			Prep: SW3511 / 2/22/23		Analyst: **SJB**
DRO (C10-C28)	U		0.081	0.10	mg/L	1	2/25/2023 04:58
ORO (C28-C40)	U		0.051	0.10	mg/L	1	2/25/2023 04:58
Surr: 4-Terphenyl-d14	*34.8*			*30-121*	*%REC*	1	2/25/2023 04:58
GASOLINE RANGE ORGANICS BY GC-FID		Method: **SW8015D**					Analyst: **RM**
GRO (C6-C10)	U		76	200	µg/L	1	2/20/2023 23:37
Surr: Toluene-d8	*86.9*			*73-116*	*%REC*	1	2/20/2023 23:37
SEMI-VOLATILE ORGANIC COMPOUNDS		Method: **SW8270E**					Analyst: **EEW**
1,1`-Biphenyl	U		1.7	4.1	µg/L	1	2/28/2023 09:35
1,2,4,5-Tetrachlorobenzene	U		1.4	20	µg/L	1	2/28/2023 09:35
1,4-Dioxane	U		2.9	20	µg/L	1	2/28/2023 09:35
1-Methylnaphthalene	U		0.34	0.41	µg/L	1	2/28/2023 09:35
2,2`-Oxybis(1-chloropropane)	U		0.93	4.1	µg/L	1	2/28/2023 09:35
2,3,4,6-Tetrachlorophenol	U		1.8	4.1	µg/L	1	2/28/2023 09:35
2,4,5-Trichlorophenol	U		0.69	4.1	µg/L	1	2/28/2023 09:35
2,4,6-Trichlorophenol	U		1.0	4.1	µg/L	1	2/28/2023 09:35
2,4-Dichlorophenol	U		1.4	4.1	µg/L	1	2/28/2023 09:35
2,4-Dimethylphenol	U		1.5	4.1	µg/L	1	2/28/2023 09:35
2,4-Dinitrophenol	U		11	20	µg/L	1	2/28/2023 09:35
2,4-Dinitrotoluene	U		1.7	4.1	µg/L	1	2/28/2023 09:35
2,6-Dinitrotoluene	U		1.3	4.1	µg/L	1	2/28/2023 09:35
2-Chloronaphthalene	U		0.30	0.41	µg/L	1	2/28/2023 09:35
2-Chlorophenol	U		0.93	4.1	µg/L	1	2/28/2023 09:35
2-Methylnaphthalene	U		0.26	0.41	µg/L	1	2/28/2023 09:35
2-Methylphenol	U		1.0	4.1	µg/L	1	2/28/2023 09:35
2-Nitroaniline	U		0.85	4.1	µg/L	1	2/28/2023 09:35
2-Nitrophenol	U		1.4	4.1	µg/L	1	2/28/2023 09:35
3&4-Methylphenol	U		0.85	4.1	µg/L	1	2/28/2023 09:35
3,3´-Dichlorobenzidine	U		1.9	20	µg/L	1	2/28/2023 09:35
3-Nitroaniline	U		2.6	4.1	µg/L	1	2/28/2023 09:35
4,6-Dinitro-2-methylphenol	U		1.1	4.1	µg/L	1	2/28/2023 09:35
4-Bromophenyl phenyl ether	U		1.3	4.1	µg/L	1	2/28/2023 09:35
4-Chloro-3-methylphenol	U		1.1	4.1	µg/L	1	2/28/2023 09:35
4-Chloroaniline	U		1.4	4.1	µg/L	1	2/28/2023 09:35
4-Chlorophenyl phenyl ether	U		1.3	4.1	µg/L	1	2/28/2023 09:35
4-Nitroaniline	U		2.3	4.1	µg/L	1	2/28/2023 09:35
4-Nitrophenol	U		0.97	20	µg/L	1	2/28/2023 09:35
Acenaphthene	U		0.33	0.41	µg/L	1	2/28/2023 09:35

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Big Pine Consultants
Project: East Palestine Water
Sample ID: Big Pine 08
Collection Date: 2/17/2023 12:30 PM

Work Order: 23021418
Lab ID: 23021418-08
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Acenaphthylene	U		0.30	0.41	µg/L	1	2/28/2023 09:35
Acetophenone	U		1.5	4.1	µg/L	1	2/28/2023 09:35
Anthracene	U		0.11	0.41	µg/L	1	2/28/2023 09:35
Atrazine	U		1.4	4.1	µg/L	1	2/28/2023 09:35
Benzaldehyde	U		2.1	4.1	µg/L	1	2/28/2023 09:35
Benzo(a)anthracene	U		0.40	0.41	µg/L	1	2/28/2023 09:35
Benzo(a)pyrene	U		0.18	0.41	µg/L	1	2/28/2023 09:35
Benzo(b)fluoranthene	U		0.21	0.41	µg/L	1	2/28/2023 09:35
Benzo(g,h,i)perylene	U		0.36	0.41	µg/L	1	2/28/2023 09:35
Benzo(k)fluoranthene	U		0.19	0.41	µg/L	1	2/28/2023 09:35
Bis(2-chloroethoxy)methane	U		1.2	4.1	µg/L	1	2/28/2023 09:35
Bis(2-chloroethyl)ether	U		1.5	4.1	µg/L	1	2/28/2023 09:35
Bis(2-chloroisopropyl)ether	U		0.93	4.1	µg/L	1	2/28/2023 09:35
Bis(2-ethylhexyl)phthalate	U		1.6	4.1	µg/L	1	2/28/2023 09:35
Butyl benzyl phthalate	U		1.2	4.1	µg/L	1	2/28/2023 09:35
Caprolactam	U		3.9	20	µg/L	1	2/28/2023 09:35
Carbazole	U		0.97	4.1	µg/L	1	2/28/2023 09:35
Chrysene	U		0.19	0.41	µg/L	1	2/28/2023 09:35
Dibenzo(a,h)anthracene	U		0.30	0.41	µg/L	1	2/28/2023 09:35
Dibenzofuran	U		0.93	4.1	µg/L	1	2/28/2023 09:35
Diethyl phthalate	U		0.69	4.1	µg/L	1	2/28/2023 09:35
Dimethyl phthalate	U		0.73	4.1	µg/L	1	2/28/2023 09:35
Di-n-butyl phthalate	U		0.85	4.1	µg/L	1	2/28/2023 09:35
Di-n-octyl phthalate	U		2.2	4.1	µg/L	1	2/28/2023 09:35
Fluoranthene	U		0.15	0.41	µg/L	1	2/28/2023 09:35
Fluorene	U		0.21	0.41	µg/L	1	2/28/2023 09:35
Hexachlorobenzene	U		1.8	4.1	µg/L	1	2/28/2023 09:35
Hexachlorobutadiene	U		2.6	4.1	µg/L	1	2/28/2023 09:35
Hexachlorocyclopentadiene	U		4.4	20	µg/L	1	2/28/2023 09:35
Hexachloroethane	U		2.5	4.1	µg/L	1	2/28/2023 09:35
Indeno(1,2,3-cd)pyrene	U		0.27	0.41	µg/L	1	2/28/2023 09:35
Isophorone	U		1.4	20	µg/L	1	2/28/2023 09:35
Naphthalene	U		0.27	0.41	µg/L	1	2/28/2023 09:35
Nitrobenzene	U		1.1	4.1	µg/L	1	2/28/2023 09:35
N-Nitrosodi-n-propylamine	U		1.4	4.1	µg/L	1	2/28/2023 09:35
N-Nitrosodiphenylamine	U		2.0	4.1	µg/L	1	2/28/2023 09:35
Pentachlorophenol	U		3.9	20	µg/L	1	2/28/2023 09:35
Phenanthrene	U		0.33	0.41	µg/L	1	2/28/2023 09:35
Phenol	U		0.85	4.1	µg/L	1	2/28/2023 09:35
Pyrene	U		0.15	0.41	µg/L	1	2/28/2023 09:35

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Big Pine Consultants
Project: East Palestine Water
Sample ID: Big Pine 08
Collection Date: 2/17/2023 12:30 PM

