

Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190622-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: Trip Blank
Date Collected: 04/23/24 08:57
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-16
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			05/02/24 22:48	1
4-Isopropyltoluene	ND		1.0	0.43	ug/L			05/02/24 22:48	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			05/02/24 22:48	1
Acetone	ND		15	6.6	ug/L			05/02/24 22:48	1
Benzene	ND		1.0	0.31	ug/L			05/02/24 22:48	1
Bromobenzene	ND		1.0	0.40	ug/L			05/02/24 22:48	1
Bromochloromethane	ND		1.0	0.40	ug/L			05/02/24 22:48	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/02/24 22:48	1
Bromoform	ND		2.0	1.2	ug/L			05/02/24 22:48	1
Bromomethane	ND		5.0	2.4	ug/L			05/02/24 22:48	1
Carbon disulfide	ND		2.0	0.63	ug/L			05/02/24 22:48	1
Carbon tetrachloride	ND		1.0	0.57	ug/L			05/02/24 22:48	1
Chlorobenzene	ND		1.0	0.42	ug/L			05/02/24 22:48	1
Chloroethane	ND		4.0	1.4	ug/L			05/02/24 22:48	1
Chloroform	ND		1.0	0.36	ug/L			05/02/24 22:48	1
Chloromethane	ND		2.0	0.75	ug/L			05/02/24 22:48	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			05/02/24 22:48	1
cis-1,3-Dichloropropene	ND		2.0	0.63	ug/L			05/02/24 22:48	1
Dibromochloromethane	ND		2.0	0.62	ug/L			05/02/24 22:48	1
Dibromomethane	ND		1.0	0.34	ug/L			05/02/24 22:48	1
Dichlorodifluoromethane	ND	*-	3.0	0.96	ug/L			05/02/24 22:48	1
Ethylbenzene	ND		1.0	0.30	ug/L			05/02/24 22:48	1
Hexachlorobutadiene	ND		2.0	1.2	ug/L			05/02/24 22:48	1
Isopropylbenzene	ND		1.0	0.36	ug/L			05/02/24 22:48	1
Methylene Chloride	ND		2.0	0.94	ug/L			05/02/24 22:48	1
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			05/02/24 22:48	1
Naphthalene	ND		2.0	0.63	ug/L			05/02/24 22:48	1
n-Butylbenzene	ND		1.0	0.48	ug/L			05/02/24 22:48	1
N-Propylbenzene	ND		1.0	0.53	ug/L			05/02/24 22:48	1
o-Xylene	ND		1.0	0.33	ug/L			05/02/24 22:48	1
sec-Butylbenzene	ND		1.0	0.45	ug/L			05/02/24 22:48	1
Styrene	ND		1.0	0.36	ug/L			05/02/24 22:48	1
tert-Butylbenzene	ND		1.0	0.42	ug/L			05/02/24 22:48	1
Tetrachloroethene	ND		1.0	0.40	ug/L			05/02/24 22:48	1
Toluene	ND		1.0	0.32	ug/L			05/02/24 22:48	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			05/02/24 22:48	1
trans-1,3-Dichloropropene	ND		2.0	0.65	ug/L			05/02/24 22:48	1
Trichloroethene	ND		1.0	0.30	ug/L			05/02/24 22:48	1
Trichlorofluoromethane	ND		2.0	0.57	ug/L			05/02/24 22:48	1
Vinyl chloride	ND		2.0	0.51	ug/L			05/02/24 22:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		70 - 127		05/02/24 22:48	1
4-Bromofluorobenzene (Surr)	98		78 - 120		05/02/24 22:48	1
Dibromofluoromethane (Surr)	99		77 - 120		05/02/24 22:48	1
Toluene-d8 (Surr)	99		80 - 125		05/02/24 22:48	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190622-1

Method: EPA 200.8 - Metals (ICP/MS)

Client Sample ID: MW-1D
Date Collected: 04/24/24 09:37
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.58	J	5.0	0.50	ug/L		05/01/24 08:38	05/02/24 00:21	1

Client Sample ID: MW-3D
Date Collected: 04/23/24 10:15
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		05/01/24 08:38	05/02/24 00:32	1

Client Sample ID: MW-10S
Date Collected: 04/23/24 09:34
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		05/01/24 08:38	05/02/24 00:35	1

Client Sample ID: MW-10D
Date Collected: 04/23/24 08:57
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		05/01/24 08:38	05/02/24 00:39	1

Client Sample ID: VLF240422-2
Date Collected: 04/22/24 17:44
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		05/01/24 08:38	05/02/24 00:43	1

Client Sample ID: VLF240422-1
Date Collected: 04/22/24 17:10
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		05/01/24 08:38	05/02/24 00:46	1

Client Sample ID: MW-12S
Date Collected: 04/23/24 11:31
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.68	J	5.0	0.50	ug/L		05/01/24 08:38	05/02/24 00:57	1

Client Sample ID: MW-12D
Date Collected: 04/23/24 11:03
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		05/01/24 08:38	05/02/24 01:00	1

Client Sample ID: MW-23
Date Collected: 04/24/24 10:20
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	20		5.0	0.50	ug/L		05/01/24 08:38	05/02/24 01:04	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190622-1

Method: EPA 200.8 - Metals (ICP/MS)

Client Sample ID: MW-26
Date Collected: 04/24/24 12:00
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	14		5.0	0.50	ug/L		05/01/24 08:38	05/02/24 01:08	1

Client Sample ID: MW-27
Date Collected: 04/24/24 11:14
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	35		5.0	0.50	ug/L		05/01/24 08:38	05/02/24 01:11	1

Client Sample ID: P-8
Date Collected: 04/23/24 12:19
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		05/01/24 08:38	05/02/24 01:15	1

Client Sample ID: Duplicate 1
Date Collected: 04/23/24 07:00
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		05/01/24 08:38	05/02/24 01:18	1

Client Sample ID: Duplicate 2
Date Collected: 04/23/24 08:00
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-14
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.74	J	5.0	0.50	ug/L		05/01/24 08:38	05/02/24 01:22	1

Method: SW846 6010B - Dissolved Metals - Dissolved

Client Sample ID: MW-1D
Date Collected: 04/24/24 09:37
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	26000	B	200	24	ug/L		05/01/24 08:30	05/03/24 22:40	1
Iron	20	J B	100	9.1	ug/L		05/01/24 08:30	05/03/24 22:40	1
Magnesium	11000		200	4.2	ug/L		05/01/24 08:30	05/03/24 22:40	1
Manganese	0.66	J	10	0.45	ug/L		05/01/24 08:30	05/03/24 22:40	1
Sodium	25000		1000	97	ug/L		05/01/24 08:30	05/03/24 22:40	1

Client Sample ID: MW-3D
Date Collected: 04/23/24 10:15
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	43000	B	200	24	ug/L		05/01/24 08:30	05/03/24 23:10	1
Iron	11	J B	100	9.1	ug/L		05/01/24 08:30	05/03/24 23:10	1
Magnesium	19000		200	4.2	ug/L		05/01/24 08:30	05/03/24 23:10	1
Manganese	1.9	J	10	0.45	ug/L		05/01/24 08:30	05/03/24 23:10	1
Sodium	20000		1000	97	ug/L		05/01/24 08:30	05/03/24 23:10	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190622-1

Method: SW846 6010B - Dissolved Metals - Dissolved

Client Sample ID: MW-10S
Date Collected: 04/23/24 09:34
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	330000	B	200	24	ug/L		05/01/24 08:30	05/03/24 23:14	1
Iron	11	J B	100	9.1	ug/L		05/01/24 08:30	05/03/24 23:14	1
Magnesium	150000		200	4.2	ug/L		05/01/24 08:30	05/03/24 23:14	1
Manganese	91		10	0.45	ug/L		05/01/24 08:30	05/03/24 23:14	1
Sodium	36000		1000	97	ug/L		05/01/24 08:30	05/03/24 23:14	1

Client Sample ID: MW-10D
Date Collected: 04/23/24 08:57
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	130000	B	200	24	ug/L		05/01/24 08:30	05/03/24 23:18	1
Iron	14	J B	100	9.1	ug/L		05/01/24 08:30	05/03/24 23:18	1
Magnesium	42000		200	4.2	ug/L		05/01/24 08:30	05/03/24 23:18	1
Manganese	64		10	0.45	ug/L		05/01/24 08:30	05/03/24 23:18	1
Sodium	35000		1000	97	ug/L		05/01/24 08:30	05/03/24 23:18	1

Client Sample ID: VLF240422-2
Date Collected: 04/22/24 17:44
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	150000	B	200	24	ug/L		05/01/24 08:30	05/03/24 23:22	1
Iron	ND		100	9.1	ug/L		05/01/24 08:30	05/03/24 23:22	1
Magnesium	64000		200	4.2	ug/L		05/01/24 08:30	05/03/24 23:22	1
Manganese	4.6	J	10	0.45	ug/L		05/01/24 08:30	05/03/24 23:22	1
Sodium	24000		1000	97	ug/L		05/01/24 08:30	05/03/24 23:22	1

Client Sample ID: VLF240422-1
Date Collected: 04/22/24 17:10
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	240000	B	200	24	ug/L		05/01/24 08:30	05/03/24 23:25	1
Iron	23	J B	100	9.1	ug/L		05/01/24 08:30	05/03/24 23:25	1
Magnesium	100000		200	4.2	ug/L		05/01/24 08:30	05/03/24 23:25	1
Manganese	29		10	0.45	ug/L		05/01/24 08:30	05/03/24 23:25	1
Sodium	39000		1000	97	ug/L		05/01/24 08:30	05/03/24 23:25	1

Client Sample ID: MW-12S
Date Collected: 04/23/24 11:31
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	53000	B	200	24	ug/L		05/01/24 08:30	05/03/24 23:29	1
Iron	520	B	100	9.1	ug/L		05/01/24 08:30	05/03/24 23:29	1
Magnesium	26000		200	4.2	ug/L		05/01/24 08:30	05/03/24 23:29	1
Manganese	690		10	0.45	ug/L		05/01/24 08:30	05/03/24 23:29	1
Sodium	36000		1000	97	ug/L		05/01/24 08:30	05/03/24 23:29	1

Client Sample ID: MW-12D
Date Collected: 04/23/24 11:03
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	26000	B	200	24	ug/L		05/01/24 08:30	05/03/24 23:33	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190622-1

Method: SW846 6010B - Dissolved Metals - Dissolved (Continued)

Client Sample ID: MW-12D
Date Collected: 04/23/24 11:03
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		100	9.1	ug/L		05/01/24 08:30	05/03/24 23:33	1
Magnesium	12000		200	4.2	ug/L		05/01/24 08:30	05/03/24 23:33	1
Manganese	ND		10	0.45	ug/L		05/01/24 08:30	05/03/24 23:33	1
Sodium	24000		1000	97	ug/L		05/01/24 08:30	05/03/24 23:33	1

Client Sample ID: MW-23
Date Collected: 04/24/24 10:20
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	33000	B	200	24	ug/L		05/01/24 08:30	05/03/24 23:37	1
Iron	1300	B	100	9.1	ug/L		05/01/24 08:30	05/03/24 23:37	1
Magnesium	14000		200	4.2	ug/L		05/01/24 08:30	05/03/24 23:37	1
Manganese	1200		10	0.45	ug/L		05/01/24 08:30	05/03/24 23:37	1
Sodium	25000		1000	97	ug/L		05/01/24 08:30	05/03/24 23:37	1

Client Sample ID: MW-26
Date Collected: 04/24/24 12:00
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	25000	B	200	24	ug/L		05/01/24 08:30	05/03/24 23:41	1
Iron	410	B	100	9.1	ug/L		05/01/24 08:30	05/03/24 23:41	1
Magnesium	9400		200	4.2	ug/L		05/01/24 08:30	05/03/24 23:41	1
Manganese	570		10	0.45	ug/L		05/01/24 08:30	05/03/24 23:41	1
Sodium	27000		1000	97	ug/L		05/01/24 08:30	05/03/24 23:41	1

Client Sample ID: MW-27
Date Collected: 04/24/24 11:14
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	87000	B	200	24	ug/L		05/01/24 08:30	05/03/24 23:44	1
Iron	6100	B	100	9.1	ug/L		05/01/24 08:30	05/03/24 23:44	1
Magnesium	38000		200	4.2	ug/L		05/01/24 08:30	05/03/24 23:44	1
Manganese	9500		10	0.45	ug/L		05/01/24 08:30	05/03/24 23:44	1
Sodium	37000		1000	97	ug/L		05/01/24 08:30	05/03/24 23:44	1

Client Sample ID: P-8
Date Collected: 04/23/24 12:19
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	31000	B	200	24	ug/L		05/01/24 08:30	05/04/24 00:03	1
Iron	ND		100	9.1	ug/L		05/01/24 08:30	05/04/24 00:03	1
Magnesium	14000		200	4.2	ug/L		05/01/24 08:30	05/04/24 00:03	1
Manganese	ND		10	0.45	ug/L		05/01/24 08:30	05/04/24 00:03	1
Sodium	29000		1000	97	ug/L		05/01/24 08:30	05/04/24 00:03	1

Client Sample ID: Duplicate 1
Date Collected: 04/23/24 07:00
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	120000	B	200	24	ug/L		05/01/24 08:30	05/04/24 00:07	1
Iron	13	J B	100	9.1	ug/L		05/01/24 08:30	05/04/24 00:07	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190622-1

Method: SW846 6010B - Dissolved Metals - Dissolved (Continued)

Client Sample ID: Duplicate 1
Date Collected: 04/23/24 07:00
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	40000		200	4.2	ug/L		05/01/24 08:30	05/04/24 00:07	1
Manganese	55		10	0.45	ug/L		05/01/24 08:30	05/04/24 00:07	1
Sodium	34000		1000	97	ug/L		05/01/24 08:30	05/04/24 00:07	1

Client Sample ID: Duplicate 2
Date Collected: 04/23/24 08:00
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-14
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	31000	B	200	24	ug/L		05/01/24 08:30	05/04/24 00:10	1
Iron	9.2	J B	100	9.1	ug/L		05/01/24 08:30	05/04/24 00:10	1
Magnesium	14000		200	4.2	ug/L		05/01/24 08:30	05/04/24 00:10	1
Manganese	ND		10	0.45	ug/L		05/01/24 08:30	05/04/24 00:10	1
Sodium	29000		1000	97	ug/L		05/01/24 08:30	05/04/24 00:10	1

General Chemistry

Client Sample ID: MW-1D
Date Collected: 04/24/24 09:37
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	6.4		3.0	1.0	mg/L			05/02/24 18:01	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	140		10	3.1	mg/L			05/01/24 22:11	1
Total Dissolved Solids (SM 2540C)	190		10	4.7	mg/L			04/30/24 11:05	1
Total Suspended Solids (SM 2540D)	ND		4.0	1.1	mg/L			04/30/24 15:29	1

Client Sample ID: MW-3D
Date Collected: 04/23/24 10:15
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	44		15	5.1	mg/L			05/02/24 18:46	5
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	140		10	3.1	mg/L			05/01/24 22:18	1
Total Dissolved Solids (SM 2540C)	280		10	4.7	mg/L			04/30/24 11:05	1
Total Suspended Solids (SM 2540D)	ND		4.0	1.1	mg/L			04/30/24 15:29	1

Client Sample ID: MW-10S
Date Collected: 04/23/24 09:34
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	500		30	10	mg/L			05/02/24 18:57	10
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	610		10	3.1	mg/L			05/01/24 22:27	1
Total Dissolved Solids (SM 2540C)	1500		20	9.4	mg/L			04/30/24 11:05	1
Total Suspended Solids (SM 2540D)	ND		4.0	1.1	mg/L			04/30/24 15:29	1

Client Sample ID: MW-10D
Date Collected: 04/23/24 08:57
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	68		15	5.1	mg/L			05/02/24 19:09	5

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190622-1

General Chemistry (Continued)

Client Sample ID: MW-10D
Date Collected: 04/23/24 08:57
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO ₃ (SM 2320B)	400		10	3.1	mg/L			05/01/24 22:35	1
Total Dissolved Solids (SM 2540C)	590		10	4.7	mg/L			04/30/24 11:05	1
Total Suspended Solids (SM 2540D)	ND		4.0	1.1	mg/L			04/30/24 15:29	1

Client Sample ID: VLF240422-2
Date Collected: 04/22/24 17:44
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	33		6.0	2.0	mg/L			05/03/24 00:36	2
Bicarbonate Alkalinity as CaCO ₃ (SM 2320B)	590		10	3.1	mg/L			05/01/24 22:45	1
Total Dissolved Solids (SM 2540C)	690		10	4.7	mg/L			04/29/24 09:18	1
Total Suspended Solids (SM 2540D)	18		4.0	1.1	mg/L			04/29/24 15:56	1

Client Sample ID: VLF240422-1
Date Collected: 04/22/24 17:10
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	83		15	5.1	mg/L			05/02/24 19:20	5
Bicarbonate Alkalinity as CaCO ₃ (SM 2320B)	820		10	3.1	mg/L			05/01/24 23:09	1
Total Dissolved Solids (SM 2540C)	1100		20	9.4	mg/L			04/29/24 09:18	1
Total Suspended Solids (SM 2540D)	ND		4.0	1.1	mg/L			04/29/24 15:56	1

Client Sample ID: MW-12S
Date Collected: 04/23/24 11:31
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	31		6.0	2.0	mg/L			05/02/24 19:31	2
Bicarbonate Alkalinity as CaCO ₃ (SM 2320B)	240		10	3.1	mg/L			05/01/24 23:16	1
Total Dissolved Solids (SM 2540C)	340		10	4.7	mg/L			04/30/24 11:05	1
Total Suspended Solids (SM 2540D)	ND		4.0	1.1	mg/L			04/30/24 15:29	1

Client Sample ID: MW-12D
Date Collected: 04/23/24 11:03
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	9.6		3.0	1.0	mg/L			05/02/24 19:42	1
Bicarbonate Alkalinity as CaCO ₃ (SM 2320B)	140		10	3.1	mg/L			05/01/24 23:22	1
Total Dissolved Solids (SM 2540C)	200		10	4.7	mg/L			04/30/24 11:05	1
Total Suspended Solids (SM 2540D)	ND		4.0	1.1	mg/L			04/30/24 15:29	1

Client Sample ID: MW-23
Date Collected: 04/24/24 10:20
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	17		3.0	1.0	mg/L			05/08/24 03:51	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190622-1

General Chemistry (Continued)

Client Sample ID: MW-23
Date Collected: 04/24/24 10:20
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO ₃ (SM 2320B)	170		10	3.1	mg/L			05/01/24 23:28	1
Total Dissolved Solids (SM 2540C)	230		10	4.7	mg/L			04/30/24 11:05	1
Total Suspended Solids (SM 2540D)	31		4.0	1.1	mg/L			04/30/24 15:29	1

Client Sample ID: MW-26
Date Collected: 04/24/24 12:00
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	5.6		3.0	1.0	mg/L			05/08/24 03:39	1
Bicarbonate Alkalinity as CaCO ₃ (SM 2320B)	150		10	3.1	mg/L			05/01/24 23:35	1
Total Dissolved Solids (SM 2540C)	200		10	4.7	mg/L			05/01/24 10:33	1
Total Suspended Solids (SM 2540D)	12		4.0	1.1	mg/L			05/01/24 15:56	1

Client Sample ID: MW-27
Date Collected: 04/24/24 11:14
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	11		3.0	1.0	mg/L			05/08/24 03:28	1
Bicarbonate Alkalinity as CaCO ₃ (SM 2320B)	440		10	3.1	mg/L			05/01/24 23:43	1
Total Dissolved Solids (SM 2540C)	490		10	4.7	mg/L			05/01/24 10:33	1
Total Suspended Solids (SM 2540D)	32		4.0	1.1	mg/L			05/01/24 15:56	1

Client Sample ID: P-8
Date Collected: 04/23/24 12:19
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	8.8		3.0	1.0	mg/L			05/08/24 09:40	1
Bicarbonate Alkalinity as CaCO ₃ (SM 2320B)	170		10	3.1	mg/L			05/01/24 23:49	1
Total Dissolved Solids (SM 2540C)	230		10	4.7	mg/L			04/30/24 11:05	1
Total Suspended Solids (SM 2540D)	ND		4.0	1.1	mg/L			04/30/24 15:29	1

Client Sample ID: Duplicate 1
Date Collected: 04/23/24 07:00
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	68		15	5.1	mg/L			05/08/24 09:29	5
Bicarbonate Alkalinity as CaCO ₃ (SM 2320B)	400		10	3.1	mg/L			05/01/24 23:58	1
Total Dissolved Solids (SM 2540C)	570		10	4.7	mg/L			04/30/24 11:06	1
Total Suspended Solids (SM 2540D)	ND		4.0	1.1	mg/L			04/30/24 15:29	1

Client Sample ID: Duplicate 2
Date Collected: 04/23/24 08:00
Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-14
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	33		3.0	1.0	mg/L			05/08/24 09:18	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190622-1

General Chemistry (Continued)

Client Sample ID: Duplicate 2					Lab Sample ID: 280-190622-14				
Date Collected: 04/23/24 08:00					Matrix: Water				
Date Received: 04/25/24 09:25									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	240		10	3.1	mg/L			05/02/24 00:04	1
Total Dissolved Solids (SM 2540C)	340		10	4.7	mg/L			04/30/24 11:05	1
Total Suspended Solids (SM 2540D)	ND		4.0	1.1	mg/L			04/30/24 15:29	1

Surrogate Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190622-1

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (70-127)	BFB (78-120)	DBFM (77-120)	TOL (80-125)
280-190622-1	MW-1D	102	98	98	101
280-190622-2	MW-3D	102	95	100	103
280-190622-3	MW-10S	102	96	100	101
280-190622-4	MW-10D	105	98	100	99
280-190622-5	VLF240422-2	102	99	98	99
280-190622-6	VLF240422-1	104	97	100	98
280-190622-7	MW-12S	101	95	99	100
280-190622-8	MW-12D	101	97	96	100
280-190622-9	MW-23	105	97	100	101
280-190622-10	MW-26	105	94	100	99
280-190622-11	MW-27	105	96	99	99
280-190622-12	P-8	104	94	102	100
280-190622-13	Duplicate 1	104	96	97	101
280-190622-14	Duplicate 2	107	97	100	98
280-190622-15	Field Blank	99	98	100	101
280-190622-16	Trip Blank	101	98	99	99
LCS 280-651953/4	Lab Control Sample	98	97	99	100
LCSD 280-651953/5	Lab Control Sample Dup	96	99	98	98
MB 280-651953/9	Method Blank	99	98	96	99

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190622-1

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

Lab Sample ID: MB 280-651953/9

Matrix: Water

Analysis Batch: 651953

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.58	ug/L			05/02/24 22:03	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			05/02/24 22:03	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/02/24 22:03	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			05/02/24 22:03	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			05/02/24 22:03	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			05/02/24 22:03	1
1,1-Dichloropropene	ND		1.0	0.42	ug/L			05/02/24 22:03	1
1,2,3-Trichlorobenzene	ND		2.0	0.70	ug/L			05/02/24 22:03	1
1,2,3-Trichloropropane	ND		2.5	0.86	ug/L			05/02/24 22:03	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			05/02/24 22:03	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			05/02/24 22:03	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.8	ug/L			05/02/24 22:03	1
1,2-Dibromoethane	ND		1.0	0.40	ug/L			05/02/24 22:03	1
1,2-Dichlorobenzene	ND		1.0	0.37	ug/L			05/02/24 22:03	1
1,2-Dichloroethane	ND		1.0	0.54	ug/L			05/02/24 22:03	1
1,2-Dichloropropane	ND		1.0	0.52	ug/L			05/02/24 22:03	1
1,3,5-Trimethylbenzene	ND		1.0	0.37	ug/L			05/02/24 22:03	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			05/02/24 22:03	1
1,3-Dichloropropane	ND		1.0	0.38	ug/L			05/02/24 22:03	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			05/02/24 22:03	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			05/02/24 22:03	1
2-Butanone (MEK)	ND		15	6.0	ug/L			05/02/24 22:03	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			05/02/24 22:03	1
2-Hexanone	ND		5.0	1.7	ug/L			05/02/24 22:03	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			05/02/24 22:03	1
4-Isopropyltoluene	ND		1.0	0.43	ug/L			05/02/24 22:03	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			05/02/24 22:03	1
Acetone	ND		15	6.6	ug/L			05/02/24 22:03	1
Benzene	ND		1.0	0.31	ug/L			05/02/24 22:03	1
Bromobenzene	ND		1.0	0.40	ug/L			05/02/24 22:03	1
Bromochloromethane	ND		1.0	0.40	ug/L			05/02/24 22:03	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/02/24 22:03	1
Bromoform	ND		2.0	1.2	ug/L			05/02/24 22:03	1
Bromomethane	ND		5.0	2.4	ug/L			05/02/24 22:03	1
Carbon disulfide	ND		2.0	0.63	ug/L			05/02/24 22:03	1
Carbon tetrachloride	ND		1.0	0.57	ug/L			05/02/24 22:03	1
Chlorobenzene	ND		1.0	0.42	ug/L			05/02/24 22:03	1
Chloroethane	ND		4.0	1.4	ug/L			05/02/24 22:03	1
Chloroform	ND		1.0	0.36	ug/L			05/02/24 22:03	1
Chloromethane	ND		2.0	0.75	ug/L			05/02/24 22:03	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			05/02/24 22:03	1
cis-1,3-Dichloropropene	ND		2.0	0.63	ug/L			05/02/24 22:03	1
Dibromochloromethane	ND		2.0	0.62	ug/L			05/02/24 22:03	1
Dibromomethane	ND		1.0	0.34	ug/L			05/02/24 22:03	1
Dichlorodifluoromethane	ND		3.0	0.96	ug/L			05/02/24 22:03	1
Ethylbenzene	ND		1.0	0.30	ug/L			05/02/24 22:03	1
Hexachlorobutadiene	ND		2.0	1.2	ug/L			05/02/24 22:03	1
Isopropylbenzene	ND		1.0	0.36	ug/L			05/02/24 22:03	1

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190622-1

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

Lab Sample ID: MB 280-651953/9

Matrix: Water

Analysis Batch: 651953

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		2.0	0.94	ug/L			05/02/24 22:03	1
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			05/02/24 22:03	1
Naphthalene	ND		2.0	0.63	ug/L			05/02/24 22:03	1
n-Butylbenzene	ND		1.0	0.48	ug/L			05/02/24 22:03	1
N-Propylbenzene	ND		1.0	0.53	ug/L			05/02/24 22:03	1
o-Xylene	ND		1.0	0.33	ug/L			05/02/24 22:03	1
sec-Butylbenzene	ND		1.0	0.45	ug/L			05/02/24 22:03	1
Styrene	ND		1.0	0.36	ug/L			05/02/24 22:03	1
tert-Butylbenzene	ND		1.0	0.42	ug/L			05/02/24 22:03	1
Tetrachloroethene	ND		1.0	0.40	ug/L			05/02/24 22:03	1
Toluene	ND		1.0	0.32	ug/L			05/02/24 22:03	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			05/02/24 22:03	1
trans-1,3-Dichloropropene	ND		2.0	0.65	ug/L			05/02/24 22:03	1
Trichloroethene	ND		1.0	0.30	ug/L			05/02/24 22:03	1
Trichlorofluoromethane	ND		2.0	0.57	ug/L			05/02/24 22:03	1
Vinyl chloride	ND		2.0	0.51	ug/L			05/02/24 22:03	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		70 - 127		05/02/24 22:03	1
4-Bromofluorobenzene (Surr)	98		78 - 120		05/02/24 22:03	1
Dibromofluoromethane (Surr)	96		77 - 120		05/02/24 22:03	1
Toluene-d8 (Surr)	99		80 - 125		05/02/24 22:03	1

Lab Sample ID: LCS 280-651953/4

Matrix: Water

Analysis Batch: 651953

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	50.0	48.4		ug/L		97	74 - 121
1,1,1-Trichloroethane	50.0	43.5		ug/L		87	62 - 132
1,1,2,2-Tetrachloroethane	50.0	52.8		ug/L		106	72 - 122
1,1,2-Trichloroethane	50.0	48.7		ug/L		97	72 - 128
1,1-Dichloroethane	50.0	43.9		ug/L		88	66 - 130
1,1-Dichloroethene	50.0	42.5		ug/L		85	62 - 130
1,1-Dichloropropene	50.0	44.3		ug/L		89	64 - 133
1,2,3-Trichlorobenzene	50.0	53.1		ug/L		106	70 - 127
1,2,3-Trichloropropane	50.0	53.7		ug/L		107	74 - 123
1,2,4-Trichlorobenzene	50.0	52.0		ug/L		104	73 - 124
1,2,4-Trimethylbenzene	50.0	50.1		ug/L		100	74 - 124
1,2-Dibromo-3-Chloropropane	50.0	48.0		ug/L		96	58 - 122
1,2-Dibromoethane	50.0	48.0		ug/L		96	81 - 118
1,2-Dichlorobenzene	50.0	50.7		ug/L		101	77 - 121
1,2-Dichloroethane	50.0	44.7		ug/L		89	61 - 130
1,2-Dichloropropane	50.0	46.9		ug/L		94	68 - 127
1,3,5-Trimethylbenzene	50.0	49.9		ug/L		100	73 - 127
1,3-Dichlorobenzene	50.0	50.2		ug/L		100	76 - 121
1,3-Dichloropropane	50.0	48.3		ug/L		97	80 - 118
1,4-Dichlorobenzene	50.0	49.9		ug/L		100	76 - 119

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190622-1

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

Lab Sample ID: LCS 280-651953/4

Matrix: Water

Analysis Batch: 651953

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,2-Dichloropropane	50.0	44.2		ug/L		88	57 - 140
2-Butanone (MEK)	200	199		ug/L		99	53 - 135
2-Chlorotoluene	50.0	50.6		ug/L		101	75 - 123
2-Hexanone	200	216		ug/L		108	58 - 134
4-Chlorotoluene	50.0	49.9		ug/L		100	74 - 124
4-Isopropyltoluene	50.0	51.2		ug/L		102	74 - 127
4-Methyl-2-pentanone (MIBK)	200	211		ug/L		106	56 - 135
Acetone	200	203		ug/L		101	50 - 137
Benzene	50.0	44.0		ug/L		88	69 - 126
Bromobenzene	50.0	49.0		ug/L		98	75 - 122
Bromochloromethane	50.0	38.5		ug/L		77	71 - 130
Bromodichloromethane	50.0	43.7		ug/L		87	67 - 126
Bromoform	50.0	44.7		ug/L		89	57 - 125
Bromomethane	50.0	39.8		ug/L		80	25 - 163
Carbon disulfide	50.0	37.8		ug/L		76	56 - 128
Carbon tetrachloride	50.0	41.8		ug/L		84	60 - 133
Chlorobenzene	50.0	47.7		ug/L		95	78 - 118
Chloroethane	50.0	52.0		ug/L		104	52 - 144
Chloroform	50.0	44.5		ug/L		89	68 - 128
Chloromethane	50.0	54.3		ug/L		109	43 - 142
cis-1,2-Dichloroethene	50.0	44.4		ug/L		89	69 - 126
cis-1,3-Dichloropropene	50.0	44.4		ug/L		89	75 - 120
Dibromochloromethane	50.0	43.3		ug/L		87	71 - 122
Dibromomethane	50.0	46.7		ug/L		93	68 - 129
Dichlorodifluoromethane	50.0	54.9		ug/L		110	26 - 152
Ethylbenzene	50.0	48.3		ug/L		97	76 - 121
Hexachlorobutadiene	50.0	53.0		ug/L		106	69 - 133
Isopropylbenzene	50.0	48.6		ug/L		97	70 - 127
Methylene Chloride	50.0	44.4		ug/L		89	64 - 128
m-Xylene & p-Xylene	50.0	46.9		ug/L		94	76 - 122
Naphthalene	50.0	54.3		ug/L		109	63 - 129
n-Butylbenzene	50.0	51.6		ug/L		103	69 - 130
N-Propylbenzene	50.0	47.6		ug/L		95	73 - 127
o-Xylene	50.0	46.3		ug/L		93	77 - 120
sec-Butylbenzene	50.0	50.8		ug/L		102	72 - 127
Styrene	50.0	50.4		ug/L		101	79 - 120
tert-Butylbenzene	50.0	49.7		ug/L		99	72 - 126
Tetrachloroethene	50.0	42.6		ug/L		85	72 - 127
Toluene	50.0	45.0		ug/L		90	68 - 127
trans-1,2-Dichloroethene	50.0	41.7		ug/L		83	66 - 129
trans-1,3-Dichloropropene	50.0	46.1		ug/L		92	66 - 127
Trichloroethene	50.0	42.9		ug/L		86	70 - 125
Trichlorofluoromethane	50.0	59.7		ug/L		119	57 - 144
Vinyl chloride	50.0	50.8		ug/L		102	53 - 141

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		70 - 127
4-Bromofluorobenzene (Surr)	97		78 - 120

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190622-1

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

Lab Sample ID: LCS 280-651953/4

Matrix: Water

Analysis Batch: 651953

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
Dibromofluoromethane (Surr)	99		77 - 120
Toluene-d8 (Surr)	100		80 - 125

Lab Sample ID: LCSD 280-651953/5

Matrix: Water

Analysis Batch: 651953

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	50.0	47.1		ug/L		94	74 - 121	3	20
1,1,1-Trichloroethane	50.0	43.2		ug/L		86	62 - 132	1	20
1,1,2,2-Tetrachloroethane	50.0	52.0		ug/L		104	72 - 122	2	20
1,1,2-Trichloroethane	50.0	48.4		ug/L		97	72 - 128	1	20
1,1-Dichloroethane	50.0	42.7		ug/L		85	66 - 130	3	20
1,1-Dichloroethene	50.0	41.4		ug/L		83	62 - 130	3	21
1,1-Dichloropropene	50.0	43.1		ug/L		86	64 - 133	3	20
1,2,3-Trichlorobenzene	50.0	53.1		ug/L		106	70 - 127	0	20
1,2,3-Trichloropropane	50.0	54.8		ug/L		110	74 - 123	2	20
1,2,4-Trichlorobenzene	50.0	51.6		ug/L		103	73 - 124	1	20
1,2,4-Trimethylbenzene	50.0	49.7		ug/L		99	74 - 124	1	20
1,2-Dibromo-3-Chloropropane	50.0	48.2		ug/L		96	58 - 122	0	21
1,2-Dibromoethane	50.0	46.8		ug/L		94	81 - 118	2	20
1,2-Dichlorobenzene	50.0	50.7		ug/L		101	77 - 121	0	20
1,2-Dichloroethane	50.0	43.9		ug/L		88	61 - 130	2	20
1,2-Dichloropropane	50.0	45.3		ug/L		91	68 - 127	3	20
1,3,5-Trimethylbenzene	50.0	49.4		ug/L		99	73 - 127	1	20
1,3-Dichlorobenzene	50.0	50.1		ug/L		100	76 - 121	0	20
1,3-Dichloropropane	50.0	47.8		ug/L		96	80 - 118	1	20
1,4-Dichlorobenzene	50.0	49.7		ug/L		99	76 - 119	0	20
2,2-Dichloropropane	50.0	43.1		ug/L		86	57 - 140	3	22
2-Butanone (MEK)	200	196		ug/L		98	53 - 135	2	20
2-Chlorotoluene	50.0	49.7		ug/L		99	75 - 123	2	20
2-Hexanone	200	211		ug/L		105	58 - 134	2	21
4-Chlorotoluene	50.0	51.0		ug/L		102	74 - 124	2	20
4-Isopropyltoluene	50.0	50.7		ug/L		101	74 - 127	1	20
4-Methyl-2-pentanone (MIBK)	200	207		ug/L		104	56 - 135	2	20
Acetone	200	202		ug/L		101	50 - 137	1	21
Benzene	50.0	42.8		ug/L		86	69 - 126	3	20
Bromobenzene	50.0	48.7		ug/L		97	75 - 122	1	20
Bromochloromethane	50.0	38.8		ug/L		78	71 - 130	1	20
Bromodichloromethane	50.0	43.3		ug/L		87	67 - 126	1	20
Bromoform	50.0	45.6		ug/L		91	57 - 125	2	20
Bromomethane	50.0	44.8		ug/L		90	25 - 163	12	40
Carbon disulfide	50.0	37.9		ug/L		76	56 - 128	0	20
Carbon tetrachloride	50.0	41.0		ug/L		82	60 - 133	2	20
Chlorobenzene	50.0	46.9		ug/L		94	78 - 118	2	20
Chloroethane	50.0	49.4		ug/L		99	52 - 144	5	30
Chloroform	50.0	43.2		ug/L		86	68 - 128	3	20
Chloromethane	50.0	53.6		ug/L		107	43 - 142	1	20

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190622-1

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

Lab Sample ID: LCSD 280-651953/5

Matrix: Water

Analysis Batch: 651953

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	50.0	43.4		ug/L		87	69 - 126	2	20
cis-1,3-Dichloropropene	50.0	43.9		ug/L		88	75 - 120	1	20
Dibromochloromethane	50.0	44.3		ug/L		89	71 - 122	2	20
Dibromomethane	50.0	46.4		ug/L		93	68 - 129	1	20
Dichlorodifluoromethane	50.0	52.9		ug/L		106	26 - 152	4	21
Ethylbenzene	50.0	47.8		ug/L		96	76 - 121	1	20
Hexachlorobutadiene	50.0	52.4		ug/L		105	69 - 133	1	20
Isopropylbenzene	50.0	48.0		ug/L		96	70 - 127	1	20
Methylene Chloride	50.0	43.3		ug/L		87	64 - 128	2	20
m-Xylene & p-Xylene	50.0	45.4		ug/L		91	76 - 122	3	20
Naphthalene	50.0	54.8		ug/L		110	63 - 129	1	21
n-Butylbenzene	50.0	51.3		ug/L		103	69 - 130	1	20
N-Propylbenzene	50.0	47.4		ug/L		95	73 - 127	0	20
o-Xylene	50.0	46.8		ug/L		94	77 - 120	1	20
sec-Butylbenzene	50.0	49.1		ug/L		98	72 - 127	3	20
Styrene	50.0	49.0		ug/L		98	79 - 120	3	20
tert-Butylbenzene	50.0	48.4		ug/L		97	72 - 126	3	20
Tetrachloroethene	50.0	42.8		ug/L		86	72 - 127	0	20
Toluene	50.0	44.6		ug/L		89	68 - 127	1	20
trans-1,2-Dichloroethene	50.0	40.4		ug/L		81	66 - 129	3	20
trans-1,3-Dichloropropene	50.0	46.1		ug/L		92	66 - 127	0	20
Trichloroethene	50.0	42.3		ug/L		85	70 - 125	1	20
Trichlorofluoromethane	50.0	57.0		ug/L		114	57 - 144	5	28
Vinyl chloride	50.0	50.1		ug/L		100	53 - 141	1	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	96		70 - 127
4-Bromofluorobenzene (Surr)	99		78 - 120
Dibromofluoromethane (Surr)	98		77 - 120
Toluene-d8 (Surr)	98		80 - 125

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 280-651498/1-A

Matrix: Water

Analysis Batch: 651786

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 651498

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		05/01/24 08:38	05/02/24 00:14	1

Lab Sample ID: LCS 280-651498/2-A

Matrix: Water

Analysis Batch: 651786

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 651498

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	40.0	41.8		ug/L		104	89 - 111

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190622-1

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: 280-190622-1 MS
Matrix: Water
Analysis Batch: 651786

Client Sample ID: MW-1D
Prep Type: Total/NA
Prep Batch: 651498

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.58	J	40.0	42.2		ug/L		104	79 - 120

Lab Sample ID: 280-190622-1 MSD
Matrix: Water
Analysis Batch: 651786

Client Sample ID: MW-1D
Prep Type: Total/NA
Prep Batch: 651498

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Arsenic	0.58	J	40.0	40.5		ug/L		100	79 - 120	4	20

Method: 6010B - Dissolved Metals

Lab Sample ID: MB 280-651496/1-A
Matrix: Water
Analysis Batch: 652161

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 651496

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	31.9	J	200	24	ug/L		05/01/24 08:30	05/03/24 22:33	1
Iron	20.8	J	100	9.1	ug/L		05/01/24 08:30	05/03/24 22:33	1
Magnesium	ND		200	4.2	ug/L		05/01/24 08:30	05/03/24 22:33	1
Manganese	ND		10	0.45	ug/L		05/01/24 08:30	05/03/24 22:33	1
Sodium	ND		1000	97	ug/L		05/01/24 08:30	05/03/24 22:33	1

Lab Sample ID: LCS 280-651496/2-A
Matrix: Water
Analysis Batch: 652161

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 651496

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	50000	50700		ug/L		101	90 - 111
Iron	10000	9870		ug/L		99	89 - 115
Magnesium	50000	51600		ug/L		103	90 - 113
Manganese	1000	1030		ug/L		103	90 - 110
Sodium	50000	51300		ug/L		103	90 - 115

Lab Sample ID: 280-190622-1 MS
Matrix: Water
Analysis Batch: 652161

Client Sample ID: MW-1D
Prep Type: Dissolved
Prep Batch: 651496

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	26000	B	50000	75600		ug/L		99	48 - 153
Iron	20	J B	10000	9850		ug/L		98	52 - 155
Magnesium	11000		50000	62500		ug/L		103	62 - 146
Manganese	0.66	J	1000	1030		ug/L		103	79 - 121
Sodium	25000		50000	71800		ug/L		94	70 - 203

Lab Sample ID: 280-190622-1 MSD
Matrix: Water
Analysis Batch: 652161

Client Sample ID: MW-1D
Prep Type: Dissolved
Prep Batch: 651496

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Calcium	26000	B	50000	77200		ug/L		102	48 - 153	2	20

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190622-1

Method: 6010B - Dissolved Metals (Continued)

Lab Sample ID: 280-190622-1 MSD

Matrix: Water

Analysis Batch: 652161

Client Sample ID: MW-1D

Prep Type: Dissolved

Prep Batch: 651496

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Iron	20	J B	10000	10000		ug/L		100	52 - 155	2	20
Magnesium	11000		50000	63500		ug/L		105	62 - 146	2	20
Manganese	0.66	J	1000	1040		ug/L		104	79 - 121	2	20
Sodium	25000		50000	73600		ug/L		98	70 - 203	2	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 280-651819/13

Matrix: Water

Analysis Batch: 651819

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0	1.0	mg/L			05/02/24 12:58	1

Lab Sample ID: MB 280-651819/46

Matrix: Water

Analysis Batch: 651819

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0	1.0	mg/L			05/02/24 21:13	1

Lab Sample ID: LCS 280-651819/11

Matrix: Water

Analysis Batch: 651819

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	100	94.7		mg/L		95	90 - 110

Lab Sample ID: LCS 280-651819/44

Matrix: Water

Analysis Batch: 651819

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	100	96.8		mg/L		97	90 - 110

Lab Sample ID: LCSD 280-651819/12

Matrix: Water

Analysis Batch: 651819

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	100	95.0		mg/L		95	90 - 110	0	10

Lab Sample ID: LCSD 280-651819/45

Matrix: Water

Analysis Batch: 651819

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	100	96.9		mg/L		97	90 - 110	0	10

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190622-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MRL 280-651819/10

Matrix: Water

Analysis Batch: 651819

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	5.00	4.59		mg/L		92	50 - 150

Lab Sample ID: 280-190622-1 MS

Matrix: Water

Analysis Batch: 651819

Client Sample ID: MW-1D

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	6.4		50.0	51.7		mg/L		91	80 - 120

Lab Sample ID: 280-190622-1 MSD

Matrix: Water

Analysis Batch: 651819

Client Sample ID: MW-1D

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	6.4		50.0	52.4		mg/L		92	80 - 120	1	20

Lab Sample ID: 280-190622-1 DU

Matrix: Water

Analysis Batch: 651819

Client Sample ID: MW-1D

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	6.4		6.08		mg/L		6	15

Lab Sample ID: MB 280-652354/6

Matrix: Water

Analysis Batch: 652354

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0	1.0	mg/L			05/07/24 10:52	1

Lab Sample ID: MB 280-652354/75

Matrix: Water

Analysis Batch: 652354

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0	1.0	mg/L			05/08/24 07:25	1