Work Order: 23021418
Lab ID: 23021418-08
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Pyridine	U		2.3	41	µg/L	1	2/28/2023 09:35
Surr: 2,4,6-Tribromophenol	*61.0*			*38-103*	*%REC*	1	2/28/2023 09:35
Surr: 2-Fluorobiphenyl	*64.1*			*36-96*	*%REC*	1	2/28/2023 09:35
Surr: 2-Fluorophenol	*34.8*			*20-73*	*%REC*	1	2/28/2023 09:35
Surr: 4-Terphenyl-d14	*76.1*			*44-114*	*%REC*	1	2/28/2023 09:35
Surr: Nitrobenzene-d5	*56.1*			*33-100*	*%REC*	1	2/28/2023 09:35
Surr: Phenol-d6	*22.7*			*10-48*	*%REC*	1	2/28/2023 09:35
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260D**					Analyst: **HJ**
1,1,1-Trichloroethane	U		0.46	1.0	µg/L	1	2/21/2023 21:00
1,1,2,2-Tetrachloroethane	U		0.40	1.0	µg/L	1	2/21/2023 21:00
1,1,2-Trichloroethane	U		0.46	1.0	µg/L	1	2/21/2023 21:00
1,1,2-Trichlorotrifluoroethane	U		0.52	1.0	µg/L	1	2/21/2023 21:00
1,1-Dichloroethane	U		0.44	1.0	µg/L	1	2/21/2023 21:00
1,1-Dichloroethene	U		0.40	1.0	µg/L	1	2/21/2023 21:00
1,2,3-Trichlorobenzene	U		0.42	1.0	µg/L	1	2/21/2023 21:00
1,2,3-Trichloropropane	U		0.40	1.0	µg/L	1	2/21/2023 21:00
1,2,4-Trichlorobenzene	U		0.45	1.0	µg/L	1	2/21/2023 21:00
1,2,4-Trimethylbenzene	U		0.45	1.0	µg/L	1	2/21/2023 21:00
1,2-Dibromo-3-chloropropane	U		0.43	1.0	µg/L	1	2/21/2023 21:00
1,2-Dibromoethane	U		0.41	1.0	µg/L	1	2/21/2023 21:00
1,2-Dichlorobenzene	U		0.32	1.0	µg/L	1	2/21/2023 21:00
1,2-Dichloroethane	U		0.44	1.0	µg/L	1	2/21/2023 21:00
1,2-Dichloropropane	U		0.48	1.0	µg/L	1	2/21/2023 21:00
1,3,5-Trimethylbenzene	U		0.65	1.0	µg/L	1	2/21/2023 21:00
1,3-Dichlorobenzene	U		0.33	1.0	µg/L	1	2/21/2023 21:00
1,4-Dichlorobenzene	U		0.35	1.0	µg/L	1	2/21/2023 21:00
2-Butanone	U		0.52	5.0	µg/L	1	2/21/2023 21:00
2-Hexanone	U		0.59	5.0	µg/L	1	2/21/2023 21:00
4-Methyl-2-pentanone	U		0.52	1.0	µg/L	1	2/21/2023 21:00
Acetone	**1.3**	J	**1.1**	**10**	**µg/L**	1	2/21/2023 21:00
Benzene	U		0.46	1.0	µg/L	1	2/21/2023 21:00
Bromochloromethane	U		0.45	1.0	µg/L	1	2/21/2023 21:00
Bromodichloromethane	U		0.49	1.0	µg/L	1	2/21/2023 21:00
Bromoform	U		0.56	1.0	µg/L	1	2/21/2023 21:00
Bromomethane	U		0.90	1.0	µg/L	1	2/21/2023 21:00
Carbon disulfide	U		0.49	1.0	µg/L	1	2/21/2023 21:00
Carbon tetrachloride	U		0.40	1.0	µg/L	1	2/21/2023 21:00
Chlorobenzene	U		0.40	1.0	µg/L	1	2/21/2023 21:00
Chloroethane	U		0.68	1.0	µg/L	1	2/21/2023 21:00

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Big Pine Consultants
Project: East Palestine Water
Sample ID: Big Pine 08
Collection Date: 2/17/2023 12:30 PM

Work Order: 23021418
Lab ID: 23021418-08
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Chloroform	U		0.46	1.0	µg/L	1	2/21/2023 21:00
Chloromethane	U		0.83	1.0	µg/L	1	2/21/2023 21:00
cis-1,2-Dichloroethene	U		0.42	1.0	µg/L	1	2/21/2023 21:00
cis-1,3-Dichloropropene	U		0.57	1.0	µg/L	1	2/21/2023 21:00
Cyclohexane	U		0.63	2.0	µg/L	1	2/21/2023 21:00
Dibromochloromethane	U		0.40	1.0	µg/L	1	2/21/2023 21:00
Dichlorodifluoromethane	U		0.68	1.0	µg/L	1	2/21/2023 21:00
Ethylbenzene	U		0.34	1.0	µg/L	1	2/21/2023 21:00
Isopropylbenzene	U		0.35	1.0	µg/L	1	2/21/2023 21:00
m,p-Xylene	U		0.81	2.0	µg/L	1	2/21/2023 21:00
Methyl acetate	U		0.59	2.0	µg/L	1	2/21/2023 21:00
Methyl tert-butyl ether	U		0.45	1.0	µg/L	1	2/21/2023 21:00
Methylcyclohexane	U		0.35	1.0	µg/L	1	2/21/2023 21:00
Methylene chloride	U		0.86	5.0	µg/L	1	2/21/2023 21:00
o-Xylene	U		0.31	1.0	µg/L	1	2/21/2023 21:00
Styrene	U		0.33	1.0	µg/L	1	2/21/2023 21:00
Tetrachloroethene	U		0.39	1.0	µg/L	1	2/21/2023 21:00
Toluene	U		0.45	1.0	µg/L	1	2/21/2023 21:00
trans-1,2-Dichloroethene	U		0.48	1.0	µg/L	1	2/21/2023 21:00
trans-1,3-Dichloropropene	U		0.38	1.0	µg/L	1	2/21/2023 21:00
Trichloroethene	U		0.43	1.0	µg/L	1	2/21/2023 21:00
Trichlorofluoromethane	U		0.52	1.0	µg/L	1	2/21/2023 21:00
Vinyl chloride	U		0.53	1.0	µg/L	1	2/21/2023 21:00
Xylenes, Total	U		0.81	2.0	µg/L	1	2/21/2023 21:00
Surr: 1,2-Dichloroethane-d4	*105*			*80-120*	*%REC*	1	2/21/2023 21:00
Surr: 4-Bromofluorobenzene	*100*			*80-120*	*%REC*	1	2/21/2023 21:00
Surr: Dibromofluoromethane	*100*			*80-120*	*%REC*	1	2/21/2023 21:00
Surr: Toluene-d8	*96.8*			*80-120*	*%REC*	1	2/21/2023 21:00

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Big Pine Consultants
Project: East Palestine Water
Sample ID: Big Pine 09
Collection Date: 2/17/2023 01:00 PM

Work Order: 23021418
Lab ID: 23021418-09
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID		Method: **SW8015D**			Prep: SW3511 / 2/22/23		Analyst: **SJB**
DRO (C10-C28)	U		0.080	0.099	mg/L	1	2/25/2023 05:34
ORO (C28-C40)	U		0.051	0.099	mg/L	1	2/25/2023 05:34
Surr: 4-Terphenyl-d14	*40.8*			*30-121*	*%REC*	1	2/25/2023 05:34
GASOLINE RANGE ORGANICS BY GC-FID		Method: **SW8015D**					Analyst: **RM**
GRO (C6-C10)	U		76	200	µg/L	1	2/20/2023 23:59
Surr: Toluene-d8	*89.2*			*73-116*	*%REC*	1	2/20/2023 23:59
SEMI-VOLATILE ORGANIC COMPOUNDS		Method: **SW8270E**					Analyst: **EEW**
1,1`-Biphenyl	U		1.7	4.1	µg/L	1	2/28/2023 10:03
1,2,4,5-Tetrachlorobenzene	U		1.4	20	µg/L	1	2/28/2023 10:03
1,4-Dioxane	U		2.9	20	µg/L	1	2/28/2023 10:03
1-Methylnaphthalene	U		0.34	0.41	µg/L	1	2/28/2023 10:03
2,2`-Oxybis(1-chloropropane)	U		0.94	4.1	µg/L	1	2/28/2023 10:03
2,3,4,6-Tetrachlorophenol	U		1.8	4.1	µg/L	1	2/28/2023 10:03
2,4,5-Trichlorophenol	U		0.69	4.1	µg/L	1	2/28/2023 10:03
2,4,6-Trichlorophenol	U		1.0	4.1	µg/L	1	2/28/2023 10:03
2,4-Dichlorophenol	U		1.4	4.1	µg/L	1	2/28/2023 10:03
2,4-Dimethylphenol	U		1.5	4.1	µg/L	1	2/28/2023 10:03
2,4-Dinitrophenol	U		11	20	µg/L	1	2/28/2023 10:03
2,4-Dinitrotoluene	U		1.7	4.1	µg/L	1	2/28/2023 10:03
2,6-Dinitrotoluene	U		1.3	4.1	µg/L	1	2/28/2023 10:03
2-Chloronaphthalene	U		0.31	0.41	µg/L	1	2/28/2023 10:03
2-Chlorophenol	U		0.94	4.1	µg/L	1	2/28/2023 10:03
2-Methylnaphthalene	U		0.26	0.41	µg/L	1	2/28/2023 10:03
2-Methylphenol	U		1.0	4.1	µg/L	1	2/28/2023 10:03
2-Nitroaniline	U		0.85	4.1	µg/L	1	2/28/2023 10:03
2-Nitrophenol	U		1.4	4.1	µg/L	1	2/28/2023 10:03
3&4-Methylphenol	U		0.85	4.1	µg/L	1	2/28/2023 10:03
3,3´-Dichlorobenzidine	U		1.9	20	µg/L	1	2/28/2023 10:03
3-Nitroaniline	U		2.6	4.1	µg/L	1	2/28/2023 10:03
4,6-Dinitro-2-methylphenol	U		1.1	4.1	µg/L	1	2/28/2023 10:03
4-Bromophenyl phenyl ether	U		1.3	4.1	µg/L	1	2/28/2023 10:03
4-Chloro-3-methylphenol	U		1.1	4.1	µg/L	1	2/28/2023 10:03
4-Chloroaniline	U		1.4	4.1	µg/L	1	2/28/2023 10:03
4-Chlorophenyl phenyl ether	U		1.3	4.1	µg/L	1	2/28/2023 10:03
4-Nitroaniline	U		2.3	4.1	µg/L	1	2/28/2023 10:03
4-Nitrophenol	U		0.98	20	µg/L	1	2/28/2023 10:03
Acenaphthene	U		0.33	0.41	µg/L	1	2/28/2023 10:03

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *02-Mar-23*

Client: Big Pine Consultants
Project: East Palestine Water
Sample ID: Big Pine 09
Collection Date: 2/17/2023 01:00 PM

Work Order: 23021418
Lab ID: 23021418-09
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Acenaphthylene	U		0.31	0.41	µg/L	1	2/28/2023 10:03
Acetophenone	U		1.5	4.1	µg/L	1	2/28/2023 10:03
Anthracene	**0.28**	J	**0.11**	**0.41**	**µg/L**	1	2/28/2023 10:03
Atrazine	U		1.4	4.1	µg/L	1	2/28/2023 10:03
Benzaldehyde	U		2.1	4.1	µg/L	1	2/28/2023 10:03
Benzo(a)anthracene	U		0.40	0.41	µg/L	1	2/28/2023 10:03
Benzo(a)pyrene	**0.37**	J	**0.18**	**0.41**	**µg/L**	1	2/28/2023 10:03
Benzo(b)fluoranthene	**0.57**		**0.21**	**0.41**	**µg/L**	1	2/28/2023 10:03
Benzo(g,h,i)perylene	**0.41**	J	**0.36**	**0.41**	**µg/L**	1	2/28/2023 10:03
Benzo(k)fluoranthene	**0.53**		**0.20**	**0.41**	**µg/L**	1	2/28/2023 10:03
Bis(2-chloroethoxy)methane	U		1.2	4.1	µg/L	1	2/28/2023 10:03
Bis(2-chloroethyl)ether	U		1.5	4.1	µg/L	1	2/28/2023 10:03
Bis(2-chloroisopropyl)ether	U		0.94	4.1	µg/L	1	2/28/2023 10:03
Bis(2-ethylhexyl)phthalate	U		1.6	4.1	µg/L	1	2/28/2023 10:03
Butyl benzyl phthalate	**1.3**	J	**1.2**	**4.1**	**µg/L**	1	2/28/2023 10:03
Caprolactam	U		3.9	20	µg/L	1	2/28/2023 10:03
Carbazole	U		0.98	4.1	µg/L	1	2/28/2023 10:03
Chrysene	**0.41**	J	**0.20**	**0.41**	**µg/L**	1	2/28/2023 10:03
Dibenzo(a,h)anthracene	**0.49**		**0.30**	**0.41**	**µg/L**	1	2/28/2023 10:03
Dibenzofuran	U		0.94	4.1	µg/L	1	2/28/2023 10:03
Diethyl phthalate	U		0.69	4.1	µg/L	1	2/28/2023 10:03
Dimethyl phthalate	U		0.73	4.1	µg/L	1	2/28/2023 10:03
Di-n-butyl phthalate	**2.2**	J	**0.85**	**4.1**	**µg/L**	1	2/28/2023 10:03
Di-n-octyl phthalate	U		2.2	4.1	µg/L	1	2/28/2023 10:03
Fluoranthene	**0.41**	J	**0.15**	**0.41**	**µg/L**	1	2/28/2023 10:03
Fluorene	U		0.21	0.41	µg/L	1	2/28/2023 10:03
Hexachlorobenzene	U		1.8	4.1	µg/L	1	2/28/2023 10:03
Hexachlorobutadiene	U		2.6	4.1	µg/L	1	2/28/2023 10:03
Hexachlorocyclopentadiene	U		4.4	20	µg/L	1	2/28/2023 10:03
Hexachloroethane	U		2.5	4.1	µg/L	1	2/28/2023 10:03
Indeno(1,2,3-cd)pyrene	**0.49**		**0.27**	**0.41**	**µg/L**	1	2/28/2023 10:03
Isophorone	U		1.4	20	µg/L	1	2/28/2023 10:03
Naphthalene	U		0.27	0.41	µg/L	1	2/28/2023 10:03
Nitrobenzene	U		1.1	4.1	µg/L	1	2/28/2023 10:03
N-Nitrosodi-n-propylamine	U		1.4	4.1	µg/L	1	2/28/2023 10:03
N-Nitrosodiphenylamine	U		2.0	4.1	µg/L	1	2/28/2023 10:03
Pentachlorophenol	U		3.9	20	µg/L	1	2/28/2023 10:03
Phenanthrene	U		0.33	0.41	µg/L	1	2/28/2023 10:03
Phenol	U		0.85	4.1	µg/L	1	2/28/2023 10:03
Pyrene	**0.41**	J	**0.15**	**0.41**	**µg/L**	1	2/28/2023 10:03

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Big Pine Consultants
Project: East Palestine Water
Sample ID: Big Pine 09
Collection Date: 2/17/2023 01:00 PM

Work Order: 23021418
Lab ID: 23021418-09
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Pyridine	U		2.3	41	µg/L	1	2/28/2023 10:03
Surr: 2,4,6-Tribromophenol	*67.1*			*38-103*	*%REC*	1	2/28/2023 10:03
Surr: 2-Fluorobiphenyl	*68.1*			*36-96*	*%REC*	1	2/28/2023 10:03
Surr: 2-Fluorophenol	*40.8*			*20-73*	*%REC*	1	2/28/2023 10:03
Surr: 4-Terphenyl-d14	*79.6*			*44-114*	*%REC*	1	2/28/2023 10:03
Surr: Nitrobenzene-d5	*59.6*			*33-100*	*%REC*	1	2/28/2023 10:03
Surr: Phenol-d6	*27.0*			*10-48*	*%REC*	1	2/28/2023 10:03
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260D**					Analyst: **HJ**
1,1,1-Trichloroethane	U		0.46	1.0	µg/L	1	2/21/2023 21:24
1,1,2,2-Tetrachloroethane	U		0.40	1.0	µg/L	1	2/21/2023 21:24
1,1,2-Trichloroethane	U		0.46	1.0	µg/L	1	2/21/2023 21:24
1,1,2-Trichlorotrifluoroethane	U		0.52	1.0	µg/L	1	2/21/2023 21:24
1,1-Dichloroethane	U		0.44	1.0	µg/L	1	2/21/2023 21:24
1,1-Dichloroethene	U		0.40	1.0	µg/L	1	2/21/2023 21:24
1,2,3-Trichlorobenzene	U		0.42	1.0	µg/L	1	2/21/2023 21:24
1,2,3-Trichloropropane	U		0.40	1.0	µg/L	1	2/21/2023 21:24
1,2,4-Trichlorobenzene	U		0.45	1.0	µg/L	1	2/21/2023 21:24
1,2,4-Trimethylbenzene	U		0.45	1.0	µg/L	1	2/21/2023 21:24
1,2-Dibromo-3-chloropropane	U		0.43	1.0	µg/L	1	2/21/2023 21:24
1,2-Dibromoethane	U		0.41	1.0	µg/L	1	2/21/2023 21:24
1,2-Dichlorobenzene	U		0.32	1.0	µg/L	1	2/21/2023 21:24
1,2-Dichloroethane	U		0.44	1.0	µg/L	1	2/21/2023 21:24
1,2-Dichloropropane	U		0.48	1.0	µg/L	1	2/21/2023 21:24
1,3,5-Trimethylbenzene	U		0.65	1.0	µg/L	1	2/21/2023 21:24
1,3-Dichlorobenzene	U		0.33	1.0	µg/L	1	2/21/2023 21:24
1,4-Dichlorobenzene	U		0.35	1.0	µg/L	1	2/21/2023 21:24
2-Butanone	U		0.52	5.0	µg/L	1	2/21/2023 21:24
2-Hexanone	U		0.59	5.0	µg/L	1	2/21/2023 21:24
4-Methyl-2-pentanone	U		0.52	1.0	µg/L	1	2/21/2023 21:24
Acetone	U		1.1	10	µg/L	1	2/21/2023 21:24
Benzene	U		0.46	1.0	µg/L	1	2/21/2023 21:24
Bromochloromethane	U		0.45	1.0	µg/L	1	2/21/2023 21:24
Bromodichloromethane	U		0.49	1.0	µg/L	1	2/21/2023 21:24
Bromoform	U		0.56	1.0	µg/L	1	2/21/2023 21:24
Bromomethane	U		0.90	1.0	µg/L	1	2/21/2023 21:24
Carbon disulfide	U		0.49	1.0	µg/L	1	2/21/2023 21:24
Carbon tetrachloride	U		0.40	1.0	µg/L	1	2/21/2023 21:24
Chlorobenzene	U		0.40	1.0	µg/L	1	2/21/2023 21:24
Chloroethane	U		0.68	1.0	µg/L	1	2/21/2023 21:24

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *02-Mar-23*

Client: Big Pine Consultants
Project: East Palestine Water
Sample ID: Big Pine 09
Collection Date: 2/17/2023 01:00 PM

Work Order: 23021418
Lab ID: 23021418-09
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Chloroform	U		0.46	1.0	µg/L	1	2/21/2023 21:24
Chloromethane	U		0.83	1.0	µg/L	1	2/21/2023 21:24
cis-1,2-Dichloroethene	U		0.42	1.0	µg/L	1	2/21/2023 21:24
cis-1,3-Dichloropropene	U		0.57	1.0	µg/L	1	2/21/2023 21:24
Cyclohexane	U		0.63	2.0	µg/L	1	2/21/2023 21:24
Dibromochloromethane	U		0.40	1.0	µg/L	1	2/21/2023 21:24
Dichlorodifluoromethane	U		0.68	1.0	µg/L	1	2/21/2023 21:24
Ethylbenzene	U		0.34	1.0	µg/L	1	2/21/2023 21:24
Isopropylbenzene	U		0.35	1.0	µg/L	1	2/21/2023 21:24
m,p-Xylene	U		0.81	2.0	µg/L	1	2/21/2023 21:24
Methyl acetate	U		0.59	2.0	µg/L	1	2/21/2023 21:24
Methyl tert-butyl ether	U		0.45	1.0	µg/L	1	2/21/2023 21:24
Methylcyclohexane	U		0.35	1.0	µg/L	1	2/21/2023 21:24
Methylene chloride	U		0.86	5.0	µg/L	1	2/21/2023 21:24
o-Xylene	U		0.31	1.0	µg/L	1	2/21/2023 21:24
Styrene	U		0.33	1.0	µg/L	1	2/21/2023 21:24
Tetrachloroethene	U		0.39	1.0	µg/L	1	2/21/2023 21:24
Toluene	U		0.45	1.0	µg/L	1	2/21/2023 21:24
trans-1,2-Dichloroethene	U		0.48	1.0	µg/L	1	2/21/2023 21:24
trans-1,3-Dichloropropene	U		0.38	1.0	µg/L	1	2/21/2023 21:24
Trichloroethene	U		0.43	1.0	µg/L	1	2/21/2023 21:24
Trichlorofluoromethane	U		0.52	1.0	µg/L	1	2/21/2023 21:24
Vinyl chloride	U		0.53	1.0	µg/L	1	2/21/2023 21:24
Xylenes, Total	U		0.81	2.0	µg/L	1	2/21/2023 21:24
Surr: 1,2-Dichloroethane-d4	*106*			*80-120*	*%REC*	1	2/21/2023 21:24
Surr: 4-Bromofluorobenzene	*101*			*80-120*	*%REC*	1	2/21/2023 21:24
Surr: Dibromofluoromethane	*100*			*80-120*	*%REC*	1	2/21/2023 21:24
Surr: Toluene-d8	*95.4*			*80-120*	*%REC*	1	2/21/2023 21:24