Lab Sample ID: LCS 280-652354/4

Matrix: Water

Analysis Batch: 652354

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	100	96.5		mg/L		96	90 - 110

Lab Sample ID: LCS 280-652354/73

Matrix: Water

Analysis Batch: 652354

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	100	98.2		mg/L		98	90 - 110

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190622-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCSD 280-652354/5

Matrix: Water

Analysis Batch: 652354

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	100	96.0		mg/L		96	90 - 110	0	10

Lab Sample ID: LCSD 280-652354/74

Matrix: Water

Analysis Batch: 652354

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	100	101		mg/L		101	90 - 110	2	10

Lab Sample ID: MRL 280-652354/3

Matrix: Water

Analysis Batch: 652354

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	5.00	4.63		mg/L		93	50 - 150		

Lab Sample ID: 280-190622-9 MS

Matrix: Water

Analysis Batch: 652354

Client Sample ID: MW-23

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	17		50.0	68.8		mg/L		103	80 - 120		

Lab Sample ID: 280-190622-9 MSD

Matrix: Water

Analysis Batch: 652354

Client Sample ID: MW-23

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	17		50.0	68.8		mg/L		103	80 - 120	0	20

Lab Sample ID: 280-190622-9 DU

Matrix: Water

Analysis Batch: 652354

Client Sample ID: MW-23

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chloride	17			17.1		mg/L				0.6	15

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-651790/58

Matrix: Water

Analysis Batch: 651790

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		10	3.1	mg/L			05/01/24 21:19	1

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190622-1

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: 280-190547-C-1 DU

Matrix: Water

Analysis Batch: 651790

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	470		475		mg/L		0.7	20

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

Lab Sample ID: MB 280-651279/1

Matrix: Water

Analysis Batch: 651279

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	4.7	mg/L			04/29/24 09:18	1

Lab Sample ID: LCS 280-651279/2

Matrix: Water

Analysis Batch: 651279

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	503	514		mg/L		102	88 - 114

Lab Sample ID: 280-190531-C-11 DU

Matrix: Water

Analysis Batch: 651279

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	300		291		mg/L		2	10

Lab Sample ID: MB 280-651481/1

Matrix: Water

Analysis Batch: 651481

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	4.7	mg/L			04/30/24 11:05	1

Lab Sample ID: LCS 280-651481/2

Matrix: Water

Analysis Batch: 651481

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	503	513		mg/L		102	88 - 114

Lab Sample ID: 280-190622-1 DU

Matrix: Water

Analysis Batch: 651481

Client Sample ID: MW-1D

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	190		186		mg/L		2	10

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190622-1

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

Lab Sample ID: 280-190622-12 DU

Matrix: Water

Analysis Batch: 651481

Client Sample ID: P-8

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	230		243		mg/L		4	10

Lab Sample ID: MB 280-651482/1

Matrix: Water

Analysis Batch: 651482

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	4.7	mg/L			04/30/24 11:06	1

Lab Sample ID: LCS 280-651482/2

Matrix: Water

Analysis Batch: 651482

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	503	442		mg/L		88	88 - 114

Lab Sample ID: LCSD 280-651482/3

Matrix: Water

Analysis Batch: 651482

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids	503	503		mg/L		100	88 - 114	13	20

Lab Sample ID: 280-190622-13 DU

Matrix: Water

Analysis Batch: 651482

Client Sample ID: Duplicate 1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	570		575		mg/L		0.2	10

Lab Sample ID: MB 280-651668/1

Matrix: Water

Analysis Batch: 651668

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	4.7	mg/L			05/01/24 10:33	1

Lab Sample ID: LCS 280-651668/2

Matrix: Water

Analysis Batch: 651668

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	503	511		mg/L		102	88 - 114

Lab Sample ID: 280-190307-B-2 DU

Matrix: Water

Analysis Batch: 651668

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	73		67.0		mg/L		9	10

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190622-1

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 280-651386/1
Matrix: Water
Analysis Batch: 651386

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	1.1	mg/L			04/29/24 15:56	1

Lab Sample ID: LCS 280-651386/2
Matrix: Water
Analysis Batch: 651386

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	500	424		mg/L		85	79 - 114

Lab Sample ID: LCSD 280-651386/3
Matrix: Water
Analysis Batch: 651386

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Suspended Solids	500	453		mg/L		91	79 - 114	7	20

Lab Sample ID: 280-190717-A-1 DU
Matrix: Water
Analysis Batch: 651386

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	ND		ND		mg/L		NC	10

Lab Sample ID: MB 280-651559/1
Matrix: Water
Analysis Batch: 651559

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	1.1	mg/L			04/30/24 15:29	1

Lab Sample ID: LCS 280-651559/2
Matrix: Water
Analysis Batch: 651559

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	500	466		mg/L		93	79 - 114

Lab Sample ID: 280-190622-14 DU
Matrix: Water
Analysis Batch: 651559

Client Sample ID: Duplicate 2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	ND		1.20	J	mg/L		NC	10

Lab Sample ID: MB 280-651734/1
Matrix: Water
Analysis Batch: 651734

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	1.1	mg/L			05/01/24 15:56	1

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190622-1

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: LCS 280-651734/2
Matrix: Water
Analysis Batch: 651734

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	504	417		mg/L		83	79 - 114

Lab Sample ID: 280-190817-A-2 DU
Matrix: Water
Analysis Batch: 651734

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	48		54.0	F3	mg/L		13	10

QC Association Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190622-1

GC/MS VOA

Analysis Batch: 651953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190622-1	MW-1D	Total/NA	Water	8260B	
280-190622-2	MW-3D	Total/NA	Water	8260B	
280-190622-3	MW-10S	Total/NA	Water	8260B	
280-190622-4	MW-10D	Total/NA	Water	8260B	
280-190622-5	VLF240422-2	Total/NA	Water	8260B	
280-190622-6	VLF240422-1	Total/NA	Water	8260B	
280-190622-7	MW-12S	Total/NA	Water	8260B	
280-190622-8	MW-12D	Total/NA	Water	8260B	
280-190622-9	MW-23	Total/NA	Water	8260B	
280-190622-10	MW-26	Total/NA	Water	8260B	
280-190622-11	MW-27	Total/NA	Water	8260B	
280-190622-12	P-8	Total/NA	Water	8260B	
280-190622-13	Duplicate 1	Total/NA	Water	8260B	
280-190622-14	Duplicate 2	Total/NA	Water	8260B	
280-190622-15	Field Blank	Total/NA	Water	8260B	
280-190622-16	Trip Blank	Total/NA	Water	8260B	
MB 280-651953/9	Method Blank	Total/NA	Water	8260B	
LCS 280-651953/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-651953/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Metals

Prep Batch: 651496

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190622-1	MW-1D	Dissolved	Water	3005A	
280-190622-2	MW-3D	Dissolved	Water	3005A	
280-190622-3	MW-10S	Dissolved	Water	3005A	
280-190622-4	MW-10D	Dissolved	Water	3005A	
280-190622-5	VLF240422-2	Dissolved	Water	3005A	
280-190622-6	VLF240422-1	Dissolved	Water	3005A	
280-190622-7	MW-12S	Dissolved	Water	3005A	
280-190622-8	MW-12D	Dissolved	Water	3005A	
280-190622-9	MW-23	Dissolved	Water	3005A	
280-190622-10	MW-26	Dissolved	Water	3005A	
280-190622-11	MW-27	Dissolved	Water	3005A	
280-190622-12	P-8	Dissolved	Water	3005A	
280-190622-13	Duplicate 1	Dissolved	Water	3005A	
280-190622-14	Duplicate 2	Dissolved	Water	3005A	
MB 280-651496/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-651496/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-190622-1 MS	MW-1D	Dissolved	Water	3005A	
280-190622-1 MSD	MW-1D	Dissolved	Water	3005A	

Prep Batch: 651498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190622-1	MW-1D	Total/NA	Water	200.8	
280-190622-2	MW-3D	Total/NA	Water	200.8	
280-190622-3	MW-10S	Total/NA	Water	200.8	
280-190622-4	MW-10D	Total/NA	Water	200.8	
280-190622-5	VLF240422-2	Total/NA	Water	200.8	
280-190622-6	VLF240422-1	Total/NA	Water	200.8	

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QC Association Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190622-1

Metals (Continued)

Prep Batch: 651498 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190622-7	MW-12S	Total/NA	Water	200.8	
280-190622-8	MW-12D	Total/NA	Water	200.8	
280-190622-9	MW-23	Total/NA	Water	200.8	
280-190622-10	MW-26	Total/NA	Water	200.8	
280-190622-11	MW-27	Total/NA	Water	200.8	
280-190622-12	P-8	Total/NA	Water	200.8	
280-190622-13	Duplicate 1	Total/NA	Water	200.8	
280-190622-14	Duplicate 2	Total/NA	Water	200.8	
MB 280-651498/1-A	Method Blank	Total/NA	Water	200.8	
LCS 280-651498/2-A	Lab Control Sample	Total/NA	Water	200.8	
280-190622-1 MS	MW-1D	Total/NA	Water	200.8	
280-190622-1 MSD	MW-1D	Total/NA	Water	200.8	

Analysis Batch: 651786

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190622-1	MW-1D	Total/NA	Water	200.8	651498
280-190622-2	MW-3D	Total/NA	Water	200.8	651498
280-190622-3	MW-10S	Total/NA	Water	200.8	651498
280-190622-4	MW-10D	Total/NA	Water	200.8	651498
280-190622-5	VLF240422-2	Total/NA	Water	200.8	651498
280-190622-6	VLF240422-1	Total/NA	Water	200.8	651498
280-190622-7	MW-12S	Total/NA	Water	200.8	651498
280-190622-8	MW-12D	Total/NA	Water	200.8	651498
280-190622-9	MW-23	Total/NA	Water	200.8	651498
280-190622-10	MW-26	Total/NA	Water	200.8	651498
280-190622-11	MW-27	Total/NA	Water	200.8	651498
280-190622-12	P-8	Total/NA	Water	200.8	651498
280-190622-13	Duplicate 1	Total/NA	Water	200.8	651498
280-190622-14	Duplicate 2	Total/NA	Water	200.8	651498
MB 280-651498/1-A	Method Blank	Total/NA	Water	200.8	651498
LCS 280-651498/2-A	Lab Control Sample	Total/NA	Water	200.8	651498
280-190622-1 MS	MW-1D	Total/NA	Water	200.8	651498
280-190622-1 MSD	MW-1D	Total/NA	Water	200.8	651498

Analysis Batch: 652161

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190622-1	MW-1D	Dissolved	Water	6010B	651496
280-190622-2	MW-3D	Dissolved	Water	6010B	651496
280-190622-3	MW-10S	Dissolved	Water	6010B	651496
280-190622-4	MW-10D	Dissolved	Water	6010B	651496
280-190622-5	VLF240422-2	Dissolved	Water	6010B	651496
280-190622-6	VLF240422-1	Dissolved	Water	6010B	651496
280-190622-7	MW-12S	Dissolved	Water	6010B	651496
280-190622-8	MW-12D	Dissolved	Water	6010B	651496
280-190622-9	MW-23	Dissolved	Water	6010B	651496
280-190622-10	MW-26	Dissolved	Water	6010B	651496
280-190622-11	MW-27	Dissolved	Water	6010B	651496
280-190622-12	P-8	Dissolved	Water	6010B	651496
280-190622-13	Duplicate 1	Dissolved	Water	6010B	651496
280-190622-14	Duplicate 2	Dissolved	Water	6010B	651496
MB 280-651496/1-A	Method Blank	Total Recoverable	Water	6010B	651496

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QC Association Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190622-1

Metals (Continued)

Analysis Batch: 652161 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 280-651496/2-A	Lab Control Sample	Total Recoverable	Water	6010B	651496
280-190622-1 MS	MW-1D	Dissolved	Water	6010B	651496
280-190622-1 MSD	MW-1D	Dissolved	Water	6010B	651496

General Chemistry

Analysis Batch: 651279

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190622-5	VLF240422-2	Total/NA	Water	SM 2540C	
280-190622-6	VLF240422-1	Total/NA	Water	SM 2540C	
MB 280-651279/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-651279/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-190531-C-11 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 651386

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190622-5	VLF240422-2	Total/NA	Water	SM 2540D	
280-190622-6	VLF240422-1	Total/NA	Water	SM 2540D	
MB 280-651386/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 280-651386/2	Lab Control Sample	Total/NA	Water	SM 2540D	
LCSD 280-651386/3	Lab Control Sample Dup	Total/NA	Water	SM 2540D	
280-190717-A-1 DU	Duplicate	Total/NA	Water	SM 2540D	

Analysis Batch: 651481

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190622-1	MW-1D	Total/NA	Water	SM 2540C	
280-190622-2	MW-3D	Total/NA	Water	SM 2540C	
280-190622-3	MW-10S	Total/NA	Water	SM 2540C	
280-190622-4	MW-10D	Total/NA	Water	SM 2540C	
280-190622-7	MW-12S	Total/NA	Water	SM 2540C	
280-190622-8	MW-12D	Total/NA	Water	SM 2540C	
280-190622-9	MW-23	Total/NA	Water	SM 2540C	
280-190622-12	P-8	Total/NA	Water	SM 2540C	
280-190622-14	Duplicate 2	Total/NA	Water	SM 2540C	
MB 280-651481/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-651481/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-190622-1 DU	MW-1D	Total/NA	Water	SM 2540C	
280-190622-12 DU	P-8	Total/NA	Water	SM 2540C	

Analysis Batch: 651482

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190622-13	Duplicate 1	Total/NA	Water	SM 2540C	
MB 280-651482/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-651482/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 280-651482/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
280-190622-13 DU	Duplicate 1	Total/NA	Water	SM 2540C	

Analysis Batch: 651559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190622-1	MW-1D	Total/NA	Water	SM 2540D	
280-190622-2	MW-3D	Total/NA	Water	SM 2540D	

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QC Association Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190622-1

General Chemistry (Continued)

Analysis Batch: 651559 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190622-3	MW-10S	Total/NA	Water	SM 2540D	
280-190622-4	MW-10D	Total/NA	Water	SM 2540D	
280-190622-7	MW-12S	Total/NA	Water	SM 2540D	
280-190622-8	MW-12D	Total/NA	Water	SM 2540D	
280-190622-9	MW-23	Total/NA	Water	SM 2540D	
280-190622-12	P-8	Total/NA	Water	SM 2540D	
280-190622-13	Duplicate 1	Total/NA	Water	SM 2540D	
280-190622-14	Duplicate 2	Total/NA	Water	SM 2540D	
MB 280-651559/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 280-651559/2	Lab Control Sample	Total/NA	Water	SM 2540D	
280-190622-14 DU	Duplicate 2	Total/NA	Water	SM 2540D	

Analysis Batch: 651668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190622-10	MW-26	Total/NA	Water	SM 2540C	
280-190622-11	MW-27	Total/NA	Water	SM 2540C	
MB 280-651668/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-651668/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-190307-B-2 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 651734

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190622-10	MW-26	Total/NA	Water	SM 2540D	
280-190622-11	MW-27	Total/NA	Water	SM 2540D	
MB 280-651734/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 280-651734/2	Lab Control Sample	Total/NA	Water	SM 2540D	
280-190817-A-2 DU	Duplicate	Total/NA	Water	SM 2540D	

Analysis Batch: 651790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190622-1	MW-1D	Total/NA	Water	SM 2320B	
280-190622-2	MW-3D	Total/NA	Water	SM 2320B	
280-190622-3	MW-10S	Total/NA	Water	SM 2320B	
280-190622-4	MW-10D	Total/NA	Water	SM 2320B	
280-190622-5	VLF240422-2	Total/NA	Water	SM 2320B	
280-190622-6	VLF240422-1	Total/NA	Water	SM 2320B	
280-190622-7	MW-12S	Total/NA	Water	SM 2320B	
280-190622-8	MW-12D	Total/NA	Water	SM 2320B	
280-190622-9	MW-23	Total/NA	Water	SM 2320B	
280-190622-10	MW-26	Total/NA	Water	SM 2320B	
280-190622-11	MW-27	Total/NA	Water	SM 2320B	
280-190622-12	P-8	Total/NA	Water	SM 2320B	
280-190622-13	Duplicate 1	Total/NA	Water	SM 2320B	
280-190622-14	Duplicate 2	Total/NA	Water	SM 2320B	
MB 280-651790/58	Method Blank	Total/NA	Water	SM 2320B	
280-190547-C-1 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 651819

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190622-1	MW-1D	Total/NA	Water	300.0	
280-190622-2	MW-3D	Total/NA	Water	300.0	

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QC Association Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190622-1

General Chemistry (Continued)

Analysis Batch: 651819 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190622-3	MW-10S	Total/NA	Water	300.0	
280-190622-4	MW-10D	Total/NA	Water	300.0	
280-190622-5	VLF240422-2	Total/NA	Water	300.0	
280-190622-6	VLF240422-1	Total/NA	Water	300.0	
280-190622-7	MW-12S	Total/NA	Water	300.0	
280-190622-8	MW-12D	Total/NA	Water	300.0	
MB 280-651819/13	Method Blank	Total/NA	Water	300.0	
MB 280-651819/46	Method Blank	Total/NA	Water	300.0	
LCS 280-651819/11	Lab Control Sample	Total/NA	Water	300.0	
LCS 280-651819/44	Lab Control Sample	Total/NA	Water	300.0	
LCSD 280-651819/12	Lab Control Sample Dup	Total/NA	Water	300.0	
LCSD 280-651819/45	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 280-651819/10	Lab Control Sample	Total/NA	Water	300.0	
280-190622-1 MS	MW-1D	Total/NA	Water	300.0	
280-190622-1 MSD	MW-1D	Total/NA	Water	300.0	
280-190622-1 DU	MW-1D	Total/NA	Water	300.0	

Analysis Batch: 652354

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190622-9	MW-23	Total/NA	Water	300.0	
280-190622-10	MW-26	Total/NA	Water	300.0	
280-190622-11	MW-27	Total/NA	Water	300.0	
280-190622-12	P-8	Total/NA	Water	300.0	
280-190622-13	Duplicate 1	Total/NA	Water	300.0	
280-190622-14	Duplicate 2	Total/NA	Water	300.0	
MB 280-652354/6	Method Blank	Total/NA	Water	300.0	
MB 280-652354/75	Method Blank	Total/NA	Water	300.0	
LCS 280-652354/4	Lab Control Sample	Total/NA	Water	300.0	
LCS 280-652354/73	Lab Control Sample	Total/NA	Water	300.0	
LCSD 280-652354/5	Lab Control Sample Dup	Total/NA	Water	300.0	
LCSD 280-652354/74	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 280-652354/3	Lab Control Sample	Total/NA	Water	300.0	
280-190622-9 MS	MW-23	Total/NA	Water	300.0	
280-190622-9 MSD	MW-23	Total/NA	Water	300.0	
280-190622-9 DU	MW-23	Total/NA	Water	300.0	

Lab Chronicle

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190622-1

Client Sample ID: MW-1D

Date Collected: 04/24/24 09:37

Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	651953	05/02/24 23:56	BMJ	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	651498	05/01/24 08:38	JTC	EET DEN
Total/NA	Analysis	200.8		1			651786	05/02/24 00:21	LMT	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	651496	05/01/24 08:30	JTC	EET DEN
Dissolved	Analysis	6010B		1			652161	05/03/24 22:40	ADL	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	651819	05/02/24 18:01	IRC	EET DEN
Total/NA	Analysis	SM 2320B		1			651790	05/01/24 22:11	LL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	651481	04/30/24 11:05	AKF	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	651559	04/30/24 15:29	AKF	EET DEN

Client Sample ID: MW-3D

Date Collected: 04/23/24 10:15

Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	651953	05/03/24 00:18	BMJ	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	651498	05/01/24 08:38	JTC	EET DEN
Total/NA	Analysis	200.8		1			651786	05/02/24 00:32	LMT	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	651496	05/01/24 08:30	JTC	EET DEN
Dissolved	Analysis	6010B		1			652161	05/03/24 23:10	ADL	EET DEN
Total/NA	Analysis	300.0		5	10 mL	10 mL	651819	05/02/24 18:46	IRC	EET DEN
Total/NA	Analysis	SM 2320B		1			651790	05/01/24 22:18	LL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	651481	04/30/24 11:05	AKF	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	651559	04/30/24 15:29	AKF	EET DEN

Client Sample ID: MW-10S

Date Collected: 04/23/24 09:34

Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	651953	05/03/24 00:41	BMJ	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	651498	05/01/24 08:38	JTC	EET DEN
Total/NA	Analysis	200.8		1			651786	05/02/24 00:35	LMT	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	651496	05/01/24 08:30	JTC	EET DEN
Dissolved	Analysis	6010B		1			652161	05/03/24 23:14	ADL	EET DEN
Total/NA	Analysis	300.0		10	10 mL	10 mL	651819	05/02/24 18:57	IRC	EET DEN
Total/NA	Analysis	SM 2320B		1			651790	05/01/24 22:27	LL	EET DEN
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	651481	04/30/24 11:05	AKF	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	651559	04/30/24 15:29	AKF	EET DEN

Eurofins Denver

Lab Chronicle

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190622-1

Client Sample ID: MW-10D

Lab Sample ID: 280-190622-4

Date Collected: 04/23/24 08:57

Matrix: Water

Date Received: 04/25/24 09:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	651953	05/03/24 01:03	BMJ	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	651498	05/01/24 08:38	JTC	EET DEN
Total/NA	Analysis	200.8		1			651786	05/02/24 00:39	LMT	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	651496	05/01/24 08:30	JTC	EET DEN
Dissolved	Analysis	6010B		1			652161	05/03/24 23:18	ADL	EET DEN
Total/NA	Analysis	300.0		5	10 mL	10 mL	651819	05/02/24 19:09	IRC	EET DEN
Total/NA	Analysis	SM 2320B		1			651790	05/01/24 22:35	LL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	651481	04/30/24 11:05	AKF	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	651559	04/30/24 15:29	AKF	EET DEN

Client Sample ID: VLF240422-2

Lab Sample ID: 280-190622-5

Date Collected: 04/22/24 17:44

Matrix: Water

Date Received: 04/25/24 09:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	651953	05/03/24 01:26	BMJ	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	651498	05/01/24 08:38	JTC	EET DEN
Total/NA	Analysis	200.8		1			651786	05/02/24 00:43	LMT	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	651496	05/01/24 08:30	JTC	EET DEN
Dissolved	Analysis	6010B		1			652161	05/03/24 23:22	ADL	EET DEN
Total/NA	Analysis	300.0		2	10 mL	10 mL	651819	05/03/24 00:36	IRC	EET DEN
Total/NA	Analysis	SM 2320B		1			651790	05/01/24 22:45	LL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	651279	04/29/24 09:18	AKF	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	651386	04/29/24 15:56	AKF	EET DEN

Client Sample ID: VLF240422-1

Lab Sample ID: 280-190622-6

Date Collected: 04/22/24 17:10

Matrix: Water

Date Received: 04/25/24 09:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	651953	05/03/24 01:49	BMJ	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	651498	05/01/24 08:38	JTC	EET DEN
Total/NA	Analysis	200.8		1			651786	05/02/24 00:46	LMT	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	651496	05/01/24 08:30	JTC	EET DEN
Dissolved	Analysis	6010B		1			652161	05/03/24 23:25	ADL	EET DEN
Total/NA	Analysis	300.0		5	10 mL	10 mL	651819	05/02/24 19:20	IRC	EET DEN
Total/NA	Analysis	SM 2320B		1			651790	05/01/24 23:09	LL	EET DEN
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	651279	04/29/24 09:18	AKF	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	651386	04/29/24 15:56	AKF	EET DEN

Eurofins Denver

Lab Chronicle

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190622-1

Client Sample ID: MW-12S

Lab Sample ID: 280-190622-7

Date Collected: 04/23/24 11:31

Matrix: Water

Date Received: 04/25/24 09:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	651953	05/03/24 02:11	BMJ	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	651498	05/01/24 08:38	JTC	EET DEN
Total/NA	Analysis	200.8		1			651786	05/02/24 00:57	LMT	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	651496	05/01/24 08:30	JTC	EET DEN
Dissolved	Analysis	6010B		1			652161	05/03/24 23:29	ADL	EET DEN
Total/NA	Analysis	300.0		2	10 mL	10 mL	651819	05/02/24 19:31	IRC	EET DEN
Total/NA	Analysis	SM 2320B		1			651790	05/01/24 23:16	LL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	651481	04/30/24 11:05	AKF	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	651559	04/30/24 15:29	AKF	EET DEN

Client Sample ID: MW-12D

Lab Sample ID: 280-190622-8

Date Collected: 04/23/24 11:03

Matrix: Water

Date Received: 04/25/24 09:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	651953	05/03/24 02:33	BMJ	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	651498	05/01/24 08:38	JTC	EET DEN
Total/NA	Analysis	200.8		1			651786	05/02/24 01:00	LMT	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	651496	05/01/24 08:30	JTC	EET DEN
Dissolved	Analysis	6010B		1			652161	05/03/24 23:33	ADL	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	651819	05/02/24 19:42	IRC	EET DEN
Total/NA	Analysis	SM 2320B		1			651790	05/01/24 23:22	LL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	651481	04/30/24 11:05	AKF	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	651559	04/30/24 15:29	AKF	EET DEN

Client Sample ID: MW-23

Lab Sample ID: 280-190622-9

Date Collected: 04/24/24 10:20

Matrix: Water

Date Received: 04/25/24 09:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	651953	05/03/24 02:56	BMJ	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	651498	05/01/24 08:38	JTC	EET DEN
Total/NA	Analysis	200.8		1			651786	05/02/24 01:04	LMT	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	651496	05/01/24 08:30	JTC	EET DEN
Dissolved	Analysis	6010B		1			652161	05/03/24 23:37	ADL	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	652354	05/08/24 03:51	IRC	EET DEN
Total/NA	Analysis	SM 2320B		1			651790	05/01/24 23:28	LL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	651481	04/30/24 11:05	AKF	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	651559	04/30/24 15:29	AKF	EET DEN

Eurofins Denver

Lab Chronicle

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190622-1

Client Sample ID: MW-26

Date Collected: 04/24/24 12:00

Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	651953	05/03/24 03:18	BMJ	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	651498	05/01/24 08:38	JTC	EET DEN
Total/NA	Analysis	200.8		1			651786	05/02/24 01:08	LMT	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	651496	05/01/24 08:30	JTC	EET DEN
Dissolved	Analysis	6010B		1			652161	05/03/24 23:41	ADL	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	652354	05/08/24 03:39	IRC	EET DEN
Total/NA	Analysis	SM 2320B		1			651790	05/01/24 23:35	LL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	651668	05/01/24 10:33	AKF	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	651734	05/01/24 15:56	AKF	EET DEN

Client Sample ID: MW-27

Date Collected: 04/24/24 11:14

Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	651953	05/03/24 03:40	BMJ	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	651498	05/01/24 08:38	JTC	EET DEN
Total/NA	Analysis	200.8		1			651786	05/02/24 01:11	LMT	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	651496	05/01/24 08:30	JTC	EET DEN
Dissolved	Analysis	6010B		1			652161	05/03/24 23:44	ADL	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	652354	05/08/24 03:28	IRC	EET DEN
Total/NA	Analysis	SM 2320B		1			651790	05/01/24 23:43	LL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	651668	05/01/24 10:33	AKF	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	651734	05/01/24 15:56	AKF	EET DEN

Client Sample ID: P-8

Date Collected: 04/23/24 12:19

Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	651953	05/03/24 04:02	BMJ	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	651498	05/01/24 08:38	JTC	EET DEN
Total/NA	Analysis	200.8		1			651786	05/02/24 01:15	LMT	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	651496	05/01/24 08:30	JTC	EET DEN
Dissolved	Analysis	6010B		1			652161	05/04/24 00:03	ADL	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	652354	05/08/24 09:40	IRC	EET DEN
Total/NA	Analysis	SM 2320B		1			651790	05/01/24 23:49	LL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	651481	04/30/24 11:05	AKF	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	651559	04/30/24 15:29	AKF	EET DEN

Eurofins Denver

Lab Chronicle

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190622-1

Client Sample ID: Duplicate 1

Date Collected: 04/23/24 07:00

Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	651953	05/03/24 04:25	BMJ	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	651498	05/01/24 08:38	JTC	EET DEN
Total/NA	Analysis	200.8		1			651786	05/02/24 01:18	LMT	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	651496	05/01/24 08:30	JTC	EET DEN
Dissolved	Analysis	6010B		1			652161	05/04/24 00:07	ADL	EET DEN
Total/NA	Analysis	300.0		5	10 mL	10 mL	652354	05/08/24 09:29	IRC	EET DEN
Total/NA	Analysis	SM 2320B		1			651790	05/01/24 23:58	LL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	651482	04/30/24 11:06	AKF	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	651559	04/30/24 15:29	AKF	EET DEN

Client Sample ID: Duplicate 2

Date Collected: 04/23/24 08:00

Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-14

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	651953	05/03/24 04:47	BMJ	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	651498	05/01/24 08:38	JTC	EET DEN
Total/NA	Analysis	200.8		1			651786	05/02/24 01:22	LMT	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	651496	05/01/24 08:30	JTC	EET DEN
Dissolved	Analysis	6010B		1			652161	05/04/24 00:10	ADL	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	652354	05/08/24 09:18	IRC	EET DEN
Total/NA	Analysis	SM 2320B		1			651790	05/02/24 00:04	LL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	651481	04/30/24 11:05	AKF	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	651559	04/30/24 15:29	AKF	EET DEN

Client Sample ID: Field Blank

Date Collected: 04/23/24 00:00

Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-15

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	651953	05/02/24 23:11	BMJ	EET DEN

Client Sample ID: Trip Blank

Date Collected: 04/23/24 08:57

Date Received: 04/25/24 09:25

Lab Sample ID: 280-190622-16

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	651953	05/02/24 22:48	BMJ	EET DEN

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Eurofins Denver

Eurofins Denver

4955 Yarrow Street

Arvada, CO 80002

Phone (303) 736-0100 Fax (303) 431-7171

Chain of Custody Record

Environment Testing
TestAmerica

Client Information		Sampler: NR NR		Lab PM: Collins, Janice S		Carrier Tracking No(s):		COC No: 280-97584-22898.1			
Client Contact: N. Reas		Phone: (909) 332-0312		E-Mail: Janice.Collins@et.eurofinsus.com				Page: 1 of 2			
Company: Valley Landfills, Inc. Republic Services				Analysis Requested						Job #: 1012	
Address: 28972 Coffin Butte Road		Due Date Requested:		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) 2320B - Bicarb Alkalinity 2540C/300 - TDS/Chloride 6010B - Dissolved Metals (FF) 200.8 - Total Arsenic 2540D - TSS 8260B - VOCs Total Number of containers						Preservation Codes:	
City: Corvallis		TAT Requested (days):								A - HCL M - Hexane	
State, Zip: OR, 97330		Compliance Project: ☐ Yes ☐ No								B - NaOH N - None	
Phone: 503-675-1335(Tel)		PO #: PO# 1584668								C - Zn Acetate O - AsNaO2	
Email:		WO #:								D - Nitric Acid P - Na2O4S	
Project Name: Coffin Butte/Valley Landfills		Project #: 28003197 "GW_SLCS_Leachate"								Q - Na2SO3	
Site: SSOW#:										R - Na2S2O3	
										S - H2SO4	
										T - TSP Dodecahydrate	
										U - Acetone	
										V - MCAA	
										W - pH 4-5	
										Z - other (specify)	
										Other:	
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)		Special Instructions/Note:	
MW-1D		4/24/24		0937		G		W			
MW-3D		4/23/24		1015		G		W			
MW-10s		4/23/24		0934		G		W			
MW-10d		4/23/24		0857		G		W			
VLF240422-2		4/22/24		1744		G		W			
VLF240422-1		4/22/24		1710		G		W			
MW-12s		4/23/24		1131		G		W			
MW-12d		4/23/24		1103		G		W			
MW-23		4/24/24		1020		G		W			
MW-26		4/24/24		1200		G		W			
MW-27		4/24/24		1114		G		W			
Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological											
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months											
Deliverable Requested: I, II, III, IV, Other (specify)											
Special Instructions/QC Requirements:											
Empty Kit Relinquished by:				Date:		Time:		Method of Shipment:			
Relinquished by:		Date/Time:		Company:		Received by: QW		Date/Time: 4/29/24 0925		Company: EETDEN	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:	
Custody Seals Intact: ☐ Yes ☐ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 1.4C 1.0C 0.8C FO.1IR14							

Ver: 01/16/2019



 eurofins Environment Testing
TestAmerica

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: Geo-Logic Associates

Job Number: 280-190622-1

Login Number: 190622

List Number: 1

Creator: Roehsner, Karen P

List Source: Eurofins Denver

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

ANALYTICAL REPORT

PREPARED FOR

Attn: Aaron Ogorzalek
Geo-Logic Associates
2777 East Guasti Road
Suite 1
Ontario, California 91761
Generated 5/10/2024 1:43:15 PM

JOB DESCRIPTION

Valley LF - Republic Serv Coffin Butte

JOB NUMBER

280-190735-1

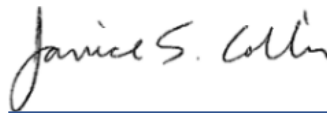
Eurofins Denver

Job Notes

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The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

Authorization



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Authorized for release by
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Definitions/Glossary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190735-1

Qualifiers

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Case Narrative

Client: Geo-Logic Associates
Project: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190735-1

Job ID: 280-190735-1

Eurofins Denver

Job Narrative 280-190735-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 4/26/2024 9:05 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.3°C.

Metals

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

General Chemistry

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

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Detection Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190735-1

Client Sample ID: S-U3

Lab Sample ID: 280-190735-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	36000		200	24	ug/L	1		6010B	Dissolved
Iron	28	J	100	9.1	ug/L	1		6010B	Dissolved
Magnesium	17000	B	200	4.2	ug/L	1		6010B	Dissolved
Manganese	53	B	10	0.45	ug/L	1		6010B	Dissolved
Sodium	57000		1000	97	ug/L	1		6010B	Dissolved
Chloride	93		15	5.1	mg/L	5		300.0	Total/NA
Bicarbonate Alkalinity as CaCO3	83		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	340		10	4.7	mg/L	1		SM 2540C	Total/NA

Client Sample ID: S-U4

Lab Sample ID: 280-190735-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	16000		200	24	ug/L	1		6010B	Dissolved
Magnesium	7300	B	200	4.2	ug/L	1		6010B	Dissolved
Manganese	5.4	J B	10	0.45	ug/L	1		6010B	Dissolved
Sodium	7200		1000	97	ug/L	1		6010B	Dissolved
Chloride	3.5		3.0	1.0	mg/L	1		300.0	Total/NA
Bicarbonate Alkalinity as CaCO3	81		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	130		10	4.7	mg/L	1		SM 2540C	Total/NA

Client Sample ID: S-U5

Lab Sample ID: 280-190735-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	31000		200	24	ug/L	1		6010B	Dissolved
Magnesium	16000	B	200	4.2	ug/L	1		6010B	Dissolved
Sodium	9700		1000	97	ug/L	1		6010B	Dissolved
Chloride	6.7		3.0	1.0	mg/L	1		300.0	Total/NA
Bicarbonate Alkalinity as CaCO3	130		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	200		10	4.7	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

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Method Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190735-1

Method	Method Description	Protocol	Laboratory
6010B	Dissolved Metals	SW846	EET DEN
300.0	Anions, Ion Chromatography	EPA	EET DEN
SM 2320B	Alkalinity	SM	EET DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET DEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET DEN

Protocol References:

EPA = US Environmental Protection Agency

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

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

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Sample Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190735-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-190735-1	S-U3	Water	04/25/24 09:30	04/26/24 09:05
280-190735-2	S-U4	Water	04/25/24 08:45	04/26/24 09:05
280-190735-3	S-U5	Water	04/25/24 09:05	04/26/24 09:05

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190735-1

Method: SW846 6010B - Dissolved Metals - Dissolved

Client Sample ID: S-U3
Date Collected: 04/25/24 09:30
Date Received: 04/26/24 09:05

Lab Sample ID: 280-190735-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	36000		200	24	ug/L		05/01/24 14:50	05/06/24 21:44	1
Iron	28	J	100	9.1	ug/L		05/01/24 14:50	05/06/24 21:44	1
Magnesium	17000	B	200	4.2	ug/L		05/01/24 14:50	05/06/24 21:44	1
Manganese	53	B	10	0.45	ug/L		05/01/24 14:50	05/06/24 21:44	1
Sodium	57000		1000	97	ug/L		05/01/24 14:50	05/06/24 21:44	1

Client Sample ID: S-U4
Date Collected: 04/25/24 08:45
Date Received: 04/26/24 09:05

Lab Sample ID: 280-190735-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	16000		200	24	ug/L		05/01/24 14:50	05/06/24 21:48	1
Iron	ND		100	9.1	ug/L		05/01/24 14:50	05/06/24 21:48	1
Magnesium	7300	B	200	4.2	ug/L		05/01/24 14:50	05/06/24 21:48	1
Manganese	5.4	J B	10	0.45	ug/L		05/01/24 14:50	05/06/24 21:48	1
Sodium	7200		1000	97	ug/L		05/01/24 14:50	05/06/24 21:48	1

Client Sample ID: S-U5
Date Collected: 04/25/24 09:05
Date Received: 04/26/24 09:05

Lab Sample ID: 280-190735-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	31000		200	24	ug/L		05/01/24 14:50	05/06/24 21:52	1
Iron	ND		100	9.1	ug/L		05/01/24 14:50	05/06/24 21:52	1
Magnesium	16000	B	200	4.2	ug/L		05/01/24 14:50	05/06/24 21:52	1
Manganese	ND		10	0.45	ug/L		05/01/24 14:50	05/06/24 21:52	1
Sodium	9700		1000	97	ug/L		05/01/24 14:50	05/06/24 21:52	1

General Chemistry

Client Sample ID: S-U3
Date Collected: 04/25/24 09:30
Date Received: 04/26/24 09:05

Lab Sample ID: 280-190735-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	93		15	5.1	mg/L			05/04/24 02:38	5
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	83		10	3.1	mg/L			05/06/24 21:13	1
Total Dissolved Solids (SM 2540C)	340		10	4.7	mg/L			05/02/24 10:48	1

Client Sample ID: S-U4
Date Collected: 04/25/24 08:45
Date Received: 04/26/24 09:05

Lab Sample ID: 280-190735-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	3.5		3.0	1.0	mg/L			05/03/24 16:51	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	81		10	3.1	mg/L			05/06/24 21:32	1
Total Dissolved Solids (SM 2540C)	130		10	4.7	mg/L			05/02/24 10:48	1

Client Sample ID: S-U5
Date Collected: 04/25/24 09:05
Date Received: 04/26/24 09:05

Lab Sample ID: 280-190735-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	6.7		3.0	1.0	mg/L			05/03/24 17:02	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190735-1

General Chemistry (Continued)

Client Sample ID: S-U5					Lab Sample ID: 280-190735-3				
Date Collected: 04/25/24 09:05					Matrix: Water				
Date Received: 04/26/24 09:05									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	130		10	3.1	mg/L			05/06/24 21:38	1
Total Dissolved Solids (SM 2540C)	200		10	4.7	mg/L			05/02/24 10:38	1

QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190735-1

Method: 6010B - Dissolved Metals

Lab Sample ID: MB 280-651656/1-A

Matrix: Water

Analysis Batch: 652329

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 651656

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		200	24	ug/L		05/01/24 14:50	05/06/24 21:00	1
Iron	ND		100	9.1	ug/L		05/01/24 14:50	05/06/24 21:00	1
Magnesium	8.41	J	200	4.2	ug/L		05/01/24 14:50	05/06/24 21:00	1
Manganese	0.485	J	10	0.45	ug/L		05/01/24 14:50	05/06/24 21:00	1
Sodium	ND		1000	97	ug/L		05/01/24 14:50	05/06/24 21:00	1

Lab Sample ID: LCS 280-651656/2-A

Matrix: Water

Analysis Batch: 652329

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 651656

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	50000	47900		ug/L		96	90 - 111
Iron	10000	9560		ug/L		96	89 - 115
Magnesium	50000	48100		ug/L		96	90 - 113
Manganese	1000	958		ug/L		96	90 - 110
Sodium	50000	49700		ug/L		99	90 - 115

Lab Sample ID: 280-190694-A-1-C MS

Matrix: Water

Analysis Batch: 652329

Client Sample ID: Matrix Spike

Prep Type: Dissolved

Prep Batch: 651656

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	16000		50000	63900		ug/L		95	48 - 153
Iron	24	J	10000	9500		ug/L		95	52 - 155
Magnesium	12000	B	50000	59800		ug/L		96	62 - 146
Manganese	2800	B	1000	3680		ug/L		86	79 - 121
Sodium	110000		50000	153000		ug/L		91	70 - 203

Lab Sample ID: 280-190694-A-1-D MSD

Matrix: Water

Analysis Batch: 652329

Client Sample ID: Matrix Spike Duplicate

Prep Type: Dissolved

Prep Batch: 651656

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Calcium	16000		50000	65400		ug/L		98	48 - 153	2	20
Iron	24	J	10000	9760		ug/L		97	52 - 155	3	20
Magnesium	12000	B	50000	61600		ug/L		100	62 - 146	3	20
Manganese	2800	B	1000	3780		ug/L		96	79 - 121	3	20
Sodium	110000		50000	158000		ug/L		100	70 - 203	3	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 280-652030/44

Matrix: Water

Analysis Batch: 652030

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0	1.0	mg/L			05/03/24 21:44	1

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190735-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 280-652030/6

Matrix: Water

Analysis Batch: 652030

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0	1.0	mg/L			05/03/24 12:00	1

Lab Sample ID: LCS 280-652030/4

Matrix: Water

Analysis Batch: 652030

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	100	95.1		mg/L		95	90 - 110

Lab Sample ID: LCS 280-652030/42

Matrix: Water

Analysis Batch: 652030

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	100	96.2		mg/L		96	90 - 110

Lab Sample ID: LCSD 280-652030/43

Matrix: Water

Analysis Batch: 652030

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	100	96.0		mg/L		96	90 - 110	0	10

Lab Sample ID: LCSD 280-652030/5

Matrix: Water

Analysis Batch: 652030

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	100	95.9		mg/L		96	90 - 110	1	10

Lab Sample ID: MRL 280-652030/3

Matrix: Water

Analysis Batch: 652030

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	5.00	4.56		mg/L		91	50 - 150

Lab Sample ID: 280-190318-A-13 MS

Matrix: Water

Analysis Batch: 652030

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	ND		50.0	45.1		mg/L		90	80 - 120

Lab Sample ID: 280-190318-A-13 MSD

Matrix: Water

Analysis Batch: 652030

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	ND		50.0	46.3		mg/L		93	80 - 120	3	20

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190735-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 280-190608-A-28 MS

Matrix: Water

Analysis Batch: 652030

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	15		50.0	63.2		mg/L		95	80 - 120

Lab Sample ID: 280-190608-A-28 MSD

Matrix: Water

Analysis Batch: 652030

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	15		50.0	63.6		mg/L		96	80 - 120	1	20

Lab Sample ID: 280-190318-A-13 DU

Matrix: Water

Analysis Batch: 652030

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	ND		ND		mg/L		NC	15

Lab Sample ID: 280-190608-A-28 DU

Matrix: Water

Analysis Batch: 652030

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	15		15.4		mg/L		0.1	15

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-652411/32

Matrix: Water

Analysis Batch: 652411

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		10	3.1	mg/L			05/06/24 19:41	1

Lab Sample ID: 280-190676-C-16 DU

Matrix: Water

Analysis Batch: 652411

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	470		471		mg/L		0.1	20

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

Lab Sample ID: MB 280-651850/1

Matrix: Water

Analysis Batch: 651850

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	4.7	mg/L			05/02/24 10:38	1

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190735-1

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

Lab Sample ID: LCS 280-651850/2

Matrix: Water

Analysis Batch: 651850

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	503	510		mg/L		101	88 - 114

Lab Sample ID: LCSD 280-651850/3

Matrix: Water

Analysis Batch: 651850

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids	503	510		mg/L		101	88 - 114	0	20

Lab Sample ID: 280-190734-A-7 DU

Matrix: Water

Analysis Batch: 651850

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	24000		22400		mg/L		7	10

Lab Sample ID: MB 280-651859/1

Matrix: Water

Analysis Batch: 651859

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	4.7	mg/L			05/02/24 10:48	1

Lab Sample ID: LCS 280-651859/2

Matrix: Water

Analysis Batch: 651859

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	503	514		mg/L		102	88 - 114

Lab Sample ID: 280-190735-2 DU

Matrix: Water

Analysis Batch: 651859

Client Sample ID: S-U4

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	130		120		mg/L		7	10

QC Association Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190735-1

Metals

Prep Batch: 651656

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190735-1	S-U3	Dissolved	Water	3005A	
280-190735-2	S-U4	Dissolved	Water	3005A	
280-190735-3	S-U5	Dissolved	Water	3005A	
MB 280-651656/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-651656/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-190694-A-1-C MS	Matrix Spike	Dissolved	Water	3005A	
280-190694-A-1-D MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	

Analysis Batch: 652329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190735-1	S-U3	Dissolved	Water	6010B	651656
280-190735-2	S-U4	Dissolved	Water	6010B	651656
280-190735-3	S-U5	Dissolved	Water	6010B	651656
MB 280-651656/1-A	Method Blank	Total Recoverable	Water	6010B	651656
LCS 280-651656/2-A	Lab Control Sample	Total Recoverable	Water	6010B	651656
280-190694-A-1-C MS	Matrix Spike	Dissolved	Water	6010B	651656
280-190694-A-1-D MSD	Matrix Spike Duplicate	Dissolved	Water	6010B	651656

General Chemistry

Analysis Batch: 651850

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190735-3	S-U5	Total/NA	Water	SM 2540C	
MB 280-651850/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-651850/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 280-651850/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
280-190734-A-7 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 651859

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190735-1	S-U3	Total/NA	Water	SM 2540C	
280-190735-2	S-U4	Total/NA	Water	SM 2540C	
MB 280-651859/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-651859/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-190735-2 DU	S-U4	Total/NA	Water	SM 2540C	

Analysis Batch: 652030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190735-1	S-U3	Total/NA	Water	300.0	
280-190735-2	S-U4	Total/NA	Water	300.0	
280-190735-3	S-U5	Total/NA	Water	300.0	
MB 280-652030/44	Method Blank	Total/NA	Water	300.0	
MB 280-652030/6	Method Blank	Total/NA	Water	300.0	
LCS 280-652030/4	Lab Control Sample	Total/NA	Water	300.0	
LCS 280-652030/42	Lab Control Sample	Total/NA	Water	300.0	
LCSD 280-652030/43	Lab Control Sample Dup	Total/NA	Water	300.0	
LCSD 280-652030/5	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 280-652030/3	Lab Control Sample	Total/NA	Water	300.0	
280-190318-A-13 MS	Matrix Spike	Total/NA	Water	300.0	
280-190318-A-13 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
280-190608-A-28 MS	Matrix Spike	Total/NA	Water	300.0	

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QC Association Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190735-1

General Chemistry (Continued)

Analysis Batch: 652030 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190608-A-28 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
280-190318-A-13 DU	Duplicate	Total/NA	Water	300.0	
280-190608-A-28 DU	Duplicate	Total/NA	Water	300.0	

Analysis Batch: 652411

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190735-1	S-U3	Total/NA	Water	SM 2320B	
280-190735-2	S-U4	Total/NA	Water	SM 2320B	
280-190735-3	S-U5	Total/NA	Water	SM 2320B	
MB 280-652411/32	Method Blank	Total/NA	Water	SM 2320B	
280-190676-C-16 DU	Duplicate	Total/NA	Water	SM 2320B	

Lab Chronicle

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190735-1

Client Sample ID: S-U3

Date Collected: 04/25/24 09:30

Date Received: 04/26/24 09:05

Lab Sample ID: 280-190735-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			50 mL	50 mL	651656	05/01/24 14:50	KLG	EET DEN
Dissolved	Analysis	6010B		1			652329	05/06/24 21:44	ADL	EET DEN
Total/NA	Analysis	300.0		5	10 mL	10 mL	652030	05/04/24 02:38	EJS	EET DEN
Total/NA	Analysis	SM 2320B		1			652411	05/06/24 21:13	AKF	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	651859	05/02/24 10:48	MF	EET DEN

Client Sample ID: S-U4

Date Collected: 04/25/24 08:45

Date Received: 04/26/24 09:05

Lab Sample ID: 280-190735-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			50 mL	50 mL	651656	05/01/24 14:50	KLG	EET DEN
Dissolved	Analysis	6010B		1			652329	05/06/24 21:48	ADL	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	652030	05/03/24 16:51	EJS	EET DEN
Total/NA	Analysis	SM 2320B		1			652411	05/06/24 21:32	AKF	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	651859	05/02/24 10:48	MF	EET DEN

Client Sample ID: S-U5

Date Collected: 04/25/24 09:05

Date Received: 04/26/24 09:05

Lab Sample ID: 280-190735-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			50 mL	50 mL	651656	05/01/24 14:50	KLG	EET DEN
Dissolved	Analysis	6010B		1			652329	05/06/24 21:52	ADL	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	652030	05/03/24 17:02	EJS	EET DEN
Total/NA	Analysis	SM 2320B		1			652411	05/06/24 21:38	AKF	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	651850	05/02/24 10:38	MF	EET DEN

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

 eurofins Environment Testing
TestAmerica

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: Geo-Logic Associates

Job Number: 280-190735-1

Login Number: 190735

List Number: 1

Creator: Roehsner, Karen P

List Source: Eurofins Denver

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

ANALYTICAL REPORT

PREPARED FOR

Attn: Aaron Ogorzalek
Geo-Logic Associates
2777 East Guasti Road
Suite 1
Ontario, California 91761

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JOB DESCRIPTION

Valley LF - Republic Serv Coffin Butte

JOB NUMBER

280-190736-1

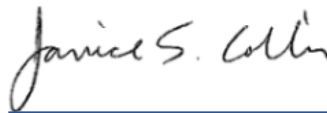
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Job Notes

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Authorization



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Authorized for release by
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(303)736-0100



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Definitions/Glossary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190736-1

Qualifiers

GC/MS VOA

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

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

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

Glossary

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

Case Narrative

Client: Geo-Logic Associates
Project: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190736-1

Job ID: 280-190736-1

Eurofins Denver

Job Narrative 280-190736-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 4/26/2024 9:05 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.9°C.

GC/MS VOA

Method 8260B: In analytical batch 280-652305 for Method 8260, the following samples were diluted due to the foamy nature of the sample matrix that would contaminate the instrument at lesser dilutions: 280-190736-1 and 280-190736-4. Elevated reporting limits (RLs) are provided.

Method 8260B: The following sample was collected in a properly preserved vial; however, the pH (5) was outside the required criteria when verified by the laboratory. The sample was analyzed outside the 7-day holding time specified for unpreserved samples but within the 14-day holding time specified for preserved samples: 280-190736-1.

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

Metals

Method 200.8: The following samples were improperly preserved in the field: 280-190736-1 and 280-190736-5. 2.5 mL of preservative was added in order to achieve the necessary pH for digestion. This does not meet regulatory requirements.

Method 6010B - Dissolved: The following samples were improperly preserved in the field: 280-190736-1 and 280-190736-5. 2.5 mL of preservative was added in order to achieve the necessary pH for digestion. This does not meet regulatory requirements.

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

General Chemistry

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

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Detection Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190736-1

Client Sample ID: LDS-2B

Lab Sample ID: 280-190736-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Isopropylbenzene	1.5	J	4.0	1.5	ug/L	4		8260B	Total/NA
Arsenic	22		5.0	0.50	ug/L	1		200.8	Total/NA
Calcium	200000		200	24	ug/L	1		6010B	Dissolved
Iron	5100		100	9.1	ug/L	1		6010B	Dissolved
Magnesium	120000	B	200	4.2	ug/L	1		6010B	Dissolved
Manganese	3900	B	10	0.45	ug/L	1		6010B	Dissolved
Sodium	1400000		1000	97	ug/L	1		6010B	Dissolved
Chloride	2000		150	51	mg/L	50		300.0	Total/NA
Bicarbonate Alkalinity as CaCO3	1600		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	7000		100	47	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	20		4.0	1.1	mg/L	1		SM 2540D	Total/NA

Client Sample ID: LDS-3

Lab Sample ID: 280-190736-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.75	J	5.0	0.50	ug/L	1		200.8	Total/NA
Calcium	32000		200	24	ug/L	1		6010B	Dissolved
Iron	30	J	100	9.1	ug/L	1		6010B	Dissolved
Magnesium	13000	B	200	4.2	ug/L	1		6010B	Dissolved
Manganese	220	B	10	0.45	ug/L	1		6010B	Dissolved
Sodium	76000		1000	97	ug/L	1		6010B	Dissolved
Chloride	100		15	5.1	mg/L	5		300.0	Total/NA
Bicarbonate Alkalinity as CaCO3	95		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	350		10	4.7	mg/L	1		SM 2540C	Total/NA

Client Sample ID: LDS-4

Lab Sample ID: 280-190736-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.60	J	5.0	0.50	ug/L	1		200.8	Total/NA
Calcium	93000		200	24	ug/L	1		6010B	Dissolved
Iron	22	J	100	9.1	ug/L	1		6010B	Dissolved
Magnesium	41000	B	200	4.2	ug/L	1		6010B	Dissolved
Manganese	0.93	J B	10	0.45	ug/L	1		6010B	Dissolved
Sodium	110000		1000	97	ug/L	1		6010B	Dissolved
Chloride	130		15	5.1	mg/L	5		300.0	Total/NA
Bicarbonate Alkalinity as CaCO3	420		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	720		20	9.4	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	1.2	J	4.0	1.1	mg/L	1		SM 2540D	Total/NA

Client Sample ID: LDS-5

Lab Sample ID: 280-190736-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.5	J	5.0	0.50	ug/L	1		200.8	Total/NA
Calcium	220000		200	24	ug/L	1		6010B	Dissolved
Iron	88	J	100	9.1	ug/L	1		6010B	Dissolved
Magnesium	93000	B	200	4.2	ug/L	1		6010B	Dissolved
Manganese	1400	B	10	0.45	ug/L	1		6010B	Dissolved
Sodium	450000		1000	97	ug/L	1		6010B	Dissolved
Chloride	890		150	51	mg/L	50		300.0	Total/NA
Bicarbonate Alkalinity as CaCO3	130		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	2600		40	19	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

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Method Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190736-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	EET DEN
200.8	Metals (ICP/MS)	EPA	EET DEN
6010B	Dissolved Metals	SW846	EET DEN
300.0	Anions, Ion Chromatography	EPA	EET DEN
SM 2320B	Alkalinity	SM	EET DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET DEN
SM 2540D	Solids, Total Suspended (TSS)	SM	EET DEN
200.8	Preparation, Total Metals	EPA	EET DEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET DEN
5030B	Purge and Trap	SW846	EET DEN

Protocol References:

EPA = US Environmental Protection Agency

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

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

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Sample Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190736-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-190736-1	LDS-2B	Water	04/25/24 11:05	04/26/24 09:05
280-190736-2	LDS-3	Water	04/25/24 10:40	04/26/24 09:05
280-190736-3	LDS-4	Water	04/25/24 11:25	04/26/24 09:05
280-190736-4	LDS-5	Water	04/25/24 10:10	04/26/24 09:05
280-190736-6	TRIP BLANK	Water	04/25/24 10:10	04/26/24 09:05

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190736-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: LDS-2B
Date Collected: 04/25/24 11:05
Date Received: 04/26/24 09:05

Lab Sample ID: 280-190736-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		4.0	2.3	ug/L			05/07/24 04:51	4
1,1,1-Trichloroethane	ND		4.0	1.6	ug/L			05/07/24 04:51	4
1,1,2,2-Tetrachloroethane	ND		4.0	0.84	ug/L			05/07/24 04:51	4
1,1,2-Trichloroethane	ND		4.0	1.1	ug/L			05/07/24 04:51	4
1,1-Dichloroethane	ND		4.0	0.88	ug/L			05/07/24 04:51	4
1,1-Dichloroethene	ND		4.0	0.92	ug/L			05/07/24 04:51	4
1,1-Dichloropropene	ND		4.0	1.7	ug/L			05/07/24 04:51	4
1,2,3-Trichlorobenzene	ND		8.0	2.8	ug/L			05/07/24 04:51	4
1,2,3-Trichloropropane	ND		10	3.4	ug/L			05/07/24 04:51	4
1,2,4-Trichlorobenzene	ND		4.0	2.3	ug/L			05/07/24 04:51	4
1,2,4-Trimethylbenzene	ND		4.0	0.60	ug/L			05/07/24 04:51	4
1,2-Dibromo-3-Chloropropane	ND		20	7.0	ug/L			05/07/24 04:51	4
1,2-Dibromoethane	ND		4.0	1.6	ug/L			05/07/24 04:51	4
1,2-Dichlorobenzene	ND		4.0	1.5	ug/L			05/07/24 04:51	4
1,2-Dichloroethane	ND		4.0	2.2	ug/L			05/07/24 04:51	4
1,2-Dichloropropane	ND		4.0	2.1	ug/L			05/07/24 04:51	4
1,3,5-Trimethylbenzene	ND		4.0	1.5	ug/L			05/07/24 04:51	4
1,3-Dichlorobenzene	ND		4.0	1.3	ug/L			05/07/24 04:51	4
1,3-Dichloropropane	ND		4.0	1.5	ug/L			05/07/24 04:51	4
1,4-Dichlorobenzene	ND		4.0	1.6	ug/L			05/07/24 04:51	4
2,2-Dichloropropane	ND		4.0	1.5	ug/L			05/07/24 04:51	4
2-Butanone (MEK)	ND		60	24	ug/L			05/07/24 04:51	4
2-Chlorotoluene	ND		4.0	1.4	ug/L			05/07/24 04:51	4
2-Hexanone	ND		20	6.8	ug/L			05/07/24 04:51	4
4-Chlorotoluene	ND		4.0	0.84	ug/L			05/07/24 04:51	4
4-Isopropyltoluene	ND		4.0	1.7	ug/L			05/07/24 04:51	4
4-Methyl-2-pentanone (MIBK)	ND		20	3.9	ug/L			05/07/24 04:51	4
Acetone	ND		60	26	ug/L			05/07/24 04:51	4
Benzene	ND		4.0	1.2	ug/L			05/07/24 04:51	4
Bromobenzene	ND		4.0	1.6	ug/L			05/07/24 04:51	4
Bromochloromethane	ND		4.0	1.6	ug/L			05/07/24 04:51	4
Bromodichloromethane	ND		4.0	1.5	ug/L			05/07/24 04:51	4
Bromoform	ND		8.0	4.8	ug/L			05/07/24 04:51	4
Bromomethane	ND		20	9.4	ug/L			05/07/24 04:51	4
Carbon disulfide	ND		8.0	2.5	ug/L			05/07/24 04:51	4
Carbon tetrachloride	ND		4.0	2.3	ug/L			05/07/24 04:51	4
Chlorobenzene	ND		4.0	1.7	ug/L			05/07/24 04:51	4
Chloroethane	ND		16	5.5	ug/L			05/07/24 04:51	4
Chloroform	ND		4.0	1.4	ug/L			05/07/24 04:51	4
Chloromethane	ND		8.0	3.0	ug/L			05/07/24 04:51	4
cis-1,2-Dichloroethene	ND		4.0	1.3	ug/L			05/07/24 04:51	4
cis-1,3-Dichloropropene	ND		8.0	2.5	ug/L			05/07/24 04:51	4
Dibromochloromethane	ND		8.0	2.5	ug/L			05/07/24 04:51	4
Dibromomethane	ND		4.0	1.4	ug/L			05/07/24 04:51	4
Dichlorodifluoromethane	ND		12	3.8	ug/L			05/07/24 04:51	4
Ethylbenzene	ND		4.0	1.2	ug/L			05/07/24 04:51	4
Hexachlorobutadiene	ND		8.0	4.7	ug/L			05/07/24 04:51	4
Isopropylbenzene	1.5	J	4.0	1.5	ug/L			05/07/24 04:51	4
Methylene Chloride	ND		8.0	3.8	ug/L			05/07/24 04:51	4

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190736-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: LDS-2B
Date Collected: 04/25/24 11:05
Date Received: 04/26/24 09:05

Lab Sample ID: 280-190736-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		8.0	1.4	ug/L			05/07/24 04:51	4
Naphthalene	ND		8.0	2.5	ug/L			05/07/24 04:51	4
n-Butylbenzene	ND		4.0	1.9	ug/L			05/07/24 04:51	4
N-Propylbenzene	ND		4.0	2.1	ug/L			05/07/24 04:51	4
o-Xylene	ND		4.0	1.3	ug/L			05/07/24 04:51	4
sec-Butylbenzene	ND		4.0	1.8	ug/L			05/07/24 04:51	4
Styrene	ND		4.0	1.4	ug/L			05/07/24 04:51	4
tert-Butylbenzene	ND		4.0	1.7	ug/L			05/07/24 04:51	4
Tetrachloroethene	ND		4.0	1.6	ug/L			05/07/24 04:51	4
Toluene	ND		4.0	1.3	ug/L			05/07/24 04:51	4
trans-1,2-Dichloroethene	ND		4.0	1.5	ug/L			05/07/24 04:51	4
trans-1,3-Dichloropropene	ND		8.0	2.6	ug/L			05/07/24 04:51	4
Trichloroethene	ND		4.0	1.2	ug/L			05/07/24 04:51	4
Trichlorofluoromethane	ND		8.0	2.3	ug/L			05/07/24 04:51	4
Vinyl chloride	ND		8.0	2.0	ug/L			05/07/24 04:51	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		70 - 127					05/07/24 04:51	4
4-Bromofluorobenzene (Surr)	98		78 - 120					05/07/24 04:51	4
Dibromofluoromethane (Surr)	103		77 - 120					05/07/24 04:51	4
Toluene-d8 (Surr)	100		80 - 125					05/07/24 04:51	4

Client Sample ID: LDS-3
Date Collected: 04/25/24 10:40
Date Received: 04/26/24 09:05

Lab Sample ID: 280-190736-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.58	ug/L			05/07/24 02:23	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			05/07/24 02:23	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/07/24 02:23	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			05/07/24 02:23	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			05/07/24 02:23	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			05/07/24 02:23	1
1,1-Dichloropropene	ND		1.0	0.42	ug/L			05/07/24 02:23	1
1,2,3-Trichlorobenzene	ND		2.0	0.70	ug/L			05/07/24 02:23	1
1,2,3-Trichloropropane	ND		2.5	0.86	ug/L			05/07/24 02:23	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			05/07/24 02:23	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			05/07/24 02:23	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.8	ug/L			05/07/24 02:23	1
1,2-Dibromoethane	ND		1.0	0.40	ug/L			05/07/24 02:23	1
1,2-Dichlorobenzene	ND		1.0	0.37	ug/L			05/07/24 02:23	1
1,2-Dichloroethane	ND		1.0	0.54	ug/L			05/07/24 02:23	1
1,2-Dichloropropane	ND		1.0	0.52	ug/L			05/07/24 02:23	1
1,3,5-Trimethylbenzene	ND		1.0	0.37	ug/L			05/07/24 02:23	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			05/07/24 02:23	1
1,3-Dichloropropane	ND		1.0	0.38	ug/L			05/07/24 02:23	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			05/07/24 02:23	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			05/07/24 02:23	1
2-Butanone (MEK)	ND		15	6.0	ug/L			05/07/24 02:23	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			05/07/24 02:23	1
2-Hexanone	ND		5.0	1.7	ug/L			05/07/24 02:23	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190736-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: LDS-3
Date Collected: 04/25/24 10:40
Date Received: 04/26/24 09:05

Lab Sample ID: 280-190736-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			05/07/24 02:23	1
4-Isopropyltoluene	ND		1.0	0.43	ug/L			05/07/24 02:23	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			05/07/24 02:23	1
Acetone	ND		15	6.6	ug/L			05/07/24 02:23	1
Benzene	ND		1.0	0.31	ug/L			05/07/24 02:23	1
Bromobenzene	ND		1.0	0.40	ug/L			05/07/24 02:23	1
Bromochloromethane	ND		1.0	0.40	ug/L			05/07/24 02:23	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/07/24 02:23	1
Bromoform	ND		2.0	1.2	ug/L			05/07/24 02:23	1
Bromomethane	ND		5.0	2.4	ug/L			05/07/24 02:23	1
Carbon disulfide	ND		2.0	0.63	ug/L			05/07/24 02:23	1
Carbon tetrachloride	ND		1.0	0.57	ug/L			05/07/24 02:23	1
Chlorobenzene	ND		1.0	0.42	ug/L			05/07/24 02:23	1
Chloroethane	ND		4.0	1.4	ug/L			05/07/24 02:23	1
Chloroform	ND		1.0	0.36	ug/L			05/07/24 02:23	1
Chloromethane	ND		2.0	0.75	ug/L			05/07/24 02:23	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			05/07/24 02:23	1
cis-1,3-Dichloropropene	ND		2.0	0.63	ug/L			05/07/24 02:23	1
Dibromochloromethane	ND		2.0	0.62	ug/L			05/07/24 02:23	1
Dibromomethane	ND		1.0	0.34	ug/L			05/07/24 02:23	1
Dichlorodifluoromethane	ND		3.0	0.96	ug/L			05/07/24 02:23	1
Ethylbenzene	ND		1.0	0.30	ug/L			05/07/24 02:23	1
Hexachlorobutadiene	ND		2.0	1.2	ug/L			05/07/24 02:23	1
Isopropylbenzene	ND		1.0	0.36	ug/L			05/07/24 02:23	1
Methylene Chloride	ND		2.0	0.94	ug/L			05/07/24 02:23	1
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			05/07/24 02:23	1
Naphthalene	ND		2.0	0.63	ug/L			05/07/24 02:23	1
n-Butylbenzene	ND		1.0	0.48	ug/L			05/07/24 02:23	1
N-Propylbenzene	ND		1.0	0.53	ug/L			05/07/24 02:23	1
o-Xylene	ND		1.0	0.33	ug/L			05/07/24 02:23	1
sec-Butylbenzene	ND		1.0	0.45	ug/L			05/07/24 02:23	1
Styrene	ND		1.0	0.36	ug/L			05/07/24 02:23	1
tert-Butylbenzene	ND		1.0	0.42	ug/L			05/07/24 02:23	1
Tetrachloroethene	ND		1.0	0.40	ug/L			05/07/24 02:23	1
Toluene	ND		1.0	0.32	ug/L			05/07/24 02:23	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			05/07/24 02:23	1
trans-1,3-Dichloropropene	ND		2.0	0.65	ug/L			05/07/24 02:23	1
Trichloroethene	ND		1.0	0.30	ug/L			05/07/24 02:23	1
Trichlorofluoromethane	ND		2.0	0.57	ug/L			05/07/24 02:23	1
Vinyl chloride	ND		2.0	0.51	ug/L			05/07/24 02:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		70 - 127		05/07/24 02:23	1
4-Bromofluorobenzene (Surr)	97		78 - 120		05/07/24 02:23	1
Dibromofluoromethane (Surr)	103		77 - 120		05/07/24 02:23	1
Toluene-d8 (Surr)	100		80 - 125		05/07/24 02:23	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190736-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: LDS-4
Date Collected: 04/25/24 11:25
Date Received: 04/26/24 09:05

Lab Sample ID: 280-190736-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.58	ug/L			05/07/24 02:44	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			05/07/24 02:44	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/07/24 02:44	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			05/07/24 02:44	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			05/07/24 02:44	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			05/07/24 02:44	1
1,1-Dichloropropene	ND		1.0	0.42	ug/L			05/07/24 02:44	1
1,2,3-Trichlorobenzene	ND		2.0	0.70	ug/L			05/07/24 02:44	1
1,2,3-Trichloropropane	ND		2.5	0.86	ug/L			05/07/24 02:44	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			05/07/24 02:44	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			05/07/24 02:44	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.8	ug/L			05/07/24 02:44	1
1,2-Dibromoethane	ND		1.0	0.40	ug/L			05/07/24 02:44	1
1,2-Dichlorobenzene	ND		1.0	0.37	ug/L			05/07/24 02:44	1
1,2-Dichloroethane	ND		1.0	0.54	ug/L			05/07/24 02:44	1
1,2-Dichloropropane	ND		1.0	0.52	ug/L			05/07/24 02:44	1
1,3,5-Trimethylbenzene	ND		1.0	0.37	ug/L			05/07/24 02:44	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			05/07/24 02:44	1
1,3-Dichloropropane	ND		1.0	0.38	ug/L			05/07/24 02:44	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			05/07/24 02:44	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			05/07/24 02:44	1
2-Butanone (MEK)	ND		15	6.0	ug/L			05/07/24 02:44	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			05/07/24 02:44	1
2-Hexanone	ND		5.0	1.7	ug/L			05/07/24 02:44	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			05/07/24 02:44	1
4-Isopropyltoluene	ND		1.0	0.43	ug/L			05/07/24 02:44	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			05/07/24 02:44	1
Acetone	ND		15	6.6	ug/L			05/07/24 02:44	1
Benzene	ND		1.0	0.31	ug/L			05/07/24 02:44	1
Bromobenzene	ND		1.0	0.40	ug/L			05/07/24 02:44	1
Bromochloromethane	ND		1.0	0.40	ug/L			05/07/24 02:44	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/07/24 02:44	1
Bromoform	ND		2.0	1.2	ug/L			05/07/24 02:44	1
Bromomethane	ND		5.0	2.4	ug/L			05/07/24 02:44	1
Carbon disulfide	ND		2.0	0.63	ug/L			05/07/24 02:44	1
Carbon tetrachloride	ND		1.0	0.57	ug/L			05/07/24 02:44	1
Chlorobenzene	ND		1.0	0.42	ug/L			05/07/24 02:44	1
Chloroethane	ND		4.0	1.4	ug/L			05/07/24 02:44	1
Chloroform	ND		1.0	0.36	ug/L			05/07/24 02:44	1
Chloromethane	ND		2.0	0.75	ug/L			05/07/24 02:44	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			05/07/24 02:44	1
cis-1,3-Dichloropropene	ND		2.0	0.63	ug/L			05/07/24 02:44	1
Dibromochloromethane	ND		2.0	0.62	ug/L			05/07/24 02:44	1
Dibromomethane	ND		1.0	0.34	ug/L			05/07/24 02:44	1
Dichlorodifluoromethane	ND		3.0	0.96	ug/L			05/07/24 02:44	1
Ethylbenzene	ND		1.0	0.30	ug/L			05/07/24 02:44	1
Hexachlorobutadiene	ND		2.0	1.2	ug/L			05/07/24 02:44	1
Isopropylbenzene	ND		1.0	0.36	ug/L			05/07/24 02:44	1
Methylene Chloride	ND		2.0	0.94	ug/L			05/07/24 02:44	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190736-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: LDS-4
Date Collected: 04/25/24 11:25
Date Received: 04/26/24 09:05

Lab Sample ID: 280-190736-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			05/07/24 02:44	1
Naphthalene	ND		2.0	0.63	ug/L			05/07/24 02:44	1
n-Butylbenzene	ND		1.0	0.48	ug/L			05/07/24 02:44	1
N-Propylbenzene	ND		1.0	0.53	ug/L			05/07/24 02:44	1
o-Xylene	ND		1.0	0.33	ug/L			05/07/24 02:44	1
sec-Butylbenzene	ND		1.0	0.45	ug/L			05/07/24 02:44	1
Styrene	ND		1.0	0.36	ug/L			05/07/24 02:44	1
tert-Butylbenzene	ND		1.0	0.42	ug/L			05/07/24 02:44	1
Tetrachloroethene	ND		1.0	0.40	ug/L			05/07/24 02:44	1
Toluene	ND		1.0	0.32	ug/L			05/07/24 02:44	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			05/07/24 02:44	1
trans-1,3-Dichloropropene	ND		2.0	0.65	ug/L			05/07/24 02:44	1
Trichloroethene	ND		1.0	0.30	ug/L			05/07/24 02:44	1
Trichlorofluoromethane	ND		2.0	0.57	ug/L			05/07/24 02:44	1
Vinyl chloride	ND		2.0	0.51	ug/L			05/07/24 02:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		70 - 127					05/07/24 02:44	1
4-Bromofluorobenzene (Surr)	97		78 - 120					05/07/24 02:44	1
Dibromofluoromethane (Surr)	103		77 - 120					05/07/24 02:44	1
Toluene-d8 (Surr)	102		80 - 125					05/07/24 02:44	1

Client Sample ID: LDS-5
Date Collected: 04/25/24 10:10
Date Received: 04/26/24 09:05

Lab Sample ID: 280-190736-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		4.0	2.3	ug/L			05/07/24 05:13	4
1,1,1-Trichloroethane	ND		4.0	1.6	ug/L			05/07/24 05:13	4
1,1,2,2-Tetrachloroethane	ND		4.0	0.84	ug/L			05/07/24 05:13	4
1,1,2-Trichloroethane	ND		4.0	1.1	ug/L			05/07/24 05:13	4
1,1-Dichloroethane	ND		4.0	0.88	ug/L			05/07/24 05:13	4
1,1-Dichloroethene	ND		4.0	0.92	ug/L			05/07/24 05:13	4
1,1-Dichloropropene	ND		4.0	1.7	ug/L			05/07/24 05:13	4
1,2,3-Trichlorobenzene	ND		8.0	2.8	ug/L			05/07/24 05:13	4
1,2,3-Trichloropropane	ND		10	3.4	ug/L			05/07/24 05:13	4
1,2,4-Trichlorobenzene	ND		4.0	2.3	ug/L			05/07/24 05:13	4
1,2,4-Trimethylbenzene	ND		4.0	0.60	ug/L			05/07/24 05:13	4
1,2-Dibromo-3-Chloropropane	ND		20	7.0	ug/L			05/07/24 05:13	4
1,2-Dibromoethane	ND		4.0	1.6	ug/L			05/07/24 05:13	4
1,2-Dichlorobenzene	ND		4.0	1.5	ug/L			05/07/24 05:13	4
1,2-Dichloroethane	ND		4.0	2.2	ug/L			05/07/24 05:13	4
1,2-Dichloropropane	ND		4.0	2.1	ug/L			05/07/24 05:13	4
1,3,5-Trimethylbenzene	ND		4.0	1.5	ug/L			05/07/24 05:13	4
1,3-Dichlorobenzene	ND		4.0	1.3	ug/L			05/07/24 05:13	4
1,3-Dichloropropane	ND		4.0	1.5	ug/L			05/07/24 05:13	4
1,4-Dichlorobenzene	ND		4.0	1.6	ug/L			05/07/24 05:13	4
2,2-Dichloropropane	ND		4.0	1.5	ug/L			05/07/24 05:13	4
2-Butanone (MEK)	ND		60	24	ug/L			05/07/24 05:13	4
2-Chlorotoluene	ND		4.0	1.4	ug/L			05/07/24 05:13	4
2-Hexanone	ND		20	6.8	ug/L			05/07/24 05:13	4

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190736-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: LDS-5
Date Collected: 04/25/24 10:10
Date Received: 04/26/24 09:05

Lab Sample ID: 280-190736-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		4.0	0.84	ug/L			05/07/24 05:13	4
4-Isopropyltoluene	ND		4.0	1.7	ug/L			05/07/24 05:13	4
4-Methyl-2-pentanone (MIBK)	ND		20	3.9	ug/L			05/07/24 05:13	4
Acetone	ND		60	26	ug/L			05/07/24 05:13	4
Benzene	ND		4.0	1.2	ug/L			05/07/24 05:13	4
Bromobenzene	ND		4.0	1.6	ug/L			05/07/24 05:13	4
Bromochloromethane	ND		4.0	1.6	ug/L			05/07/24 05:13	4
Bromodichloromethane	ND		4.0	1.5	ug/L			05/07/24 05:13	4
Bromoform	ND		8.0	4.8	ug/L			05/07/24 05:13	4
Bromomethane	ND		20	9.4	ug/L			05/07/24 05:13	4
Carbon disulfide	ND		8.0	2.5	ug/L			05/07/24 05:13	4
Carbon tetrachloride	ND		4.0	2.3	ug/L			05/07/24 05:13	4
Chlorobenzene	ND		4.0	1.7	ug/L			05/07/24 05:13	4
Chloroethane	ND		16	5.5	ug/L			05/07/24 05:13	4
Chloroform	ND		4.0	1.4	ug/L			05/07/24 05:13	4
Chloromethane	ND		8.0	3.0	ug/L			05/07/24 05:13	4
cis-1,2-Dichloroethene	ND		4.0	1.3	ug/L			05/07/24 05:13	4
cis-1,3-Dichloropropene	ND		8.0	2.5	ug/L			05/07/24 05:13	4
Dibromochloromethane	ND		8.0	2.5	ug/L			05/07/24 05:13	4
Dibromomethane	ND		4.0	1.4	ug/L			05/07/24 05:13	4
Dichlorodifluoromethane	ND		12	3.8	ug/L			05/07/24 05:13	4
Ethylbenzene	ND		4.0	1.2	ug/L			05/07/24 05:13	4
Hexachlorobutadiene	ND		8.0	4.7	ug/L			05/07/24 05:13	4
Isopropylbenzene	ND		4.0	1.5	ug/L			05/07/24 05:13	4
Methylene Chloride	ND		8.0	3.8	ug/L			05/07/24 05:13	4
m-Xylene & p-Xylene	ND		8.0	1.4	ug/L			05/07/24 05:13	4
Naphthalene	ND		8.0	2.5	ug/L			05/07/24 05:13	4
n-Butylbenzene	ND		4.0	1.9	ug/L			05/07/24 05:13	4
N-Propylbenzene	ND		4.0	2.1	ug/L			05/07/24 05:13	4
o-Xylene	ND		4.0	1.3	ug/L			05/07/24 05:13	4
sec-Butylbenzene	ND		4.0	1.8	ug/L			05/07/24 05:13	4
Styrene	ND		4.0	1.4	ug/L			05/07/24 05:13	4
tert-Butylbenzene	ND		4.0	1.7	ug/L			05/07/24 05:13	4
Tetrachloroethene	ND		4.0	1.6	ug/L			05/07/24 05:13	4
Toluene	ND		4.0	1.3	ug/L			05/07/24 05:13	4
trans-1,2-Dichloroethene	ND		4.0	1.5	ug/L			05/07/24 05:13	4
trans-1,3-Dichloropropene	ND		8.0	2.6	ug/L			05/07/24 05:13	4
Trichloroethene	ND		4.0	1.2	ug/L			05/07/24 05:13	4
Trichlorofluoromethane	ND		8.0	2.3	ug/L			05/07/24 05:13	4
Vinyl chloride	ND		8.0	2.0	ug/L			05/07/24 05:13	4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		70 - 127		05/07/24 05:13	4
4-Bromofluorobenzene (Surr)	96		78 - 120		05/07/24 05:13	4
Dibromofluoromethane (Surr)	102		77 - 120		05/07/24 05:13	4
Toluene-d8 (Surr)	98		80 - 125		05/07/24 05:13	4

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190736-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: TRIP BLANK
Date Collected: 04/25/24 10:10
Date Received: 04/26/24 09:05

Lab Sample ID: 280-190736-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.58	ug/L			05/06/24 22:31	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			05/06/24 22:31	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/06/24 22:31	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			05/06/24 22:31	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			05/06/24 22:31	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			05/06/24 22:31	1
1,1-Dichloropropene	ND		1.0	0.42	ug/L			05/06/24 22:31	1
1,2,3-Trichlorobenzene	ND		2.0	0.70	ug/L			05/06/24 22:31	1
1,2,3-Trichloropropane	ND		2.5	0.86	ug/L			05/06/24 22:31	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			05/06/24 22:31	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			05/06/24 22:31	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.8	ug/L			05/06/24 22:31	1
1,2-Dibromoethane	ND		1.0	0.40	ug/L			05/06/24 22:31	1
1,2-Dichlorobenzene	ND		1.0	0.37	ug/L			05/06/24 22:31	1
1,2-Dichloroethane	ND		1.0	0.54	ug/L			05/06/24 22:31	1
1,2-Dichloropropane	ND		1.0	0.52	ug/L			05/06/24 22:31	1
1,3,5-Trimethylbenzene	ND		1.0	0.37	ug/L			05/06/24 22:31	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			05/06/24 22:31	1
1,3-Dichloropropane	ND		1.0	0.38	ug/L			05/06/24 22:31	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			05/06/24 22:31	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			05/06/24 22:31	1
2-Butanone (MEK)	ND		15	6.0	ug/L			05/06/24 22:31	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			05/06/24 22:31	1
2-Hexanone	ND		5.0	1.7	ug/L			05/06/24 22:31	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			05/06/24 22:31	1
4-Isopropyltoluene	ND		1.0	0.43	ug/L			05/06/24 22:31	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			05/06/24 22:31	1
Acetone	ND		15	6.6	ug/L			05/06/24 22:31	1
Benzene	ND		1.0	0.31	ug/L			05/06/24 22:31	1
Bromobenzene	ND		1.0	0.40	ug/L			05/06/24 22:31	1
Bromochloromethane	ND		1.0	0.40	ug/L			05/06/24 22:31	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/06/24 22:31	1
Bromoform	ND		2.0	1.2	ug/L			05/06/24 22:31	1
Bromomethane	ND		5.0	2.4	ug/L			05/06/24 22:31	1
Carbon disulfide	ND		2.0	0.63	ug/L			05/06/24 22:31	1
Carbon tetrachloride	ND		1.0	0.57	ug/L			05/06/24 22:31	1
Chlorobenzene	ND		1.0	0.42	ug/L			05/06/24 22:31	1
Chloroethane	ND		4.0	1.4	ug/L			05/06/24 22:31	1
Chloroform	ND		1.0	0.36	ug/L			05/06/24 22:31	1
Chloromethane	ND		2.0	0.75	ug/L			05/06/24 22:31	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			05/06/24 22:31	1
cis-1,3-Dichloropropene	ND		2.0	0.63	ug/L			05/06/24 22:31	1
Dibromochloromethane	ND		2.0	0.62	ug/L			05/06/24 22:31	1
Dibromomethane	ND		1.0	0.34	ug/L			05/06/24 22:31	1
Dichlorodifluoromethane	ND		3.0	0.96	ug/L			05/06/24 22:31	1
Ethylbenzene	ND		1.0	0.30	ug/L			05/06/24 22:31	1
Hexachlorobutadiene	ND		2.0	1.2	ug/L			05/06/24 22:31	1
Isopropylbenzene	ND		1.0	0.36	ug/L			05/06/24 22:31	1
Methylene Chloride	ND		2.0	0.94	ug/L			05/06/24 22:31	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190736-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: TRIP BLANK
Date Collected: 04/25/24 10:10
Date Received: 04/26/24 09:05

Lab Sample ID: 280-190736-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			05/06/24 22:31	1
Naphthalene	ND		2.0	0.63	ug/L			05/06/24 22:31	1
n-Butylbenzene	ND		1.0	0.48	ug/L			05/06/24 22:31	1
N-Propylbenzene	ND		1.0	0.53	ug/L			05/06/24 22:31	1
o-Xylene	ND		1.0	0.33	ug/L			05/06/24 22:31	1
sec-Butylbenzene	ND		1.0	0.45	ug/L			05/06/24 22:31	1
Styrene	ND		1.0	0.36	ug/L			05/06/24 22:31	1
tert-Butylbenzene	ND		1.0	0.42	ug/L			05/06/24 22:31	1
Tetrachloroethene	ND		1.0	0.40	ug/L			05/06/24 22:31	1
Toluene	ND		1.0	0.32	ug/L			05/06/24 22:31	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			05/06/24 22:31	1
trans-1,3-Dichloropropene	ND		2.0	0.65	ug/L			05/06/24 22:31	1
Trichloroethene	ND		1.0	0.30	ug/L			05/06/24 22:31	1
Trichlorofluoromethane	ND		2.0	0.57	ug/L			05/06/24 22:31	1
Vinyl chloride	ND		2.0	0.51	ug/L			05/06/24 22:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		70 - 127					05/06/24 22:31	1
4-Bromofluorobenzene (Surr)	96		78 - 120					05/06/24 22:31	1
Dibromofluoromethane (Surr)	103		77 - 120					05/06/24 22:31	1
Toluene-d8 (Surr)	101		80 - 125					05/06/24 22:31	1

Method: EPA 200.8 - Metals (ICP/MS)

Client Sample ID: LDS-2B
Date Collected: 04/25/24 11:05
Date Received: 04/26/24 09:05

Lab Sample ID: 280-190736-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	22		5.0	0.50	ug/L		05/01/24 15:03	05/02/24 20:43	1

Client Sample ID: LDS-3
Date Collected: 04/25/24 10:40
Date Received: 04/26/24 09:05

Lab Sample ID: 280-190736-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.75	J	5.0	0.50	ug/L		05/01/24 15:03	05/02/24 20:46	1

Client Sample ID: LDS-4
Date Collected: 04/25/24 11:25
Date Received: 04/26/24 09:05

Lab Sample ID: 280-190736-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.60	J	5.0	0.50	ug/L		05/01/24 15:03	05/02/24 20:48	1

Client Sample ID: LDS-5
Date Collected: 04/25/24 10:10
Date Received: 04/26/24 09:05

Lab Sample ID: 280-190736-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.5	J	5.0	0.50	ug/L		05/01/24 15:03	05/02/24 20:50	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190736-1

Method: SW846 6010B - Dissolved Metals - Dissolved

Client Sample ID: LDS-2B
Date Collected: 04/25/24 11:05
Date Received: 04/26/24 09:05

Lab Sample ID: 280-190736-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	200000		200	24	ug/L		05/01/24 14:50	05/06/24 21:56	1
Iron	5100		100	9.1	ug/L		05/01/24 14:50	05/06/24 21:56	1
Magnesium	120000	B	200	4.2	ug/L		05/01/24 14:50	05/06/24 21:56	1
Manganese	3900	B	10	0.45	ug/L		05/01/24 14:50	05/06/24 21:56	1
Sodium	1400000		1000	97	ug/L		05/01/24 14:50	05/06/24 21:56	1

Client Sample ID: LDS-3
Date Collected: 04/25/24 10:40
Date Received: 04/26/24 09:05

Lab Sample ID: 280-190736-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	32000		200	24	ug/L		05/01/24 14:50	05/06/24 22:01	1
Iron	30	J	100	9.1	ug/L		05/01/24 14:50	05/06/24 22:01	1
Magnesium	13000	B	200	4.2	ug/L		05/01/24 14:50	05/06/24 22:01	1
Manganese	220	B	10	0.45	ug/L		05/01/24 14:50	05/06/24 22:01	1
Sodium	76000		1000	97	ug/L		05/01/24 14:50	05/06/24 22:01	1

Client Sample ID: LDS-4
Date Collected: 04/25/24 11:25
Date Received: 04/26/24 09:05

Lab Sample ID: 280-190736-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	93000		200	24	ug/L		05/01/24 14:50	05/06/24 22:16	1
Iron	22	J	100	9.1	ug/L		05/01/24 14:50	05/06/24 22:16	1
Magnesium	41000	B	200	4.2	ug/L		05/01/24 14:50	05/06/24 22:16	1
Manganese	0.93	J B	10	0.45	ug/L		05/01/24 14:50	05/06/24 22:16	1
Sodium	110000		1000	97	ug/L		05/01/24 14:50	05/06/24 22:16	1

Client Sample ID: LDS-5
Date Collected: 04/25/24 10:10
Date Received: 04/26/24 09:05

Lab Sample ID: 280-190736-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	220000		200	24	ug/L		05/01/24 14:50	05/06/24 22:20	1
Iron	88	J	100	9.1	ug/L		05/01/24 14:50	05/06/24 22:20	1
Magnesium	93000	B	200	4.2	ug/L		05/01/24 14:50	05/06/24 22:20	1
Manganese	1400	B	10	0.45	ug/L		05/01/24 14:50	05/06/24 22:20	1
Sodium	450000		1000	97	ug/L		05/01/24 14:50	05/06/24 22:20	1

General Chemistry

Client Sample ID: LDS-2B
Date Collected: 04/25/24 11:05
Date Received: 04/26/24 09:05