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 02-Mar-23

Client: Big Pine Consultants

Work Order: 23021418

Project: East Palestine Water

QC BATCH REPORT

Batch ID: **211739** Instrument ID **GC8** Method: **SW8015D**

MBLK Sample ID: **DBLKW1-211739-211739** Units: **mg/L** Analysis Date: **2/24/2023 09:00 PM**

Client ID: Run ID: **GC8_230224C** SeqNo: **9308781** Prep Date: **2/22/2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	U	0.10	0	0	0		0			
ORO (C28-C40)	U	0.10	0	0	0		0			
Surr: 4-Terphenyl-d14	*0.02817*	0	*0.0417*	0	*67.5*	*30-121*	0			

LCS Sample ID: **DLCSW1-211739-211739** Units: **mg/L** Analysis Date: **2/24/2023 10:13 PM**

Client ID: Run ID: **GC8_230224C** SeqNo: **9308783** Prep Date: **2/22/2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	3.766	0.10	4.17	0	90.3	64-143	0			
ORO (C28-C40)	3.692	0.10	4.17	0	88.5	58-141	0			
Surr: 4-Terphenyl-d14	*0.02233*	0	*0.0417*	0	*53.6*	*30-121*	0			

LCSD Sample ID: **DLCSDW1-211739-211739** Units: **mg/L** Analysis Date: **2/24/2023 10:50 PM**

Client ID: Run ID: **GC8_230224C** SeqNo: **9308784** Prep Date: **2/22/2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	3.968	0.10	4.17	0	95.2	64-143	3.766	5.23	20	
ORO (C28-C40)	3.946	0.10	4.17	0	94.6	58-141	3.692	6.66	20	
Surr: 4-Terphenyl-d14	*0.0225*	0	*0.0417*	0	*54*	*30-121*	0.02233	*0.744*	*20*	

The following samples were analyzed in this batch:

23021418-01B	23021418-02B	23021418-03B
23021418-04B	23021418-05B	23021418-06B
23021418-07B	23021418-08B	23021418-09B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Big Pine Consultants
Work Order: 23021418
Project: East Palestine Water

QC BATCH REPORT

Batch ID: **R364985** Instrument ID **GC9** Method: **SW8015D**

MBLK Sample ID: **9G-BLKW1-230220-R364985** Units: **µg/L** Analysis Date: **2/20/2023 05:03 PM**
Client ID: Run ID: **GC9_230220A** SeqNo: **9295555** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	U	200								
Surr: Toluene-d8	*88.21*	0	*100*	0	*88.2*	*73-116*	0			

LCS Sample ID: **9G-LCSW1-230220-R364985** Units: **µg/L** Analysis Date: **2/20/2023 04:20 PM**
Client ID: Run ID: **GC9_230220A** SeqNo: **9295554** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	4540	200	5000	0	90.8	70-132	0			
Surr: Toluene-d8	*90.49*	0	*100*	0	*90.5*	*73-116*	0			

MS Sample ID: **23021418-02A MS** Units: **µg/L** Analysis Date: **2/21/2023 01:48 AM**
Client ID: **Big Pine 02** Run ID: **GC9_230220A** SeqNo: **9295564** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	5117	200	5000	0	102	70-132	0			
Surr: Toluene-d8	*95.21*	0	*100*	0	*95.2*	*73-116*	0			

DUP Sample ID: **23021418-01A DUP** Units: **µg/L** Analysis Date: **2/21/2023 01:26 AM**
Client ID: **Big Pine 01** Run ID: **GC9_230220A** SeqNo: **9295563** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	U	200	0	0	0		0	0	30	
Surr: Toluene-d8	*88.39*	0	*100*	0	*88.4*	*73-116*	88.46	*0.0792*	*30*	

The following samples were analyzed in this batch:

23021418-01A	23021418-02A	23021418-03A
23021418-04A	23021418-05A	23021418-06A
23021418-07A	23021418-08A	23021418-09A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **211854a** Instrument ID **SVMS10** Method: **SW8270E**

MBLK	Sample ID: **SBLKW1-211854-211854a**				Units: **µg/L**			Analysis Date: **2/28/2023 08:39 PM**		
Client ID:		Run ID: **SVMS10_230228A**			SeqNo: **9310745**		Prep Date: **2/24/2023**		DF: **1**	

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1`-Biphenyl	U	1.0								
1,2,4,5-Tetrachlorobenzene	U	5.0								
1,4-Dioxane	U	5.0								
1-Methylnaphthalene	U	0.10								
2,2`-Oxybis(1-chloropropane)	U	1.0								
2,3,4,6-Tetrachlorophenol	U	1.0								
2,4,5-Trichlorophenol	U	1.0								
2,4,6-Trichlorophenol	U	1.0								
2,4-Dichlorophenol	U	1.0								
2,4-Dimethylphenol	U	1.0								
2,4-Dinitrophenol	U	5.0								
2,4-Dinitrotoluene	U	1.0								
2,6-Dinitrotoluene	U	1.0								
2-Chloronaphthalene	U	0.10								
2-Chlorophenol	U	1.0								
2-Methylnaphthalene	U	0.10								
2-Methylphenol	U	1.0								
2-Nitroaniline	U	1.0								
2-Nitrophenol	U	1.0								
3&4-Methylphenol	U	1.0								
3,3´-Dichlorobenzidine	U	5.0								
3-Nitroaniline	U	1.0								
4,6-Dinitro-2-methylphenol	U	1.0								
4-Bromophenyl phenyl ether	U	1.0								
4-Chloro-3-methylphenol	U	1.0								
4-Chloroaniline	U	1.0								
4-Chlorophenyl phenyl ether	U	1.0								
4-Nitroaniline	U	1.0								
4-Nitrophenol	U	5.0								
Acenaphthene	U	0.10								
Acenaphthylene	U	0.10								
Acetophenone	U	1.0								
Anthracene	U	0.10								
Atrazine	U	1.0								
Benzaldehyde	U	1.0								
Benzo(a)anthracene	U	0.10								
Benzo(a)pyrene	U	0.10								
Benzo(b)fluoranthene	U	0.10								
Benzo(g,h,i)perylene	U	0.10								
Benzo(k)fluoranthene	U	0.10								
Bis(2-chloroethoxy)methane	U	1.0								
Bis(2-chloroethyl)ether	U	1.0								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **211854a** Instrument ID **SVMS10** Method: **SW8270E**

Bis(2-chloroisopropyl)ether	U	1.0					
Bis(2-ethylhexyl)phthalate	U	1.0					
Butyl benzyl phthalate	U	1.0					
Caprolactam	U	5.0					
Carbazole	U	1.0					
Chrysene	U	0.10					
Dibenzo(a,h)anthracene	U	0.10					
Dibenzofuran	U	1.0					
Diethyl phthalate	U	1.0					
Dimethyl phthalate	U	1.0					
Di-n-butyl phthalate	U	1.0					
Di-n-octyl phthalate	U	1.0					
Fluoranthene	U	0.10					
Fluorene	U	0.10					
Hexachlorobenzene	U	1.0					
Hexachlorobutadiene	U	1.0					
Hexachlorocyclopentadiene	U	5.0					
Hexachloroethane	U	1.0					
Indeno(1,2,3-cd)pyrene	U	0.10					
Isophorone	U	5.0					
Naphthalene	U	0.10					
Nitrobenzene	U	1.0					
N-Nitrosodi-n-propylamine	U	1.0					
N-Nitrosodiphenylamine	U	1.0					
Pentachlorophenol	U	5.0					
Phenanthrene	U	0.10					
Phenol	U	1.0					
Pyrene	U	0.10					
Pyridine	U	10					
Surr: 2,4,6-Tribromophenol	*26.56*	0	*50*	0	*53.1*	*38-103*	0
Surr: 2-Fluorobiphenyl	*27.74*	0	*50*	0	*55.5*	*36-96*	0
Surr: 2-Fluorophenol	*18.83*	0	*50*	0	*37.7*	*20-73*	0
Surr: 4-Terphenyl-d14	*37.7*	0	*50*	0	*75.4*	*44-114*	0
Surr: Nitrobenzene-d5	*25.33*	0	*50*	0	*50.7*	*33-100*	0
Surr: Phenol-d6	*11.67*	0	*50*	0	*23.3*	*10-48*	0

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Big Pine Consultants
Work Order: 23021418
Project: East Palestine Water