Lab Sample ID: 280-190736-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	2000		150	51	mg/L			05/04/24 02:49	50
Bicarbonate Alkalinity as CaCO ₃ (SM 2320B)	1600		10	3.1	mg/L			05/06/24 21:55	1
Total Dissolved Solids (SM 2540C)	7000		100	47	mg/L			05/01/24 10:34	1
Total Suspended Solids (SM 2540D)	20		4.0	1.1	mg/L			05/01/24 15:59	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190736-1

General Chemistry

Client Sample ID: LDS-3
Date Collected: 04/25/24 10:40
Date Received: 04/26/24 09:05

Lab Sample ID: 280-190736-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	100		15	5.1	mg/L			05/04/24 03:00	5
Bicarbonate Alkalinity as CaCO ₃ (SM 2320B)	95		10	3.1	mg/L			05/06/24 22:02	1
Total Dissolved Solids (SM 2540C)	350		10	4.7	mg/L			05/01/24 10:34	1
Total Suspended Solids (SM 2540D)	ND		4.0	1.1	mg/L			05/01/24 15:59	1

Client Sample ID: LDS-4
Date Collected: 04/25/24 11:25
Date Received: 04/26/24 09:05

Lab Sample ID: 280-190736-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	130		15	5.1	mg/L			05/03/24 17:36	5
Bicarbonate Alkalinity as CaCO ₃ (SM 2320B)	420		10	3.1	mg/L			05/06/24 22:10	1
Total Dissolved Solids (SM 2540C)	720		20	9.4	mg/L			05/01/24 10:34	1
Total Suspended Solids (SM 2540D)	1.2	J	4.0	1.1	mg/L			05/02/24 15:42	1

Client Sample ID: LDS-5
Date Collected: 04/25/24 10:10
Date Received: 04/26/24 09:05

Lab Sample ID: 280-190736-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	890		150	51	mg/L			05/04/24 03:12	50
Bicarbonate Alkalinity as CaCO ₃ (SM 2320B)	130		10	3.1	mg/L			05/06/24 22:16	1
Total Dissolved Solids (SM 2540C)	2600		40	19	mg/L			05/02/24 10:48	1
Total Suspended Solids (SM 2540D)	ND		4.0	1.1	mg/L			05/01/24 15:59	1

Surrogate Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190736-1

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

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	DCA (70-127)	BFB (78-120)	DBFM (77-120)	TOL (80-125)
280-190736-1	LDS-2B	113	98	103	100
280-190736-2	LDS-3	112	97	103	100
280-190736-3	LDS-4	112	97	103	102
280-190736-4	LDS-5	114	96	102	98
280-190736-6	TRIP BLANK	112	96	103	101
280-190776-D-1 MS	Matrix Spike	111	99	103	102
280-190776-D-1 MSD	Matrix Spike Duplicate	114	97	104	101
LCS 280-652305/4	Lab Control Sample	114	96	103	99
LCSD 280-652305/5	Lab Control Sample Dup	112	96	106	99
MB 280-652305/9	Method Blank	111	96	104	101

Surrogate Legend

- DCA = 1,2-Dichloroethane-d4 (Surr)
- BFB = 4-Bromofluorobenzene (Surr)
- DBFM = Dibromofluoromethane (Surr)
- TOL = Toluene-d8 (Surr)

QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190736-1

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

Lab Sample ID: MB 280-652305/9

Matrix: Water

Analysis Batch: 652305

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.58	ug/L			05/06/24 21:54	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			05/06/24 21:54	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/06/24 21:54	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			05/06/24 21:54	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			05/06/24 21:54	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			05/06/24 21:54	1
1,1-Dichloropropene	ND		1.0	0.42	ug/L			05/06/24 21:54	1
1,2,3-Trichlorobenzene	ND		2.0	0.70	ug/L			05/06/24 21:54	1
1,2,3-Trichloropropane	ND		2.5	0.86	ug/L			05/06/24 21:54	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			05/06/24 21:54	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			05/06/24 21:54	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.8	ug/L			05/06/24 21:54	1
1,2-Dibromoethane	ND		1.0	0.40	ug/L			05/06/24 21:54	1
1,2-Dichlorobenzene	ND		1.0	0.37	ug/L			05/06/24 21:54	1
1,2-Dichloroethane	ND		1.0	0.54	ug/L			05/06/24 21:54	1
1,2-Dichloropropane	ND		1.0	0.52	ug/L			05/06/24 21:54	1
1,3,5-Trimethylbenzene	ND		1.0	0.37	ug/L			05/06/24 21:54	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			05/06/24 21:54	1
1,3-Dichloropropane	ND		1.0	0.38	ug/L			05/06/24 21:54	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			05/06/24 21:54	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			05/06/24 21:54	1
2-Butanone (MEK)	ND		15	6.0	ug/L			05/06/24 21:54	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			05/06/24 21:54	1
2-Hexanone	ND		5.0	1.7	ug/L			05/06/24 21:54	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			05/06/24 21:54	1
4-Isopropyltoluene	ND		1.0	0.43	ug/L			05/06/24 21:54	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			05/06/24 21:54	1
Acetone	ND		15	6.6	ug/L			05/06/24 21:54	1
Benzene	ND		1.0	0.31	ug/L			05/06/24 21:54	1
Bromobenzene	ND		1.0	0.40	ug/L			05/06/24 21:54	1
Bromochloromethane	ND		1.0	0.40	ug/L			05/06/24 21:54	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/06/24 21:54	1
Bromoform	ND		2.0	1.2	ug/L			05/06/24 21:54	1
Bromomethane	ND		5.0	2.4	ug/L			05/06/24 21:54	1
Carbon disulfide	ND		2.0	0.63	ug/L			05/06/24 21:54	1
Carbon tetrachloride	ND		1.0	0.57	ug/L			05/06/24 21:54	1
Chlorobenzene	ND		1.0	0.42	ug/L			05/06/24 21:54	1
Chloroethane	ND		4.0	1.4	ug/L			05/06/24 21:54	1
Chloroform	ND		1.0	0.36	ug/L			05/06/24 21:54	1
Chloromethane	ND		2.0	0.75	ug/L			05/06/24 21:54	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			05/06/24 21:54	1
cis-1,3-Dichloropropene	ND		2.0	0.63	ug/L			05/06/24 21:54	1
Dibromochloromethane	ND		2.0	0.62	ug/L			05/06/24 21:54	1
Dibromomethane	ND		1.0	0.34	ug/L			05/06/24 21:54	1
Dichlorodifluoromethane	ND		3.0	0.96	ug/L			05/06/24 21:54	1
Ethylbenzene	ND		1.0	0.30	ug/L			05/06/24 21:54	1
Hexachlorobutadiene	ND		2.0	1.2	ug/L			05/06/24 21:54	1
Isopropylbenzene	ND		1.0	0.36	ug/L			05/06/24 21:54	1

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190736-1

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

Lab Sample ID: MB 280-652305/9

Matrix: Water

Analysis Batch: 652305

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		2.0	0.94	ug/L			05/06/24 21:54	1
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			05/06/24 21:54	1
Naphthalene	ND		2.0	0.63	ug/L			05/06/24 21:54	1
n-Butylbenzene	ND		1.0	0.48	ug/L			05/06/24 21:54	1
N-Propylbenzene	ND		1.0	0.53	ug/L			05/06/24 21:54	1
o-Xylene	ND		1.0	0.33	ug/L			05/06/24 21:54	1
sec-Butylbenzene	ND		1.0	0.45	ug/L			05/06/24 21:54	1
Styrene	ND		1.0	0.36	ug/L			05/06/24 21:54	1
tert-Butylbenzene	ND		1.0	0.42	ug/L			05/06/24 21:54	1
Tetrachloroethene	ND		1.0	0.40	ug/L			05/06/24 21:54	1
Toluene	ND		1.0	0.32	ug/L			05/06/24 21:54	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			05/06/24 21:54	1
trans-1,3-Dichloropropene	ND		2.0	0.65	ug/L			05/06/24 21:54	1
Trichloroethene	ND		1.0	0.30	ug/L			05/06/24 21:54	1
Trichlorofluoromethane	ND		2.0	0.57	ug/L			05/06/24 21:54	1
Vinyl chloride	ND		2.0	0.51	ug/L			05/06/24 21:54	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		70 - 127		05/06/24 21:54	1
4-Bromofluorobenzene (Surr)	96		78 - 120		05/06/24 21:54	1
Dibromofluoromethane (Surr)	104		77 - 120		05/06/24 21:54	1
Toluene-d8 (Surr)	101		80 - 125		05/06/24 21:54	1

Lab Sample ID: LCS 280-652305/4

Matrix: Water

Analysis Batch: 652305

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	50.0	49.6		ug/L		99	74 - 121
1,1,1-Trichloroethane	50.0	56.4		ug/L		113	62 - 132
1,1,2,2-Tetrachloroethane	50.0	46.4		ug/L		93	72 - 122
1,1,2-Trichloroethane	50.0	49.4		ug/L		99	72 - 128
1,1-Dichloroethane	50.0	54.8		ug/L		110	66 - 130
1,1-Dichloroethene	50.0	50.5		ug/L		101	62 - 130
1,1-Dichloropropene	50.0	53.8		ug/L		108	64 - 133
1,2,3-Trichlorobenzene	50.0	45.1		ug/L		90	70 - 127
1,2,3-Trichloropropane	50.0	45.8		ug/L		92	74 - 123
1,2,4-Trichlorobenzene	50.0	48.0		ug/L		96	73 - 124
1,2,4-Trimethylbenzene	50.0	46.6		ug/L		93	74 - 124
1,2-Dibromo-3-Chloropropane	50.0	44.5		ug/L		89	58 - 122
1,2-Dibromoethane	50.0	48.0		ug/L		96	81 - 118
1,2-Dichlorobenzene	50.0	46.3		ug/L		93	77 - 121
1,2-Dichloroethane	50.0	54.7		ug/L		109	61 - 130
1,2-Dichloropropane	50.0	53.3		ug/L		107	68 - 127
1,3,5-Trimethylbenzene	50.0	46.5		ug/L		93	73 - 127
1,3-Dichlorobenzene	50.0	45.6		ug/L		91	76 - 121
1,3-Dichloropropane	50.0	49.4		ug/L		99	80 - 118
1,4-Dichlorobenzene	50.0	44.7		ug/L		89	76 - 119

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190736-1

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

Lab Sample ID: LCS 280-652305/4

Matrix: Water

Analysis Batch: 652305

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,2-Dichloropropane	50.0	53.2		ug/L		106	57 - 140
2-Butanone (MEK)	200	232		ug/L		116	53 - 135
2-Chlorotoluene	50.0	45.7		ug/L		91	75 - 123
2-Hexanone	200	237		ug/L		119	58 - 134
4-Chlorotoluene	50.0	45.2		ug/L		90	74 - 124
4-Isopropyltoluene	50.0	46.8		ug/L		94	74 - 127
4-Methyl-2-pentanone (MIBK)	200	249		ug/L		124	56 - 135
Acetone	200	230		ug/L		115	50 - 137
Benzene	50.0	51.1		ug/L		102	69 - 126
Bromobenzene	50.0	46.6		ug/L		93	75 - 122
Bromochloromethane	50.0	49.5		ug/L		99	71 - 130
Bromodichloromethane	50.0	50.6		ug/L		101	67 - 126
Bromoform	50.0	45.3		ug/L		91	57 - 125
Bromomethane	50.0	47.0		ug/L		94	25 - 163
Carbon disulfide	50.0	49.2		ug/L		98	56 - 128
Carbon tetrachloride	50.0	57.1		ug/L		114	60 - 133
Chlorobenzene	50.0	47.4		ug/L		95	78 - 118
Chloroethane	50.0	50.2		ug/L		100	52 - 144
Chloroform	50.0	51.9		ug/L		104	68 - 128
Chloromethane	50.0	43.5		ug/L		87	43 - 142
cis-1,2-Dichloroethene	50.0	49.0		ug/L		98	69 - 126
cis-1,3-Dichloropropene	50.0	50.3		ug/L		101	75 - 120
Dibromochloromethane	50.0	49.3		ug/L		99	71 - 122
Dibromomethane	50.0	50.0		ug/L		100	68 - 129
Dichlorodifluoromethane	50.0	29.7		ug/L		59	26 - 152
Ethylbenzene	50.0	48.2		ug/L		96	76 - 121
Hexachlorobutadiene	50.0	49.1		ug/L		98	69 - 133
Isopropylbenzene	50.0	47.0		ug/L		94	70 - 127
Methylene Chloride	50.0	48.0		ug/L		96	64 - 128
m-Xylene & p-Xylene	50.0	47.6		ug/L		95	76 - 122
Naphthalene	50.0	45.0		ug/L		90	63 - 129
n-Butylbenzene	50.0	47.2		ug/L		94	69 - 130
N-Propylbenzene	50.0	47.5		ug/L		95	73 - 127
o-Xylene	50.0	47.1		ug/L		94	77 - 120
sec-Butylbenzene	50.0	45.1		ug/L		90	72 - 127
Styrene	50.0	47.8		ug/L		96	79 - 120
tert-Butylbenzene	50.0	46.8		ug/L		94	72 - 126
Tetrachloroethene	50.0	50.3		ug/L		101	72 - 127
Toluene	50.0	47.1		ug/L		94	68 - 127
trans-1,2-Dichloroethene	50.0	49.9		ug/L		100	66 - 129
trans-1,3-Dichloropropene	50.0	50.2		ug/L		100	66 - 127
Trichloroethene	50.0	48.8		ug/L		98	70 - 125
Trichlorofluoromethane	50.0	50.7		ug/L		101	57 - 144
Vinyl chloride	50.0	44.1		ug/L		88	53 - 141

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	114		70 - 127
4-Bromofluorobenzene (Surr)	96		78 - 120

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190736-1

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

Lab Sample ID: LCS 280-652305/4

Matrix: Water

Analysis Batch: 652305

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
Dibromofluoromethane (Surr)	103		77 - 120
Toluene-d8 (Surr)	99		80 - 125

Lab Sample ID: LCSD 280-652305/5

Matrix: Water

Analysis Batch: 652305

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	50.0	52.1		ug/L		104	74 - 121	5	20
1,1,1-Trichloroethane	50.0	60.3		ug/L		121	62 - 132	7	20
1,1,2,2-Tetrachloroethane	50.0	50.0		ug/L		100	72 - 122	7	20
1,1,2-Trichloroethane	50.0	53.0		ug/L		106	72 - 128	7	20
1,1-Dichloroethane	50.0	57.9		ug/L		116	66 - 130	5	20
1,1-Dichloroethene	50.0	54.6		ug/L		109	62 - 130	8	21
1,1-Dichloropropene	50.0	58.2		ug/L		116	64 - 133	8	20
1,2,3-Trichlorobenzene	50.0	49.0		ug/L		98	70 - 127	8	20
1,2,3-Trichloropropane	50.0	49.6		ug/L		99	74 - 123	8	20
1,2,4-Trichlorobenzene	50.0	51.8		ug/L		104	73 - 124	7	20
1,2,4-Trimethylbenzene	50.0	50.5		ug/L		101	74 - 124	8	20
1,2-Dibromo-3-Chloropropane	50.0	48.1		ug/L		96	58 - 122	8	21
1,2-Dibromoethane	50.0	50.8		ug/L		102	81 - 118	6	20
1,2-Dichlorobenzene	50.0	50.2		ug/L		100	77 - 121	8	20
1,2-Dichloroethane	50.0	57.9		ug/L		116	61 - 130	6	20
1,2-Dichloropropane	50.0	56.8		ug/L		114	68 - 127	6	20
1,3,5-Trimethylbenzene	50.0	50.2		ug/L		100	73 - 127	8	20
1,3-Dichlorobenzene	50.0	49.0		ug/L		98	76 - 121	7	20
1,3-Dichloropropane	50.0	52.2		ug/L		104	80 - 118	6	20
1,4-Dichlorobenzene	50.0	49.4		ug/L		99	76 - 119	10	20
2,2-Dichloropropane	50.0	55.7		ug/L		111	57 - 140	5	22
2-Butanone (MEK)	200	240		ug/L		120	53 - 135	4	20
2-Chlorotoluene	50.0	47.7		ug/L		95	75 - 123	4	20
2-Hexanone	200	249		ug/L		124	58 - 134	5	21
4-Chlorotoluene	50.0	48.0		ug/L		96	74 - 124	6	20
4-Isopropyltoluene	50.0	50.5		ug/L		101	74 - 127	8	20
4-Methyl-2-pentanone (MIBK)	200	264		ug/L		132	56 - 135	6	20
Acetone	200	241		ug/L		120	50 - 137	4	21
Benzene	50.0	53.6		ug/L		107	69 - 126	5	20
Bromobenzene	50.0	51.0		ug/L		102	75 - 122	9	20
Bromochloromethane	50.0	53.2		ug/L		106	71 - 130	7	20
Bromodichloromethane	50.0	54.4		ug/L		109	67 - 126	7	20
Bromoform	50.0	46.9		ug/L		94	57 - 125	3	20
Bromomethane	50.0	53.3		ug/L		107	25 - 163	13	40
Carbon disulfide	50.0	52.6		ug/L		105	56 - 128	7	20
Carbon tetrachloride	50.0	60.7		ug/L		121	60 - 133	6	20
Chlorobenzene	50.0	49.7		ug/L		99	78 - 118	5	20
Chloroethane	50.0	53.5		ug/L		107	52 - 144	6	30
Chloroform	50.0	55.0		ug/L		110	68 - 128	6	20
Chloromethane	50.0	47.0		ug/L		94	43 - 142	8	20

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190736-1

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

Lab Sample ID: LCSD 280-652305/5

Matrix: Water

Analysis Batch: 652305

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	50.0	51.7		ug/L		103	69 - 126	5	20
cis-1,3-Dichloropropene	50.0	53.4		ug/L		107	75 - 120	6	20
Dibromochloromethane	50.0	51.0		ug/L		102	71 - 122	3	20
Dibromomethane	50.0	54.2		ug/L		108	68 - 129	8	20
Dichlorodifluoromethane	50.0	32.1		ug/L		64	26 - 152	8	21
Ethylbenzene	50.0	50.8		ug/L		102	76 - 121	5	20
Hexachlorobutadiene	50.0	53.8		ug/L		108	69 - 133	9	20
Isopropylbenzene	50.0	50.0		ug/L		100	70 - 127	6	20
Methylene Chloride	50.0	51.6		ug/L		103	64 - 128	7	20
m-Xylene & p-Xylene	50.0	50.0		ug/L		100	76 - 122	5	20
Naphthalene	50.0	48.7		ug/L		97	63 - 129	8	21
n-Butylbenzene	50.0	50.9		ug/L		102	69 - 130	7	20
N-Propylbenzene	50.0	51.9		ug/L		104	73 - 127	9	20
o-Xylene	50.0	49.3		ug/L		99	77 - 120	5	20
sec-Butylbenzene	50.0	49.6		ug/L		99	72 - 127	9	20
Styrene	50.0	50.8		ug/L		102	79 - 120	6	20
tert-Butylbenzene	50.0	51.0		ug/L		102	72 - 126	9	20
Tetrachloroethene	50.0	52.5		ug/L		105	72 - 127	4	20
Toluene	50.0	50.4		ug/L		101	68 - 127	7	20
trans-1,2-Dichloroethene	50.0	52.1		ug/L		104	66 - 129	4	20
trans-1,3-Dichloropropene	50.0	53.7		ug/L		107	66 - 127	7	20
Trichloroethene	50.0	51.0		ug/L		102	70 - 125	4	20
Trichlorofluoromethane	50.0	54.6		ug/L		109	57 - 144	7	28
Vinyl chloride	50.0	48.7		ug/L		97	53 - 141	10	25

Surrogate	%Recovery	LCSD Qualifier	LCSD Limits
1,2-Dichloroethane-d4 (Surr)	112		70 - 127
4-Bromofluorobenzene (Surr)	96		78 - 120
Dibromofluoromethane (Surr)	106		77 - 120
Toluene-d8 (Surr)	99		80 - 125

Lab Sample ID: 280-190776-D-1 MS

Matrix: Water

Analysis Batch: 652305

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	ND		50.0	50.8		ug/L		102	74 - 121
1,1,1-Trichloroethane	ND		50.0	58.9		ug/L		118	62 - 132
1,1,2,2-Tetrachloroethane	ND		50.0	49.4		ug/L		99	72 - 122
1,1,2-Trichloroethane	ND		50.0	51.3		ug/L		103	72 - 128
1,1-Dichloroethane	ND		50.0	57.5		ug/L		115	66 - 130
1,1-Dichloroethene	ND		50.0	52.9		ug/L		106	62 - 130
1,1-Dichloropropene	ND		50.0	56.7		ug/L		113	64 - 133
1,2,3-Trichlorobenzene	ND		50.0	48.2		ug/L		96	70 - 127
1,2,3-Trichloropropane	ND		50.0	49.3		ug/L		99	74 - 123
1,2,4-Trichlorobenzene	ND		50.0	50.6		ug/L		101	73 - 124
1,2,4-Trimethylbenzene	ND		50.0	50.6		ug/L		101	74 - 124
1,2-Dibromo-3-Chloropropane	ND		50.0	46.4		ug/L		93	58 - 122

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190736-1

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

Lab Sample ID: 280-190776-D-1 MS

Matrix: Water

Analysis Batch: 652305

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromoethane	ND		50.0	50.3		ug/L		101	81 - 118
1,2-Dichlorobenzene	ND		50.0	48.7		ug/L		97	77 - 121
1,2-Dichloroethane	ND		50.0	57.3		ug/L		115	61 - 130
1,2-Dichloropropane	ND		50.0	55.6		ug/L		111	68 - 127
1,3,5-Trimethylbenzene	ND		50.0	49.8		ug/L		100	73 - 127
1,3-Dichlorobenzene	ND		50.0	48.1		ug/L		96	76 - 121
1,3-Dichloropropane	ND		50.0	52.2		ug/L		104	80 - 118
1,4-Dichlorobenzene	ND		50.0	47.8		ug/L		96	76 - 119
2,2-Dichloropropane	ND		50.0	51.4		ug/L		103	57 - 140
2-Butanone (MEK)	ND		200	238		ug/L		119	53 - 135
2-Chlorotoluene	ND		50.0	47.0		ug/L		94	75 - 123
2-Hexanone	ND		200	248		ug/L		124	58 - 134
4-Chlorotoluene	ND		50.0	48.7		ug/L		97	74 - 124
4-Isopropyltoluene	ND		50.0	49.2		ug/L		98	74 - 127
4-Methyl-2-pentanone (MIBK)	ND		200	257		ug/L		128	56 - 135
Acetone	ND		200	234		ug/L		117	50 - 137
Benzene	ND		50.0	53.6		ug/L		107	69 - 126
Bromobenzene	ND		50.0	49.8		ug/L		100	75 - 122
Bromochloromethane	ND		50.0	50.4		ug/L		101	71 - 130
Bromodichloromethane	ND		50.0	52.1		ug/L		104	67 - 126
Bromoform	ND		50.0	45.6		ug/L		91	57 - 125
Bromomethane	ND		50.0	37.6		ug/L		75	25 - 163
Carbon disulfide	ND		50.0	50.6		ug/L		101	56 - 128
Carbon tetrachloride	ND		50.0	59.4		ug/L		119	60 - 133
Chlorobenzene	ND		50.0	49.3		ug/L		99	78 - 118
Chloroethane	ND		50.0	51.0		ug/L		102	52 - 144
Chloroform	ND		50.0	55.4		ug/L		111	68 - 128
Chloromethane	ND		50.0	45.3		ug/L		91	43 - 142
cis-1,2-Dichloroethene	ND		50.0	50.7		ug/L		101	69 - 126
cis-1,3-Dichloropropene	ND		50.0	50.9		ug/L		102	75 - 120
Dibromochloromethane	ND		50.0	49.8		ug/L		100	71 - 122
Dibromomethane	ND		50.0	52.7		ug/L		105	68 - 129
Dichlorodifluoromethane	ND		50.0	29.0		ug/L		58	26 - 152
Ethylbenzene	ND		50.0	50.0		ug/L		100	76 - 121
Hexachlorobutadiene	ND		50.0	50.6		ug/L		101	69 - 133
Isopropylbenzene	ND		50.0	50.8		ug/L		102	70 - 127
Methylene Chloride	ND		50.0	49.8		ug/L		100	64 - 128
m-Xylene & p-Xylene	ND		50.0	50.3		ug/L		101	76 - 122
Naphthalene	ND		50.0	48.4		ug/L		97	63 - 129
n-Butylbenzene	ND		50.0	49.2		ug/L		98	69 - 130
N-Propylbenzene	ND		50.0	50.7		ug/L		101	73 - 127
o-Xylene	ND		50.0	48.5		ug/L		97	77 - 120
sec-Butylbenzene	ND		50.0	48.1		ug/L		96	72 - 127
Styrene	ND		50.0	50.0		ug/L		100	79 - 120
tert-Butylbenzene	ND		50.0	50.9		ug/L		102	72 - 126
Tetrachloroethene	ND		50.0	51.5		ug/L		103	72 - 127
Toluene	ND		50.0	49.8		ug/L		100	68 - 127
trans-1,2-Dichloroethene	ND		50.0	52.0		ug/L		104	66 - 129
trans-1,3-Dichloropropene	ND		50.0	50.6		ug/L		101	66 - 127

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190736-1

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

Lab Sample ID: 280-190776-D-1 MS

Matrix: Water

Analysis Batch: 652305

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Trichloroethene	ND		50.0	52.1		ug/L		104	70 - 125
Trichlorofluoromethane	ND		50.0	51.5		ug/L		103	57 - 144
Vinyl chloride	ND		50.0	44.8		ug/L		90	53 - 141
Surrogate	MS %Recovery	MS Qualifier	Limits						
1,2-Dichloroethane-d4 (Surr)	111		70 - 127						
4-Bromofluorobenzene (Surr)	99		78 - 120						
Dibromofluoromethane (Surr)	103		77 - 120						
Toluene-d8 (Surr)	102		80 - 125						

Lab Sample ID: 280-190776-D-1 MSD

Matrix: Water

Analysis Batch: 652305

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		50.0	51.7		ug/L		103	74 - 121	2	20
1,1,1-Trichloroethane	ND		50.0	59.2		ug/L		118	62 - 132	1	20
1,1,2,2-Tetrachloroethane	ND		50.0	48.6		ug/L		97	72 - 122	2	20
1,1,2-Trichloroethane	ND		50.0	51.9		ug/L		104	72 - 128	1	20
1,1-Dichloroethane	ND		50.0	57.2		ug/L		114	66 - 130	0	20
1,1-Dichloroethene	ND		50.0	52.9		ug/L		106	62 - 130	0	21
1,1-Dichloropropene	ND		50.0	56.2		ug/L		112	64 - 133	1	20
1,2,3-Trichlorobenzene	ND		50.0	49.1		ug/L		98	70 - 127	2	20
1,2,3-Trichloropropane	ND		50.0	49.4		ug/L		99	74 - 123	0	20
1,2,4-Trichlorobenzene	ND		50.0	51.3		ug/L		103	73 - 124	1	20
1,2,4-Trimethylbenzene	ND		50.0	49.7		ug/L		99	74 - 124	2	20
1,2-Dibromo-3-Chloropropane	ND		50.0	47.9		ug/L		96	58 - 122	3	21
1,2-Dibromoethane	ND		50.0	49.3		ug/L		99	81 - 118	2	20
1,2-Dichlorobenzene	ND		50.0	48.9		ug/L		98	77 - 121	0	20
1,2-Dichloroethane	ND		50.0	57.2		ug/L		114	61 - 130	0	20
1,2-Dichloropropane	ND		50.0	55.7		ug/L		111	68 - 127	0	20
1,3,5-Trimethylbenzene	ND		50.0	49.5		ug/L		99	73 - 127	1	20
1,3-Dichlorobenzene	ND		50.0	48.4		ug/L		97	76 - 121	1	20
1,3-Dichloropropane	ND		50.0	52.2		ug/L		104	80 - 118	0	20
1,4-Dichlorobenzene	ND		50.0	47.8		ug/L		96	76 - 119	0	20
2,2-Dichloropropane	ND		50.0	51.4		ug/L		103	57 - 140	0	22
2-Butanone (MEK)	ND		200	238		ug/L		119	53 - 135	0	20
2-Chlorotoluene	ND		50.0	47.3		ug/L		95	75 - 123	1	20
2-Hexanone	ND		200	247		ug/L		123	58 - 134	0	21
4-Chlorotoluene	ND		50.0	48.2		ug/L		96	74 - 124	1	20
4-Isopropyltoluene	ND		50.0	49.3		ug/L		99	74 - 127	0	20
4-Methyl-2-pentanone (MIBK)	ND		200	259		ug/L		129	56 - 135	1	20
Acetone	ND		200	237		ug/L		119	50 - 137	1	21
Benzene	ND		50.0	53.6		ug/L		107	69 - 126	0	20
Bromobenzene	ND		50.0	49.8		ug/L		100	75 - 122	0	20
Bromochloromethane	ND		50.0	50.9		ug/L		102	71 - 130	1	20
Bromodichloromethane	ND		50.0	53.6		ug/L		107	67 - 126	3	20
Bromoform	ND		50.0	46.4		ug/L		93	57 - 125	2	20

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190736-1

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

Lab Sample ID: 280-190776-D-1 MSD

Matrix: Water

Analysis Batch: 652305

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bromomethane	ND		50.0	42.7		ug/L		85	25 - 163	13	40
Carbon disulfide	ND		50.0	51.2		ug/L		102	56 - 128	1	20
Carbon tetrachloride	ND		50.0	60.8		ug/L		122	60 - 133	2	20
Chlorobenzene	ND		50.0	49.8		ug/L		100	78 - 118	1	20
Chloroethane	ND		50.0	51.5		ug/L		103	52 - 144	1	30
Chloroform	ND		50.0	54.9		ug/L		110	68 - 128	1	20
Chloromethane	ND		50.0	45.4		ug/L		91	43 - 142	0	20
cis-1,2-Dichloroethene	ND		50.0	50.5		ug/L		101	69 - 126	0	20
cis-1,3-Dichloropropene	ND		50.0	52.0		ug/L		104	75 - 120	2	20
Dibromochloromethane	ND		50.0	50.4		ug/L		101	71 - 122	1	20
Dibromomethane	ND		50.0	52.6		ug/L		105	68 - 129	0	20
Dichlorodifluoromethane	ND		50.0	29.4		ug/L		59	26 - 152	2	21
Ethylbenzene	ND		50.0	50.6		ug/L		101	76 - 121	1	20
Hexachlorobutadiene	ND		50.0	51.4		ug/L		103	69 - 133	2	20
Isopropylbenzene	ND		50.0	49.8		ug/L		100	70 - 127	2	20
Methylene Chloride	ND		50.0	50.5		ug/L		101	64 - 128	1	20
m-Xylene & p-Xylene	ND		50.0	49.9		ug/L		100	76 - 122	1	20
Naphthalene	ND		50.0	50.0		ug/L		100	63 - 129	3	21
n-Butylbenzene	ND		50.0	49.0		ug/L		98	69 - 130	1	20
N-Propylbenzene	ND		50.0	50.2		ug/L		100	73 - 127	1	20
o-Xylene	ND		50.0	50.0		ug/L		100	77 - 120	3	20
sec-Butylbenzene	ND		50.0	48.2		ug/L		96	72 - 127	0	20
Styrene	ND		50.0	50.1		ug/L		100	79 - 120	0	20
tert-Butylbenzene	ND		50.0	49.9		ug/L		100	72 - 126	2	20
Tetrachloroethene	ND		50.0	51.7		ug/L		103	72 - 127	0	20
Toluene	ND		50.0	49.5		ug/L		99	68 - 127	1	20
trans-1,2-Dichloroethene	ND		50.0	52.3		ug/L		105	66 - 129	0	20
trans-1,3-Dichloropropene	ND		50.0	51.2		ug/L		102	66 - 127	1	20
Trichloroethene	ND		50.0	51.4		ug/L		103	70 - 125	1	20
Trichlorofluoromethane	ND		50.0	50.4		ug/L		101	57 - 144	2	28
Vinyl chloride	ND		50.0	45.4		ug/L		91	53 - 141	1	25

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	114		70 - 127
4-Bromofluorobenzene (Surr)	97		78 - 120
Dibromofluoromethane (Surr)	104		77 - 120
Toluene-d8 (Surr)	101		80 - 125

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 280-651648/1-A

Matrix: Water

Analysis Batch: 651972

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 651648

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		5.0	0.50	ug/L		05/01/24 15:03	05/02/24 19:44	1

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190736-1

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 280-651648/25-A
Matrix: Water
Analysis Batch: 651972

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 651648

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	40.0	40.5		ug/L		101	89 - 111

Lab Sample ID: 280-190797-D-1-E MS
Matrix: Water
Analysis Batch: 651972

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 651648

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	1.4	J	40.0	42.8		ug/L		104	79 - 120

Lab Sample ID: 280-190797-D-1-F MSD
Matrix: Water
Analysis Batch: 651972

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 651648

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	1.4	J	40.0	42.1		ug/L		102	79 - 120	2	20

Method: 6010B - Dissolved Metals

Lab Sample ID: MB 280-651656/1-A
Matrix: Water
Analysis Batch: 652329

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 651656

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		200	24	ug/L		05/01/24 14:50	05/06/24 21:00	1
Iron	ND		100	9.1	ug/L		05/01/24 14:50	05/06/24 21:00	1
Magnesium	8.41	J	200	4.2	ug/L		05/01/24 14:50	05/06/24 21:00	1
Manganese	0.485	J	10	0.45	ug/L		05/01/24 14:50	05/06/24 21:00	1
Sodium	ND		1000	97	ug/L		05/01/24 14:50	05/06/24 21:00	1

Lab Sample ID: LCS 280-651656/2-A
Matrix: Water
Analysis Batch: 652329

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 651656

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	50000	47900		ug/L		96	90 - 111
Iron	10000	9560		ug/L		96	89 - 115
Magnesium	50000	48100		ug/L		96	90 - 113
Manganese	1000	958		ug/L		96	90 - 110
Sodium	50000	49700		ug/L		99	90 - 115

Lab Sample ID: 280-190694-A-1-C MS
Matrix: Water
Analysis Batch: 652329

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 651656

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	16000		50000	63900		ug/L		95	48 - 153
Iron	24	J	10000	9500		ug/L		95	52 - 155
Magnesium	12000	B	50000	59800		ug/L		96	62 - 146
Manganese	2800	B	1000	3680		ug/L		86	79 - 121
Sodium	110000		50000	153000		ug/L		91	70 - 203

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190736-1

Method: 6010B - Dissolved Metals

Lab Sample ID: 280-190694-A-1-D MSD

Matrix: Water

Analysis Batch: 652329

Client Sample ID: Matrix Spike Duplicate

Prep Type: Dissolved

Prep Batch: 651656

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	16000		50000	65400		ug/L		98	48 - 153	2	20
Iron	24	J	10000	9760		ug/L		97	52 - 155	3	20
Magnesium	12000	B	50000	61600		ug/L		100	62 - 146	3	20
Manganese	2800	B	1000	3780		ug/L		96	79 - 121	3	20
Sodium	110000		50000	158000		ug/L		100	70 - 203	3	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 280-652030/44

Matrix: Water

Analysis Batch: 652030

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0	1.0	mg/L			05/03/24 21:44	1

Lab Sample ID: MB 280-652030/6

Matrix: Water

Analysis Batch: 652030

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0	1.0	mg/L			05/03/24 12:00	1

Lab Sample ID: LCS 280-652030/4

Matrix: Water

Analysis Batch: 652030

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	100	95.1		mg/L		95	90 - 110

Lab Sample ID: LCS 280-652030/42

Matrix: Water

Analysis Batch: 652030

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	100	96.2		mg/L		96	90 - 110

Lab Sample ID: LCSD 280-652030/43

Matrix: Water

Analysis Batch: 652030

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	100	96.0		mg/L		96	90 - 110	0	10

Lab Sample ID: LCSD 280-652030/5

Matrix: Water

Analysis Batch: 652030

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	100	95.9		mg/L		96	90 - 110	1	10

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190736-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MRL 280-652030/3

Matrix: Water

Analysis Batch: 652030

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	5.00	4.56		mg/L		91	50 - 150

Lab Sample ID: 280-190318-A-13 MS

Matrix: Water

Analysis Batch: 652030

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	ND		50.0	45.1		mg/L		90	80 - 120

Lab Sample ID: 280-190318-A-13 MSD

Matrix: Water

Analysis Batch: 652030

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	ND		50.0	46.3		mg/L		93	80 - 120	3	20

Lab Sample ID: 280-190608-A-28 MS

Matrix: Water

Analysis Batch: 652030

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	15		50.0	63.2		mg/L		95	80 - 120

Lab Sample ID: 280-190608-A-28 MSD

Matrix: Water

Analysis Batch: 652030

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	15		50.0	63.6		mg/L		96	80 - 120	1	20

Lab Sample ID: 280-190318-A-13 DU

Matrix: Water

Analysis Batch: 652030

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	ND		ND		mg/L		NC	15

Lab Sample ID: 280-190608-A-28 DU

Matrix: Water

Analysis Batch: 652030

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	15		15.4		mg/L		0.1	15

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190736-1

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-652411/32

Matrix: Water

Analysis Batch: 652411

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO ₃	ND		10	3.1	mg/L			05/06/24 19:41	1

Lab Sample ID: 280-190676-C-16 DU

Matrix: Water

Analysis Batch: 652411

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	Prepared	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO ₃	470		471		mg/L			0.1	20

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

Lab Sample ID: MB 280-651669/1

Matrix: Water

Analysis Batch: 651669

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	4.7	mg/L			05/01/24 10:34	1

Lab Sample ID: LCS 280-651669/2

Matrix: Water

Analysis Batch: 651669

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	503	510		mg/L		101	88 - 114

Lab Sample ID: 280-190626-D-1 DU

Matrix: Water

Analysis Batch: 651669

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	Prepared	RPD	RPD Limit
Total Dissolved Solids	1600		1610		mg/L			1	10

Lab Sample ID: MB 280-651859/1

Matrix: Water

Analysis Batch: 651859

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	4.7	mg/L			05/02/24 10:48	1

Lab Sample ID: LCS 280-651859/2

Matrix: Water

Analysis Batch: 651859

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	503	514		mg/L		102	88 - 114

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190736-1

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

Lab Sample ID: 280-190735-A-2 DU

Matrix: Water

Analysis Batch: 651859

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	130		120		mg/L		7	10

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 280-651735/1

Matrix: Water

Analysis Batch: 651735

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	1.1	mg/L			05/01/24 15:59	1

Lab Sample ID: LCS 280-651735/2

Matrix: Water

Analysis Batch: 651735

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	504	506		mg/L		100	79 - 114

Lab Sample ID: 320-111787-D-43 DU

Matrix: Water

Analysis Batch: 651735

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	9.6		10.0		mg/L		4	10

Lab Sample ID: MB 280-651920/1

Matrix: Water

Analysis Batch: 651920

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	1.1	mg/L			05/02/24 15:42	1

Lab Sample ID: LCS 280-651920/2

Matrix: Water

Analysis Batch: 651920

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	504	525		mg/L		104	79 - 114

Lab Sample ID: 280-190780-B-1 DU

Matrix: Water

Analysis Batch: 651920

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	350		389		mg/L		10	10

Eurofins Denver

QC Association Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190736-1

GC/MS VOA

Analysis Batch: 652305

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190736-1	LDS-2B	Total/NA	Water	8260B	
280-190736-2	LDS-3	Total/NA	Water	8260B	
280-190736-3	LDS-4	Total/NA	Water	8260B	
280-190736-4	LDS-5	Total/NA	Water	8260B	
280-190736-6	TRIP BLANK	Total/NA	Water	8260B	
MB 280-652305/9	Method Blank	Total/NA	Water	8260B	
LCS 280-652305/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-652305/5	Lab Control Sample Dup	Total/NA	Water	8260B	
280-190776-D-1 MS	Matrix Spike	Total/NA	Water	8260B	
280-190776-D-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Metals

Prep Batch: 651648

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190736-1	LDS-2B	Total/NA	Water	200.8	
280-190736-2	LDS-3	Total/NA	Water	200.8	
280-190736-3	LDS-4	Total/NA	Water	200.8	
280-190736-4	LDS-5	Total/NA	Water	200.8	
MB 280-651648/1-A	Method Blank	Total/NA	Water	200.8	
LCS 280-651648/25-A	Lab Control Sample	Total/NA	Water	200.8	
280-190797-D-1-E MS	Matrix Spike	Total/NA	Water	200.8	
280-190797-D-1-F MSD	Matrix Spike Duplicate	Total/NA	Water	200.8	

Prep Batch: 651656

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190736-1	LDS-2B	Dissolved	Water	3005A	
280-190736-2	LDS-3	Dissolved	Water	3005A	
280-190736-3	LDS-4	Dissolved	Water	3005A	
280-190736-4	LDS-5	Dissolved	Water	3005A	
MB 280-651656/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-651656/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-190694-A-1-C MS	Matrix Spike	Dissolved	Water	3005A	
280-190694-A-1-D MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	

Analysis Batch: 651972

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190736-1	LDS-2B	Total/NA	Water	200.8	651648
280-190736-2	LDS-3	Total/NA	Water	200.8	651648
280-190736-3	LDS-4	Total/NA	Water	200.8	651648
280-190736-4	LDS-5	Total/NA	Water	200.8	651648
MB 280-651648/1-A	Method Blank	Total/NA	Water	200.8	651648
LCS 280-651648/25-A	Lab Control Sample	Total/NA	Water	200.8	651648
280-190797-D-1-E MS	Matrix Spike	Total/NA	Water	200.8	651648
280-190797-D-1-F MSD	Matrix Spike Duplicate	Total/NA	Water	200.8	651648

Analysis Batch: 652329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190736-1	LDS-2B	Dissolved	Water	6010B	651656
280-190736-2	LDS-3	Dissolved	Water	6010B	651656
280-190736-3	LDS-4	Dissolved	Water	6010B	651656

Eurofins Denver

QC Association Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190736-1

Metals (Continued)

Analysis Batch: 652329 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190736-4	LDS-5	Dissolved	Water	6010B	651656
MB 280-651656/1-A	Method Blank	Total Recoverable	Water	6010B	651656
LCS 280-651656/2-A	Lab Control Sample	Total Recoverable	Water	6010B	651656
280-190694-A-1-C MS	Matrix Spike	Dissolved	Water	6010B	651656
280-190694-A-1-D MSD	Matrix Spike Duplicate	Dissolved	Water	6010B	651656

General Chemistry

Analysis Batch: 651669

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190736-1	LDS-2B	Total/NA	Water	SM 2540C	
280-190736-2	LDS-3	Total/NA	Water	SM 2540C	
280-190736-3	LDS-4	Total/NA	Water	SM 2540C	
MB 280-651669/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-651669/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-190626-D-1 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 651735

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190736-1	LDS-2B	Total/NA	Water	SM 2540D	
280-190736-2	LDS-3	Total/NA	Water	SM 2540D	
280-190736-4	LDS-5	Total/NA	Water	SM 2540D	
MB 280-651735/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 280-651735/2	Lab Control Sample	Total/NA	Water	SM 2540D	
320-111787-D-43 DU	Duplicate	Total/NA	Water	SM 2540D	

Analysis Batch: 651859

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190736-4	LDS-5	Total/NA	Water	SM 2540C	
MB 280-651859/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-651859/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-190735-A-2 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 651920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190736-3	LDS-4	Total/NA	Water	SM 2540D	
MB 280-651920/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 280-651920/2	Lab Control Sample	Total/NA	Water	SM 2540D	
280-190780-B-1 DU	Duplicate	Total/NA	Water	SM 2540D	

Analysis Batch: 652030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190736-1	LDS-2B	Total/NA	Water	300.0	
280-190736-2	LDS-3	Total/NA	Water	300.0	
280-190736-3	LDS-4	Total/NA	Water	300.0	
280-190736-4	LDS-5	Total/NA	Water	300.0	
MB 280-652030/44	Method Blank	Total/NA	Water	300.0	
MB 280-652030/6	Method Blank	Total/NA	Water	300.0	
LCS 280-652030/4	Lab Control Sample	Total/NA	Water	300.0	
LCS 280-652030/42	Lab Control Sample	Total/NA	Water	300.0	
LCSD 280-652030/43	Lab Control Sample Dup	Total/NA	Water	300.0	