QC BATCH REPORT

Batch ID: **211854a** Instrument ID **SVMS10** Method: **SW8270E**

LCS	Sample ID: **SLCSW1-211854-211854a**				Units: **µg/L**			Analysis Date: **3/1/2023 07:55 PM**			
Client ID:		Run ID: **SVMS8_230301A**			SeqNo: **9315934**			Prep Date: **2/24/2023**		DF: **2**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1`-Biphenyl	13.24	2.0	20	0	66.2	24-111	0			
1,2,4,5-Tetrachlorobenzene	12.26	10	20	0	61.3	14-110	0			
1-Methylnaphthalene	13.2	0.20	20	0	66	17-114	0			
2,2`-Oxybis(1-chloropropane)	13.66	2.0	20	0	68.3	31-104	0			
2,3,4,6-Tetrachlorophenol	14.1	2.0	20	0	70.5	38-110	0			
2,4,5-Trichlorophenol	13.16	2.0	20	0	65.8	33-114	0			
2,4,6-Trichlorophenol	13.46	2.0	20	0	67.3	36-113	0			
2,4-Dichlorophenol	13.98	2.0	20	0	69.9	30-111	0			
2,4-Dimethylphenol	10.8	2.0	20	0	54	36-109	0			
2,4-Dinitrophenol	15.46	10	20	0	77.3	12-113	0			
2,4-Dinitrotoluene	14.06	2.0	20	0	70.3	51-107	0			
2,6-Dinitrotoluene	14.3	2.0	20	0	71.5	51-105	0			
2-Chloronaphthalene	12.98	0.20	20	0	64.9	22-112	0			
2-Chlorophenol	13.54	2.0	20	0	67.7	35-108	0			
2-Methylnaphthalene	12.96	0.20	20	0	64.8	12-119	0			
2-Methylphenol	12.44	2.0	20	0	62.2	31-100	0			
2-Nitroaniline	13.82	2.0	20	0	69.1	46-106	0			
2-Nitrophenol	13.16	2.0	20	0	65.8	26-111	0			
3&4-Methylphenol	11.28	2.0	20	0	56.4	24-95	0			
3,3´-Dichlorobenzidine	15.38	10	20	0	76.9	48-101	0			
3-Nitroaniline	14.12	2.0	20	0	70.6	52-105	0			
4,6-Dinitro-2-methylphenol	15.24	2.0	20	0	76.2	28-121	0			
4-Bromophenyl phenyl ether	15.46	2.0	20	0	77.3	49-107	0			
4-Chloro-3-methylphenol	13.86	2.0	20	0	69.3	35-105	0			
4-Chloroaniline	14.1	2.0	20	0	70.5	46-101	0			
4-Chlorophenyl phenyl ether	13.7	2.0	20	0	68.5	40-107	0			
4-Nitroaniline	13.68	2.0	20	0	68.4	49-110	0			
4-Nitrophenol	5.26	10	20	0	26.3	10-64	0			J
Acenaphthene	13.34	0.20	20	0	66.7	32-108	0			
Acenaphthylene	13.14	0.20	20	0	65.7	34-107	0			
Acetophenone	14.14	2.0	20	0	70.7	41-102	0			
Anthracene	14.18	0.20	20	0	70.9	53-105	0			
Atrazine	13.58	2.0	20	0	67.9	53-112	0			
Benzaldehyde	13.12	2.0	20	0	65.6	32-111	0			
Benzo(a)anthracene	16.06	0.20	20	0	80.3	57-106	0			
Benzo(a)pyrene	16.48	0.20	20	0	82.4	54-107	0			
Benzo(b)fluoranthene	17.64	0.20	20	0	88.2	53-109	0			
Benzo(g,h,i)perylene	13.5	0.20	20	0	67.5	50-114	0			
Benzo(k)fluoranthene	17.8	0.20	20	0	89	53-110	0			
Bis(2-chloroethoxy)methane	13.44	2.0	20	0	67.2	42-101	0			
Bis(2-chloroethyl)ether	14.18	2.0	20	0	70.9	39-100	0			
Bis(2-chloroisopropyl)ether	13.66	2.0	20	0	68.3	31-104	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Batch ID: **211854a** Instrument ID **SVMS10** Method: **SW8270E**

Bis(2-ethylhexyl)phthalate	18.1	2.0	20	0	90.5	53-116	0	
Butyl benzyl phthalate	17.48	2.0	20	0	87.4	45-112	0	
Carbazole	13.82	2.0	20	0	69.1	55-106	0	
Chrysene	16.12	0.20	20	0	80.6	57-108	0	
Dibenzo(a,h)anthracene	13.94	0.20	20	0	69.7	51-112	0	
Dibenzofuran	13.58	2.0	20	0	67.9	37-107	0	
Diethyl phthalate	14.2	2.0	20	0	71	44-114	0	
Dimethyl phthalate	14.08	2.0	20	0	70.4	40-115	0	
Di-n-butyl phthalate	15.2	2.0	20	0	76	49-112	0	
Di-n-octyl phthalate	21.8	2.0	20	0	109	47-120	0	
Fluoranthene	13.76	0.20	20	0	68.8	54-107	0	
Fluorene	13.28	0.20	20	0	66.4	42-107	0	
Hexachlorobenzene	14.76	2.0	20	0	73.8	50-105	0	
Hexachlorobutadiene	12.66	2.0	20	0	63.3	10-112	0	
Hexachlorocyclopentadiene	12.68	10	20	0	63.4	10-102	0	
Hexachloroethane	12.96	2.0	20	0	64.8	10-115	0	
Indeno(1,2,3-cd)pyrene	13.78	0.20	20	0	68.9	49-113	0	
Isophorone	13.5	10	20	0	67.5	42-103	0	
Naphthalene	12.5	0.20	20	0	62.5	18-109	0	
Nitrobenzene	12.92	2.0	20	0	64.6	38-101	0	
N-Nitrosodi-n-propylamine	14.42	2.0	20	0	72.1	40-104	0	
N-Nitrosodiphenylamine	14.46	2.0	20	0	72.3	49-105	0	
Pentachlorophenol	13.48	10	20	0	67.4	22-109	0	
Phenanthrene	14.14	0.20	20	0	70.7	51-103	0	
Phenol	6.02	2.0	20	0	30.1	10-63	0	
Pyrene	17.42	0.20	20	0	87.1	50-105	0	
Pyridine	8.28	20	20	0	41.4	11-77	0	J
Surr: 2,4,6-Tribromophenol	*38.06*	0	*50*	0	*76.1*	*38-103*	0	
Surr: 2-Fluorobiphenyl	*32.08*	0	*50*	0	*64.2*	*36-96*	0	
Surr: 2-Fluorophenol	*22.08*	0	*50*	0	*44.2*	*20-73*	0	
Surr: 4-Terphenyl-d14	*42.62*	0	*50*	0	*85.2*	*44-114*	0	
Surr: Nitrobenzene-d5	*31.42*	0	*50*	0	*62.8*	*33-100*	0	
Surr: Phenol-d6	*14.5*	0	*50*	0	*29*	*10-48*	0	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Big Pine Consultants
Work Order: 23021418
Project: East Palestine Water

QC BATCH REPORT

Batch ID: **211854a** Instrument ID **SVMS10** Method: **SW8270E**

LCSD	Sample ID: **SLCSDW1-211854-211854a**				Units: **µg/L**			Analysis Date: **3/1/2023 08:16 PM**			
Client ID:		Run ID: **SVMS8_230301A**			SeqNo: **9315935**			Prep Date: **2/24/2023**		DF: **2**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1`-Biphenyl	13.64	2.0	20	0	68.2	24-111	13.24	2.98	30	
1,2,4,5-Tetrachlorobenzene	12.38	10	20	0	61.9	14-110	12.26	0.974	30	
1-Methylnaphthalene	13.44	0.20	20	0	67.2	17-114	13.2	1.8	30	
2,2`-Oxybis(1-chloropropane)	14.3	2.0	20	0	71.5	31-104	13.66	4.58	30	
2,3,4,6-Tetrachlorophenol	14.38	2.0	20	0	71.9	38-110	14.1	1.97	30	
2,4,5-Trichlorophenol	14.04	2.0	20	0	70.2	33-114	13.16	6.47	30	
2,4,6-Trichlorophenol	14.18	2.0	20	0	70.9	36-113	13.46	5.21	30	
2,4-Dichlorophenol	14.68	2.0	20	0	73.4	30-111	13.98	4.88	30	
2,4-Dimethylphenol	11.7	2.0	20	0	58.5	36-109	10.8	8	30	
2,4-Dinitrophenol	15	10	20	0	75	12-113	15.46	3.02	30	
2,4-Dinitrotoluene	14.44	2.0	20	0	72.2	51-107	14.06	2.67	30	
2,6-Dinitrotoluene	14.54	2.0	20	0	72.7	51-105	14.3	1.66	30	
2-Chloronaphthalene	13.5	0.20	20	0	67.5	22-112	12.98	3.93	30	
2-Chlorophenol	14.4	2.0	20	0	72	35-108	13.54	6.16	30	
2-Methylnaphthalene	13.32	0.20	20	0	66.6	12-119	12.96	2.74	30	
2-Methylphenol	13.08	2.0	20	0	65.4	31-100	12.44	5.02	30	
2-Nitroaniline	14.44	2.0	20	0	72.2	46-106	13.82	4.39	30	
2-Nitrophenol	13.5	2.0	20	0	67.5	26-111	13.16	2.55	30	
3&4-Methylphenol	12.22	2.0	20	0	61.1	24-95	11.28	8	30	
3,3´-Dichlorobenzidine	15.66	10	20	0	78.3	48-101	15.38	1.8	30	
3-Nitroaniline	14.18	2.0	20	0	70.9	52-105	14.12	0.424	30	
4,6-Dinitro-2-methylphenol	15.92	2.0	20	0	79.6	28-121	15.24	4.36	30	
4-Bromophenyl phenyl ether	15.7	2.0	20	0	78.5	49-107	15.46	1.54	30	
4-Chloro-3-methylphenol	14.02	2.0	20	0	70.1	35-105	13.86	1.15	30	
4-Chloroaniline	14.66	2.0	20	0	73.3	46-101	14.1	3.89	30	
4-Chlorophenyl phenyl ether	14	2.0	20	0	70	40-107	13.7	2.17	30	
4-Nitroaniline	14.06	2.0	20	0	70.3	49-110	13.68	2.74	30	
4-Nitrophenol	5.6	10	20	0	28	10-64	5.26	0	30	J
Acenaphthene	13.52	0.20	20	0	67.6	32-108	13.34	1.34	30	
Acenaphthylene	13.56	0.20	20	0	67.8	34-107	13.14	3.15	30	
Acetophenone	14.72	2.0	20	0	73.6	41-102	14.14	4.02	30	
Anthracene	14.42	0.20	20	0	72.1	53-105	14.18	1.68	30	
Atrazine	14.04	2.0	20	0	70.2	53-112	13.58	3.33	30	
Benzaldehyde	13.66	2.0	20	0	68.3	32-111	13.12	4.03	30	
Benzo(a)anthracene	16.38	0.20	20	0	81.9	57-106	16.06	1.97	30	
Benzo(a)pyrene	16.72	0.20	20	0	83.6	54-107	16.48	1.45	30	
Benzo(b)fluoranthene	18.1	0.20	20	0	90.5	53-109	17.64	2.57	30	
Benzo(g,h,i)perylene	13.64	0.20	20	0	68.2	50-114	13.5	1.03	30	
Benzo(k)fluoranthene	18.26	0.20	20	0	91.3	53-110	17.8	2.55	30	
Bis(2-chloroethoxy)methane	14.02	2.0	20	0	70.1	42-101	13.44	4.22	30	
Bis(2-chloroethyl)ether	14.86	2.0	20	0	74.3	39-100	14.18	4.68	30	
Bis(2-chloroisopropyl)ether	14.3	2.0	20	0	71.5	31-104	13.66	4.58	30	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Big Pine Consultants
Work Order: 23021418
Project: East Palestine Water

QC BATCH REPORT

Batch ID: **211854a** Instrument ID **SVMS10** Method: **SW8270E**

Bis(2-ethylhexyl)phthalate	18.36	2.0	20	0	91.8	53-116	18.1	1.43	30	
Butyl benzyl phthalate	17.62	2.0	20	0	88.1	45-112	17.48	0.798	30	
Carbazole	14.36	2.0	20	0	71.8	55-106	13.82	3.83	30	
Chrysene	16.46	0.20	20	0	82.3	57-108	16.12	2.09	30	
Dibenzo(a,h)anthracene	14.16	0.20	20	0	70.8	51-112	13.94	1.57	30	
Dibenzofuran	14.3	2.0	20	0	71.5	37-107	13.58	5.16	30	
Diethyl phthalate	14.64	2.0	20	0	73.2	44-114	14.2	3.05	30	
Dimethyl phthalate	14.58	2.0	20	0	72.9	40-115	14.08	3.49	30	
Di-n-butyl phthalate	15.26	2.0	20	0	76.3	49-112	15.2	0.394	30	
Di-n-octyl phthalate	22.42	2.0	20	0	112	47-120	21.8	2.8	30	
Fluoranthene	14.4	0.20	20	0	72	54-107	13.76	4.55	30	
Fluorene	13.64	0.20	20	0	68.2	42-107	13.28	2.67	30	
Hexachlorobenzene	14.88	2.0	20	0	74.4	50-105	14.76	0.81	30	
Hexachlorobutadiene	13.22	2.0	20	0	66.1	10-112	12.66	4.33	30	
Hexachlorocyclopentadiene	12.66	10	20	0	63.3	10-102	12.68	0.158	30	
Hexachloroethane	13.42	2.0	20	0	67.1	10-115	12.96	3.49	30	
Indeno(1,2,3-cd)pyrene	14.52	0.20	20	0	72.6	49-113	13.78	5.23	30	
Isophorone	14.04	10	20	0	70.2	42-103	13.5	3.92	30	
Naphthalene	13.1	0.20	20	0	65.5	18-109	12.5	4.69	30	
Nitrobenzene	13.6	2.0	20	0	68	38-101	12.92	5.13	30	
N-Nitrosodi-n-propylamine	14.98	2.0	20	0	74.9	40-104	14.42	3.81	30	
N-Nitrosodiphenylamine	14.6	2.0	20	0	73	49-105	14.46	0.964	30	
Pentachlorophenol	12.46	10	20	0	62.3	22-109	13.48	7.86	30	
Phenanthrene	14.38	0.20	20	0	71.9	51-103	14.14	1.68	30	
Phenol	6.62	2.0	20	0	33.1	10-63	6.02	9.49	30	
Pyrene	17.78	0.20	20	0	88.9	50-105	17.42	2.05	30	
Pyridine	8.36	20	20	0	41.8	11-77	8.28	0	30	J
Surr: 2,4,6-Tribromophenol	*38.08*	0	*50*	0	*76.2*	*38-103*	38.06	*0.0525*	*40*	
Surr: 2-Fluorobiphenyl	*32.6*	0	*50*	0	*65.2*	*36-96*	32.08	*1.61*	*40*	
Surr: 2-Fluorophenol	*23.4*	0	*50*	0	*46.8*	*20-73*	22.08	*5.8*	*40*	
Surr: 4-Terphenyl-d14	*43.14*	0	*50*	0	*86.3*	*44-114*	42.62	*1.21*	*40*	
Surr: Nitrobenzene-d5	*32.58*	0	*50*	0	*65.2*	*33-100*	31.42	*3.62*	*40*	
Surr: Phenol-d6	*15.68*	0	*50*	0	*31.4*	*10-48*	14.5	*7.82*	*40*	

The following samples were analyzed in this batch:

23021418-01C	23021418-02C	23021418-03C
23021418-04C	23021418-05C	23021418-06C
23021418-07C	23021418-08C	23021418-09C

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Big Pine Consultants
Work Order: 23021418
Project: East Palestine Water

QC BATCH REPORT

Batch ID: **R364850b** Instrument ID **VMS12** Method: **SW8260D**

MBLK	Sample ID: **12V-BLKW1-230221-R364850b**				Units: **µg/L**		Analysis Date: **2/21/2023 01:52 PM**			
Client ID:		Run ID: **VMS12_230221A**			SeqNo: **9292325**		Prep Date:		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	U	1.0								
1,1,2,2-Tetrachloroethane	U	1.0								
1,1,2-Trichloroethane	U	1.0								
1,1,2-Trichlorotrifluoroethane	U	1.0								
1,1-Dichloroethane	U	1.0								
1,1-Dichloroethene	U	1.0								
1,2,3-Trichlorobenzene	U	1.0								
1,2,3-Trichloropropane	U	1.0								
1,2,4-Trichlorobenzene	U	1.0								
1,2,4-Trimethylbenzene	U	1.0								
1,2-Dibromo-3-chloropropane	U	1.0								
1,2-Dibromoethane	U	1.0								
1,2-Dichlorobenzene	U	1.0								
1,2-Dichloroethane	U	1.0								
1,2-Dichloropropane	U	1.0								
1,3,5-Trimethylbenzene	U	1.0								
1,3-Dichlorobenzene	U	1.0								
1,4-Dichlorobenzene	U	1.0								
2-Butanone	U	5.0								
2-Hexanone	U	5.0								
4-Methyl-2-pentanone	U	1.0								
Acetone	U	10								
Benzene	U	1.0								
Bromochloromethane	U	1.0								
Bromodichloromethane	U	1.0								
Bromoform	U	1.0								
Bromomethane	U	1.0								
Carbon disulfide	U	1.0								
Carbon tetrachloride	U	1.0								
Chlorobenzene	U	1.0								
Chloroethane	U	1.0								
Chloroform	U	1.0								
Chloromethane	U	1.0								
cis-1,2-Dichloroethene	U	1.0								
cis-1,3-Dichloropropene	U	1.0								
Cyclohexane	U	2.0								
Dibromochloromethane	U	1.0								
Dichlorodifluoromethane	U	1.0								
Ethylbenzene	U	1.0								
Isopropylbenzene	U	1.0								
m,p-Xylene	U	2.0								
Methyl acetate	U	2.0								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **R364850b** Instrument ID **VMS12** Method: **SW8260D**

Methyl tert-butyl ether	U	1.0					
Methylcyclohexane	U	1.0					
Methylene chloride	U	5.0					
o-Xylene	U	1.0					
Styrene	U	1.0					
Tetrachloroethene	U	1.0					
Toluene	U	1.0					
trans-1,2-Dichloroethene	U	1.0					
trans-1,3-Dichloropropene	U	1.0					
Trichloroethene	U	1.0					
Trichlorofluoromethane	U	1.0					
Vinyl chloride	U	1.0					
Xylenes, Total	U	2.0					
Surr: 1,2-Dichloroethane-d4	*20.94*	0	*20*	0	*105*	*80-120*	0
Surr: 4-Bromofluorobenzene	*20*	0	*20*	0	*100*	*80-120*	0
Surr: Dibromofluoromethane	*20.02*	0	*20*	0	*100*	*80-120*	0
Surr: Toluene-d8	*19.4*	0	*20*	0	*97*	*80-120*	0

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Big Pine Consultants
Work Order: 23021418
Project: East Palestine Water