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QC Association Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190736-1

General Chemistry (Continued)

Analysis Batch: 652030 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 280-652030/5	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 280-652030/3	Lab Control Sample	Total/NA	Water	300.0	
280-190318-A-13 MS	Matrix Spike	Total/NA	Water	300.0	
280-190318-A-13 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
280-190608-A-28 MS	Matrix Spike	Total/NA	Water	300.0	
280-190608-A-28 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
280-190318-A-13 DU	Duplicate	Total/NA	Water	300.0	
280-190608-A-28 DU	Duplicate	Total/NA	Water	300.0	

Analysis Batch: 652411

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190736-1	LDS-2B	Total/NA	Water	SM 2320B	
280-190736-2	LDS-3	Total/NA	Water	SM 2320B	
280-190736-3	LDS-4	Total/NA	Water	SM 2320B	
280-190736-4	LDS-5	Total/NA	Water	SM 2320B	
MB 280-652411/32	Method Blank	Total/NA	Water	SM 2320B	
280-190676-C-16 DU	Duplicate	Total/NA	Water	SM 2320B	

Lab Chronicle

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190736-1

Client Sample ID: LDS-2B

Lab Sample ID: 280-190736-1

Date Collected: 04/25/24 11:05

Matrix: Water

Date Received: 04/26/24 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		4	5 mL	5 mL	652305	05/07/24 04:51	CCF	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	651648	05/01/24 15:03	KLG	EET DEN
Total/NA	Analysis	200.8		1			651972	05/02/24 20:43	LMT	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	651656	05/01/24 14:50	KLG	EET DEN
Dissolved	Analysis	6010B		1			652329	05/06/24 21:56	ADL	EET DEN
Total/NA	Analysis	300.0		50	10 mL	10 mL	652030	05/04/24 02:49	EJS	EET DEN
Total/NA	Analysis	SM 2320B		1			652411	05/06/24 21:55	AKF	EET DEN
Total/NA	Analysis	SM 2540C		1	10 mL	100 mL	651669	05/01/24 10:34	AKF	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	651735	05/01/24 15:59	AKF	EET DEN

Client Sample ID: LDS-3

Lab Sample ID: 280-190736-2

Date Collected: 04/25/24 10:40

Matrix: Water

Date Received: 04/26/24 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	652305	05/07/24 02:23	CCF	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	651648	05/01/24 15:03	KLG	EET DEN
Total/NA	Analysis	200.8		1			651972	05/02/24 20:46	LMT	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	651656	05/01/24 14:50	KLG	EET DEN
Dissolved	Analysis	6010B		1			652329	05/06/24 22:01	ADL	EET DEN
Total/NA	Analysis	300.0		5	10 mL	10 mL	652030	05/04/24 03:00	EJS	EET DEN
Total/NA	Analysis	SM 2320B		1			652411	05/06/24 22:02	AKF	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	651669	05/01/24 10:34	AKF	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	651735	05/01/24 15:59	AKF	EET DEN

Client Sample ID: LDS-4

Lab Sample ID: 280-190736-3

Date Collected: 04/25/24 11:25

Matrix: Water

Date Received: 04/26/24 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	652305	05/07/24 02:44	CCF	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	651648	05/01/24 15:03	KLG	EET DEN
Total/NA	Analysis	200.8		1			651972	05/02/24 20:48	LMT	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	651656	05/01/24 14:50	KLG	EET DEN
Dissolved	Analysis	6010B		1			652329	05/06/24 22:16	ADL	EET DEN
Total/NA	Analysis	300.0		5	10 mL	10 mL	652030	05/03/24 17:36	EJS	EET DEN
Total/NA	Analysis	SM 2320B		1			652411	05/06/24 22:10	AKF	EET DEN
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	651669	05/01/24 10:34	AKF	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	651920	05/02/24 15:42	MF	EET DEN

Eurofins Denver

Lab Chronicle

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-190736-1

Client Sample ID: LDS-5

Date Collected: 04/25/24 10:10

Date Received: 04/26/24 09:05

Lab Sample ID: 280-190736-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		4	5 mL	5 mL	652305	05/07/24 05:13	CCF	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	651648	05/01/24 15:03	KLG	EET DEN
Total/NA	Analysis	200.8		1			651972	05/02/24 20:50	LMT	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	651656	05/01/24 14:50	KLG	EET DEN
Dissolved	Analysis	6010B		1			652329	05/06/24 22:20	ADL	EET DEN
Total/NA	Analysis	300.0		50	10 mL	10 mL	652030	05/04/24 03:12	EJS	EET DEN
Total/NA	Analysis	SM 2320B		1			652411	05/06/24 22:16	AKF	EET DEN
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	651859	05/02/24 10:48	MF	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	651735	05/01/24 15:59	AKF	EET DEN

Client Sample ID: TRIP BLANK

Date Collected: 04/25/24 10:10

Date Received: 04/26/24 09:05

Lab Sample ID: 280-190736-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	652305	05/06/24 22:31	CCF	EET DEN

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

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280-190736 Chain of Custody

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5/10/2024

Login Sample Receipt Checklist

Client: Geo-Logic Associates

Job Number: 280-190736-1

Login Number: 190736

List Number: 1

Creator: Roehsner, Karen P

List Source: Eurofins Denver

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

**GROUNDWATER MONITORING PROGRAM
WATER LEVEL SURVEY RECORD SHEET**

SITE NAME: Coffin Butte 4F
DATE: 10-14-2024 - 10-18-2024
PROJECT NUMBER: A024.1090
WATER LEVEL MAKE/MODEL: SOLINST 101
FIELD PERSONNEL: N. PEASON, N. RUDOLPH

WELL ID	CONSTRUCTION TOTAL DEPTH (TD)	ACTUAL TOTAL DEPTH (TD)	DEPTH TO WATER (DTW)	COMMENTS
MW-1S			DRY	TD: 24.50
MW-1D			29.20	
MW-3S			19.67	
MW-3D			25.46	
MW-8S			6.44	
MW-8D			5.31	
MW-9S			10.62	
MW-10S			31.07	
MW-10D			31.09	
MW-11S			15.55	
MW-11D			15.28	
MW-12S			25.02	
MW-12D			24.91	
MW-14S			18.86	
MW-14D			26.77	
MW-15			6.14	
MW-17			20.14	
MW-18			11.36	
MW-19			6.93	
MW-20			8.97	
MW-21			7.72	
MW-23			2.69	
MW-24			21.88	
MW-26			9.02	
MW-27			22.69	
P-8			22.15	
P-9			10.43	

REMARKS: PAGE 1 of 2

SIGNATURE: NICHOLAS PEASON



**GROUNDWATER MONITORING PROGRAM
WATER LEVEL SURVEY RECORD SHEET**

SITE NAME: COFFIN BUTTE
DATE: 10/14/2024 - 10/18/2024
PROJECT NUMBER: AU24-1090
WATER LEVEL MAKE/MODEL: SOLINST 101
FIELD PERSONNEL: N. REASON, N. BUDOLPH

WELL ID	CONSTRUCTION TOTAL DEPTH (TD)	ACTUAL TOTAL DEPTH (TD)	DEPTH TO WATER (DTW)	COMMENTS
P-10			3.10	
P-19			21.49	
P-22			38.61	
P-23			103.83	
DUPLEX			18.95	
PHILLIPS			29.40	
BERKLAND NEW			39.99	
BERKLAND OLD			8.35	
MERRIL			24.82	
S-2			15.02	
S-4			16.37	
PW-2			17.10	
QP-3S			313.89	
QP-4S			114.88	
QP-5N			100.25	
QP-6N			54.21	
QP-7N			11.63	
WP-1			12.54	
WP-3			11.59	NO LOCK
WP-5			11.46	NO LOCK
WP-6			10.57	NO LOCK, NO PVC CAP
WP-8			10.16	
WP-9			5.78	
S-1			14.44	
BH-16			3.31	
BH-17			22.03	

REMARKS: PAGE 2 of 2

SIGNATURE: NICHOLAS REASON



GROUNDWATER MONITORING PROGRAM WELL DATA SHEET

Site Name: COFFIN BUTTE

Well I.D.: MW-1B

Collected By: NR

Casing Diameter (inches): 2

Starting Water Level: 29.24

Total Depth (feet): 41.40

Water column (feet): 12.16

Screen Length (feet): —

Sample Method: Micro Purge Low Flow

Horiba Model S/N: U-521GRWEXW6K

Project No.: AU24.1090

Sampling Date: 10-16-2024

Purge start Time: 1556

Purge Stop time: 1615

Sampling (Well Recovery) Time: 1625

Ending Water Level (feet): 29.41

Total Purged (gallons): 2

Duplicate Sample: YES NO

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
1604	1/2	29.37	6.83	0.342	0.0	4.20	14.14	-15
1607	1	29.39	7.37	0.349	0.0	2.21	14.07	-16
1611	1 1/2	29.41	7.45	0.349	0.0	1.89	14.09	-34
1613	1 3/4	29.40	7.47	0.348	0.0	1.80	14.10	-38
1615	2	29.41	7.48	0.348	0.0	1.75	14.10	-40

Purge Sampling Rates: 20 PSI CPM #4 setting

Well condition: OK

Additional Info/Comments: CLOUDY, MILD, HUMID

Name: NICHOLAS PEARSON Signature: [Signature]

GROUNDWATER MONITORING PROGRAM WELL DATA SHEET

Site Name: COFFIN BUTTE
 Well I.D.: M-3D
 Collected By: NR
 Casing Diameter (inches): 2
 Starting Water Level: 25.51
 Total Depth (feet): 56.20
 Water column (feet): 30.69
 Screen Length (feet): -
 Sample Method: Micro Purge Low Flow
 Horiba Model S/N: U-52/GRWEXW6K

Project No.: A024.1090
 Sampling Date: 10-16-2024
 Purge start Time: 1456
 Purge Stop time: 1510
 Sampling (Well Recovery) Time: 1520
 Ending Water Level (feet): 26.50
 Total Purged (gallons): 2 1/4
 Duplicate Sample: YES ☒ NO

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
1459	1/2	26.39	7.01	0.431	0.0	5.01	14.12	115
1502	1	26.44	7.12	0.444	0.0	3.40	14.09	119
1505	1 1/2	26.46	7.15	0.450	0.0	2.93	14.08	118
1507	1 3/4	26.47	7.16	0.454	0.0	2.60	14.11	118
1508	2	26.48	7.18	0.455	0.0	2.51	14.09	117
1510	2 1/4	26.50	7.17	0.456	0.0	2.43	14.09	117

Purge Sampling Rates: PSI 30 CPM #4 setting

Well condition: OK - WATER CLEAR WITH NO OIL

Additional Info/Comments: CLOUDY, MICRO, HUMID

Name: NICHOLAS REASON Signature: [Signature]

GROUNDWATER MONITORING PROGRAM WELL DATA SHEET

Site Name: COFFIN BUTTE

Well I.D.: MW-83

Collected By: NL

Casing Diameter (inches): 2

Starting Water Level: 6.40

Total Depth (feet): 24.60

Water column (feet): 18.20

Screen Length (feet): —

Sample Method: Micro Purge Low Flow

Horiba Model S/N: U-52/GawExw6K

Project No.: A024-1090

Sampling Date: 10/15/24

Purge start Time: 1411

Purge Stop time: 1432

Sampling (Well Recovery) Time: 1440

Ending Water Level (feet): 8.04

Total Purged (gallons): 4 1/4

Duplicate Sample: YES NO

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
1414	3/4	8.32	7.38	0.365	0.8	3.09	15.29	-32
1416	1 1/2	8.40	7.38	0.364	0.0	2.41	15.24	-20
1418	2	8.51	7.38	0.363	0.0	1.94	15.22	-9
1420	2 1/2	8.43	7.38	0.363	0.0	1.65	15.19	-2
1422	3	7.92	7.39	0.362	0.0	1.51	15.35	4
1424	3 1/2	7.85	7.36	0.362	0.0	1.35	15.30	10
1428	3 3/4	7.96	7.36	0.363	0.0	1.19	15.26	18
1430	4	7.89	7.36	0.362	0.0	1.14	15.24	20
1432	4 1/4	8.04	7.38	0.362	0.0	1.10	15.24	20

Purge Sampling Rates: PS1 20 CPM #4

Well condition: OK - WATER cloudy initially then cleared, strong odor

Additional Info/Comments: Cloudy, mild

Name: Nicholas Pearson

Signature: [Signature]

GROUNDWATER MONITORING PROGRAM WELL DATA SHEET

Site Name: COFFIN BUTTE
Well I.D.: MW-95
Collected By: NR
Casing Diameter (inches): 2
Starting Water Level: 10.61
Total Depth (feet): 35.80
Water column (feet): 25.19
Screen Length (feet): 12.32
Sample Method: ~~Micro-Purge~~ Low Flow BAILED
Horiba Model S/N: U-52 / GRWEXW6K

Project No.: A024.1090
Sampling Date: 10/15/2024
Purge start Time: 1513
Purge Stop time: 1621
Sampling (Well Recovery) Time: 1645
Ending Water Level (feet): 12.45
Total Purged (gallons): 12.5
Duplicate Sample: YES ☐ NO ☒

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
1529	2	11.47	6.98	1.00	32.21	3.15	15.85	-103
1540	4	11.79	7.40	1.63	5.7	2.56	14.72	-123
1551	6	11.92	7.52	1.56	12.4	3.57	14.21	-164
1600	8	12.10	7.53	1.48	12.6	2.24	14.16	-148
~~1610~~ 1621	10	12.20	7.52	1.24	1.24	1.41	13.83	-122
~~1621~~ 1621	12.5	12.45	7.54	1.20	5.5	1.09	13.86	-122

Purge Sampling Rates: PURGED AND SAMPLED WELL USING A NEW 1 1/2" DISPOSABLE BAILER

Well condition: OK

Additional Info/Comments: CLOUDY, COOL, BREEZY

Name: NICHOLAS REASON

Signature: [Signature]

GROUNDWATER MONITORING PROGRAM WELL DATA SHEET

Site Name: CUFFIN BOTTLE
Well I.D.: MW-103
Collected By: PR
Casing Diameter (inches): 2
Starting Water Level: 30.89
Total Depth (feet): 40.50
Water column (feet): 9.61
Screen Length (feet): —
Sample Method: Micro Purge Low Flow
Horiba Model S/N: U-52/GRWEXW6K

Project No.: 30 Au 24. 1090
Sampling Date: 10-15-2024
Purge start Time: 1523 1530
Purge Stop time: 1549
Sampling (Well Recovery) Time: 1557
Ending Water Level (feet): 31.31
Total Purged (gallons): 2
Duplicate Sample: YES NO

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
1536	1/2	31.06	7.08	2.72	0.6	3.04	15.61	108
1540	1	31.29	7.07	2.76	0.5	2.37	15.58	112
1545	1 1/2	31.28	7.06	2.77	0.0	2.30	15.60	115
1547	1 3/4	31.30	7.06	2.77	0.0	2.32	15.63	115
1549	2	31.31	7.05	2.77	0.0	2.37	15.65	117

Purge Sampling Rates: 20 g/s Ref: 11 (10) Discharge (5)

Well condition: OK - WATER CLEAR WITH NO ODO

Additional Info/Comments: CLOUDY, COOL

Name: NICHOLAS REASON

Signature: [Signature]

GROUNDWATER MONITORING PROGRAM WELL DATA SHEET

Site Name: Coffin Butte
 Well I.D.: MW-10D
 Collected By: NR
 Casing Diameter (inches): 2 inch
 Starting Water Level: 31.64
 Total Depth (feet): 83.50
 Water column (feet): 51.84
 Screen Length (feet): -
 Sample Method: Micro Purge Low Flow
 Horiba Model S/N: U-52/X76N2GMX

Project No.: AV24.1090
 Sampling Date: 10-16-24
 Purge start Time: 0842
 Purge Stop time: 0901
 Sampling (Well Recovery) Time: 0915
 Ending Water Level (feet): 37.73
 Total Purged (gallons): 2 gal
 Duplicate Sample: YES NO

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
0849	0.5	35.01	6.60	0.941	0.5	0.32	14.92	290
0853	1.0	36.39	6.84	0.938	0.3	0.00	14.85	248
0856	1.5	37.44	6.81	0.936	0.0	0.00	14.83	205
0859	1.75	37.49	6.81	0.935	0.6	0.00	14.82	196
0901	2.00	37.73	6.81	0.933	0.0	0.00	14.82	186

Purge Sampling Rates: Purge Settings CPM 4 40 psi

Well condition: OK

Additional Info/Comments: Overcast, cool, light Breeze, installed new discharge tubing

Name: Nick Rudolph Signature: Nh Rudolph

GROUNDWATER MONITORING PROGRAM WELL DATA SHEET

Site Name: Coffin Butte
Well I.D.: MW-115
Collected By: NR
Casing Diameter (inches): 2 inch
Starting Water Level: 15.38
Total Depth (feet): 31.90
Water column (feet): 16.52
Screen Length (feet): -

Project No.: A024.1090
Sampling Date: 10-16-24
Purge start Time: 1134
Purge Stop time: 1146
Sampling (Well Recovery) Time: 1155
Ending Water Level (feet): 17.41
Total Purged (gallons): 2.25
Duplicate Sample: YES ☐ NO ☒

Sample Method: ☒ Micro Purge ☐ Low Flow
Horiba Model S/N: (NR) 42 / U-52 / X76N2GMX

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
1137	0.5	16.81	6.88	1.05	224	3.36	15.09	177
1139	1.0	17.01	6.87	1.33	58.3	0.88	14.89	185
1142	1.5	17.21	6.89	1.45	19.9	0.00	14.82	184
1143	1.75	17.41	6.89	1.46	16.6	0.00	14.77	183
1144	2.0	17.41	6.90	1.49	11.4	0.00	14.75	182
1145	2.25	17.41	6.91	1.50	9.9	0.00	14.73	181

Purge Sampling Rates: 20 PSI CPM 4

Well condition: OK

Additional Info/Comments: Partly Cloudy, warm

Name: Nick Rudolph

Signature: Nh Rudolph

GROUNDWATER MONITORING PROGRAM WELL DATA SHEET

Site Name: Coffin Butte
 Well I.D.: MW-11D
 Collected By: NR
 Casing Diameter (inches): 2 inch
 Starting Water Level: 15.77
 Total Depth (feet): 75.20
 Water column (feet): 59.43
 Screen Length (feet): -
 Sample Method: Micro Purge ☒ Low Flow ☐
 Horiba Model S/N: U-52/X76N26MX

Project No.: AV24-1090
 Sampling Date: 10-16-24
 Purge start Time: 1033
 Purge Stop time: 1052
 Sampling (Well Recovery) Time: 1105
 Ending Water Level (feet): 15.96
 Total Purged (gallons): 2
 Duplicate Sample: YES ☐ NO ☒

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
1037	.5	15.96	6.77	1.83	2.8	0.00	14.56	28
1042	1.0	15.96	6.89	1.84	0.1	0.00	14.47	5
1046	1.5	15.96	6.91	1.85	1.1	0.00	14.44	4
1048	1.75	15.96	6.91	1.85	0.0	0.00	14.43	4
1050	2.0	15.96	6.92	1.85	0.0	0.00	14.43	4

Purge Sampling Rates: 40 PSI CPM #4

Well condition: OK

Additional Info/Comments: Partly cloudy, cool, light breeze

Name: Nick Rudolph

Signature: Nh Rudolph

GROUNDWATER MONITORING PROGRAM WELL DATA SHEET

Site Name: COFFIN BUTTE

Well I.D.: MW-123

Collected By: NR, NR

Casing Diameter (inches): 2

Starting Water Level: Top of Pump = 23.38 / WL 25.02

Total Depth (feet): 27.90

Water column (feet): 2.88

Screen Length (feet): —

Sample Method: Micro Purge Low Flow

Horiba Model S/N: U-52/ERWEXWBK

Project No.: A024-1090

Sampling Date: 10/15/2024

Purge start Time: 0832

Purge Stop time: 1007

Sampling (Well Recovery) Time: 1017

Ending Water Level (feet): 25.24

Total Purged (gallons): 4 1/2

Duplicate Sample: YES ☒ NO

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
0843	1/2		6.96	0.669	0.0	10.29	13.93	-68
0849	3/4		6.92	0.673	0.0	8.94	13.92	-91
0853	1		6.92	0.671	0.0	8.21	13.91	-97
0858	1 1/4		6.94	0.654	0.0	7.45	13.91	-99
0903	1 1/2		6.95	0.637	0.0	6.76	13.91	-100
0910	1 3/4		6.97	0.617	0.0	6.03	13.89	-101
0914	2		6.98	0.611	0.0	5.71	13.90	-101
0919	2 1/4		6.99	0.597	0.0	4.99	13.88	-100
0925	2 1/2		7.00	0.587	0.0	4.46	13.87	-99
0930	2 3/4		7.01	0.583	0.0	4.12	13.87	-99
0936	3		7.01	0.576	0.0	3.67	13.88	-98
0942	3 1/4		7.02	0.571	0.0	3.35	13.88	-98

Purge Sampling Rates: 20 PSI R: 10 Di 3.4

Well condition: OK - Low YIELD, WATER LEVEL AT INLET OF BLADDER PUMP

Additional Info/Comments: CLOUDY, COOL TEMP

Name: NICHOLAS REASON

Signature: [Signature]

GROUNDWATER MONITORING PROGRAM WELL DATA SHEET

Site Name: COFFIN BUTTE
Well I.D.: MW-125
Collected By: NR, NR
Casing Diameter (inches): 2
Starting Water Level: 23.38 / WL: 25.02
Total Depth (feet): 27.90
Water column (feet): 2.88
Screen Length (feet): -
Sample Method: Micro Purge ☒ Low Flow ☐
Horiba Model S/N: U-52 / ~~U-52~~ GRWEXW6K

Project No.: A024.1090
Sampling Date: 10/15/2020
Purge start Time: 0832
Purge Stop time: 1007
Sampling (Well Recovery) Time: 1017
Ending Water Level (feet): 25.24
Total Purged (gallons): 4 1/2
Duplicate Sample: YES ☐ NO ☒

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
0947	3 1/2		7.02	0.567	0.0	3.12	13.88	-97
0952	3 3/4		7.04	0.565	0.0	2.85	13.87	-96
0957	4		7.04	0.567	0.0	0.94	13.86	-95
1002	4 1/4		7.05	0.564	0.0	0.89	13.86	-95
1007	4 1/2	25.24	7.05	0.561	0.0	0.87	13.86	-94

Purge Sampling Rates: 20 PSI R: 10 D: 3.4

Well condition:

Additional Info/Comments: Cloudy, cool, light mist

Name: Nicholas Pearson

Signature: [Signature]

GROUNDWATER MONITORING PROGRAM WELL DATA SHEET

Site Name: COFFIN BUTTE
Well I.D.: MW-120
Collected By: NR, NR
Casing Diameter (inches): 2
Starting Water Level: 24.82
Total Depth (feet): 61.90
Water column (feet): 37.08
Screen Length (feet):
Sample Method: Micro Purge Low Flow
Horiba Model S/N: U-52 1GRWEXW6K

Project No.: 50 AU20-1090
Sampling Date: 10-15-2024
Purge start Time: 1059
Purge Stop time: 1115
Sampling (Well Recovery) Time: 1123
Ending Water Level (feet): 25.07
Total Purged (gallons): 2 1/2
Duplicate Sample: YES ☒ NO

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
1106	1/2	24.99	7.09	0.309	0.0	3.87	14.13	90
1109	1 3/4	25.01	7.22	0.309	0.0	3.04	14.09	90
1111	1 1/2	25.02	7.26	0.309	0.0	2.78	14.09	88
1112	1 3/4	25.00	7.26	0.309	0.0	2.67	14.09	88
1113	2	25.03	7.28	0.310	0.0	2.59	14.09	87
1114	2 1/4	25.06	7.27	0.311	0.0	2.51	14.07	88
1115	2 1/2	25.07	7.25	0.310	0.0	2.49	14.09	89

Purge Sampling Rates: 30 PSI REFILL (10) Discharge (7)

Well condition: Good

Additional Info/Comments: Cloudy, cool

Name: Nicholas Pearson Signature: [Signature]

GROUNDWATER MONITORING PROGRAM WELL DATA SHEET

Site Name: COFFIN BUTTE
Well I.D.: MW-15
Collected By: NR
Casing Diameter (inches): 2
Starting Water Level: 6.04
Total Depth (feet): 25.00
Water column (feet): 18.96
Screen Length (feet): -
Sample Method: Micro Purge Low Flow
Horiba Model S/N: U-52/GRWEXWBK

Project No.: A024.1090
Sampling Date: 10-17-2024
Purge start Time: 1152
Purge Stop time: 1204
Sampling (Well Recovery) Time: 1214
Ending Water Level (feet): 9.17
Total Purged (gallons): 2 1/2
Duplicate Sample: YES ☒ NO

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
1154	1/2	8.21	6.64	0.431	0.0	3.78	13.50	147
1158	1	8.67	6.64	0.491	0.0	2.84	13.40	151
1200	1 1/2	9.00	6.65	0.523	0.0	2.33	13.38	152
1202	2	9.13	6.64	0.534	0.0	2.02	13.35	153
1203	2 1/4	9.15	6.64	0.537	0.0	1.91	13.36	154
1204	2 1/2	9.17	6.64	0.539	0.0	1.85	13.34	152

Purge Sampling Rates: 15 PSI CPM SETTING #4

Well condition: OK

Additional Info/Comments: PARTLY CLOUDY, COOL

Name: NICHOLAS REASON

Signature: [Signature]

GROUNDWATER MONITORING PROGRAM WELL DATA SHEET

Site Name: Coffin Butte
 Well I.D.: MW-17
 Collected By: NR
 Casing Diameter (inches): 2
 Starting Water Level: 20.80 / Top Pump @ 19.3
 Total Depth (feet): 28.00
 Water column (feet): 7.20
 Screen Length (feet): —
 Sample Method: Micro Purge Low Flow
 Horiba Model S/N: U-52 / GRWEXW6K

Project No.: A024.1090
 Sampling Date: 10-16-2024
 Purge start Time: 1259
 Purge Stop time: 1318
 Sampling (Well Recovery) Time: 1328
 Ending Water Level (feet): Top Pump 19.30
 Total Purged (gallons): 1 3/4
 Duplicate Sample: YES (NO)

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
1303	1/2	Top Pump 19.30	7.25	0.343	0.0	11.21	14.07	106
1306	3/4	Top Pump 19.30	7.25	0.343	0.0	9.83	14.06	107
1309	1	Top Pump 19.30	7.26	0.341	0.0	8.96	14.01	123
1312	1 1/4	Top Pump 19.30	7.27	0.341	0.0	8.45	13.99	131
1315	1 1/2	Top Pump 19.30	7.26	0.341	0.0	8.40	13.97	133
1318	1 3/4	Top Pump 19.30	7.27	0.341	0.0	8.36	13.92	134

Purge Sampling Rates: 20 PSI CPM #4 setting

Well condition: OK - water clear no odor

Additional Info/Comments: Cloudy, cool, breezy

Name: Nicholas Reardon

Signature: [Signature]

GROUNDWATER MONITORING PROGRAM WELL DATA SHEET

Site Name: Coffin Butte
 Well I.D.: MW-18
 Collected By: NR
 Casing Diameter (inches): 2 inch
 Starting Water Level: 11.4
 Total Depth (feet): _____
 Water column (feet): _____
 Screen Length (feet): —
 Sample Method: Micro Purge ☐ Low Flow ☐
 Horiba Model S/N: _____

Project No.: AU24.1090
 Sampling Date: 10-16-24
 Purge start Time: 1245
 Purge Stop time: 1252
 Sampling (Well Recovery) Time: 1259
 Ending Water Level (feet): _____
 Total Purged (gallons): _____
 Duplicate Sample: NR ~~YES~~ ~~NO~~ NR

yes
Duplicate Sample collected

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
1247	.5	11.71	7.01	0.255	0.0	11.36	14.15	199
1249	1	11.85	7.03	0.258	0.2	10.40	13.95	202
1250	1.5	11.87	7.05	0.261	0.0	10.12	13.87	205
1252	2	11.91	7.05	0.263	0.0	10.01	13.83	206

Purge Sampling Rates: 20 psi CPM #4

Well condition: OK

Additional Info/Comments: Partly Cloudy, Light breeze, Warm

Name: Nick Rudolph

Signature: NH Rudolph

GROUNDWATER MONITORING PROGRAM WELL DATA SHEET

Site Name: Coffin Butte
 Well I.D.: MW-19
 Collected By: NR
 Casing Diameter (inches): 2
 Starting Water Level: 6.87
 Total Depth (feet): 19.50
 Water column (feet): 12.63
 Screen Length (feet): —
 Sample Method: Micro Purge Low Flow
 Horiba Model S/N: U-52 GRWEXW6K

Project No.: AU24.1090
 Sampling Date: 10-16-2024
 Purge start Time: 1204
 Purge Stop time: 1213
 Sampling (Well Recovery) Time: 1223
 Ending Water Level (feet): 15.49
 Total Purged (gallons): 2
 Duplicate Sample: YES ☒ NO

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
1207	1/2	11.44	7.08	1.06	0.0	11.43	14.32	88
1209	1	13.30	7.12	1.07	0.0	8.58	14.48	89
1211	1 1/2	15.27	7.15	1.07	0.0	8.02	14.63	91
1212	1 3/4	15.38	7.16	1.07	0.0	8.13	14.64	93
1213	2	15.49	7.16	1.07	0.0	8.08	14.66	93

Purge Sampling Rates: 20 psi CPM #4 setting

Well condition: OK - WATER CLEAR with no odor

Additional Info/Comments: Cloudy, Mild

Name: Nicholas Reaser Signature: [Signature]

GROUNDWATER MONITORING PROGRAM WELL DATA SHEET

Site Name: COFFIN BUTTE Project No.: AV24.1090
 Well I.D.: MW-20 Sampling Date: 10/16/2024
 Collected By: NR Purge start Time: 1055
 Casing Diameter (inches): 2 Purge Stop time: 1112
 Starting Water Level: 8.92 Sampling (Well Recovery) Time: 1122
 Total Depth (feet): 22.05 Ending Water Level (feet): 14.64
 Water column (feet): 13.13 Total Purged (gallons): 2 3/4
 Screen Length (feet): _____ Duplicate Sample: YES ☒ NO ☐
 Sample Method: Micro Purge ☒ Low Flow ☐ Blanks collected here
 Horiba Model S/N: U-521 GRWEXW6K

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
1058	1/2	13.01	7.24	0.921	0.0	6.35	12.93	39
1101	1	14.43	7.20	0.884	0.0	3.49	13.22	30
1104	1 1/2	14.56	7.06	0.848	0.0	2.66	13.48	31
1107	2	14.58	7.08	0.859	0.0	2.35	13.53	33
1109	2 1/4	14.60	7.16	0.882	0.0	2.11	13.44	32
1110	2 1/2	14.62	7.18	0.888	0.0	2.06	13.39	31
1112	2 3/4	14.64	7.19	0.890	0.0	2.00	13.38	31

Purge Sampling Rates: 20 PS1 CPM #4

Well condition: OK

Additional Info/Comments: cloudy, mild

Name: Nicholas Reason Signature: [Signature]

GROUNDWATER MONITORING PROGRAM WELL DATA SHEET

Site Name: Coffin Butte Project No.: A074.1290
 Well I.D.: MW-21 Sampling Date: 10/16/2024
 Collected By: NR Purge start Time: 0934
 Casing Diameter (inches): 2 Purge Stop time: 1002
 Starting Water Level: 11.25 Sampling (Well Recovery) Time: 1012
 Total Depth (feet): 19.35 Ending Water Level (feet): TOP PUMP 15.30
 Water column (feet): 8.10 Total Purged (gallons): 2
 Screen Length (feet): — Duplicate Sample: YES NO
 Sample Method: Micro Purge Low Flow Duplicate 2 collected
 Horiba Model S/N: U-52 GRWEXW6K

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
0937	3/4	12.02	7.36	1.03	0.0	5.75	12.82	-67
0944	1 1/4	13.41	7.40	1.02	0.0	2.20	13.08	-104
0950	1 1/2	14.58	7.42	1.03	0.0	1.87	13.06	-107
0956	1 3/4	TOP PUMP 15.30	7.42	1.04	0.0	1.81	13.07	-107
1002	2	TOP PUMP 15.30	7.42	1.04	0.0	1.84	13.04	-107

Purge Sampling Rates: 20 PSI Refill (10) Discharge (5)

Well condition: OK - WATER MOSTLY CLEAR NO odor. ABOUT HALFWAY THROUGH SAMPLING,
WATER TURNED BLACK WITH HEAVY SEDIMENT.
 Additional Info/Comments: Cloudy, cool

Name: Nicholas Reagin Signature: [Signature]

GROUNDWATER MONITORING PROGRAM WELL DATA SHEET

Site Name: COFFIN BUTTE

Well I.D.: MW-23

Collected By: NZ

Casing Diameter (inches): 2

Starting Water Level: 2.29

Total Depth (feet): 24.70

Water column (feet): 22.41

Screen Length (feet): —

Sample Method: Micro Purge Low Flow

Horiba Model S/N: U-52/GRWEXW6K

Project No.: A024.1090

Sampling Date: 10-17-2024

Purge start Time: 1254

Purge Stop time: 1303

Sampling (Well Recovery) Time: 1313

Ending Water Level (feet): 8.72

Total Purged (gallons): 2 1/4

Duplicate Sample: YES NO

★ Blanks collected here ★

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
1256	1/2	6.78	7.28	0.373	8.0	3.52	16.59	-123
1258	1	7.23	7.36	0.366	8.1	3.44	16.60	-124
1300	1 1/2	8.13	7.35	0.371	8.0	2.60	16.54	-131
1301	1 3/4	8.96	7.34	0.372	8.0	2.45	16.53	-134
1302	2	8.81	7.33	0.373	8.0	2.39	16.53	-134
1303	2 1/4	8.72	7.34	0.373	8.0	2.30	16.51	-134

Purge Sampling Rates: 10 PDI CPM SETTING #4

Well condition: OK - WATER yellow brown w/ odor

Additional Info/Comments: Sunny, some clouds, Humid

Name: NICHOLAS REASON

Signature: [Signature]

GROUNDWATER MONITORING PROGRAM WELL DATA SHEET

Site Name: Coffin Butte
Well I.D.: MW-24
Collected By: NR
Casing Diameter (inches): 2 inch
Starting Water Level: 21.91
~~Total Depth (feet):~~ 28.26
~~Depth to top of pump (feet)~~
Water column (feet): 6.35
Screen Length (feet): -

Project No.: AV24.1090
Sampling Date: 10-17-24
Purge start Time: 1209
Purge Stop time: 1229
Sampling (Well Recovery) Time: 1240
Ending Water Level (feet): 22.78
Total Purged (gallons): 2
Duplicate Sample: YES ☐ NO ☒

Sample Method: Micro Purge ☒ Low Flow ☐
Horiba Model S/N: U-52 / X76N2GMX

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
1219	.5	22.52	7.28	0.335	17.0	1.22	16.04	94
12:22	1	22.62	7.27	0.333	8.0	0.00	15.88	106
1226	1.5	22.62	7.26	0.333	5.0	0.00	15.89	109
1229	2	22.78	7.25	0.333	2.5	0.00	15.85	114

Purge Sampling Rates: 17 psi CPM #4

Well condition: OK

Additional Info/Comments: Sunny, warm,

Name: Nick Rudolph

Signature: Nh Rudolph

GROUNDWATER MONITORING PROGRAM WELL DATA SHEET

Site Name: Coffin Butte Project No.: AU24.1090
 Well I.D.: MW-26 Sampling Date: 10-17-24
 Collected By: NR Purge start Time: 1030
 Casing Diameter (inches): 2 inch Purge Stop time: 1043
 Starting Water Level: 8.61 Sampling (Well Recovery) Time: 1105
 Total Depth (feet): 30.0 Ending Water Level (feet): 12.02
 Water column (feet): 21.39 Total Purged (gallons): 2
 Screen Length (feet): - Duplicate Sample: YES NO
 Sample Method: Micro Purge Low Flow
 Horiba Model S/N: U-52 / X76NZGMX Duplicate Sample taken

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
1035	.5	10.41	6.86	0.242	32.9	0.83	14.83	-45
1038	1	11.21	7.20	0.294	16.2	0.00	14.94	-117
1040	1.25	11.41	7.27	0.294	18.1	0.00	14.98	-126
1041	1.5	11.63	7.30	0.294	17.2	0.00	15.00	-130
1042	1.75	11.79	7.34	0.293	18.6	0.00	15.01	-136
1043	2	12.02	7.37	0.293	17.8	0.00	15.02	-139

Purge Sampling Rates: 10psi CPM #4

Well condition: OK

Additional Info/Comments: light Rain, Partly cloudy, water semi opaque w/ slight odor

Name:

Signature:

GROUNDWATER MONITORING PROGRAM WELL DATA SHEET

Site Name: COPPIN Butte
Well I.D.: MW-27
Collected By: NR, NR
Casing Diameter (inches): 2
Starting Water Level: 22.60
Total Depth (feet): 37.70
Water column (feet): 15.10
Screen Length (feet): —
Sample Method: Micro Purge ☒ Low Flow ☐
Horiba Model S/N: U-52 GRWEXW6K

Project No.: A024.1090
Sampling Date: 10/15/2024
Purge start Time: 1200
Purge Stop time: 1231
Sampling (Well Recovery) Time: 1246
Ending Water Level (feet): 32.36
Total Purged (gallons): 3
Duplicate Sample: YES ☐ NO ☒

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
1214	1/2	27.98	6.80	0.851	0.0	1.63	16.24	-98
1218	~~1~~	29.40	6.78	0.766	0.0	1.70	16.21	-86
1221	1 1/2	30.12	6.76	0.761	0.0	1.21	16.17	-73
1223	1 3/4	30.62	6.76	0.802	0.0	1.26	16.17	-85
1226	2	31.17	6.78	0.837	0.0	1.19	16.18	-99
1228	2 1/4	31.49	6.78	0.840	0.0	1.10	16.21	-106
1229	2 1/2	31.72	6.80	0.843	0.0	0.99	16.21	-108
1230	2 3/4	32.09	6.80	0.845	0.0	0.95	16.23	-110
1231	3	32.36	6.81	0.847	0.0	0.94	16.21	-111

Purge Sampling Rates: 70 PSL Refill (10) Discharge (5)

Well condition: OK

Additional Info/Comments: Cloudy, mild temp

Name: Nicholas Reason

Signature: [Signature]

GROUNDWATER MONITORING PROGRAM WELL DATA SHEET

Site Name: COFFIN BUTTE
Well I.D.: P-8
Collected By: NR
Casing Diameter (inches): 2
Starting Water Level: 22.28
Total Depth (feet): 30.00
Water column (feet): 7.72
Screen Length (feet): —
Sample Method: Micro Purge Low Flow
Horiba Model S/N: U-52/GRW Exw6K

Project No.: AU24.1090
Sampling Date: 10-12-2024
Purge start Time: 1037
Purge Stop time: 1052
Sampling (Well Recovery) Time: 1102
Ending Water Level (feet): 23.12
Total Purged (gallons): 1 1/4
Duplicate Sample: YES NO

TIME	GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
1042	1/2	22.92	7.14	0.339	0.1	4.33	12.60	196
1044	3/4	22.96	7.27	0.339	0.1	4.03	12.62	190
1046	1	23.03	7.31	0.340	0.0	3.90	12.63	186
1048	1 1/4	23.09	7.33	0.341	0.0	3.75	12.61	183
1050	1 1/2	23.10	7.34	0.341	0.0	3.70	12.63	182
1052	1 3/4	23.12	7.35	0.341	0.0	3.64	12.64	181

Purge Sampling Rates: 7.5 PSI CPM SETTING #4

Well condition: OK - WATER CLEAR with NO ODR

Additional Info/Comments: LIGHT RAIN, COLD

Name: NICHOLAS REASON

Signature: [Signature]

**GROUNDWATER MONITORING PROGRAM
WELL DATA SHEET**

Site Name.:	<u>COFFIN BUTTE</u>	Project No.:	<u>A024.1090</u>
Well I.D.:	<u>PHILLIPS</u>	Sampling Date:	<u>10-17-2024</u>
Collected By:	<u>NR, NR</u>	Purge start Time:	
Casing Diameter (inches):	<u>6</u>	Purge Stop time:	
Starting Water Level:	<u>29.40</u>	Sampling Time:	<u>0945</u>
Total Depth (feet):		Ending Water Level (feet):	
Water column (feet):		Total Purged (gallons):	
Screen Length (feet):		PID/FID Reading:	
Purge Volume (gallons):	<u>GRAB</u>	Duplicate Sample:	YES ☐ NO ☒
Horiba Model S/N:	<u>U-521 X76 N2 GMY</u>		

GALLONS PURGED	WATER LEVEL	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
GRAB	-	7.71	0.268	1.1	6.86	12.54	189

Purge Sampling Rates: GRAB SAMPLE COLLECTED FROM SPIGOT AT WELL HEAD AFTER LETTING WATER RUN FOR APPROX 5 MIN

Well condition: OK - ABUNDANT RODENT DROPPINGS ON AND AROUND WELL

Additional Info/Comments: SUNNY, COOL

Name: NICHOLAS PEARSON Signature: [Signature]

GROUNDWATER MONITORING PROGRAM
SURFACE WATER DATA SHEET

Site Name: COFFIN BUTTE

Project No.: AV24.1090

Station I.D.: S-1

Sampling Date: 10-17-2024

Collected By: NR, NR

Sampling Time: 0825

Horiba Model S/N: U-52/X76N2GMX

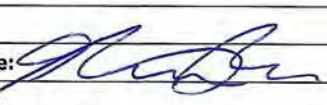
Duplicate Sample: YES ☐ NO ☒

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
CLEAR	NONE	6.38	0.264	6.8	7.07	11.74	284

Surface water conditions (including stream flow rate, stream depth): 20 FT WIDE, DEEP OF 2 FT
WITH A MODERATE FLOW

Additional Info/Comments: PARTLY CLOUDY, COOL

Name: NICHOLAS REASON

Signature: 

GROUNDWATER MONITORING PROGRAM SURFACE WATER DATA SHEET

Site Name: COFFIN BUTTE

Project No.: A024.1090

Station I.D.: S-2

Sampling Date: 10-17-2024

Collected By: NR, NR

Sampling Time: 0840

Horiba Model S/N: U-52 | X76 N2GMX

Duplicate Sample: YES ☐ NO ☒

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
CLEAR	NONE	7.19	0.268	10.5	6.98	11.86	216

Surface water conditions (including stream flow rate, stream depth): 14 FEET WIDE, 1 FOOT DEEP,
MODERATE TO LOW FLOW

Additional Info/Comments: Cloudy, cool

Name: NICHOLAS REASON

Signature: [Signature]

GROUNDWATER MONITORING PROGRAM SURFACE WATER DATA SHEET

Site Name: COFFIN BUTTE

Project No.: AJ27.1290

Station I.D.: S-4

Sampling Date: 10-17-2024

Collected By: NR, NR

Sampling Time: 0905

Horiba Model S/N: U-52/X76N2GMX

Duplicate Sample: YES ☐ NO ☒

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
<u>Mostly CLEAR</u>	<u>NONE</u>	<u>7.53</u>	<u>0.264</u>	<u>5.3</u>	<u>6.14</u>	<u>11.78</u>	<u>200</u>

Surface water conditions (including stream flow rate, stream depth): Approx 10 ft wide, 1 ft deep,
with low flow

Additional Info/Comments: Cloudy, cool

Name: Nicholas Zeban

Signature: [Signature]

GROUNDWATER MONITORING PROGRAM SURFACE WATER DATA SHEET

Site Name: Coffin Butte

Project No.: AV24.1090

Station I.D.: S-U3

Sampling Date: 10-18-2024

Collected By: NR, NR

Sampling Time: _____

Horiba Model S/N: _____

Duplicate Sample: YES NO

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
			DRY				

Surface water conditions (including stream flow rate, stream depth): SAMPLING LOCATION WAS OBSERVED
TO BE DRY DURING THIS SAMPLING EVENT

Additional Info/Comments: CLAY, COAL

Name: NICHOLAS REASON

Signature: [Signature]

**GROUNDWATER MONITORING PROGRAM
SURFACE WATER DATA SHEET**

Site Name: COFFIN BUTTE

Project No.: A024.1090

Station I.D.: S-U4

Sampling Date: 10-17-2024

Collected By: NR

Sampling Time: 1500

Horiba Model S/N: U-521X76N2GMX

Duplicate Sample: YES NO

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
CLEAR	NONE	6.54	0.178	1.4	2.45	16.51	197

Surface water conditions (including stream flow rate, stream depth): SAMPLE COLLECTED FROM PIPE, MODERATE FLOW

Additional Info/Comments: CLOUDY, LIGHT WINDS

Name: NICHOLAS REASON

Signature: [Signature]

GROUNDWATER MONITORING PROGRAM SURFACE WATER DATA SHEET

Site Name: COFFIN BUTTE

Project No.: AU24.1090

Station I.D.: S-05

Sampling Date: 10-17-2024

Collected By: NR, NR

Sampling Time: 1540

Horiba Model S/N: U-52/X76 NZCMX

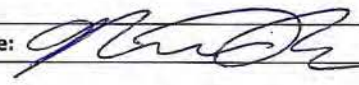
Duplicate Sample: YES ☐ NO ☒

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
clear	none	6.89	0.316	2.6	6.05	17.13	182

Surface water conditions (including stream flow rate, stream depth): SAMPLE COLLECTED FROM PIPE, LOW FLOW

Additional Info/Comments: SUNNY, SOME CLOUDS, MILD TEMP

Name: NICHOLAS REASON

Signature: 

GROUNDWATER MONITORING PROGRAM SURFACE WATER DATA SHEET

Site Name: COFFIN BUTTE

Project No.: AU24.1090

Station I.D.: SUL6

Sampling Date: 10/17/2024

Collected By: NR, NR

Sampling Time: _____

Horiba Model S/N: _____

Duplicate Sample: YES NO

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
		NOT	SAMPLED				

Surface water conditions (including stream flow rate, stream depth): SAMPLING LOCATION WAS NOT ACCESSIBLE DURING THIS EVENT. PIPE BURIED BY 2' FEET OF OVERBUDEN. PIPE WAS LOCATED BUT HOLE WOULD BACKFILL WITH WATER ALMOST IMMEDIATELY FROM CREEK. CREEK BED WHERE SAMPLE POINT IS LOCATED NEEDS TO BE CLEARED IN ORDER TO ACCESS SAMPLING POINT IN THE FUTURE

Additional Info/Comments:

Name: NICHOLAS REASBY

Signature: [Signature]

GROUNDWATER MONITORING PROGRAM SURFACE WATER DATA SHEET

Site Name: Coffin Butte

Project No.: AV24-1090

Station I.D.: SU-7

Sampling Date: 10-17-24

Collected By: NR, NR

Sampling Time: _____

Horiba Model S/N: _____

Duplicate Sample: YES NO

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
_____	_____	_____	DRY	_____	_____	_____	_____

Surface water conditions (including stream flow rate, stream depth): SAMPLE LOCATION WAS OBSERVED TO BE DRY DURING THIS SAMPLING EVENT.