QC BATCH REPORT

Batch ID: **R364850b** Instrument ID **VMS12** Method: **SW8260D**

LCS	Sample ID: **12V-LCSW1-230221-R364850b**				Units: **µg/L**			Analysis Date: **2/21/2023 12:41 PM**			
Client ID:		Run ID: **VMS12_230221A**			SeqNo: **9292323**		Prep Date:		DF: **1**		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	18.68	1.0	20	0	93.4	75-119	0			
1,1,2,2-Tetrachloroethane	19.24	1.0	20	0	96.2	80-123	0			
1,1,2-Trichloroethane	18.55	1.0	20	0	92.8	83-118	0			
1,1,2-Trichlorotrifluoroethane	20.39	1.0	20	0	102	64-133	0			
1,1-Dichloroethane	20.03	1.0	20	0	100	73-122	0			
1,1-Dichloroethene	20.98	1.0	20	0	105	66-131	0			
1,2,3-Trichlorobenzene	20	1.0	20	0	100	65-140	0			
1,2,3-Trichloropropane	19.47	1.0	20	0	97.4	78-119	0			
1,2,4-Trichlorobenzene	20.64	1.0	20	0	103	73-127	0			
1,2,4-Trimethylbenzene	19.57	1.0	20	0	97.8	74-118	0			
1,2-Dibromo-3-chloropropane	17.99	1.0	20	0	90	52-141	0			
1,2-Dibromoethane	19.19	1.0	20	0	96	60-159	0			
1,2-Dichlorobenzene	19.17	1.0	20	0	95.8	80-119	0			
1,2-Dichloroethane	20.85	1.0	20	0	104	78-121	0			
1,2-Dichloropropane	19.39	1.0	20	0	97	78-120	0			
1,3,5-Trimethylbenzene	19.73	1.0	20	0	98.6	76-120	0			
1,3-Dichlorobenzene	19.62	1.0	20	0	98.1	80-120	0			
1,4-Dichlorobenzene	19.72	1.0	20	0	98.6	81-119	0			
2-Butanone	18.8	5.0	20	0	94	69-147	0			
2-Hexanone	19.41	5.0	20	0	97	67-140	0			
4-Methyl-2-pentanone	20.01	1.0	20	0	100	68-199	0			
Acetone	20	10	20	0	100	70-166	0			
Benzene	19.97	1.0	20	0	99.8	78-120	0			
Bromochloromethane	20.69	1.0	20	0	103	70-125	0			
Bromodichloromethane	20.33	1.0	20	0	102	73-126	0			
Bromoform	17.43	1.0	20	0	87.2	60-124	0			
Bromomethane	16.59	1.0	20	0	83	20-183	0			
Carbon disulfide	18.53	1.0	20	0	92.6	67-159	0			
Carbon tetrachloride	19.81	1.0	20	0	99	69-124	0			
Chlorobenzene	19.13	1.0	20	0	95.6	80-118	0			
Chloroethane	15.56	1.0	20	0	77.8	35-136	0			
Chloroform	20.04	1.0	20	0	100	75-119	0			
Chloromethane	11.05	1.0	20	0	55.2	26-117	0			
cis-1,2-Dichloroethene	20.61	1.0	20	0	103	75-123	0			
cis-1,3-Dichloropropene	20.67	1.0	20	0	103	69-120	0			
Cyclohexane	18.29	2.0	20	0	91.4	66-128	0			
Dibromochloromethane	16.3	1.0	20	0	81.5	63-117	0			
Dichlorodifluoromethane	12.66	1.0	20	0	63.3	36-133	0			
Ethylbenzene	19.42	1.0	20	0	97.1	76-116	0			
Isopropylbenzene	19.36	1.0	20	0	96.8	77-118	0			
m,p-Xylene	39.86	2.0	40	0	99.6	76-119	0			
Methyl tert-butyl ether	22.28	1.0	20	0	111	77-137	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **R364850b** Instrument ID **VMS12** Method: **SW8260D**

Methylcyclohexane	19.75	1.0	20	0	98.8	66-125	0
Methylene chloride	20.65	5.0	20	0	103	68-125	0
o-Xylene	19.8	1.0	20	0	99	77-116	0
Styrene	19.55	1.0	20	0	97.8	76-123	0
Tetrachloroethene	19.24	1.0	20	0	96.2	80-124	0
Toluene	19.05	1.0	20	0	95.2	78-116	0
trans-1,2-Dichloroethene	20.7	1.0	20	0	104	73-124	0
trans-1,3-Dichloropropene	17.75	1.0	20	0	88.8	67-118	0
Trichloroethene	19.69	1.0	20	0	98.4	75-122	0
Trichlorofluoromethane	16.26	1.0	20	0	81.3	52-115	0
Vinyl chloride	13.59	1.0	20	0	68	49-122	0
Xylenes, Total	59.66	2.0	60	0	99.4	77-119	0
Surr: 1,2-Dichloroethane-d4	*20.97*	0	*20*	0	*105*	*80-120*	0
Surr: 4-Bromofluorobenzene	*19.88*	0	*20*	0	*99.4*	*80-120*	0
Surr: Dibromofluoromethane	*21.08*	0	*20*	0	*105*	*80-120*	0
Surr: Toluene-d8	*18.6*	0	*20*	0	*93*	*80-120*	0

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Big Pine Consultants
Work Order: 23021418
Project: East Palestine Water

QC BATCH REPORT

Batch ID: **R364850b** Instrument ID **VMS12** Method: **SW8260D**

MS	Sample ID: **23021498-26A MS**				Units: **µg/L**			Analysis Date: **2/21/2023 10:35 PM**		
Client ID:		Run ID: **VMS12_230221A**			SeqNo: **9292347**		Prep Date:		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	21.03	1.0	20	0	105	75-119	0			
1,1,2,2-Tetrachloroethane	20.77	1.0	20	0	104	80-123	0			
1,1,2-Trichloroethane	21.13	1.0	20	0	106	83-118	0			
1,1,2-Trichlorotrifluoroethane	24.45	1.0	20	0	122	64-133	0			
1,1-Dichloroethane	22.38	1.0	20	0	112	73-122	0			
1,1-Dichloroethene	24.18	1.0	20	0	121	66-131	0			
1,2,3-Trichlorobenzene	18.44	1.0	20	0	92.2	65-140	0			
1,2,3-Trichloropropane	20.97	1.0	20	0	105	78-119	0			
1,2,4-Trichlorobenzene	19.56	1.0	20	0	97.8	73-127	0			
1,2,4-Trimethylbenzene	22.85	1.0	20	0	114	74-118	0			
1,2-Dibromo-3-chloropropane	16.58	1.0	20	0	82.9	52-141	0			
1,2-Dibromoethane	20.24	1.0	20	0	101	60-159	0			
1,2-Dichlorobenzene	21.39	1.0	20	0	107	80-119	0			
1,2-Dichloroethane	22.94	1.0	20	0	115	78-121	0			
1,2-Dichloropropane	21.67	1.0	20	0	108	78-120	0			
1,3,5-Trimethylbenzene	22.2	1.0	20	0	111	76-120	0			
1,3-Dichlorobenzene	21.29	1.0	20	0	106	80-120	0			
1,4-Dichlorobenzene	21.39	1.0	20	0	107	81-119	0			
2-Butanone	20.9	5.0	20	0	104	69-147	0			
2-Hexanone	21.97	5.0	20	0	110	67-140	0			
4-Methyl-2-pentanone	27.48	1.0	20	0	137	68-199	0			
Acetone	26.88	10	20	2.62	121	70-166	0			
Benzene	35.44	1.0	20	0	177	78-120	0			S
Bromochloromethane	22.65	1.0	20	0	113	70-125	0			
Bromodichloromethane	21.31	1.0	20	0	107	73-126	0			
Bromoform	17.45	1.0	20	0	87.2	60-124	0			
Bromomethane	16.24	1.0	20	0	81.2	20-183	0			
Carbon disulfide	19.37	1.0	20	0	96.8	67-159	0			
Carbon tetrachloride	21.79	1.0	20	0	109	69-124	0			
Chlorobenzene	21.82	1.0	20	0	109	80-118	0			
Chloroethane	18.14	1.0	20	0	90.7	35-136	0			
Chloroform	22.82	1.0	20	0	114	75-119	0			
Chloromethane	12.42	1.0	20	0	62.1	26-117	0			
cis-1,2-Dichloroethene	22.72	1.0	20	0	114	75-123	0			
cis-1,3-Dichloropropene	20.5	1.0	20	0	102	69-120	0			
Cyclohexane	22.59	2.0	20	0	113	66-128	0			
Dibromochloromethane	16.42	1.0	20	0	82.1	63-117	0			
Dichlorodifluoromethane	15.22	1.0	20	0	76.1	36-133	0			
Ethylbenzene	24.11	1.0	20	0	121	76-116	0			S
Isopropylbenzene	21.91	1.0	20	0	110	77-118	0			
m,p-Xylene	49.7	2.0	40	0	124	76-119	0			S
Methyl tert-butyl ether	25.27	1.0	20	0	126	77-137	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **R364850b** Instrument ID **VMS12** Method: **SW8260D**