Additional Info/Comments:

Name: Nicholas Pearson

Signature: [Signature]

GROUNDWATER MONITORING PROGRAM LEACHATE DATA SHEET

Site: Coffin Butte

Project No.: AJ24-1090

Station I.D.: LDS-2B

Sampling Date: 10-18-2024

Collected By: NR, NR

Sampling Time: 0945

Horiba Model S/N: U-52/X76N26MX

Duplicate Sample: YES ☐ NO ☒

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
Brown	strong	7.38	8.74	19.3	2.05	9.19	77

Leachate sampling station conditions: SAMPLE COLLECTED FROM JAMBE PORT

★ UNABLE TO ACHIEVE ZERO HEADSPACE ON VIALS, LIQUID VERY REACTIVE WITH PRESERVATIVE ★

Additional Info/Comments: overcast, cool

Name: Nicholas Reiser Signature: [Signature]

GROUNDWATER MONITORING PROGRAM LEACHATE DATA SHEET

Site: COFFIN BUTTE

Project No.: AU24.1090

Station I.D.: LD5-3

Sampling Date: 10-18-2024

Collected By: NR, NR

Sampling Time: 0855

Horiba Model S/N: U-52 | X76N2GMX

Duplicate Sample: YES (NO)

BLANKS COLLECTED

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
Yellow	strong	6.34	3.35	66.4	4.16	17.31	270

Leachate sampling station conditions: SAMPLE COLLECTED FROM SAMPLE PORT.

Additional Info/Comments: SOME CLOUDS, COOL TEMP

Name: NICHOLAS REASON

Signature: 

GROUNDWATER MONITORING PROGRAM LEACHATE DATA SHEET

Site: COFFIN BUTTE

Project No.: AJ24.1090

Station I.D.: LDS-4

Sampling Date: 10-18-2024

Collected By: NR NR

Sampling Time: 1027

Horiba Model S/N: U-521X76N2GMX

Duplicate Sample: YES ☐ NO ☒

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
CLEAR	NONE	7.34	1.50	42.5	2.33	18.68	135

Leachate sampling station conditions: SAMPLE COLLECTED FROM SAMPLE PORT

Additional Info/Comments: CLOUDY, COOL, BROWN

Name: NICHOLAS REASON

Signature: [Signature]

GROUNDWATER MONITORING PROGRAM LEACHATE DATA SHEET

Site: COFFIN BUTTE

Project No.: AV24.1090

Station I.D.: LDS-5

Sampling Date: 10-18-2024

Collected By: NR, NR

Sampling Time: 1053

Horiba Model S/N: U-52/X76 NZG MX

Duplicate Sample: YES ☐ NO ☒

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
Light Yellow	strong	7.17	3.27	47.4	2.11	22.74	174

Leachate sampling station conditions: SAMPLE COLLECTED FROM SAMPLE PORT

Additional Info/Comments: OVERCAST, COOL, LIGHT BREEZE

Name: NICHOLAS REASON

Signature: 

GROUNDWATER MONITORING PROGRAM LEACHATE DATA SHEET

Site: COFFIN BUTTE

Project No.: A024-090

Station I.D.: LDS-ELP

Sampling Date: 10-18-2024

Collected By: NR, NSR

Sampling Time: 1121

Horiba Model S/N: V-521 X76 N2 GMX

Duplicate Sample: YES NO

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
<u>DARK BROWN</u>	<u>SLIGHT</u>	<u>7.54</u>	<u>15.3</u>	<u>192</u>	<u>0.54</u>	<u>13.37</u>	<u>157</u>

Leachate sampling station conditions: SAMPLE COLLECTED FROM SAMPLE PORT. INSTALLED DISCHARGE
TUBING

Additional Info/Comments: CLOUDY, COOL, BREEZY

Name: Nicholas Benson

Signature: [Signature]

**GROUNDWATER MONITORING PROGRAM
LEACHATE DATA SHEET**

Site: COFFIN BUTTE

Project No.: AUZY.1090

Station I.D.: LDS-WLP

Sampling Date: 10-18-2024

Collected By: NR, NR

Sampling Time: 11:55 NR

Horiba Model S/N: U-521X76 N2GMX

Duplicate Sample: YES ☐ NO ☒

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
<u> </u>	<u> </u>	<u>NOT</u>	<u>SAMPLED</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

Leachate sampling station conditions: NO SAMPLE COLLECTED DUE TO PUMP FAILURE.
NOTIFIED REPUBLIC OF PUMP ISSUE, ELECTRICIAN WAS NOT AVAILABLE TO
INVESTIGATE PROBLEM TODAY.

Additional Info/Comments: CLOUDY, CALM, BREEZY

Name: NICHOLAS PEARSON Signature: [Signature]

GROUNDWATER MONITORING PROGRAM LEACHATE DATA SHEET

Site: COFFIN BUTTE

Project No.: A024.1090

Station I.D.: L-201D

Sampling Date: 10-18-2024

Collected By: NR, NR

Sampling Time: 1230

Horiba Model S/N: U-521X76W2GMy

Duplicate Sample: YES NO

COLOR	ODOR	pH	CONDUCTIVITY ms/cm	TURBIDITY NTU	D.O. mg/L	TEMPERATURE °C	O.R.P. mV
Black	Strong	7.63	25.9	328	0.22	17.68	-295

Leachate sampling station conditions: SAMPLE COLLECTED FROM SAMPLE PORT WHILE TRUCK WAS
FIXING UP

Additional Info/Comments: CLOUDY, COOL

Name: NICHOLAS REASSI

Signature: [Signature]

FIELD CALIBRATION DOCUMENTATION FORM

LOCATION (Site / Facility Name) COFFIN BUTTE

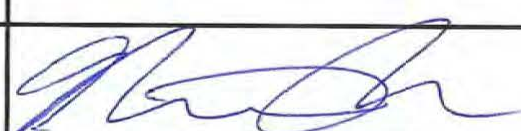
PROJECT (Name / Number) A024.1090

Instrument Make/Model # <u>HORIBA U-52</u> <u>GRWEXW6K</u>						
Date/Time <u>10/15/24</u> <u>0750</u>	pH	Electrical Conductivity (µMhos/cm)	Turbidity (NTU)	DO (mg/L or %)	Guidance Remarks	Comments
Pre. Cal	<u>4.03</u>	<u>4.46</u>	<u>0.0</u>	<u>11.69</u>		
Calibration	<u>4.00</u>	<u>4.48</u>	<u>0.0</u>	<u>11.50</u>		
Calibration Successful? (Y/N)	<u>Y</u>	<u>_____</u>			enter YES or NO	
Satisfies Protocol?	<u>Y</u>	<u>_____</u>			Did calibration meet criteria in the sampling protocol? (Y or N)	
Calibration by	<u>NL</u>	<u>_____</u>			Signature or initials	<u>[Signature]</u>
Physical Condition of Unit			<u>Good</u>			

FIELD CALIBRATION DOCUMENTATION FORM

LOCATION (Site / Facility Name) Coffin Butte

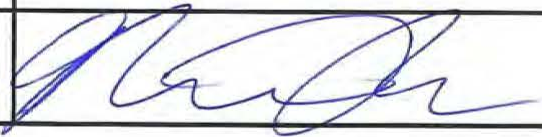
PROJECT (Name / Number) A024.1090

Instrument Make/Model # <u>Horiba U-52</u> <u>G2460000</u> <u>X76N2 GMX</u>						
Date/Time <u>10/5/24</u> <u>0715</u>	pH	Electrical Conductivity (µMhos/cm)	Turbidity (NTU)	DO (mg/L or %)	Guidance Remarks	Comments
Pre. Cal	<u>3.88</u>	<u>4.76</u>	<u>5.1</u>	<u>12.50</u>		
Calibration	<u>4.00</u>	<u>4.49</u>	<u>0.0</u>	<u>10.89</u>		
Calibration Successful? (Y/N)	<u>Y</u>				enter YES or NO	
Satisfies Protocol?	<u>Y</u>				Did calibration meet criteria in the sampling protocol? (Y or N)	
Calibration by	<u>NR</u>				Signature or initials	
Physical Condition of Unit			<u>Good</u>			

FIELD CALIBRATION DOCUMENTATION FORM

LOCATION (Site / Facility Name) COFFIN BUTTE

PROJECT (Name / Number) AV24.1090

Instrument Make/Model # <u>HORIBA U-52</u> <u>(GRWE x W6K)</u>						
Date/Time <u>10/16/2024</u> <u>0755</u>	pH	Electrical Conductivity (µMhos/cm)	Turbidity (NTU)	DO (mg/L or %)	Guidance Remarks	Comments
Pre. Cal	<u>4.11</u>	<u>4.43</u>	<u>0.0</u>	<u>12.06</u>		
Calibration	<u>4.00</u>	<u>4.50</u>	<u>0.0</u>	<u>10.60</u>		
Calibration Successful? (Y/N)	<u>Y</u>				enter YES or NO	
Satisfies Protocol?	<u>Y</u>				Did calibration meet criteria in the sampling protocol? (Y or N)	
Calibration by	<u>NR</u>				Signature or initials	
Physical Condition of Unit			<u>Good</u>			

FIELD CALIBRATION DOCUMENTATION FORM

LOCATION (Site / Facility Name) Coffin Butte Landfill PROJECT (Name / Number) _____

Instrument Make/Model # <u>Horiba U-52 (X76N2GPMX)</u>						
Date/Time	pH	Electrical Conductivity (µMhos/cm)	Turbidity (NTU)	DO (mg/L or %)	Guidance Remarks	Comments
Pre. Cal	4.05	4.34	0.0	10.81		
Calibration	4.00	4.50	0.0	11.07		
Calibration Successful? (Y/N)	Y	Y	Y	Y	enter YES or NO	
Satisfies Protocol?	Y	Y	Y	Y	Did calibration meet criteria in the sampling protocol? (Y or N)	
Calibration by	NR				Signature or initials	<u>Mh RdHr</u>
Physical Condition of Unit						

FIELD CALIBRATION DOCUMENTATION FORM

LOCATION (Site / Facility Name) Coffin Bottle Landfill PROJECT (Name / Number) A024.1090

Instrument Make/Model # <u>Hanna U-52 (X76N2GMX)</u>						
Date/Time	pH	Electrical Conductivity (µMhos/cm)	Turbidity (NTU)	DO (mg/L or %)	Guidance Remarks	Comments
Pre. Cal	3.99	4.49	0.6	9.79		
Calibration	4.00	4.51	0.3	9.47		
Calibration Successful? (Y/N)	Y				enter YES or NO	
Satisfies Protocol?	Y				Did calibration meet criteria in the sampling protocol? (Y or N)	
Calibration by	NR				Signature or initials	<u>NR RLVZ</u>
Physical Condition of Unit			GOOD			

FIELD CALIBRATION DOCUMENTATION FORM

LOCATION (Site / Facility Name) Coffin butte landfill PROJECT (Name / Number) AV24.1090

Instrument Make/Model # <u>HORIBA U-52 (X76N2GMX)</u>						
Date/Time	pH	Electrical Conductivity (µMhos/cm)	Turbidity (NTU)	DO (mg/L or %)	Guidance Remarks	Comments
Pre. Cal	3.98	4.53	0.4	10.86		
Calibration	4.00	4.51	0.0	10.02		
Calibration Successful? (Y/N)	Y				enter YES or NO	
Satisfies Protocol?	Y				Did calibration meet criteria in the sampling protocol? (Y or N)	
Calibration by	NR				Signature or initials	<u>NR RUP</u>
Physical Condition of Unit			GOOD			

FIELD CALIBRATION DOCUMENTATION FORM

LOCATION (Site / Facility Name) Coffin Butte

PROJECT (Name / Number) AV24.1090

Instrument Make/Model # <u>HORIBA U-52</u> <u>E2WEXW6K</u>						
Date/Time <u>10-17-2024</u> <u>0730</u>	pH	Electrical Conductivity (µMhos/cm)	Turbidity (NTU)	DO (mg/L or %)	Guidance Remarks	Comments
Pre. Cal	<u>4.01</u>	<u>4.54</u>	<u>0.0</u>	<u>10.82</u>		
Calibration	<u>4.00</u>	<u>4.50</u>	<u>0.0</u>	<u>9.55</u>		
Calibration Successful? (Y/N)	<u>Y</u>				enter YES or NO	
Satisfies Protocol?	<u>Y</u>				Did calibration meet criteria in the sampling protocol? (Y or N)	
Calibration by	<u>NR</u>				Signature or initials	
Physical Condition of Unit			<u>OK</u>			

ANALYTICAL REPORT

PREPARED FOR

Attn: Aaron Ogorzalek
Geo-Logic Associates
2777 East Guasti Road
Suite 1
Ontario, California 91761
Generated 10/30/2024 2:55:36 PM

JOB DESCRIPTION

Valley LF - Republic Serv Coffin Butte

JOB NUMBER

280-198148-1

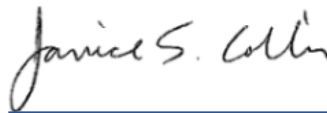
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Job Notes

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The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

Authorization



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Definitions/Glossary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198148-1

Qualifiers

Metals

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

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Case Narrative

Client: Geo-Logic Associates
Project: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198148-1

Job ID: 280-198148-1

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Job Narrative 280-198148-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 10/16/2024 9:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.3°C.

GC/MS VOA

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

Metals

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

General Chemistry

Method 353.2_Pres: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 280-672376 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

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Detection Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198148-1

Client Sample ID: MW-12S

Lab Sample ID: 280-198148-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.2		1.0	0.32	ug/L	1		8260B	Total/NA
Tetrachloroethene	12		1.0	0.40	ug/L	1		8260B	Total/NA
Trichloroethene	2.1		1.0	0.30	ug/L	1		8260B	Total/NA
Antimony	0.50	J	2.0	0.40	ug/L	1		200.8	Total/NA
Arsenic	0.53	J	5.0	0.50	ug/L	1		200.8	Total/NA
Nickel	1.3	J	3.0	0.83	ug/L	1		200.8	Total/NA
Barium	5.1		3.0	0.38	ug/L	1		200.8	Total/NA
Cobalt	3.2		1.0	0.33	ug/L	1		200.8	Total/NA
Silver	0.070	J	1.0	0.045	ug/L	1		200.8	Total/NA
Vanadium	2.0	J	5.0	1.1	ug/L	1		200.8	Total/NA
Chloride	38		3.0	1.0	mg/L	1		300.0	Total/NA
Sulfate	4.2	J	5.0	1.0	mg/L	1		300.0	Total/NA
Ammonia	0.23		0.10	0.029	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	0.11		0.10	0.044	mg/L	1		353.2	Total/NA
Bicarbonate Alkalinity as CaCO3	120		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	320		10	4.7	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	1.6	J	4.0	1.1	mg/L	1		SM 2540D	Total/NA
TOC Result 1	0.85	J	1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 2	0.84	J	1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 3	0.79	J	1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 4	0.79	J	1.0	0.35	mg/L	1		SM 5310B	Total/NA
Total Organic Carbon - Quad	0.82	J	1.0	0.35	mg/L	1		SM 5310B	Total/NA

Client Sample ID: MW-12D

Lab Sample ID: 280-198148-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	1.6		1.0	0.40	ug/L	1		8260B	Total/NA
Arsenic	0.59	J	5.0	0.50	ug/L	1		200.8	Total/NA
Barium	0.47	J	3.0	0.38	ug/L	1		200.8	Total/NA
Chromium	1.1	J	3.0	0.50	ug/L	1		200.8	Total/NA
Vanadium	58		5.0	1.1	ug/L	1		200.8	Total/NA
Chloride	8.0		3.0	1.0	mg/L	1		300.0	Total/NA
Sulfate	6.8		5.0	1.0	mg/L	1		300.0	Total/NA
Ammonia	0.043	J	0.10	0.029	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	0.52		0.10	0.044	mg/L	1		353.2	Total/NA
Bicarbonate Alkalinity as CaCO3	62		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	210		10	4.7	mg/L	1		SM 2540C	Total/NA
TOC Result 1	0.76	J	1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 2	0.76	J	1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 3	0.71	J	1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 4	0.70	J	1.0	0.35	mg/L	1		SM 5310B	Total/NA
Total Organic Carbon - Quad	0.73	J	1.0	0.35	mg/L	1		SM 5310B	Total/NA

Client Sample ID: MW-27

Lab Sample ID: 280-198148-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	35		5.0	0.50	ug/L	1		200.8	Total/NA
Lead	2.1		1.0	0.23	ug/L	1		200.8	Total/NA
Nickel	4.9		3.0	0.83	ug/L	1		200.8	Total/NA
Barium	110		3.0	0.38	ug/L	1		200.8	Total/NA
Chromium	0.95	J	3.0	0.50	ug/L	1		200.8	Total/NA
Cobalt	16		1.0	0.33	ug/L	1		200.8	Total/NA

This Detection Summary does not include radiochemical test results.

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Detection Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198148-1

Client Sample ID: MW-27 (Continued)

Lab Sample ID: 280-198148-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Copper	2.8		2.0	0.71	ug/L	1		200.8	Total/NA
Vanadium	3.8	J	5.0	1.1	ug/L	1		200.8	Total/NA
Zinc	8.7	J	10	2.0	ug/L	1		200.8	Total/NA
Chloride	13		3.0	1.0	mg/L	1		300.0	Total/NA
Ammonia	0.66		0.10	0.029	mg/L	1		350.1	Total/NA
Chemical Oxygen Demand	19	J	20	8.7	mg/L	1		410.4	Total/NA
Bicarbonate Alkalinity as CaCO3	330		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	460		10	4.7	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	48		4.0	1.1	mg/L	1		SM 2540D	Total/NA
TOC Result 1	5.2		1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 2	5.2		1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 3	5.0		1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 4	5.0		1.0	0.35	mg/L	1		SM 5310B	Total/NA
Total Organic Carbon - Quad	5.1		1.0	0.35	mg/L	1		SM 5310B	Total/NA

Client Sample ID: QCAB

Lab Sample ID: 280-198148-4

No Detections.

Client Sample ID: QCTB

Lab Sample ID: 280-198148-5

No Detections.

This Detection Summary does not include radiochemical test results.

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Method Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198148-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	EET DEN
200.8	Metals (ICP/MS)	EPA	EET DEN
300.0	Anions, Ion Chromatography	EPA	EET DEN
350.1	Nitrogen, Ammonia	EPA	EET DEN
353.2	Nitrogen, Nitrate-Nitrite	EPA	EET DEN
410.4	COD	EPA	EET DEN
SM 2320B	Alkalinity	SM	EET DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET DEN
SM 2540D	Solids, Total Suspended (TSS)	SM	EET DEN
SM 5310B	Organic Carbon, Total (TOC)	SM	EET DEN
200.8	Preparation, Total Metals	EPA	EET DEN
5030B	Purge and Trap	SW846	EET DEN

Protocol References:

EPA = US Environmental Protection Agency

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

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

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Sample Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198148-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-198148-1	MW-12S	Water	10/15/24 10:17	10/16/24 09:00
280-198148-2	MW-12D	Water	10/15/24 11:23	10/16/24 09:00
280-198148-3	MW-27	Water	10/15/24 12:56	10/16/24 09:00
280-198148-4	QCAB	Water	10/15/24 12:40	10/16/24 09:00
280-198148-5	QCTB	Water	10/15/24 10:17	10/16/24 09:00

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198148-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: MW-12S
Date Collected: 10/15/24 10:17
Date Received: 10/16/24 09:00

Lab Sample ID: 280-198148-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			10/28/24 09:54	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			10/28/24 09:54	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/28/24 09:54	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			10/28/24 09:54	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			10/28/24 09:54	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			10/28/24 09:54	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			10/28/24 09:54	1
1,2,3-Trichlorobenzene	ND		4.0	1.2	ug/L			10/28/24 09:54	1
1,2,3-Trichloropropane	ND		2.5	0.28	ug/L			10/28/24 09:54	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			10/28/24 09:54	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			10/28/24 09:54	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.42	ug/L			10/28/24 09:54	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			10/28/24 09:54	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			10/28/24 09:54	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			10/28/24 09:54	1
1,2-Dichloropropane	ND		1.0	0.24	ug/L			10/28/24 09:54	1
1,3,5-Trimethylbenzene	ND		1.0	0.12	ug/L			10/28/24 09:54	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			10/28/24 09:54	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			10/28/24 09:54	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			10/28/24 09:54	1
2,2-Dichloropropane	ND		1.0	0.17	ug/L			10/28/24 09:54	1
2-Butanone (MEK)	ND		10	4.6	ug/L			10/28/24 09:54	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			10/28/24 09:54	1
2-Hexanone	ND		5.0	0.81	ug/L			10/28/24 09:54	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			10/28/24 09:54	1
4-Isopropyltoluene	ND		1.0	0.19	ug/L			10/28/24 09:54	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			10/28/24 09:54	1
Acetone	ND		15	6.6	ug/L			10/28/24 09:54	1
Benzene	ND		1.0	0.14	ug/L			10/28/24 09:54	1
Bromobenzene	ND		1.0	0.19	ug/L			10/28/24 09:54	1
Bromochloromethane	ND		1.0	0.40	ug/L			10/28/24 09:54	1
Bromodichloromethane	ND		1.0	0.19	ug/L			10/28/24 09:54	1
Bromoform	ND		2.0	0.25	ug/L			10/28/24 09:54	1
Bromomethane	ND		5.0	2.4	ug/L			10/28/24 09:54	1
Carbon disulfide	ND		2.0	0.26	ug/L			10/28/24 09:54	1
Carbon tetrachloride	ND		1.0	0.23	ug/L			10/28/24 09:54	1
Chlorobenzene	ND		1.0	0.092	ug/L			10/28/24 09:54	1
Chloroethane	ND		2.0	0.64	ug/L			10/28/24 09:54	1
Chloroform	ND		1.0	0.36	ug/L			10/28/24 09:54	1
Chloromethane	ND		2.0	0.23	ug/L			10/28/24 09:54	1
cis-1,2-Dichloroethene	1.2		1.0	0.32	ug/L			10/28/24 09:54	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			10/28/24 09:54	1
Dibromochloromethane	ND		1.0	0.28	ug/L			10/28/24 09:54	1
Dibromomethane	ND		1.0	0.34	ug/L			10/28/24 09:54	1
Dichlorodifluoromethane	ND		2.0	0.30	ug/L			10/28/24 09:54	1
Ethylbenzene	ND		1.0	0.14	ug/L			10/28/24 09:54	1
Hexachlorobutadiene	ND		2.0	0.53	ug/L			10/28/24 09:54	1
Isopropylbenzene	ND		1.0	0.16	ug/L			10/28/24 09:54	1
Methylene Chloride	ND		2.0	0.94	ug/L			10/28/24 09:54	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198148-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: MW-12S

Date Collected: 10/15/24 10:17

Date Received: 10/16/24 09:00

Lab Sample ID: 280-198148-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			10/28/24 09:54	1
Naphthalene	ND		3.0	0.99	ug/L			10/28/24 09:54	1
n-Butylbenzene	ND		1.0	0.23	ug/L			10/28/24 09:54	1
N-Propylbenzene	ND		1.0	0.18	ug/L			10/28/24 09:54	1
o-Xylene	ND		1.0	0.11	ug/L			10/28/24 09:54	1
sec-Butylbenzene	ND		1.0	0.20	ug/L			10/28/24 09:54	1
Styrene	ND		1.0	0.13	ug/L			10/28/24 09:54	1
tert-Butylbenzene	ND		1.0	0.18	ug/L			10/28/24 09:54	1
Tetrachloroethene	12		1.0	0.40	ug/L			10/28/24 09:54	1
Toluene	ND		1.0	0.32	ug/L			10/28/24 09:54	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			10/28/24 09:54	1
trans-1,3-Dichloropropene	ND		1.0	0.14	ug/L			10/28/24 09:54	1
Trichloroethene	2.1		1.0	0.30	ug/L			10/28/24 09:54	1
Trichlorofluoromethane	ND		2.0	0.20	ug/L			10/28/24 09:54	1
Vinyl chloride	ND		1.0	0.23	ug/L			10/28/24 09:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		70 - 127					10/28/24 09:54	1
4-Bromofluorobenzene (Surr)	105		78 - 120					10/28/24 09:54	1
Dibromofluoromethane (Surr)	94		77 - 120					10/28/24 09:54	1
Toluene-d8 (Surr)	105		80 - 125					10/28/24 09:54	1

Client Sample ID: MW-12D

Date Collected: 10/15/24 11:23

Date Received: 10/16/24 09:00

Lab Sample ID: 280-198148-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			10/28/24 10:15	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			10/28/24 10:15	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/28/24 10:15	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			10/28/24 10:15	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			10/28/24 10:15	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			10/28/24 10:15	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			10/28/24 10:15	1
1,2,3-Trichlorobenzene	ND		4.0	1.2	ug/L			10/28/24 10:15	1
1,2,3-Trichloropropane	ND		2.5	0.28	ug/L			10/28/24 10:15	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			10/28/24 10:15	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			10/28/24 10:15	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.42	ug/L			10/28/24 10:15	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			10/28/24 10:15	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			10/28/24 10:15	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			10/28/24 10:15	1
1,2-Dichloropropane	ND		1.0	0.24	ug/L			10/28/24 10:15	1
1,3,5-Trimethylbenzene	ND		1.0	0.12	ug/L			10/28/24 10:15	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			10/28/24 10:15	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			10/28/24 10:15	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			10/28/24 10:15	1
2,2-Dichloropropane	ND		1.0	0.17	ug/L			10/28/24 10:15	1
2-Butanone (MEK)	ND		10	4.6	ug/L			10/28/24 10:15	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			10/28/24 10:15	1
2-Hexanone	ND		5.0	0.81	ug/L			10/28/24 10:15	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198148-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: MW-12D
Date Collected: 10/15/24 11:23
Date Received: 10/16/24 09:00

Lab Sample ID: 280-198148-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			10/28/24 10:15	1
4-Isopropyltoluene	ND		1.0	0.19	ug/L			10/28/24 10:15	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			10/28/24 10:15	1
Acetone	ND		15	6.6	ug/L			10/28/24 10:15	1
Benzene	ND		1.0	0.14	ug/L			10/28/24 10:15	1
Bromobenzene	ND		1.0	0.19	ug/L			10/28/24 10:15	1
Bromochloromethane	ND		1.0	0.40	ug/L			10/28/24 10:15	1
Bromodichloromethane	ND		1.0	0.19	ug/L			10/28/24 10:15	1
Bromoform	ND		2.0	0.25	ug/L			10/28/24 10:15	1
Bromomethane	ND		5.0	2.4	ug/L			10/28/24 10:15	1
Carbon disulfide	ND		2.0	0.26	ug/L			10/28/24 10:15	1
Carbon tetrachloride	ND		1.0	0.23	ug/L			10/28/24 10:15	1
Chlorobenzene	ND		1.0	0.092	ug/L			10/28/24 10:15	1
Chloroethane	ND		2.0	0.64	ug/L			10/28/24 10:15	1
Chloroform	ND		1.0	0.36	ug/L			10/28/24 10:15	1
Chloromethane	ND		2.0	0.23	ug/L			10/28/24 10:15	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			10/28/24 10:15	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			10/28/24 10:15	1
Dibromochloromethane	ND		1.0	0.28	ug/L			10/28/24 10:15	1
Dibromomethane	ND		1.0	0.34	ug/L			10/28/24 10:15	1
Dichlorodifluoromethane	ND		2.0	0.30	ug/L			10/28/24 10:15	1
Ethylbenzene	ND		1.0	0.14	ug/L			10/28/24 10:15	1
Hexachlorobutadiene	ND		2.0	0.53	ug/L			10/28/24 10:15	1
Isopropylbenzene	ND		1.0	0.16	ug/L			10/28/24 10:15	1
Methylene Chloride	ND		2.0	0.94	ug/L			10/28/24 10:15	1
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			10/28/24 10:15	1
Naphthalene	ND		3.0	0.99	ug/L			10/28/24 10:15	1
n-Butylbenzene	ND		1.0	0.23	ug/L			10/28/24 10:15	1
N-Propylbenzene	ND		1.0	0.18	ug/L			10/28/24 10:15	1
o-Xylene	ND		1.0	0.11	ug/L			10/28/24 10:15	1
sec-Butylbenzene	ND		1.0	0.20	ug/L			10/28/24 10:15	1
Styrene	ND		1.0	0.13	ug/L			10/28/24 10:15	1
tert-Butylbenzene	ND		1.0	0.18	ug/L			10/28/24 10:15	1
Tetrachloroethene	1.6		1.0	0.40	ug/L			10/28/24 10:15	1
Toluene	ND		1.0	0.32	ug/L			10/28/24 10:15	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			10/28/24 10:15	1
trans-1,3-Dichloropropene	ND		1.0	0.14	ug/L			10/28/24 10:15	1
Trichloroethene	ND		1.0	0.30	ug/L			10/28/24 10:15	1
Trichlorofluoromethane	ND		2.0	0.20	ug/L			10/28/24 10:15	1
Vinyl chloride	ND		1.0	0.23	ug/L			10/28/24 10:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		70 - 127		10/28/24 10:15	1
4-Bromofluorobenzene (Surr)	105		78 - 120		10/28/24 10:15	1
Dibromofluoromethane (Surr)	98		77 - 120		10/28/24 10:15	1
Toluene-d8 (Surr)	105		80 - 125		10/28/24 10:15	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198148-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: MW-27
Date Collected: 10/15/24 12:56
Date Received: 10/16/24 09:00

Lab Sample ID: 280-198148-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			10/28/24 10:37	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			10/28/24 10:37	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/28/24 10:37	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			10/28/24 10:37	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			10/28/24 10:37	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			10/28/24 10:37	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			10/28/24 10:37	1
1,2,3-Trichlorobenzene	ND		4.0	1.2	ug/L			10/28/24 10:37	1
1,2,3-Trichloropropane	ND		2.5	0.28	ug/L			10/28/24 10:37	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			10/28/24 10:37	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			10/28/24 10:37	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.42	ug/L			10/28/24 10:37	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			10/28/24 10:37	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			10/28/24 10:37	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			10/28/24 10:37	1
1,2-Dichloropropane	ND		1.0	0.24	ug/L			10/28/24 10:37	1
1,3,5-Trimethylbenzene	ND		1.0	0.12	ug/L			10/28/24 10:37	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			10/28/24 10:37	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			10/28/24 10:37	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			10/28/24 10:37	1
2,2-Dichloropropane	ND		1.0	0.17	ug/L			10/28/24 10:37	1
2-Butanone (MEK)	ND		10	4.6	ug/L			10/28/24 10:37	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			10/28/24 10:37	1
2-Hexanone	ND		5.0	0.81	ug/L			10/28/24 10:37	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			10/28/24 10:37	1
4-Isopropyltoluene	ND		1.0	0.19	ug/L			10/28/24 10:37	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			10/28/24 10:37	1
Acetone	ND		15	6.6	ug/L			10/28/24 10:37	1
Benzene	ND		1.0	0.14	ug/L			10/28/24 10:37	1
Bromobenzene	ND		1.0	0.19	ug/L			10/28/24 10:37	1
Bromochloromethane	ND		1.0	0.40	ug/L			10/28/24 10:37	1
Bromodichloromethane	ND		1.0	0.19	ug/L			10/28/24 10:37	1
Bromoform	ND		2.0	0.25	ug/L			10/28/24 10:37	1
Bromomethane	ND		5.0	2.4	ug/L			10/28/24 10:37	1
Carbon disulfide	ND		2.0	0.26	ug/L			10/28/24 10:37	1
Carbon tetrachloride	ND		1.0	0.23	ug/L			10/28/24 10:37	1
Chlorobenzene	ND		1.0	0.092	ug/L			10/28/24 10:37	1
Chloroethane	ND		2.0	0.64	ug/L			10/28/24 10:37	1
Chloroform	ND		1.0	0.36	ug/L			10/28/24 10:37	1
Chloromethane	ND		2.0	0.23	ug/L			10/28/24 10:37	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			10/28/24 10:37	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			10/28/24 10:37	1
Dibromochloromethane	ND		1.0	0.28	ug/L			10/28/24 10:37	1
Dibromomethane	ND		1.0	0.34	ug/L			10/28/24 10:37	1
Dichlorodifluoromethane	ND		2.0	0.30	ug/L			10/28/24 10:37	1
Ethylbenzene	ND		1.0	0.14	ug/L			10/28/24 10:37	1
Hexachlorobutadiene	ND		2.0	0.53	ug/L			10/28/24 10:37	1
Isopropylbenzene	ND		1.0	0.16	ug/L			10/28/24 10:37	1
Methylene Chloride	ND		2.0	0.94	ug/L			10/28/24 10:37	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198148-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: MW-27

Date Collected: 10/15/24 12:56

Date Received: 10/16/24 09:00

Lab Sample ID: 280-198148-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			10/28/24 10:37	1
Naphthalene	ND		3.0	0.99	ug/L			10/28/24 10:37	1
n-Butylbenzene	ND		1.0	0.23	ug/L			10/28/24 10:37	1
N-Propylbenzene	ND		1.0	0.18	ug/L			10/28/24 10:37	1
o-Xylene	ND		1.0	0.11	ug/L			10/28/24 10:37	1
sec-Butylbenzene	ND		1.0	0.20	ug/L			10/28/24 10:37	1
Styrene	ND		1.0	0.13	ug/L			10/28/24 10:37	1
tert-Butylbenzene	ND		1.0	0.18	ug/L			10/28/24 10:37	1
Tetrachloroethene	ND		1.0	0.40	ug/L			10/28/24 10:37	1
Toluene	ND		1.0	0.32	ug/L			10/28/24 10:37	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			10/28/24 10:37	1
trans-1,3-Dichloropropene	ND		1.0	0.14	ug/L			10/28/24 10:37	1
Trichloroethene	ND		1.0	0.30	ug/L			10/28/24 10:37	1
Trichlorofluoromethane	ND		2.0	0.20	ug/L			10/28/24 10:37	1
Vinyl chloride	ND		1.0	0.23	ug/L			10/28/24 10:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		70 - 127					10/28/24 10:37	1
4-Bromofluorobenzene (Surr)	106		78 - 120					10/28/24 10:37	1
Dibromofluoromethane (Surr)	96		77 - 120					10/28/24 10:37	1
Toluene-d8 (Surr)	105		80 - 125					10/28/24 10:37	1

Client Sample ID: QCAB

Date Collected: 10/15/24 12:40

Date Received: 10/16/24 09:00

Lab Sample ID: 280-198148-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			10/28/24 10:59	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			10/28/24 10:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/28/24 10:59	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			10/28/24 10:59	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			10/28/24 10:59	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			10/28/24 10:59	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			10/28/24 10:59	1
1,2,3-Trichlorobenzene	ND		4.0	1.2	ug/L			10/28/24 10:59	1
1,2,3-Trichloropropane	ND		2.5	0.28	ug/L			10/28/24 10:59	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			10/28/24 10:59	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			10/28/24 10:59	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.42	ug/L			10/28/24 10:59	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			10/28/24 10:59	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			10/28/24 10:59	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			10/28/24 10:59	1
1,2-Dichloropropane	ND		1.0	0.24	ug/L			10/28/24 10:59	1
1,3,5-Trimethylbenzene	ND		1.0	0.12	ug/L			10/28/24 10:59	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			10/28/24 10:59	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			10/28/24 10:59	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			10/28/24 10:59	1
2,2-Dichloropropane	ND		1.0	0.17	ug/L			10/28/24 10:59	1
2-Butanone (MEK)	ND		10	4.6	ug/L			10/28/24 10:59	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			10/28/24 10:59	1
2-Hexanone	ND		5.0	0.81	ug/L			10/28/24 10:59	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198148-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: QCAB
Date Collected: 10/15/24 12:40
Date Received: 10/16/24 09:00

Lab Sample ID: 280-198148-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			10/28/24 10:59	1
4-Isopropyltoluene	ND		1.0	0.19	ug/L			10/28/24 10:59	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			10/28/24 10:59	1
Acetone	ND		15	6.6	ug/L			10/28/24 10:59	1
Benzene	ND		1.0	0.14	ug/L			10/28/24 10:59	1
Bromobenzene	ND		1.0	0.19	ug/L			10/28/24 10:59	1
Bromochloromethane	ND		1.0	0.40	ug/L			10/28/24 10:59	1
Bromodichloromethane	ND		1.0	0.19	ug/L			10/28/24 10:59	1
Bromoform	ND		2.0	0.25	ug/L			10/28/24 10:59	1
Bromomethane	ND		5.0	2.4	ug/L			10/28/24 10:59	1
Carbon disulfide	ND		2.0	0.26	ug/L			10/28/24 10:59	1
Carbon tetrachloride	ND		1.0	0.23	ug/L			10/28/24 10:59	1
Chlorobenzene	ND		1.0	0.092	ug/L			10/28/24 10:59	1
Chloroethane	ND		2.0	0.64	ug/L			10/28/24 10:59	1
Chloroform	ND		1.0	0.36	ug/L			10/28/24 10:59	1
Chloromethane	ND		2.0	0.23	ug/L			10/28/24 10:59	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			10/28/24 10:59	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			10/28/24 10:59	1
Dibromochloromethane	ND		1.0	0.28	ug/L			10/28/24 10:59	1
Dibromomethane	ND		1.0	0.34	ug/L			10/28/24 10:59	1
Dichlorodifluoromethane	ND		2.0	0.30	ug/L			10/28/24 10:59	1
Ethylbenzene	ND		1.0	0.14	ug/L			10/28/24 10:59	1
Hexachlorobutadiene	ND		2.0	0.53	ug/L			10/28/24 10:59	1
Isopropylbenzene	ND		1.0	0.16	ug/L			10/28/24 10:59	1
Methylene Chloride	ND		2.0	0.94	ug/L			10/28/24 10:59	1
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			10/28/24 10:59	1
Naphthalene	ND		3.0	0.99	ug/L			10/28/24 10:59	1
n-Butylbenzene	ND		1.0	0.23	ug/L			10/28/24 10:59	1
N-Propylbenzene	ND		1.0	0.18	ug/L			10/28/24 10:59	1
o-Xylene	ND		1.0	0.11	ug/L			10/28/24 10:59	1
sec-Butylbenzene	ND		1.0	0.20	ug/L			10/28/24 10:59	1
Styrene	ND		1.0	0.13	ug/L			10/28/24 10:59	1
tert-Butylbenzene	ND		1.0	0.18	ug/L			10/28/24 10:59	1
Tetrachloroethene	ND		1.0	0.40	ug/L			10/28/24 10:59	1
Toluene	ND		1.0	0.32	ug/L			10/28/24 10:59	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			10/28/24 10:59	1
trans-1,3-Dichloropropene	ND		1.0	0.14	ug/L			10/28/24 10:59	1
Trichloroethene	ND		1.0	0.30	ug/L			10/28/24 10:59	1
Trichlorofluoromethane	ND		2.0	0.20	ug/L			10/28/24 10:59	1
Vinyl chloride	ND		1.0	0.23	ug/L			10/28/24 10:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		70 - 127		10/28/24 10:59	1
4-Bromofluorobenzene (Surr)	105		78 - 120		10/28/24 10:59	1
Dibromofluoromethane (Surr)	96		77 - 120		10/28/24 10:59	1
Toluene-d8 (Surr)	105		80 - 125		10/28/24 10:59	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198148-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: QCTB
Date Collected: 10/15/24 10:17
Date Received: 10/16/24 09:00

Lab Sample ID: 280-198148-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			10/28/24 09:32	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			10/28/24 09:32	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/28/24 09:32	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			10/28/24 09:32	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			10/28/24 09:32	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			10/28/24 09:32	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			10/28/24 09:32	1
1,2,3-Trichlorobenzene	ND		4.0	1.2	ug/L			10/28/24 09:32	1
1,2,3-Trichloropropane	ND		2.5	0.28	ug/L			10/28/24 09:32	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			10/28/24 09:32	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			10/28/24 09:32	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.42	ug/L			10/28/24 09:32	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			10/28/24 09:32	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			10/28/24 09:32	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			10/28/24 09:32	1
1,2-Dichloropropane	ND		1.0	0.24	ug/L			10/28/24 09:32	1
1,3,5-Trimethylbenzene	ND		1.0	0.12	ug/L			10/28/24 09:32	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			10/28/24 09:32	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			10/28/24 09:32	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			10/28/24 09:32	1
2,2-Dichloropropane	ND		1.0	0.17	ug/L			10/28/24 09:32	1
2-Butanone (MEK)	ND		10	4.6	ug/L			10/28/24 09:32	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			10/28/24 09:32	1
2-Hexanone	ND		5.0	0.81	ug/L			10/28/24 09:32	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			10/28/24 09:32	1
4-Isopropyltoluene	ND		1.0	0.19	ug/L			10/28/24 09:32	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			10/28/24 09:32	1
Acetone	ND		15	6.6	ug/L			10/28/24 09:32	1
Benzene	ND		1.0	0.14	ug/L			10/28/24 09:32	1
Bromobenzene	ND		1.0	0.19	ug/L			10/28/24 09:32	1
Bromochloromethane	ND		1.0	0.40	ug/L			10/28/24 09:32	1
Bromodichloromethane	ND		1.0	0.19	ug/L			10/28/24 09:32	1
Bromoform	ND		2.0	0.25	ug/L			10/28/24 09:32	1
Bromomethane	ND		5.0	2.4	ug/L			10/28/24 09:32	1
Carbon disulfide	ND		2.0	0.26	ug/L			10/28/24 09:32	1
Carbon tetrachloride	ND		1.0	0.23	ug/L			10/28/24 09:32	1
Chlorobenzene	ND		1.0	0.092	ug/L			10/28/24 09:32	1
Chloroethane	ND		2.0	0.64	ug/L			10/28/24 09:32	1
Chloroform	ND		1.0	0.36	ug/L			10/28/24 09:32	1
Chloromethane	ND		2.0	0.23	ug/L			10/28/24 09:32	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			10/28/24 09:32	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			10/28/24 09:32	1
Dibromochloromethane	ND		1.0	0.28	ug/L			10/28/24 09:32	1
Dibromomethane	ND		1.0	0.34	ug/L			10/28/24 09:32	1
Dichlorodifluoromethane	ND		2.0	0.30	ug/L			10/28/24 09:32	1
Ethylbenzene	ND		1.0	0.14	ug/L			10/28/24 09:32	1
Hexachlorobutadiene	ND		2.0	0.53	ug/L			10/28/24 09:32	1
Isopropylbenzene	ND		1.0	0.16	ug/L			10/28/24 09:32	1
Methylene Chloride	ND		2.0	0.94	ug/L			10/28/24 09:32	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198148-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: QCTB
Date Collected: 10/15/24 10:17
Date Received: 10/16/24 09:00

Lab Sample ID: 280-198148-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			10/28/24 09:32	1
Naphthalene	ND		3.0	0.99	ug/L			10/28/24 09:32	1
n-Butylbenzene	ND		1.0	0.23	ug/L			10/28/24 09:32	1
N-Propylbenzene	ND		1.0	0.18	ug/L			10/28/24 09:32	1
o-Xylene	ND		1.0	0.11	ug/L			10/28/24 09:32	1
sec-Butylbenzene	ND		1.0	0.20	ug/L			10/28/24 09:32	1
Styrene	ND		1.0	0.13	ug/L			10/28/24 09:32	1
tert-Butylbenzene	ND		1.0	0.18	ug/L			10/28/24 09:32	1
Tetrachloroethene	ND		1.0	0.40	ug/L			10/28/24 09:32	1
Toluene	ND		1.0	0.32	ug/L			10/28/24 09:32	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			10/28/24 09:32	1
trans-1,3-Dichloropropene	ND		1.0	0.14	ug/L			10/28/24 09:32	1
Trichloroethene	ND		1.0	0.30	ug/L			10/28/24 09:32	1
Trichlorofluoromethane	ND		2.0	0.20	ug/L			10/28/24 09:32	1
Vinyl chloride	ND		1.0	0.23	ug/L			10/28/24 09:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		70 - 127					10/28/24 09:32	1
4-Bromofluorobenzene (Surr)	105		78 - 120					10/28/24 09:32	1
Dibromofluoromethane (Surr)	96		77 - 120					10/28/24 09:32	1
Toluene-d8 (Surr)	105		80 - 125					10/28/24 09:32	1

Method: EPA 200.8 - Metals (ICP/MS)

Client Sample ID: MW-12S
Date Collected: 10/15/24 10:17
Date Received: 10/16/24 09:00

Lab Sample ID: 280-198148-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.50	J	2.0	0.40	ug/L		10/17/24 15:10	10/18/24 09:13	1
Arsenic	0.53	J	5.0	0.50	ug/L		10/17/24 15:10	10/18/24 09:13	1
Lead	ND		1.0	0.23	ug/L		10/17/24 15:10	10/18/24 09:13	1
Nickel	1.3	J	3.0	0.83	ug/L		10/17/24 15:10	10/18/24 09:13	1
Barium	5.1		3.0	0.38	ug/L		10/17/24 15:10	10/18/24 09:13	1
Selenium	ND		5.0	1.0	ug/L		10/17/24 15:10	10/18/24 09:13	1
Beryllium	ND		1.0	0.30	ug/L		10/17/24 15:10	10/18/24 09:13	1
Cadmium	ND		1.0	0.19	ug/L		10/17/24 15:10	10/18/24 09:13	1
Chromium	ND		3.0	0.50	ug/L		10/17/24 15:10	10/18/24 09:13	1
Cobalt	3.2		1.0	0.33	ug/L		10/17/24 15:10	10/18/24 09:13	1
Copper	ND		2.0	0.71	ug/L		10/17/24 15:10	10/18/24 09:13	1
Silver	0.070	J	1.0	0.045	ug/L		10/17/24 15:10	10/18/24 09:13	1
Thallium	ND		1.0	0.21	ug/L		10/17/24 15:10	10/18/24 09:13	1
Vanadium	2.0	J	5.0	1.1	ug/L		10/17/24 15:10	10/18/24 09:13	1
Zinc	ND		10	2.0	ug/L		10/17/24 15:10	10/18/24 09:13	1

Client Sample ID: MW-12D
Date Collected: 10/15/24 11:23
Date Received: 10/16/24 09:00

Lab Sample ID: 280-198148-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.40	ug/L		10/17/24 15:10	10/18/24 09:46	1
Arsenic	0.59	J	5.0	0.50	ug/L		10/17/24 15:10	10/18/24 09:46	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198148-1

Method: EPA 200.8 - Metals (ICP/MS) (Continued)

Client Sample ID: MW-12D
Date Collected: 10/15/24 11:23
Date Received: 10/16/24 09:00

Lab Sample ID: 280-198148-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.0	0.23	ug/L		10/17/24 15:10	10/18/24 09:46	1
Nickel	ND		3.0	0.83	ug/L		10/17/24 15:10	10/18/24 09:46	1
Barium	0.47	J	3.0	0.38	ug/L		10/17/24 15:10	10/18/24 09:46	1
Selenium	ND		5.0	1.0	ug/L		10/17/24 15:10	10/18/24 09:46	1
Beryllium	ND		1.0	0.30	ug/L		10/17/24 15:10	10/18/24 09:46	1
Cadmium	ND		1.0	0.19	ug/L		10/17/24 15:10	10/18/24 09:46	1
Chromium	1.1	J	3.0	0.50	ug/L		10/17/24 15:10	10/18/24 09:46	1
Cobalt	ND		1.0	0.33	ug/L		10/17/24 15:10	10/18/24 09:46	1
Copper	ND		2.0	0.71	ug/L		10/17/24 15:10	10/18/24 09:46	1
Silver	ND		1.0	0.045	ug/L		10/17/24 15:10	10/18/24 09:46	1
Thallium	ND		1.0	0.21	ug/L		10/17/24 15:10	10/18/24 09:46	1
Vanadium	58		5.0	1.1	ug/L		10/17/24 15:10	10/18/24 09:46	1
Zinc	ND		10	2.0	ug/L		10/17/24 15:10	10/18/24 09:46	1

Client Sample ID: MW-27
Date Collected: 10/15/24 12:56
Date Received: 10/16/24 09:00

Lab Sample ID: 280-198148-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.40	ug/L		10/17/24 15:10	10/18/24 09:49	1
Arsenic	35		5.0	0.50	ug/L		10/17/24 15:10	10/18/24 09:49	1
Lead	2.1		1.0	0.23	ug/L		10/17/24 15:10	10/18/24 09:49	1
Nickel	4.9		3.0	0.83	ug/L		10/17/24 15:10	10/18/24 09:49	1
Barium	110		3.0	0.38	ug/L		10/17/24 15:10	10/18/24 09:49	1
Selenium	ND		5.0	1.0	ug/L		10/17/24 15:10	10/18/24 09:49	1
Beryllium	ND		1.0	0.30	ug/L		10/17/24 15:10	10/18/24 09:49	1
Cadmium	ND		1.0	0.19	ug/L		10/17/24 15:10	10/18/24 09:49	1
Chromium	0.95	J	3.0	0.50	ug/L		10/17/24 15:10	10/18/24 09:49	1
Cobalt	16		1.0	0.33	ug/L		10/17/24 15:10	10/18/24 09:49	1
Copper	2.8		2.0	0.71	ug/L		10/17/24 15:10	10/18/24 09:49	1
Silver	ND		1.0	0.045	ug/L		10/17/24 15:10	10/18/24 09:49	1
Thallium	ND		1.0	0.21	ug/L		10/17/24 15:10	10/18/24 09:49	1
Vanadium	3.8	J	5.0	1.1	ug/L		10/17/24 15:10	10/18/24 09:49	1
Zinc	8.7	J	10	2.0	ug/L		10/17/24 15:10	10/18/24 09:49	1

General Chemistry

Client Sample ID: MW-12S
Date Collected: 10/15/24 10:17
Date Received: 10/16/24 09:00

Lab Sample ID: 280-198148-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	38		3.0	1.0	mg/L			10/25/24 22:07	1
Sulfate (EPA 300.0)	4.2	J	5.0	1.0	mg/L			10/25/24 22:07	1
Ammonia (EPA 350.1)	0.23		0.10	0.029	mg/L			10/25/24 12:44	1
Nitrate Nitrite as N (EPA 353.2)	0.11		0.10	0.044	mg/L			10/24/24 12:35	1
Chemical Oxygen Demand (EPA 410.4)	ND		20	8.7	mg/L			10/22/24 09:05	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	120		10	3.1	mg/L			10/22/24 03:41	1
Total Dissolved Solids (SM 2540C)	320		10	4.7	mg/L			10/22/24 09:46	1
Total Suspended Solids (SM 2540D)	1.6	J	4.0	1.1	mg/L			10/18/24 10:23	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198148-1

General Chemistry (Continued)

Client Sample ID: MW-12S
Date Collected: 10/15/24 10:17
Date Received: 10/16/24 09:00

Lab Sample ID: 280-198148-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TOC Result 1 (SM 5310B)	0.85	J	1.0	0.35	mg/L			10/26/24 05:15	1
TOC Result 2 (SM 5310B)	0.84	J	1.0	0.35	mg/L			10/26/24 05:15	1
TOC Result 3 (SM 5310B)	0.79	J	1.0	0.35	mg/L			10/26/24 05:15	1
TOC Result 4 (SM 5310B)	0.79	J	1.0	0.35	mg/L			10/26/24 05:15	1
Total Organic Carbon - Quad (SM 5310B)	0.82	J	1.0	0.35	mg/L			10/26/24 05:15	1

Client Sample ID: MW-12D
Date Collected: 10/15/24 11:23
Date Received: 10/16/24 09:00

Lab Sample ID: 280-198148-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	8.0		3.0	1.0	mg/L			10/25/24 21:56	1
Sulfate (EPA 300.0)	6.8		5.0	1.0	mg/L			10/25/24 21:56	1
Ammonia (EPA 350.1)	0.043	J	0.10	0.029	mg/L			10/25/24 12:46	1
Nitrate Nitrite as N (EPA 353.2)	0.52		0.10	0.044	mg/L			10/24/24 12:36	1
Chemical Oxygen Demand (EPA 410.4)	ND		20	8.7	mg/L			10/22/24 09:05	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	62		10	3.1	mg/L			10/22/24 03:53	1
Total Dissolved Solids (SM 2540C)	210		10	4.7	mg/L			10/22/24 09:46	1
Total Suspended Solids (SM 2540D)	ND		4.0	1.1	mg/L			10/18/24 10:23	1
TOC Result 1 (SM 5310B)	0.76	J	1.0	0.35	mg/L			10/26/24 05:31	1
TOC Result 2 (SM 5310B)	0.76	J	1.0	0.35	mg/L			10/26/24 05:31	1
TOC Result 3 (SM 5310B)	0.71	J	1.0	0.35	mg/L			10/26/24 05:31	1
TOC Result 4 (SM 5310B)	0.70	J	1.0	0.35	mg/L			10/26/24 05:31	1
Total Organic Carbon - Quad (SM 5310B)	0.73	J	1.0	0.35	mg/L			10/26/24 05:31	1

Client Sample ID: MW-27
Date Collected: 10/15/24 12:56
Date Received: 10/16/24 09:00

Lab Sample ID: 280-198148-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	13		3.0	1.0	mg/L			10/25/24 21:45	1
Sulfate (EPA 300.0)	ND		5.0	1.0	mg/L			10/25/24 21:45	1
Ammonia (EPA 350.1)	0.66		0.10	0.029	mg/L			10/25/24 12:49	1
Nitrate Nitrite as N (EPA 353.2)	ND		0.10	0.044	mg/L			10/24/24 12:37	1
Chemical Oxygen Demand (EPA 410.4)	19	J	20	8.7	mg/L			10/22/24 09:05	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	330		10	3.1	mg/L			10/22/24 04:01	1
Total Dissolved Solids (SM 2540C)	460		10	4.7	mg/L			10/22/24 09:46	1
Total Suspended Solids (SM 2540D)	48		4.0	1.1	mg/L			10/18/24 10:23	1
TOC Result 1 (SM 5310B)	5.2		1.0	0.35	mg/L			10/26/24 05:48	1
TOC Result 2 (SM 5310B)	5.2		1.0	0.35	mg/L			10/26/24 05:48	1
TOC Result 3 (SM 5310B)	5.0		1.0	0.35	mg/L			10/26/24 05:48	1
TOC Result 4 (SM 5310B)	5.0		1.0	0.35	mg/L			10/26/24 05:48	1
Total Organic Carbon - Quad (SM 5310B)	5.1		1.0	0.35	mg/L			10/26/24 05:48	1

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Surrogate Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198148-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	DCA (70-127)	BFB (78-120)	DBFM (77-120)	TOL (80-125)
280-198148-1	MW-12S	98	105	94	105
280-198148-2	MW-12D	105	105	98	105
280-198148-3	MW-27	102	106	96	105
280-198148-4	QCAB	101	105	96	105
280-198148-5	QCTB	102	105	96	105
280-198165-A-11 MS	Matrix Spike	103	103	102	105
280-198165-B-11 MSD	Matrix Spike Duplicate	97	101	101	104
280-198410-A-1 MSD	Matrix Spike Duplicate	97	104	99	102
280-198410-B-1 MS	Matrix Spike	101	102	99	105
LCS 280-672630/4	Lab Control Sample	102	103	99	101
LCSD 280-672630/6	Lab Control Sample Dup	103	103	98	105
MB 280-672630/9	Method Blank	100	106	94	106

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198148-1

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

Lab Sample ID: MB 280-672630/9

Matrix: Water

Analysis Batch: 672630

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			10/28/24 09:10	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			10/28/24 09:10	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/28/24 09:10	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			10/28/24 09:10	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			10/28/24 09:10	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			10/28/24 09:10	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			10/28/24 09:10	1
1,2,3-Trichlorobenzene	ND		4.0	1.2	ug/L			10/28/24 09:10	1
1,2,3-Trichloropropane	ND		2.5	0.28	ug/L			10/28/24 09:10	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			10/28/24 09:10	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			10/28/24 09:10	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.42	ug/L			10/28/24 09:10	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			10/28/24 09:10	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			10/28/24 09:10	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			10/28/24 09:10	1
1,2-Dichloropropane	ND		1.0	0.24	ug/L			10/28/24 09:10	1
1,3,5-Trimethylbenzene	ND		1.0	0.12	ug/L			10/28/24 09:10	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			10/28/24 09:10	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			10/28/24 09:10	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			10/28/24 09:10	1
2,2-Dichloropropane	ND		1.0	0.17	ug/L			10/28/24 09:10	1
2-Butanone (MEK)	ND		10	4.6	ug/L			10/28/24 09:10	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			10/28/24 09:10	1
2-Hexanone	ND		5.0	0.81	ug/L			10/28/24 09:10	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			10/28/24 09:10	1
4-Isopropyltoluene	ND		1.0	0.19	ug/L			10/28/24 09:10	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			10/28/24 09:10	1
Acetone	ND		15	6.6	ug/L			10/28/24 09:10	1
Benzene	ND		1.0	0.14	ug/L			10/28/24 09:10	1
Bromobenzene	ND		1.0	0.19	ug/L			10/28/24 09:10	1
Bromochloromethane	ND		1.0	0.40	ug/L			10/28/24 09:10	1
Bromodichloromethane	ND		1.0	0.19	ug/L			10/28/24 09:10	1
Bromoform	ND		2.0	0.25	ug/L			10/28/24 09:10	1
Bromomethane	ND		5.0	2.4	ug/L			10/28/24 09:10	1
Carbon disulfide	ND		2.0	0.26	ug/L			10/28/24 09:10	1
Carbon tetrachloride	ND		1.0	0.23	ug/L			10/28/24 09:10	1
Chlorobenzene	ND		1.0	0.092	ug/L			10/28/24 09:10	1
Chloroethane	ND		2.0	0.64	ug/L			10/28/24 09:10	1
Chloroform	ND		1.0	0.36	ug/L			10/28/24 09:10	1
Chloromethane	ND		2.0	0.23	ug/L			10/28/24 09:10	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			10/28/24 09:10	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			10/28/24 09:10	1
Dibromochloromethane	ND		1.0	0.28	ug/L			10/28/24 09:10	1
Dibromomethane	ND		1.0	0.34	ug/L			10/28/24 09:10	1
Dichlorodifluoromethane	ND		2.0	0.30	ug/L			10/28/24 09:10	1
Ethylbenzene	ND		1.0	0.14	ug/L			10/28/24 09:10	1
Hexachlorobutadiene	ND		2.0	0.53	ug/L			10/28/24 09:10	1
Isopropylbenzene	ND		1.0	0.16	ug/L			10/28/24 09:10	1

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198148-1

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

Lab Sample ID: MB 280-672630/9

Matrix: Water

Analysis Batch: 672630

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		2.0	0.94	ug/L			10/28/24 09:10	1
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			10/28/24 09:10	1
Naphthalene	ND		3.0	0.99	ug/L			10/28/24 09:10	1
n-Butylbenzene	ND		1.0	0.23	ug/L			10/28/24 09:10	1
N-Propylbenzene	ND		1.0	0.18	ug/L			10/28/24 09:10	1
o-Xylene	ND		1.0	0.11	ug/L			10/28/24 09:10	1
sec-Butylbenzene	ND		1.0	0.20	ug/L			10/28/24 09:10	1
Styrene	ND		1.0	0.13	ug/L			10/28/24 09:10	1
tert-Butylbenzene	ND		1.0	0.18	ug/L			10/28/24 09:10	1
Tetrachloroethene	ND		1.0	0.40	ug/L			10/28/24 09:10	1
Toluene	ND		1.0	0.32	ug/L			10/28/24 09:10	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			10/28/24 09:10	1
trans-1,3-Dichloropropene	ND		1.0	0.14	ug/L			10/28/24 09:10	1
Trichloroethene	ND		1.0	0.30	ug/L			10/28/24 09:10	1
Trichlorofluoromethane	ND		2.0	0.20	ug/L			10/28/24 09:10	1
Vinyl chloride	ND		1.0	0.23	ug/L			10/28/24 09:10	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		70 - 127		10/28/24 09:10	1
4-Bromofluorobenzene (Surr)	106		78 - 120		10/28/24 09:10	1
Dibromofluoromethane (Surr)	94		77 - 120		10/28/24 09:10	1
Toluene-d8 (Surr)	106		80 - 125		10/28/24 09:10	1

Lab Sample ID: LCS 280-672630/4

Matrix: Water

Analysis Batch: 672630

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	50.0	54.2		ug/L		108	80 - 124
1,1,1-Trichloroethane	50.0	49.3		ug/L		99	80 - 123
1,1,2,2-Tetrachloroethane	50.0	43.8		ug/L		88	74 - 123
1,1,2-Trichloroethane	50.0	49.7		ug/L		99	80 - 120
1,1-Dichloroethane	50.0	51.4		ug/L		103	78 - 121
1,1-Dichloroethene	50.0	48.0		ug/L		96	77 - 121
1,1-Dichloropropene	50.0	48.5		ug/L		97	77 - 123
1,2,3-Trichlorobenzene	50.0	47.6		ug/L		95	65 - 129
1,2,3-Trichloropropane	50.0	53.6		ug/L		107	80 - 120
1,2,4-Trichlorobenzene	50.0	46.3		ug/L		93	74 - 126
1,2,4-Trimethylbenzene	50.0	49.5		ug/L		99	79 - 124
1,2-Dibromo-3-Chloropropane	50.0	56.0		ug/L		112	73 - 128
1,2-Dibromoethane	50.0	51.0		ug/L		102	80 - 120
1,2-Dichlorobenzene	50.0	48.1		ug/L		96	80 - 120
1,2-Dichloroethane	50.0	47.9		ug/L		96	71 - 121
1,2-Dichloropropane	50.0	54.6		ug/L		109	78 - 120
1,3,5-Trimethylbenzene	50.0	49.4		ug/L		99	80 - 122
1,3-Dichlorobenzene	50.0	47.6		ug/L		95	80 - 120
1,3-Dichloropropane	50.0	50.8		ug/L		102	77 - 122
1,4-Dichlorobenzene	50.0	47.3		ug/L		95	80 - 120

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198148-1

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

Lab Sample ID: LCS 280-672630/4

Matrix: Water

Analysis Batch: 672630

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,2-Dichloropropane	50.0	50.4		ug/L		101	75 - 131
2-Butanone (MEK)	200	222		ug/L		111	58 - 135
2-Chlorotoluene	50.0	49.2		ug/L		98	80 - 120
2-Hexanone	200	216		ug/L		108	62 - 137
4-Chlorotoluene	50.0	48.6		ug/L		97	80 - 120
4-Isopropyltoluene	50.0	48.3		ug/L		97	80 - 122
4-Methyl-2-pentanone (MIBK)	200	229		ug/L		115	66 - 135
Acetone	200	227		ug/L		114	61 - 134
Benzene	50.0	50.4		ug/L		101	80 - 120
Bromobenzene	50.0	47.4		ug/L		95	80 - 120
Bromochloromethane	50.0	47.6		ug/L		95	80 - 123
Bromodichloromethane	50.0	52.5		ug/L		105	80 - 123
Bromoform	50.0	43.5		ug/L		87	79 - 138
Bromomethane	50.0	55.1		ug/L		110	29 - 148
Carbon disulfide	50.0	51.2		ug/L		102	70 - 121
Carbon tetrachloride	50.0	49.0		ug/L		98	79 - 127
Chlorobenzene	50.0	48.7		ug/L		97	80 - 120
Chloroethane	50.0	52.8		ug/L		106	56 - 141
Chloroform	50.0	50.4		ug/L		101	80 - 120
Chloromethane	50.0	59.0		ug/L		118	56 - 133
cis-1,2-Dichloroethene	50.0	49.5		ug/L		99	80 - 120
cis-1,3-Dichloropropene	50.0	56.3		ug/L		113	76 - 129
Dibromochloromethane	50.0	54.2		ug/L		108	80 - 125
Dibromomethane	50.0	51.0		ug/L		102	80 - 120
Dichlorodifluoromethane	50.0	49.3		ug/L		99	47 - 135
Ethylbenzene	50.0	47.6		ug/L		95	80 - 120
Hexachlorobutadiene	50.0	44.3		ug/L		89	73 - 128
Isopropylbenzene	50.0	49.3		ug/L		99	78 - 122
Methylene Chloride	50.0	53.6		ug/L		107	78 - 120
m-Xylene & p-Xylene	50.0	50.0		ug/L		100	80 - 120
Naphthalene	50.0	49.9		ug/L		100	60 - 124
n-Butylbenzene	50.0	49.0		ug/L		98	59 - 140
N-Propylbenzene	50.0	47.2		ug/L		94	80 - 123
o-Xylene	50.0	49.0		ug/L		98	80 - 120
sec-Butylbenzene	50.0	47.5		ug/L		95	80 - 123
Styrene	50.0	50.1		ug/L		100	80 - 120
tert-Butylbenzene	50.0	48.3		ug/L		97	80 - 120
Tetrachloroethene	50.0	45.1		ug/L		90	80 - 121
Toluene	50.0	47.5		ug/L		95	80 - 120
trans-1,2-Dichloroethene	50.0	49.7		ug/L		99	79 - 121
trans-1,3-Dichloropropene	50.0	57.0		ug/L		114	80 - 123
Trichloroethene	50.0	57.3		ug/L		115	80 - 120
Trichlorofluoromethane	50.0	44.9		ug/L		90	54 - 144
Vinyl chloride	50.0	54.3		ug/L		109	67 - 127

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102		70 - 127
4-Bromofluorobenzene (Surr)	103		78 - 120

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198148-1

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

Lab Sample ID: LCS 280-672630/4

Matrix: Water

Analysis Batch: 672630

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
Dibromofluoromethane (Surr)	99		77 - 120
Toluene-d8 (Surr)	101		80 - 125

Lab Sample ID: LCSD 280-672630/6

Matrix: Water

Analysis Batch: 672630

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	50.0	54.9		ug/L		110	80 - 124	1	20
1,1,1-Trichloroethane	50.0	49.7		ug/L		99	80 - 123	1	20
1,1,2,2-Tetrachloroethane	50.0	43.1		ug/L		86	74 - 123	2	20
1,1,2-Trichloroethane	50.0	48.4		ug/L		97	80 - 120	3	20
1,1-Dichloroethane	50.0	52.7		ug/L		105	78 - 121	3	20
1,1-Dichloroethene	50.0	47.9		ug/L		96	77 - 121	0	21
1,1-Dichloropropene	50.0	49.8		ug/L		100	77 - 123	3	20
1,2,3-Trichlorobenzene	50.0	48.7		ug/L		97	65 - 129	2	20
1,2,3-Trichloropropane	50.0	53.1		ug/L		106	80 - 120	1	20
1,2,4-Trichlorobenzene	50.0	47.6		ug/L		95	74 - 126	3	20
1,2,4-Trimethylbenzene	50.0	50.3		ug/L		101	79 - 124	2	20
1,2-Dibromo-3-Chloropropane	50.0	54.2		ug/L		108	73 - 128	3	21
1,2-Dibromoethane	50.0	51.7		ug/L		103	80 - 120	1	20
1,2-Dichlorobenzene	50.0	47.9		ug/L		96	80 - 120	1	20
1,2-Dichloroethane	50.0	47.7		ug/L		95	71 - 121	0	20
1,2-Dichloropropane	50.0	54.3		ug/L		109	78 - 120	0	20
1,3,5-Trimethylbenzene	50.0	50.5		ug/L		101	80 - 122	2	20
1,3-Dichlorobenzene	50.0	47.8		ug/L		96	80 - 120	0	20
1,3-Dichloropropane	50.0	50.7		ug/L		101	77 - 122	0	20
1,4-Dichlorobenzene	50.0	47.4		ug/L		95	80 - 120	0	20
2,2-Dichloropropane	50.0	52.9		ug/L		106	75 - 131	5	22
2-Butanone (MEK)	200	217		ug/L		108	58 - 135	3	20
2-Chlorotoluene	50.0	49.2		ug/L		98	80 - 120	0	20
2-Hexanone	200	218		ug/L		109	62 - 137	1	21
4-Chlorotoluene	50.0	47.9		ug/L		96	80 - 120	1	20
4-Isopropyltoluene	50.0	49.0		ug/L		98	80 - 122	1	20
4-Methyl-2-pentanone (MIBK)	200	227		ug/L		114	66 - 135	1	20
Acetone	200	225		ug/L		112	61 - 134	1	21
Benzene	50.0	50.3		ug/L		101	80 - 120	0	20
Bromobenzene	50.0	48.2		ug/L		96	80 - 120	2	20
Bromochloromethane	50.0	46.3		ug/L		93	80 - 123	3	20
Bromodichloromethane	50.0	52.1		ug/L		104	80 - 123	1	20
Bromoform	50.0	44.9		ug/L		90	79 - 138	3	20
Bromomethane	50.0	57.1		ug/L		114	29 - 148	4	40
Carbon disulfide	50.0	51.0		ug/L		102	70 - 121	0	20
Carbon tetrachloride	50.0	50.0		ug/L		100	79 - 127	2	20
Chlorobenzene	50.0	49.7		ug/L		99	80 - 120	2	20
Chloroethane	50.0	51.3		ug/L		103	56 - 141	3	30
Chloroform	50.0	50.2		ug/L		100	80 - 120	0	20
Chloromethane	50.0	59.0		ug/L		118	56 - 133	0	20

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198148-1

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

Lab Sample ID: LCSD 280-672630/6

Matrix: Water

Analysis Batch: 672630

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	50.0	49.7		ug/L		99	80 - 120	0	20
cis-1,3-Dichloropropene	50.0	59.0		ug/L		118	76 - 129	5	20
Dibromochloromethane	50.0	55.2		ug/L		110	80 - 125	2	20
Dibromomethane	50.0	50.2		ug/L		100	80 - 120	2	20
Dichlorodifluoromethane	50.0	48.0		ug/L		96	47 - 135	3	21
Ethylbenzene	50.0	48.6		ug/L		97	80 - 120	2	20
Hexachlorobutadiene	50.0	46.6		ug/L		93	73 - 128	5	20
Isopropylbenzene	50.0	49.8		ug/L		100	78 - 122	1	20
Methylene Chloride	50.0	53.1		ug/L		106	78 - 120	1	20
m-Xylene & p-Xylene	50.0	51.3		ug/L		103	80 - 120	3	20
Naphthalene	50.0	50.2		ug/L		100	60 - 124	1	21
n-Butylbenzene	50.0	48.7		ug/L		97	59 - 140	1	20
N-Propylbenzene	50.0	46.8		ug/L		94	80 - 123	1	20
o-Xylene	50.0	50.6		ug/L		101	80 - 120	3	20
sec-Butylbenzene	50.0	48.2		ug/L		96	80 - 123	1	20
Styrene	50.0	51.7		ug/L		103	80 - 120	3	20
tert-Butylbenzene	50.0	47.9		ug/L		96	80 - 120	1	20
Tetrachloroethene	50.0	47.1		ug/L		94	80 - 121	4	20
Toluene	50.0	48.7		ug/L		97	80 - 120	2	20
trans-1,2-Dichloroethene	50.0	49.5		ug/L		99	79 - 121	0	20
trans-1,3-Dichloropropene	50.0	58.3		ug/L		117	80 - 123	2	20
Trichloroethene	50.0	60.0		ug/L		120	80 - 120	4	20
Trichlorofluoromethane	50.0	42.8		ug/L		86	54 - 144	5	28
Vinyl chloride	50.0	55.6		ug/L		111	67 - 127	2	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	103		70 - 127
4-Bromofluorobenzene (Surr)	103		78 - 120
Dibromofluoromethane (Surr)	98		77 - 120
Toluene-d8 (Surr)	105		80 - 125

Lab Sample ID: 280-198165-A-11 MS

Matrix: Water

Analysis Batch: 672630

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	ND		50.0	53.8		ug/L		108	80 - 124
1,1,1-Trichloroethane	ND		50.0	50.0		ug/L		100	80 - 123
1,1,2,2-Tetrachloroethane	ND		50.0	54.3		ug/L		109	74 - 123
1,1,2-Trichloroethane	ND		50.0	49.6		ug/L		99	80 - 120
1,1-Dichloroethane	ND		50.0	52.4		ug/L		105	78 - 121
1,1-Dichloroethene	ND		50.0	48.4		ug/L		97	77 - 121
1,1-Dichloropropene	ND		50.0	50.4		ug/L		101	77 - 123
1,2,3-Trichlorobenzene	ND		50.0	49.4		ug/L		99	65 - 129
1,2,3-Trichloropropane	ND		50.0	52.6		ug/L		105	80 - 120
1,2,4-Trichlorobenzene	ND		50.0	46.2		ug/L		92	74 - 126
1,2,4-Trimethylbenzene	ND		50.0	49.2		ug/L		98	79 - 124
1,2-Dibromo-3-Chloropropane	ND		50.0	53.8		ug/L		108	73 - 128

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198148-1

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

Lab Sample ID: 280-198165-A-11 MS

Matrix: Water

Analysis Batch: 672630

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromoethane	ND		50.0	51.2		ug/L		102	80 - 120
1,2-Dichlorobenzene	ND		50.0	46.5		ug/L		93	80 - 120
1,2-Dichloroethane	ND		50.0	47.2		ug/L		94	71 - 121
1,2-Dichloropropane	ND		50.0	53.9		ug/L		108	78 - 120
1,3,5-Trimethylbenzene	ND		50.0	50.2		ug/L		100	80 - 122
1,3-Dichlorobenzene	ND		50.0	47.0		ug/L		94	80 - 120
1,3-Dichloropropane	ND		50.0	51.1		ug/L		102	77 - 122
1,4-Dichlorobenzene	ND		50.0	46.4		ug/L		93	80 - 120
2,2-Dichloropropane	ND		50.0	44.5		ug/L		89	75 - 131
2-Butanone (MEK)	ND		200	212		ug/L		106	58 - 135
2-Chlorotoluene	ND		50.0	49.2		ug/L		98	80 - 120
2-Hexanone	ND		200	228		ug/L		114	62 - 137
4-Chlorotoluene	ND		50.0	46.8		ug/L		94	80 - 120
4-Isopropyltoluene	ND		50.0	47.7		ug/L		95	80 - 122
4-Methyl-2-pentanone (MIBK)	ND		200	225		ug/L		112	66 - 135
Acetone	ND		200	215		ug/L		108	61 - 134
Benzene	ND		50.0	50.1		ug/L		100	80 - 120
Bromobenzene	ND		50.0	47.7		ug/L		95	80 - 120
Bromochloromethane	ND		50.0	45.9		ug/L		92	80 - 123
Bromodichloromethane	ND		50.0	50.9		ug/L		102	80 - 123
Bromoform	ND		50.0	42.6		ug/L		85	79 - 138
Bromomethane	ND		50.0	51.8		ug/L		104	29 - 148
Carbon disulfide	ND		50.0	50.6		ug/L		101	70 - 121
Carbon tetrachloride	ND		50.0	49.6		ug/L		99	79 - 127
Chlorobenzene	ND		50.0	48.6		ug/L		97	80 - 120
Chloroethane	ND		50.0	50.1		ug/L		100	56 - 141
Chloroform	ND		50.0	49.6		ug/L		99	80 - 120
Chloromethane	ND		50.0	57.6		ug/L		115	56 - 133
cis-1,2-Dichloroethene	ND		50.0	49.6		ug/L		99	80 - 120
cis-1,3-Dichloropropene	ND		50.0	56.4		ug/L		113	76 - 129
Dibromochloromethane	ND		50.0	53.4		ug/L		107	80 - 125
Dibromomethane	ND		50.0	48.7		ug/L		97	80 - 120
Dichlorodifluoromethane	ND		50.0	50.0		ug/L		100	47 - 135
Ethylbenzene	ND		50.0	48.8		ug/L		98	80 - 120
Hexachlorobutadiene	ND		50.0	41.8		ug/L		84	73 - 128
Isopropylbenzene	ND		50.0	49.7		ug/L		99	78 - 122
Methylene Chloride	ND		50.0	51.4		ug/L		103	78 - 120
m-Xylene & p-Xylene	ND		50.0	50.5		ug/L		101	80 - 120
Naphthalene	ND		50.0	51.8		ug/L		104	60 - 124
n-Butylbenzene	ND		50.0	46.4		ug/L		93	59 - 140
N-Propylbenzene	ND		50.0	47.0		ug/L		94	80 - 123
o-Xylene	ND		50.0	49.9		ug/L		100	80 - 120
sec-Butylbenzene	ND		50.0	47.7		ug/L		95	80 - 123
Styrene	ND		50.0	48.9		ug/L		98	80 - 120
tert-Butylbenzene	ND		50.0	49.1		ug/L		98	80 - 120
Tetrachloroethene	1.2		50.0	47.1		ug/L		92	80 - 121
Toluene	ND		50.0	49.0		ug/L		98	80 - 120
trans-1,2-Dichloroethene	ND		50.0	50.2		ug/L		100	79 - 121
trans-1,3-Dichloropropene	ND		50.0	56.6		ug/L		113	80 - 123

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198148-1

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

Lab Sample ID: 280-198165-A-11 MS

Matrix: Water

Analysis Batch: 672630

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Trichloroethene	5.8		50.0	54.6		ug/L		98	80 - 120
Trichlorofluoromethane	ND		50.0	45.0		ug/L		90	54 - 144
Vinyl chloride	ND		50.0	56.6		ug/L		113	67 - 127
Surrogate	MS %Recovery	MS Qualifier	Limits						
1,2-Dichloroethane-d4 (Surr)	103		70 - 127						
4-Bromofluorobenzene (Surr)	103		78 - 120						
Dibromofluoromethane (Surr)	102		77 - 120						
Toluene-d8 (Surr)	105		80 - 125						

Lab Sample ID: 280-198165-B-11 MSD

Matrix: Water

Analysis Batch: 672630

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		50.0	54.2		ug/L		108	80 - 124	1	20
1,1,1-Trichloroethane	ND		50.0	49.6		ug/L		99	80 - 123	1	20
1,1,2,2-Tetrachloroethane	ND		50.0	52.7		ug/L		105	74 - 123	3	20
1,1,2-Trichloroethane	ND		50.0	49.6		ug/L		99	80 - 120	0	20
1,1-Dichloroethane	ND		50.0	49.8		ug/L		100	78 - 121	5	20
1,1-Dichloroethene	ND		50.0	48.0		ug/L		96	77 - 121	1	21
1,1-Dichloropropene	ND		50.0	49.6		ug/L		99	77 - 123	2	20
1,2,3-Trichlorobenzene	ND		50.0	50.1		ug/L		100	65 - 129	2	20
1,2,3-Trichloropropane	ND		50.0	51.7		ug/L		103	80 - 120	2	20
1,2,4-Trichlorobenzene	ND		50.0	47.3		ug/L		95	74 - 126	2	20
1,2,4-Trimethylbenzene	ND		50.0	48.7		ug/L		97	79 - 124	1	20
1,2-Dibromo-3-Chloropropane	ND		50.0	54.6		ug/L		109	73 - 128	2	21
1,2-Dibromoethane	ND		50.0	51.1		ug/L		102	80 - 120	0	20
1,2-Dichlorobenzene	ND		50.0	48.5		ug/L		97	80 - 120	4	20
1,2-Dichloroethane	ND		50.0	44.8		ug/L		90	71 - 121	5	20
1,2-Dichloropropane	ND		50.0	52.9		ug/L		106	78 - 120	2	20
1,3,5-Trimethylbenzene	ND		50.0	50.3		ug/L		101	80 - 122	0	20
1,3-Dichlorobenzene	ND		50.0	47.8		ug/L		96	80 - 120	2	20
1,3-Dichloropropane	ND		50.0	51.0		ug/L		102	77 - 122	0	20
1,4-Dichlorobenzene	ND		50.0	47.4		ug/L		95	80 - 120	2	20
2,2-Dichloropropane	ND		50.0	44.0		ug/L		88	75 - 131	1	22
2-Butanone (MEK)	ND		200	201		ug/L		100	58 - 135	6	20
2-Chlorotoluene	ND		50.0	49.5		ug/L		99	80 - 120	1	20
2-Hexanone	ND		200	214		ug/L		107	62 - 137	6	21
4-Chlorotoluene	ND		50.0	48.9		ug/L		98	80 - 120	4	20
4-Isopropyltoluene	ND		50.0	49.3		ug/L		99	80 - 122	3	20
4-Methyl-2-pentanone (MIBK)	ND		200	218		ug/L		109	66 - 135	3	20
Acetone	ND		200	191		ug/L		95	61 - 134	12	21
Benzene	ND		50.0	49.3		ug/L		99	80 - 120	1	20
Bromobenzene	ND		50.0	48.0		ug/L		96	80 - 120	1	20
Bromochloromethane	ND		50.0	46.0		ug/L		92	80 - 123	0	20
Bromodichloromethane	ND		50.0	50.4		ug/L		101	80 - 123	1	20
Bromoform	ND		50.0	44.6		ug/L		89	79 - 138	5	20

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198148-1

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

Lab Sample ID: 280-198165-B-11 MSD

Matrix: Water

Analysis Batch: 672630

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bromomethane	ND		50.0	51.8		ug/L		104	29 - 148	0	40
Carbon disulfide	ND		50.0	49.4		ug/L		99	70 - 121	2	20
Carbon tetrachloride	ND		50.0	50.5		ug/L		101	79 - 127	2	20
Chlorobenzene	ND		50.0	49.5		ug/L		99	80 - 120	2	20
Chloroethane	ND		50.0	47.9		ug/L		96	56 - 141	4	30
Chloroform	ND		50.0	48.4		ug/L		97	80 - 120	3	20
Chloromethane	ND		50.0	58.7		ug/L		117	56 - 133	2	20
cis-1,2-Dichloroethene	ND		50.0	47.7		ug/L		95	80 - 120	4	20
cis-1,3-Dichloropropene	ND		50.0	55.8		ug/L		112	76 - 129	1	20
Dibromochloromethane	ND		50.0	55.3		ug/L		111	80 - 125	3	20
Dibromomethane	ND		50.0	50.1		ug/L		100	80 - 120	3	20
Dichlorodifluoromethane	ND		50.0	51.2		ug/L		102	47 - 135	2	21
Ethylbenzene	ND		50.0	48.8		ug/L		98	80 - 120	0	20
Hexachlorobutadiene	ND		50.0	44.0		ug/L		88	73 - 128	5	20
Isopropylbenzene	ND		50.0	49.9		ug/L		100	78 - 122	0	20
Methylene Chloride	ND		50.0	50.4		ug/L		101	78 - 120	2	20
m-Xylene & p-Xylene	ND		50.0	51.4		ug/L		103	80 - 120	2	20
Naphthalene	ND		50.0	53.0		ug/L		106	60 - 124	2	21
n-Butylbenzene	ND		50.0	47.7		ug/L		95	59 - 140	3	20
N-Propylbenzene	ND		50.0	48.3		ug/L		97	80 - 123	3	20
o-Xylene	ND		50.0	49.6		ug/L		99	80 - 120	1	20
sec-Butylbenzene	ND		50.0	48.3		ug/L		97	80 - 123	1	20
Styrene	ND		50.0	48.8		ug/L		98	80 - 120	0	20
tert-Butylbenzene	ND		50.0	49.1		ug/L		98	80 - 120	0	20
Tetrachloroethene	1.2		50.0	48.2		ug/L		94	80 - 121	2	20
Toluene	ND		50.0	48.9		ug/L		98	80 - 120	0	20
trans-1,2-Dichloroethene	ND		50.0	48.4		ug/L		97	79 - 121	4	20
trans-1,3-Dichloropropene	ND		50.0	55.7		ug/L		111	80 - 123	2	20
Trichloroethene	5.8		50.0	54.6		ug/L		98	80 - 120	0	20
Trichlorofluoromethane	ND		50.0	44.4		ug/L		89	54 - 144	1	28
Vinyl chloride	ND		50.0	56.9		ug/L		114	67 - 127	1	25

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		70 - 127
4-Bromofluorobenzene (Surr)	101		78 - 120
Dibromofluoromethane (Surr)	101		77 - 120
Toluene-d8 (Surr)	104		80 - 125

Lab Sample ID: 280-198410-A-1 MSD

Matrix: Water

Analysis Batch: 672630

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		50.0	53.8		ug/L		108	80 - 124	2	20
1,1,1-Trichloroethane	ND		50.0	48.8		ug/L		98	80 - 123	2	20
1,1,1,2,2-Tetrachloroethane	ND		50.0	51.7		ug/L		103	74 - 123	1	20
1,1,2-Trichloroethane	ND		50.0	50.8		ug/L		102	80 - 120	4	20
1,1-Dichloroethane	ND		50.0	51.0		ug/L		102	78 - 121	3	20

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198148-1

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

Lab Sample ID: 280-198410-A-1 MSD

Matrix: Water

Analysis Batch: 672630

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethene	ND		50.0	48.1		ug/L		96	77 - 121	2	21
1,1-Dichloropropene	ND		50.0	50.4		ug/L		101	77 - 123	0	20
1,2,3-Trichlorobenzene	ND		50.0	51.2		ug/L		102	65 - 129	5	20
1,2,3-Trichloropropane	ND		50.0	51.2		ug/L		102	80 - 120	1	20
1,2,4-Trichlorobenzene	ND		50.0	48.5		ug/L		97	74 - 126	3	20
1,2,4-Trimethylbenzene	ND		50.0	50.7		ug/L		101	79 - 124	2	20
1,2-Dibromo-3-Chloropropane	ND		50.0	53.0		ug/L		106	73 - 128	3	21
1,2-Dibromoethane	ND		50.0	50.9		ug/L		102	80 - 120	1	20
1,2-Dichlorobenzene	ND		50.0	48.4		ug/L		97	80 - 120	2	20
1,2-Dichloroethane	ND		50.0	45.4		ug/L		91	71 - 121	3	20
1,2-Dichloropropane	ND		50.0	54.8		ug/L		110	78 - 120	0	20
1,3,5-Trimethylbenzene	ND		50.0	50.8		ug/L		102	80 - 122	0	20
1,3-Dichlorobenzene	ND		50.0	48.6		ug/L		97	80 - 120	2	20
1,3-Dichloropropane	ND		50.0	50.9		ug/L		102	77 - 122	1	20
1,4-Dichlorobenzene	ND		50.0	48.9		ug/L		98	80 - 120	4	20
2,2-Dichloropropane	ND		50.0	45.0		ug/L		90	75 - 131	1	22
2-Butanone (MEK)	ND		200	203		ug/L		102	58 - 135	6	20
2-Chlorotoluene	ND		50.0	50.5		ug/L		101	80 - 120	1	20
2-Hexanone	ND		200	214		ug/L		107	62 - 137	3	21
4-Chlorotoluene	ND		50.0	48.5		ug/L		97	80 - 120	1	20
4-Isopropyltoluene	ND		50.0	50.3		ug/L		101	80 - 122	3	20
4-Methyl-2-pentanone (MIBK)	ND		200	216		ug/L		108	66 - 135	4	20
Acetone	ND		200	206		ug/L		103	61 - 134	8	21
Benzene	ND		50.0	50.5		ug/L		101	80 - 120	1	20
Bromobenzene	ND		50.0	48.3		ug/L		97	80 - 120	2	20
Bromochloromethane	ND		50.0	46.9		ug/L		94	80 - 123	0	20
Bromodichloromethane	ND		50.0	50.7		ug/L		101	80 - 123	1	20
Bromoform	ND		50.0	43.5		ug/L		87	79 - 138	7	20
Bromomethane	ND		50.0	52.6		ug/L		105	29 - 148	9	40
Carbon disulfide	ND		50.0	50.8		ug/L		102	70 - 121	3	20
Carbon tetrachloride	ND		50.0	49.0		ug/L		98	79 - 127	0	20
Chlorobenzene	ND		50.0	50.2		ug/L		100	80 - 120	3	20
Chloroethane	ND		50.0	49.5		ug/L		99	56 - 141	5	30
Chloroform	ND		50.0	48.7		ug/L		97	80 - 120	2	20
Chloromethane	ND		50.0	59.3		ug/L		119	56 - 133	4	20
cis-1,2-Dichloroethene	ND		50.0	49.8		ug/L		100	80 - 120	1	20
cis-1,3-Dichloropropene	ND		50.0	54.3		ug/L		109	76 - 129	3	20
Dibromochloromethane	ND		50.0	53.4		ug/L		107	80 - 125	2	20
Dibromomethane	ND		50.0	50.0		ug/L		100	80 - 120	2	20
Dichlorodifluoromethane	ND		50.0	47.7		ug/L		95	47 - 135	1	21
Ethylbenzene	ND		50.0	48.9		ug/L		98	80 - 120	2	20
Hexachlorobutadiene	ND		50.0	45.0		ug/L		90	73 - 128	4	20
Isopropylbenzene	ND		50.0	50.1		ug/L		100	78 - 122	1	20
Methylene Chloride	ND		50.0	52.2		ug/L		104	78 - 120	1	20
m-Xylene & p-Xylene	ND		50.0	52.1		ug/L		104	80 - 120	1	20
Naphthalene	ND		50.0	52.8		ug/L		106	60 - 124	5	21
n-Butylbenzene	ND		50.0	50.6		ug/L		101	59 - 140	3	20
N-Propylbenzene	ND		50.0	47.9		ug/L		96	80 - 123	0	20
o-Xylene	ND		50.0	50.5		ug/L		101	80 - 120	0	20

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198148-1

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

Lab Sample ID: 280-198410-A-1 MSD

Matrix: Water

Analysis Batch: 672630

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
sec-Butylbenzene	ND		50.0	49.5		ug/L		99	80 - 123	3	20
Styrene	ND		50.0	50.8		ug/L		102	80 - 120	1	20
tert-Butylbenzene	ND		50.0	49.6		ug/L		99	80 - 120	2	20
Tetrachloroethene	ND		50.0	47.1		ug/L		94	80 - 121	2	20
Toluene	ND		50.0	49.3		ug/L		99	80 - 120	1	20
trans-1,2-Dichloroethene	ND		50.0	50.2		ug/L		100	79 - 121	0	20
trans-1,3-Dichloropropene	ND		50.0	57.0		ug/L		114	80 - 123	3	20
Trichloroethene	ND		50.0	50.5		ug/L		101	80 - 120	4	20
Trichlorofluoromethane	ND		50.0	42.9		ug/L		86	54 - 144	2	28
Vinyl chloride	ND		50.0	54.4		ug/L		109	67 - 127	0	25
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1,2-Dichloroethane-d4 (Surr)	97		70 - 127								
4-Bromofluorobenzene (Surr)	104		78 - 120								
Dibromofluoromethane (Surr)	99		77 - 120								
Toluene-d8 (Surr)	102		80 - 125								

Lab Sample ID: 280-198410-B-1 MS

Matrix: Water

Analysis Batch: 672630

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1,1,2-Tetrachloroethane	ND		50.0	52.7		ug/L		105	80 - 124		
1,1,1-Trichloroethane	ND		50.0	49.6		ug/L		99	80 - 123		
1,1,2,2-Tetrachloroethane	ND		50.0	52.3		ug/L		105	74 - 123		
1,1,2-Trichloroethane	ND		50.0	48.7		ug/L		97	80 - 120		
1,1-Dichloroethane	ND		50.0	52.6		ug/L		105	78 - 121		
1,1-Dichloroethene	ND		50.0	48.8		ug/L		98	77 - 121		
1,1-Dichloropropene	ND		50.0	50.3		ug/L		101	77 - 123		
1,2,3-Trichlorobenzene	ND		50.0	48.7		ug/L		97	65 - 129		
1,2,3-Trichloropropane	ND		50.0	51.9		ug/L		104	80 - 120		
1,2,4-Trichlorobenzene	ND		50.0	47.3		ug/L		95	74 - 126		
1,2,4-Trimethylbenzene	ND		50.0	49.9		ug/L		100	79 - 124		
1,2-Dibromo-3-Chloropropane	ND		50.0	51.2		ug/L		102	73 - 128		
1,2-Dibromoethane	ND		50.0	50.3		ug/L		101	80 - 120		
1,2-Dichlorobenzene	ND		50.0	47.3		ug/L		95	80 - 120		
1,2-Dichloroethane	ND		50.0	46.5		ug/L		93	71 - 121		
1,2-Dichloropropane	ND		50.0	54.5		ug/L		109	78 - 120		
1,3,5-Trimethylbenzene	ND		50.0	50.7		ug/L		101	80 - 122		
1,3-Dichlorobenzene	ND		50.0	47.6		ug/L		95	80 - 120		
1,3-Dichloropropane	ND		50.0	51.4		ug/L		103	77 - 122		
1,4-Dichlorobenzene	ND		50.0	47.1		ug/L		94	80 - 120		
2,2-Dichloropropane	ND		50.0	45.5		ug/L		91	75 - 131		
2-Butanone (MEK)	ND		200	215		ug/L		107	58 - 135		
2-Chlorotoluene	ND		50.0	50.0		ug/L		100	80 - 120		
2-Hexanone	ND		200	220		ug/L		110	62 - 137		
4-Chlorotoluene	ND		50.0	48.2		ug/L		96	80 - 120		
4-Isopropyltoluene	ND		50.0	48.9		ug/L		98	80 - 122		

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198148-1

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

Lab Sample ID: 280-198410-B-1 MS

Matrix: Water

Analysis Batch: 672630

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
4-Methyl-2-pentanone (MIBK)	ND		200	226		ug/L		113	66 - 135
Acetone	ND		200	223		ug/L		112	61 - 134
Benzene	ND		50.0	50.1		ug/L		100	80 - 120
Bromobenzene	ND		50.0	47.2		ug/L		94	80 - 120
Bromochloromethane	ND		50.0	46.7		ug/L		93	80 - 123
Bromodichloromethane	ND		50.0	50.3		ug/L		101	80 - 123
Bromoform	ND		50.0	40.7		ug/L		81	79 - 138
Bromomethane	ND		50.0	47.9		ug/L		96	29 - 148
Carbon disulfide	ND		50.0	49.5		ug/L		99	70 - 121
Carbon tetrachloride	ND		50.0	49.2		ug/L		98	79 - 127
Chlorobenzene	ND		50.0	48.8		ug/L		98	80 - 120
Chloroethane	ND		50.0	52.2		ug/L		104	56 - 141
Chloroform	ND		50.0	49.9		ug/L		100	80 - 120
Chloromethane	ND		50.0	57.1		ug/L		114	56 - 133
cis-1,2-Dichloroethene	ND		50.0	49.1		ug/L		98	80 - 120
cis-1,3-Dichloropropene	ND		50.0	56.0		ug/L		112	76 - 129
Dibromochloromethane	ND		50.0	52.5		ug/L		105	80 - 125
Dibromomethane	ND		50.0	49.1		ug/L		98	80 - 120
Dichlorodifluoromethane	ND		50.0	47.0		ug/L		94	47 - 135
Ethylbenzene	ND		50.0	48.1		ug/L		96	80 - 120
Hexachlorobutadiene	ND		50.0	43.4		ug/L		87	73 - 128
Isopropylbenzene	ND		50.0	50.5		ug/L		101	78 - 122
Methylene Chloride	ND		50.0	52.5		ug/L		105	78 - 120
m-Xylene & p-Xylene	ND		50.0	51.4		ug/L		103	80 - 120
Naphthalene	ND		50.0	50.2		ug/L		100	60 - 124
n-Butylbenzene	ND		50.0	48.9		ug/L		98	59 - 140
N-Propylbenzene	ND		50.0	47.9		ug/L		96	80 - 123
o-Xylene	ND		50.0	50.6		ug/L		101	80 - 120
sec-Butylbenzene	ND		50.0	48.2		ug/L		96	80 - 123
Styrene	ND		50.0	51.2		ug/L		102	80 - 120
tert-Butylbenzene	ND		50.0	48.5		ug/L		97	80 - 120
Tetrachloroethene	ND		50.0	46.4		ug/L		93	80 - 121
Toluene	ND		50.0	48.9		ug/L		98	80 - 120
trans-1,2-Dichloroethene	ND		50.0	50.1		ug/L		100	79 - 121
trans-1,3-Dichloropropene	ND		50.0	55.4		ug/L		111	80 - 123
Trichloroethene	ND		50.0	52.8		ug/L		106	80 - 120
Trichlorofluoromethane	ND		50.0	43.9		ug/L		88	54 - 144
Vinyl chloride	ND		50.0	54.4		ug/L		109	67 - 127

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		70 - 127
4-Bromofluorobenzene (Surr)	102		78 - 120
Dibromofluoromethane (Surr)	99		77 - 120
Toluene-d8 (Surr)	105		80 - 125

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198148-1

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 280-671315/1-A

Matrix: Water

Analysis Batch: 671577

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 671315

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.40	ug/L		10/17/24 15:10	10/18/24 08:54	1
Arsenic	ND		5.0	0.50	ug/L		10/17/24 15:10	10/18/24 08:54	1
Lead	ND		1.0	0.23	ug/L		10/17/24 15:10	10/18/24 08:54	1
Nickel	ND		3.0	0.83	ug/L		10/17/24 15:10	10/18/24 08:54	1
Barium	ND		3.0	0.38	ug/L		10/17/24 15:10	10/18/24 08:54	1
Selenium	ND		5.0	1.0	ug/L		10/17/24 15:10	10/18/24 08:54	1
Beryllium	ND		1.0	0.30	ug/L		10/17/24 15:10	10/18/24 08:54	1
Cadmium	ND		1.0	0.19	ug/L		10/17/24 15:10	10/18/24 08:54	1
Chromium	ND		3.0	0.50	ug/L		10/17/24 15:10	10/18/24 08:54	1
Cobalt	ND		1.0	0.33	ug/L		10/17/24 15:10	10/18/24 08:54	1
Copper	ND		2.0	0.71	ug/L		10/17/24 15:10	10/18/24 08:54	1
Silver	ND		1.0	0.045	ug/L		10/17/24 15:10	10/18/24 08:54	1
Thallium	ND		1.0	0.21	ug/L		10/17/24 15:10	10/18/24 08:54	1
Vanadium	ND		5.0	1.1	ug/L		10/17/24 15:10	10/18/24 08:54	1
Zinc	ND		10	2.0	ug/L		10/17/24 15:10	10/18/24 08:54	1

Lab Sample ID: LCS 280-671315/13-A

Matrix: Water

Analysis Batch: 671577

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 671315

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	40.0	38.7		ug/L		97	85 - 115
Arsenic	40.0	38.5		ug/L		96	89 - 111
Lead	40.0	37.1		ug/L		93	88 - 115
Nickel	40.0	39.6		ug/L		99	86 - 115
Barium	40.0	38.1		ug/L		95	89 - 115
Selenium	40.0	38.1		ug/L		95	85 - 114
Beryllium	40.0	39.4		ug/L		99	85 - 115
Cadmium	40.0	38.6		ug/L		97	89 - 111
Chromium	40.0	38.9		ug/L		97	86 - 115
Cobalt	40.0	38.6		ug/L		96	92 - 115
Copper	40.0	39.3		ug/L		98	90 - 115
Silver	40.0	39.2		ug/L		98	90 - 114
Thallium	40.0	37.0		ug/L		92	86 - 115
Vanadium	40.0	39.3		ug/L		98	90 - 115
Zinc	40.0	39.8		ug/L		100	88 - 115

Lab Sample ID: 280-198156-A-16-B MS

Matrix: Water

Analysis Batch: 671577

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 671315

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	ND		40.0	39.8		ug/L		100	85 - 115
Arsenic	4.2	J	40.0	42.6		ug/L		96	79 - 120
Lead	1.8		40.0	40.0		ug/L		96	88 - 115
Nickel	4.5		40.0	44.3		ug/L		99	86 - 115
Barium	58		40.0	102		ug/L		111	89 - 115
Selenium	ND		40.0	38.3		ug/L		96	85 - 114
Beryllium	ND		40.0	40.1		ug/L		100	85 - 115

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198148-1

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: 280-198156-A-16-B MS

Matrix: Water

Analysis Batch: 671577

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 671315

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	ND		40.0	40.3		ug/L		101	89 - 111
Chromium	1.4	J	40.0	39.6		ug/L		96	86 - 115
Cobalt	ND		40.0	37.4		ug/L		94	92 - 115
Copper	ND		40.0	38.9		ug/L		97	90 - 115
Silver	ND		40.0	39.7		ug/L		99	70 - 130
Thallium	ND		40.0	37.6		ug/L		94	86 - 115
Vanadium	5.4		40.0	44.0		ug/L		96	90 - 115
Zinc	ND		40.0	39.3		ug/L		98	88 - 115

Lab Sample ID: 280-198156-A-16-C MSD

Matrix: Water

Analysis Batch: 671577

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 671315

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Antimony	ND		40.0	40.6		ug/L		102	85 - 115	2	20
Arsenic	4.2	J	40.0	43.4		ug/L		98	79 - 120	2	20
Lead	1.8		40.0	41.4		ug/L		99	88 - 115	3	20
Nickel	4.5		40.0	43.2		ug/L		97	86 - 115	2	20
Barium	58		40.0	99.9		ug/L		106	89 - 115	2	20
Selenium	ND		40.0	39.1		ug/L		98	85 - 114	2	20
Beryllium	ND		40.0	39.3		ug/L		98	85 - 115	2	20
Cadmium	ND		40.0	41.0		ug/L		103	89 - 111	2	20
Chromium	1.4	J	40.0	40.0		ug/L		97	86 - 115	1	20
Cobalt	ND		40.0	38.3		ug/L		96	92 - 115	2	20
Copper	ND		40.0	39.6		ug/L		99	90 - 115	2	20
Silver	ND		40.0	39.8		ug/L		99	70 - 130	0	20
Thallium	ND		40.0	39.9		ug/L		100	86 - 115	6	20
Vanadium	5.4		40.0	44.8		ug/L		99	90 - 115	2	20
Zinc	ND		40.0	38.1		ug/L		95	88 - 115	3	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 280-672453/6

Matrix: Water

Analysis Batch: 672453

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0	1.0	mg/L			10/25/24 11:18	1
Sulfate	ND		5.0	1.0	mg/L			10/25/24 11:18	1

Lab Sample ID: LCS 280-672453/4

Matrix: Water

Analysis Batch: 672453

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	100	98.0		mg/L		98	90 - 110
Sulfate	100	98.0		mg/L		98	90 - 110

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198148-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 280-672453/5

Matrix: Water

Analysis Batch: 672453

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	100	98.6		mg/L		99	90 - 110	1	10
Sulfate	100	98.3		mg/L		98	90 - 110	0	10

Lab Sample ID: MRL 280-672453/3

Matrix: Water

Analysis Batch: 672453

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	5.00	4.91		mg/L		98	50 - 150		
Sulfate	5.00	5.16		mg/L		103	50 - 150		

Lab Sample ID: 280-198129-B-5 MS

Matrix: Water

Analysis Batch: 672453

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	36		50.0	84.6		mg/L		98	80 - 120		
Sulfate	29		50.0	78.3		mg/L		98	80 - 120		

Lab Sample ID: 280-198129-B-5 MSD

Matrix: Water

Analysis Batch: 672453

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	36		50.0	84.7		mg/L		98	80 - 120	0	20
Sulfate	29		50.0	78.3		mg/L		98	80 - 120	0	20

Lab Sample ID: 280-198129-B-5 DU

Matrix: Water

Analysis Batch: 672453

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	36		35.3		mg/L				0.8	15
Sulfate	29		29.3		mg/L				0.3	15

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-672563/18

Matrix: Water

Analysis Batch: 672563

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.10	0.029	mg/L			10/25/24 12:22	1

Lab Sample ID: LCS 280-672563/19

Matrix: Water

Analysis Batch: 672563

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ammonia	2.51	2.51		mg/L		100	90 - 110		

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198148-1

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-672376/59
Matrix: Water
Analysis Batch: 672376

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	ND		0.10	0.044	mg/L			10/24/24 12:28	1

Lab Sample ID: LCS 280-672376/57
Matrix: Water
Analysis Batch: 672376

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	1.00	1.07		mg/L		107	90 - 110

Lab Sample ID: LCSD 280-672376/58
Matrix: Water
Analysis Batch: 672376

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate Nitrite as N	1.00	1.07		mg/L		107	90 - 110	0	10

Lab Sample ID: 280-198123-C-6 MS
Matrix: Water
Analysis Batch: 672376

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	ND	F1	2.00	1.64	F1	mg/L		82	90 - 110

Lab Sample ID: 280-198123-C-6 MSD
Matrix: Water
Analysis Batch: 672376

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate Nitrite as N	ND	F1	2.00	1.65	F1	mg/L		83	90 - 110	0	10

Method: 410.4 - COD

Lab Sample ID: MB 280-671941/4
Matrix: Water
Analysis Batch: 671941

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		20	8.7	mg/L			10/22/24 09:05	1

Lab Sample ID: LCS 280-671941/3
Matrix: Water
Analysis Batch: 671941

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	100	108		mg/L		108	90 - 110

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198148-1

Method: 410.4 - COD (Continued)

Lab Sample ID: 280-197983-C-3 MS

Matrix: Water

Analysis Batch: 671941

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	
Chemical Oxygen Demand	ND		50.0	53.3		mg/L		107	90 - 110	

Lab Sample ID: 280-197983-C-3 MSD

Matrix: Water

Analysis Batch: 671941

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chemical Oxygen Demand	ND		50.0	54.8		mg/L		110	90 - 110	3	11

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-671987/90

Matrix: Water

Analysis Batch: 671987

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		10	3.1	mg/L			10/22/24 03:34	1

Lab Sample ID: 280-198148-1 DU

Matrix: Water

Analysis Batch: 671987

Client Sample ID: MW-12S

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	Prepared	Analyzed	Dil Fac	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	120		130		mg/L					8	20

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

Lab Sample ID: MB 280-671956/1

Matrix: Water

Analysis Batch: 671956

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	4.7	mg/L			10/22/24 09:46	1

Lab Sample ID: LCS 280-671956/2

Matrix: Water

Analysis Batch: 671956

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	501	501		mg/L		100	88 - 114

Lab Sample ID: 280-198136-D-5 DU

Matrix: Water

Analysis Batch: 671956

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	Prepared	Analyzed	Dil Fac	RPD	RPD Limit
Total Dissolved Solids	2700		2670		mg/L					0.5	10

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198148-1

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 280-671567/1
Matrix: Water
Analysis Batch: 671567

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	1.1	mg/L			10/18/24 10:23	1

Lab Sample ID: LCS 280-671567/2
Matrix: Water
Analysis Batch: 671567

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	501	453		mg/L		90	79 - 114

Lab Sample ID: 280-198109-A-2 DU
Matrix: Water
Analysis Batch: 671567

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	79		78.0		mg/L		2	10

Lab Sample ID: 280-198202-C-1 DU
Matrix: Water
Analysis Batch: 671567

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	10		10.0		mg/L		8	10

Method: SM 5310B - Organic Carbon, Total (TOC)

Lab Sample ID: MB 280-672638/35
Matrix: Water
Analysis Batch: 672638

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TOC Result 1	ND		1.0	0.35	mg/L			10/26/24 01:50	1
TOC Result 2	ND		1.0	0.35	mg/L			10/26/24 01:50	1
TOC Result 3	ND		1.0	0.35	mg/L			10/26/24 01:50	1
TOC Result 4	ND		1.0	0.35	mg/L			10/26/24 01:50	1
Total Organic Carbon - Quad	ND		1.0	0.35	mg/L			10/26/24 01:50	1

Lab Sample ID: LCS 280-672638/34
Matrix: Water
Analysis Batch: 672638

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
TOC Result 1	25.0	26.6		mg/L		107	88 - 112
TOC Result 2	25.0	25.8		mg/L		103	88 - 112
TOC Result 3	25.0	25.1		mg/L		100	88 - 112
TOC Result 4	25.0	25.1		mg/L		100	88 - 112
Total Organic Carbon - Quad	25.0	25.7		mg/L		103	88 - 112

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198148-1

Method: SM 5310B - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: 280-198123-C-4 MS

Matrix: Water

Analysis Batch: 672638

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
TOC Result 1	0.69	J	25.0	26.4		mg/L		103	88 - 112
TOC Result 2	0.68	J	25.0	26.5		mg/L		103	88 - 112
TOC Result 3	0.72	J	25.0	25.6		mg/L		100	88 - 112
TOC Result 4	0.63	J	25.0	25.1		mg/L		98	88 - 112
Total Organic Carbon - Quad	0.68	J	25.0	25.9		mg/L		101	88 - 112

Lab Sample ID: 280-198123-C-4 MSD

Matrix: Water

Analysis Batch: 672638

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
TOC Result 1	0.69	J	25.0	26.3		mg/L		102	88 - 112	1	15
TOC Result 2	0.68	J	25.0	25.6		mg/L		100	88 - 112	3	15
TOC Result 3	0.72	J	25.0	25.2		mg/L		98	88 - 112	2	15
TOC Result 4	0.63	J	25.0	25.0		mg/L		97	88 - 112	0	15
Total Organic Carbon - Quad	0.68	J	25.0	25.5		mg/L		99	88 - 112	2	15

QC Association Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198148-1

GC/MS VOA

Analysis Batch: 672630

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198148-1	MW-12S	Total/NA	Water	8260B	
280-198148-2	MW-12D	Total/NA	Water	8260B	
280-198148-3	MW-27	Total/NA	Water	8260B	
280-198148-4	QCAB	Total/NA	Water	8260B	
280-198148-5	QCTB	Total/NA	Water	8260B	
MB 280-672630/9	Method Blank	Total/NA	Water	8260B	
LCS 280-672630/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-672630/6	Lab Control Sample Dup	Total/NA	Water	8260B	
280-198165-A-11 MS	Matrix Spike	Total/NA	Water	8260B	
280-198165-B-11 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
280-198410-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
280-198410-B-1 MS	Matrix Spike	Total/NA	Water	8260B	

Metals

Prep Batch: 671315

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198148-1	MW-12S	Total/NA	Water	200.8	
280-198148-2	MW-12D	Total/NA	Water	200.8	
280-198148-3	MW-27	Total/NA	Water	200.8	
MB 280-671315/1-A	Method Blank	Total/NA	Water	200.8	
LCS 280-671315/13-A	Lab Control Sample	Total/NA	Water	200.8	
280-198156-A-16-B MS	Matrix Spike	Total/NA	Water	200.8	
280-198156-A-16-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.8	

Analysis Batch: 671577

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198148-1	MW-12S	Total/NA	Water	200.8	671315
280-198148-2	MW-12D	Total/NA	Water	200.8	671315
280-198148-3	MW-27	Total/NA	Water	200.8	671315
MB 280-671315/1-A	Method Blank	Total/NA	Water	200.8	671315
LCS 280-671315/13-A	Lab Control Sample	Total/NA	Water	200.8	671315
280-198156-A-16-B MS	Matrix Spike	Total/NA	Water	200.8	671315
280-198156-A-16-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.8	671315

General Chemistry

Analysis Batch: 671567

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198148-1	MW-12S	Total/NA	Water	SM 2540D	
280-198148-2	MW-12D	Total/NA	Water	SM 2540D	
280-198148-3	MW-27	Total/NA	Water	SM 2540D	
MB 280-671567/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 280-671567/2	Lab Control Sample	Total/NA	Water	SM 2540D	
280-198109-A-2 DU	Duplicate	Total/NA	Water	SM 2540D	
280-198202-C-1 DU	Duplicate	Total/NA	Water	SM 2540D	

Analysis Batch: 671941

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198148-1	MW-12S	Total/NA	Water	410.4	
280-198148-2	MW-12D	Total/NA	Water	410.4	
280-198148-3	MW-27	Total/NA	Water	410.4	

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QC Association Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198148-1

General Chemistry (Continued)

Analysis Batch: 671941 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-671941/4	Method Blank	Total/NA	Water	410.4	
LCS 280-671941/3	Lab Control Sample	Total/NA	Water	410.4	
280-197983-C-3 MS	Matrix Spike	Total/NA	Water	410.4	
280-197983-C-3 MSD	Matrix Spike Duplicate	Total/NA	Water	410.4	

Analysis Batch: 671956

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198148-1	MW-12S	Total/NA	Water	SM 2540C	
280-198148-2	MW-12D	Total/NA	Water	SM 2540C	
280-198148-3	MW-27	Total/NA	Water	SM 2540C	
MB 280-671956/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-671956/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-198136-D-5 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 671987

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198148-1	MW-12S	Total/NA	Water	SM 2320B	
280-198148-2	MW-12D	Total/NA	Water	SM 2320B	
280-198148-3	MW-27	Total/NA	Water	SM 2320B	
MB 280-671987/90	Method Blank	Total/NA	Water	SM 2320B	
280-198148-1 DU	MW-12S	Total/NA	Water	SM 2320B	

Analysis Batch: 672376

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198148-1	MW-12S	Total/NA	Water	353.2	
280-198148-2	MW-12D	Total/NA	Water	353.2	
280-198148-3	MW-27	Total/NA	Water	353.2	
MB 280-672376/59	Method Blank	Total/NA	Water	353.2	
LCS 280-672376/57	Lab Control Sample	Total/NA	Water	353.2	
LCSD 280-672376/58	Lab Control Sample Dup	Total/NA	Water	353.2	
280-198123-C-6 MS	Matrix Spike	Total/NA	Water	353.2	
280-198123-C-6 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	

Analysis Batch: 672453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198148-1	MW-12S	Total/NA	Water	300.0	
280-198148-2	MW-12D	Total/NA	Water	300.0	
280-198148-3	MW-27	Total/NA	Water	300.0	
MB 280-672453/6	Method Blank	Total/NA	Water	300.0	
LCS 280-672453/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 280-672453/5	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 280-672453/3	Lab Control Sample	Total/NA	Water	300.0	
280-198129-B-5 MS	Matrix Spike	Total/NA	Water	300.0	
280-198129-B-5 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
280-198129-B-5 DU	Duplicate	Total/NA	Water	300.0	

Analysis Batch: 672563

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198148-1	MW-12S	Total/NA	Water	350.1	
280-198148-2	MW-12D	Total/NA	Water	350.1	
280-198148-3	MW-27	Total/NA	Water	350.1	

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QC Association Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198148-1

General Chemistry (Continued)

Analysis Batch: 672563 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-672563/18	Method Blank	Total/NA	Water	350.1	
LCS 280-672563/19	Lab Control Sample	Total/NA	Water	350.1	

Analysis Batch: 672638

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198148-1	MW-12S	Total/NA	Water	SM 5310B	
280-198148-2	MW-12D	Total/NA	Water	SM 5310B	
280-198148-3	MW-27	Total/NA	Water	SM 5310B	
MB 280-672638/35	Method Blank	Total/NA	Water	SM 5310B	
LCS 280-672638/34	Lab Control Sample	Total/NA	Water	SM 5310B	
280-198123-C-4 MS	Matrix Spike	Total/NA	Water	SM 5310B	
280-198123-C-4 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 5310B	

Lab Chronicle

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198148-1

Client Sample ID: MW-12S

Lab Sample ID: 280-198148-1

Date Collected: 10/15/24 10:17

Matrix: Water

Date Received: 10/16/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	672630	10/28/24 09:54	TAW	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	671315	10/17/24 15:10	SMK	EET DEN
Total/NA	Analysis	200.8		1			671577	10/18/24 09:13	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	672453	10/25/24 22:07	EJS	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	672563	10/25/24 12:44	LBR	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	672376	10/24/24 12:35	AKF	EET DEN
Total/NA	Analysis	410.4		1	2 mL	2 mL	671941	10/22/24 09:05	MF	EET DEN
Total/NA	Analysis	SM 2320B		1			671987	10/22/24 03:41	EL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	671956	10/22/24 09:46	BRD	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	671567	10/18/24 10:23	BRD	EET DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	672638	10/26/24 05:15	GMW	EET DEN

Client Sample ID: MW-12D

Lab Sample ID: 280-198148-2

Date Collected: 10/15/24 11:23

Matrix: Water

Date Received: 10/16/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	672630	10/28/24 10:15	TAW	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	671315	10/17/24 15:10	SMK	EET DEN
Total/NA	Analysis	200.8		1			671577	10/18/24 09:46	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	672453	10/25/24 21:56	EJS	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	672563	10/25/24 12:46	LBR	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	672376	10/24/24 12:36	AKF	EET DEN
Total/NA	Analysis	410.4		1	2 mL	2 mL	671941	10/22/24 09:05	MF	EET DEN
Total/NA	Analysis	SM 2320B		1			671987	10/22/24 03:53	EL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	671956	10/22/24 09:46	BRD	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	671567	10/18/24 10:23	BRD	EET DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	672638	10/26/24 05:31	GMW	EET DEN

Client Sample ID: MW-27

Lab Sample ID: 280-198148-3

Date Collected: 10/15/24 12:56

Matrix: Water

Date Received: 10/16/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	672630	10/28/24 10:37	TAW	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	671315	10/17/24 15:10	SMK	EET DEN
Total/NA	Analysis	200.8		1			671577	10/18/24 09:49	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	672453	10/25/24 21:45	EJS	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	672563	10/25/24 12:49	LBR	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	672376	10/24/24 12:37	AKF	EET DEN
Total/NA	Analysis	410.4		1	2 mL	2 mL	671941	10/22/24 09:05	MF	EET DEN
Total/NA	Analysis	SM 2320B		1			671987	10/22/24 04:01	EL	EET DEN

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Lab Chronicle

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198148-1

Client Sample ID: MW-27

Date Collected: 10/15/24 12:56

Date Received: 10/16/24 09:00

Lab Sample ID: 280-198148-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	671956	10/22/24 09:46	BRD	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	671567	10/18/24 10:23	BRD	EET DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	672638	10/26/24 05:48	GMW	EET DEN

Client Sample ID: QCAB

Date Collected: 10/15/24 12:40

Date Received: 10/16/24 09:00

Lab Sample ID: 280-198148-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	672630	10/28/24 10:59	TAW	EET DEN

Client Sample ID: QCTB

Date Collected: 10/15/24 10:17

Date Received: 10/16/24 09:00

Lab Sample ID: 280-198148-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	672630	10/28/24 09:32	TAW	EET DEN

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

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TestAmerica

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: Geo-Logic Associates

Job Number: 280-198148-1

Login Number: 198148

List Source: Eurofins Denver

List Number: 1

Creator: Rystrom, Joshua R

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

ANALYTICAL REPORT

PREPARED FOR

Attn: Aaron Ogorzalek
Geo-Logic Associates
2777 East Guasti Road
Suite 1
Ontario, California 91761
Generated 11/1/2024 11:24:44 AM

JOB DESCRIPTION

Valley LF - Republic Serv Coffin Butte

JOB NUMBER

280-198296-1

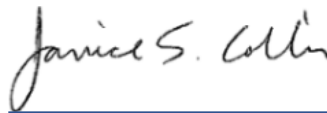
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Job Notes

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Authorization



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Authorized for release by
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(303)736-0100

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Definitions/Glossary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198296-1

Qualifiers

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

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

Glossary

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

Case Narrative

Client: Geo-Logic Associates
Project: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198296-1

Job ID: 280-198296-1

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Job Narrative 280-198296-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 10/18/2024 9:05 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.7°C.

Metals

Method 6010B - Dissolved: The method blank for preparation batch 280-671657 and analytical batch 280-672293 contained Na above half the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

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

General Chemistry

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

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Detection Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198296-1

Client Sample ID: S-1

Lab Sample ID: 280-198296-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Calcium	31000	B	200	24	ug/L	1			6010B	Dissolved
Iron	79	J B	100	9.1	ug/L	1			6010B	Dissolved
Magnesium	12000	B	200	4.2	ug/L	1			6010B	Dissolved
Manganese	16		10	0.45	ug/L	1			6010B	Dissolved
Sodium	12000	B	1000	97	ug/L	1			6010B	Dissolved
Chloride	17		3.0	1.0	mg/L	1			300.0	Total/NA
ortho-Phosphate	0.045	J	0.050	0.018	mg/L	1			365.1	Total/NA
Phosphorus, Total	0.028	J	0.050	0.025	mg/L	1			365.1	Total/NA
Biochemical Oxygen Demand	1.2	J	5.0	0.59	mg/L	1			SM5210B	Total/NA

Client Sample ID: S-2

Lab Sample ID: 280-198296-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Calcium	31000	B	200	24	ug/L	1			6010B	Dissolved
Iron	60	J B	100	9.1	ug/L	1			6010B	Dissolved
Magnesium	12000	B	200	4.2	ug/L	1			6010B	Dissolved
Manganese	15		10	0.45	ug/L	1			6010B	Dissolved
Sodium	13000	B	1000	97	ug/L	1			6010B	Dissolved
Chloride	19		3.0	1.0	mg/L	1			300.0	Total/NA
ortho-Phosphate	0.043	J	0.050	0.018	mg/L	1			365.1	Total/NA
Phosphorus, Total	0.033	J	0.050	0.025	mg/L	1			365.1	Total/NA
Biochemical Oxygen Demand	1.8	J	5.0	0.59	mg/L	1			SM5210B	Total/NA

Client Sample ID: S-4

Lab Sample ID: 280-198296-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Calcium	31000	B	200	24	ug/L	1			6010B	Dissolved
Iron	31	J B	100	9.1	ug/L	1			6010B	Dissolved
Magnesium	12000	B	200	4.2	ug/L	1			6010B	Dissolved
Manganese	11		10	0.45	ug/L	1			6010B	Dissolved
Sodium	12000	B	1000	97	ug/L	1			6010B	Dissolved
Chloride	17		3.0	1.0	mg/L	1			300.0	Total/NA
ortho-Phosphate	0.043	J	0.050	0.018	mg/L	1			365.1	Total/NA
Phosphorus, Total	0.032	J	0.050	0.025	mg/L	1			365.1	Total/NA
Biochemical Oxygen Demand	2.8	J	5.0	0.59	mg/L	1			SM5210B	Total/NA

This Detection Summary does not include radiochemical test results.

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Method Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198296-1

Method	Method Description	Protocol	Laboratory
6010B	Dissolved Metals	SW846	EET DEN
300.0	Anions, Ion Chromatography	EPA	EET DEN
351.2	Nitrogen, Total Kjeldahl	EPA	EET DEN
365.1	Phosphorus, Ortho	EPA	EET DEN
365.1	Phosphorus, Total	EPA	EET DEN
SM5210B	BOD, 5 Day	SM	EET DEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET DEN
351.2	Nitrogen, Total Kjeldahl	EPA	EET DEN
365.2/365.3/365	Phosphorus, Total	EPA	EET DEN

Protocol References:

EPA = US Environmental Protection Agency

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

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

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Sample Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198296-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-198296-1	S-1	Water	10/17/24 08:25	10/18/24 09:05
280-198296-2	S-2	Water	10/17/24 08:40	10/18/24 09:05
280-198296-3	S-4	Water	10/17/24 09:05	10/18/24 09:05

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198296-1

Method: SW846 6010B - Dissolved Metals - Dissolved

Client Sample ID: S-1
Date Collected: 10/17/24 08:25
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198296-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	31000	B	200	24	ug/L		10/21/24 08:05	10/24/24 04:44	1
Iron	79	J B	100	9.1	ug/L		10/21/24 08:05	10/24/24 04:44	1
Magnesium	12000	B	200	4.2	ug/L		10/21/24 08:05	10/24/24 04:44	1
Manganese	16		10	0.45	ug/L		10/21/24 08:05	10/24/24 04:44	1
Sodium	12000	B	1000	97	ug/L		10/21/24 08:05	10/24/24 04:44	1

Client Sample ID: S-2
Date Collected: 10/17/24 08:40
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198296-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	31000	B	200	24	ug/L		10/21/24 08:05	10/24/24 04:48	1
Iron	60	J B	100	9.1	ug/L		10/21/24 08:05	10/24/24 04:48	1
Magnesium	12000	B	200	4.2	ug/L		10/21/24 08:05	10/24/24 04:48	1
Manganese	15		10	0.45	ug/L		10/21/24 08:05	10/24/24 04:48	1
Sodium	13000	B	1000	97	ug/L		10/21/24 08:05	10/24/24 04:48	1

Client Sample ID: S-4
Date Collected: 10/17/24 09:05
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198296-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	31000	B	200	24	ug/L		10/21/24 08:05	10/24/24 04:52	1
Iron	31	J B	100	9.1	ug/L		10/21/24 08:05	10/24/24 04:52	1
Magnesium	12000	B	200	4.2	ug/L		10/21/24 08:05	10/24/24 04:52	1
Manganese	11		10	0.45	ug/L		10/21/24 08:05	10/24/24 04:52	1
Sodium	12000	B	1000	97	ug/L		10/21/24 08:05	10/24/24 04:52	1

General Chemistry

Client Sample ID: S-1
Date Collected: 10/17/24 08:25
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198296-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	17		3.0	1.0	mg/L			10/30/24 23:28	1
Nitrogen, Kjeldahl (EPA 351.2)	ND		1.0	0.69	mg/L		10/24/24 15:40	10/26/24 13:53	1
ortho-Phosphate (EPA 365.1)	0.045	J	0.050	0.018	mg/L			10/18/24 14:22	1
Phosphorus, Total (EPA 365.1)	0.028	J	0.050	0.025	mg/L		10/21/24 14:36	10/22/24 11:06	1
Biochemical Oxygen Demand (SM5210B)	1.2	J	5.0	0.59	mg/L			10/18/24 12:46	1

Client Sample ID: S-2
Date Collected: 10/17/24 08:40
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198296-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	19		3.0	1.0	mg/L			10/31/24 00:12	1
Nitrogen, Kjeldahl (EPA 351.2)	ND		1.0	0.69	mg/L		10/24/24 15:40	10/26/24 13:55	1
ortho-Phosphate (EPA 365.1)	0.043	J	0.050	0.018	mg/L			10/18/24 14:22	1
Phosphorus, Total (EPA 365.1)	0.033	J	0.050	0.025	mg/L		10/21/24 14:36	10/22/24 12:20	1
Biochemical Oxygen Demand (SM5210B)	1.8	J	5.0	0.59	mg/L			10/18/24 12:46	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198296-1

General Chemistry

Client Sample ID: S-4					Lab Sample ID: 280-198296-3				
Date Collected: 10/17/24 09:05					Matrix: Water				
Date Received: 10/18/24 09:05									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	17		3.0	1.0	mg/L			10/31/24 00:23	1
Nitrogen, Kjeldahl (EPA 351.2)	ND		1.0	0.69	mg/L		10/24/24 15:40	10/26/24 13:55	1
ortho-Phosphate (EPA 365.1)	0.043	J	0.050	0.018	mg/L			10/18/24 14:22	1
Phosphorus, Total (EPA 365.1)	0.032	J	0.050	0.025	mg/L		10/21/24 14:37	10/22/24 12:21	1
Biochemical Oxygen Demand (SM5210B)	2.8	J	5.0	0.59	mg/L			10/18/24 14:34	1

QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198296-1

Method: 6010B - Dissolved Metals

Lab Sample ID: MB 280-671657/1-A

Matrix: Water

Analysis Batch: 672293

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 671657

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	77.1	J	200	24	ug/L		10/21/24 08:05	10/24/24 03:57	1
Iron	9.80	J	100	9.1	ug/L		10/21/24 08:05	10/24/24 03:57	1
Magnesium	10.1	J	200	4.2	ug/L		10/21/24 08:05	10/24/24 03:57	1
Manganese	ND		10	0.45	ug/L		10/21/24 08:05	10/24/24 03:57	1
Sodium	599	J	1000	97	ug/L		10/21/24 08:05	10/24/24 03:57	1

Lab Sample ID: LCS 280-671657/2-A

Matrix: Water

Analysis Batch: 672293

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 671657

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	50000	54800		ug/L		110	90 - 111
Iron	10000	10700		ug/L		107	89 - 115
Magnesium	50000	52500		ug/L		105	90 - 113
Manganese	1000	946		ug/L		95	90 - 110
Sodium	50000	50200		ug/L		100	90 - 115

Lab Sample ID: 280-198313-D-11-B MS

Matrix: Water

Analysis Batch: 672293

Client Sample ID: Matrix Spike

Prep Type: Dissolved

Prep Batch: 671657

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	130000	B	50000	181000		ug/L		109	48 - 153
Iron	610	B	10000	11300		ug/L		106	52 - 155
Magnesium	56000	B	50000	111000		ug/L		109	62 - 146
Manganese	950		1000	1880		ug/L		93	79 - 121
Sodium	27000	B	50000	80800		ug/L		107	70 - 203

Lab Sample ID: 280-198313-D-11-C MSD

Matrix: Water

Analysis Batch: 672293

Client Sample ID: Matrix Spike Duplicate

Prep Type: Dissolved

Prep Batch: 671657

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Calcium	130000	B	50000	180000		ug/L		107	48 - 153	1	20
Iron	610	B	10000	11200		ug/L		106	52 - 155	1	20
Magnesium	56000	B	50000	110000		ug/L		107	62 - 146	1	20
Manganese	950		1000	1870		ug/L		92	79 - 121	0	20
Sodium	27000	B	50000	80100		ug/L		106	70 - 203	1	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 280-672999/6

Matrix: Water

Analysis Batch: 672999

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0	1.0	mg/L			10/30/24 16:24	1

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198296-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 280-672999/4

Matrix: Water

Analysis Batch: 672999

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	100	98.7		mg/L		