Methylcyclohexane	21.48	1.0	20	0	107	66-125	0	
Methylene chloride	23.11	5.0	20	0	116	68-125	0	
o-Xylene	23.86	1.0	20	0	119	77-116	0	S
Styrene	21.36	1.0	20	0	107	76-123	0	
Tetrachloroethene	22.47	1.0	20	0	112	80-124	0	
Toluene	23.2	1.0	20	0	116	78-116	0	
trans-1,2-Dichloroethene	23.7	1.0	20	0	118	73-124	0	
trans-1,3-Dichloropropene	17.55	1.0	20	0	87.8	67-118	0	
Trichloroethene	22.45	1.0	20	0	112	75-122	0	
Trichlorofluoromethane	19.07	1.0	20	0	95.4	52-115	0	
Vinyl chloride	15.45	1.0	20	0	77.2	49-122	0	
Xylenes, Total	73.56	2.0	60	0	123	77-119	0	S
Surr: 1,2-Dichloroethane-d4	*20.41*	0	*20*	0	*102*	*80-120*	0	
Surr: 4-Bromofluorobenzene	*20.29*	0	*20*	0	*101*	*80-120*	0	
Surr: Dibromofluoromethane	*19.85*	0	*20*	0	*99.2*	*80-120*	0	
Surr: Toluene-d8	*19.67*	0	*20*	0	*98.4*	*80-120*	0	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Big Pine Consultants
Work Order: 23021418
Project: East Palestine Water

QC BATCH REPORT

Batch ID: **R364850b** Instrument ID **VMS12** Method: **SW8260D**

DUP	Sample ID: **23021498-25A DUP**				Units: **µg/L**			Analysis Date: **2/21/2023 10:11 PM**			
Client ID:		Run ID: **VMS12_230221A**			SeqNo: **9292346**		Prep Date:		DF: **1**		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	U	1.0	0	0	0		0	0	30	
1,1,2,2-Tetrachloroethane	U	1.0	0	0	0		0	0	30	
1,1,2-Trichloroethane	U	1.0	0	0	0		0	0	30	
1,1,2-Trichlorotrifluoroethane	U	1.0	0	0	0		0	0	30	
1,1-Dichloroethane	U	1.0	0	0	0		0	0	30	
1,1-Dichloroethene	U	1.0	0	0	0		0	0	30	
1,2,3-Trichlorobenzene	U	1.0	0	0	0		0	0	30	
1,2,3-Trichloropropane	U	1.0	0	0	0		0	0	30	
1,2,4-Trichlorobenzene	U	1.0	0	0	0		0	0	30	
1,2,4-Trimethylbenzene	2.91	1.0	0	0	0		2.6	11.3	30	
1,2-Dibromo-3-chloropropane	U	1.0	0	0	0		0	0	30	
1,2-Dibromoethane	U	1.0	0	0	0		0	0	30	
1,2-Dichlorobenzene	U	1.0	0	0	0		0	0	30	
1,2-Dichloroethane	U	1.0	0	0	0		0	0	30	
1,2-Dichloropropane	U	1.0	0	0	0		0	0	30	
1,3,5-Trimethylbenzene	0.66	1.0	0	0	0		0.71	0	30	J
1,3-Dichlorobenzene	U	1.0	0	0	0		0	0	30	
1,4-Dichlorobenzene	U	1.0	0	0	0		0	0	30	
2-Butanone	U	5.0	0	0	0		0	0	30	
2-Hexanone	U	5.0	0	0	0		0	0	30	
4-Methyl-2-pentanone	U	1.0	0	0	0		0	0	30	
Acetone	1.42	10	0	0	0		1.76	0	30	J
Benzene	U	1.0	0	0	0		0.28	0	30	
Bromochloromethane	U	1.0	0	0	0		0	0	30	
Bromodichloromethane	U	1.0	0	0	0		0	0	30	
Bromoform	U	1.0	0	0	0		0	0	30	
Bromomethane	U	1.0	0	0	0		0	0	30	
Carbon disulfide	U	1.0	0	0	0		0	0	30	
Carbon tetrachloride	U	1.0	0	0	0		0	0	30	
Chlorobenzene	U	1.0	0	0	0		0	0	30	
Chloroethane	U	1.0	0	0	0		0	0	30	
Chloroform	U	1.0	0	0	0		0	0	30	
Chloromethane	U	1.0	0	0	0		0	0	30	
cis-1,2-Dichloroethene	U	1.0	0	0	0		0	0	30	
cis-1,3-Dichloropropene	U	1.0	0	0	0		0	0	30	
Cyclohexane	U	2.0	0	0	0		0.3	0	30	
Dibromochloromethane	U	1.0	0	0	0		0	0	30	
Dichlorodifluoromethane	U	1.0	0	0	0		0	0	30	
Ethylbenzene	1.13	1.0	0	0	0		1.33	16.3	30	
Isopropylbenzene	U	1.0	0	0	0		0	0	30	
m,p-Xylene	8.77	2.0	0	0	0		10.31	16.1	30	
Methyl acetate	U	2.0	0	0	0		0	0	30	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **R364850b** Instrument ID **VMS12** Method: **SW8260D**

Methyl tert-butyl ether	U	1.0	0	0	0		0	0	30
Methylcyclohexane	U	1.0	0	0	0		0	0	30
Methylene chloride	U	5.0	0	0	0		0	0	30
o-Xylene	3.66	1.0	0	0	0		4.06	10.4	30
Styrene	U	1.0	0	0	0		0	0	30
Tetrachloroethene	U	1.0	0	0	0		0	0	30
Toluene	2.43	1.0	0	0	0		2.69	10.2	30
trans-1,2-Dichloroethene	U	1.0	0	0	0		0	0	30
trans-1,3-Dichloropropene	U	1.0	0	0	0		0	0	30
Trichloroethene	U	1.0	0	0	0		0	0	30
Trichlorofluoromethane	U	1.0	0	0	0		0	0	30
Vinyl chloride	U	1.0	0	0	0		0	0	30
Xylenes, Total	12.43	2.0	0	0	0		14.37	14.5	30
Surr: 1,2-Dichloroethane-d4	*21.57*	0	*20*	0	*108*	*80-120*	21.03	*2.54*	*30*
Surr: 4-Bromofluorobenzene	*19.88*	0	*20*	0	*99.4*	*80-120*	19.98	*0.502*	*30*
Surr: Dibromofluoromethane	*19.69*	0	*20*	0	*98.4*	*80-120*	19.53	*0.816*	*30*
Surr: Toluene-d8	*18.81*	0	*20*	0	*94*	*80-120*	19.4	*3.09*	*30*

The following samples were analyzed in this batch:

23021418-01A	23021418-02A	23021418-03A
23021418-04A	23021418-05A	23021418-06A
23021418-07A	23021418-08A	23021418-09A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

ALS Environmental

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Chain of Custody Form

Page 1 of 1

COC ID: 15694

ALS Project Manager: | ALS Work Order #:

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	East Palestine H_2O	A	SVOC
Work Order		Project Number	2023-04	B	VOC
Company Name	Big Pine Consultants LLC	Bill To Company	Big Pine Consultants LLC	C	DRO
Send Report To	Justin Johnston	Invoice Attn	Justin Johnston	D	GRO
Address	1066 Towervue Dr.	Address	1066 Towerville Dr.	E	
				F	
City/State/Zip	Pittsburgh, PA 15227	City/State/Zip	Pittsburgh, PA 15227	G	
Phone	231-282-2192	Phone	231-282-2192	H	
Fax		Fax		I	
e-Mail Address	justin.johnston@bigpineconsultants.com	e-Mail Address	justin.johnston@bigpineconsultants.com	J	

23021418

BIGPINECONSULTANTS: Big Pine Consultants
Project: East Palestine Water

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	Big Pine 01	2/17/23	8:15 AM	H_2O		9	X	X	X	X							
2	Big Pine 02	2/17/23	9:00 AM	H_2O		9	X	X	X	X							
3	Big Pine 03	2.17.23	9:45 AM	H_2O		9	X	X	X	X							
4	Big Pine 04	2.17.23	10:15 AM	H_2O		9	X	X	X	X							
5	Big Pine 05	2.17.23	10:50 AM	H_2O		9	X	X	X	X							
6	Big Pine 06	2.17.23	11:20 AM	H_2O		9	X	X	X	X							
7	Big Pine 07	2.17.23	12:00 PM	H_2O		9	X	X	X	X							
8	Big Pine 08	2.17.23	12:30 PM	H_2O		9	X	X	X	X							
9	Big Pine 09	2.17.23	1:00 PM	H_2O		9	X	X	X	X							
10																	

Sampler(s) Please Print & Sign: Justin Johnston

Shipment Method:

Required Turnaround Time: (Check Box) ☐ Other ____ ☒ STD 10 Wk Days ☐ 5 Wk Days ☐ 2 Wk Days ☐ 24 Hour

Results Due Date: 2.27.23

Relinquished by:	Justin Johnston	Date: 2.17.23	Time: 3:04	Received by:	ALS
Relinquished by:	ALS	Date: 2-17-23	Time: 1730	Received by (Laboratory): FedEx	2/18/23 1130
Logged by (Laboratory):	KE	Date: 2/20/23	Time: 1005	Checked by (Laboratory):	

Notes:

Cooler ID	Cooler Temp
1B3	2.7°C
A433	

QC Package: (Check One Box Below)
☐ Level II Std QC ☐ TRRP Checklist
☐ Level III Std QC/Raw Date ☐ TRRP Level IV
☐ Level IV SW846/CLP
☐ Other ____

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.

ALS Group, USA
Holland, Michigan

Sample Receipt Checklist

Client Name: **BIGPINECONSULTANTS** Date/Time Received: **18-Feb-23 11:30**

Work Order: **23021418** Received by: **KRW**

Checklist completed by Keith Wierenga (eSignature) 20-Feb-23 (Date) Reviewed by: Chad Whelton (eSignature) 21-Feb-23 (Date)

Matrices: Water
Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Sample(s) received on ice?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	2.7/3.7 C	IR3	
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	2/20/2023 10:05:51 AM		
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐
pH adjusted?	Yes ☐	No ☑	N/A ☐
pH adjusted by:	-		

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction: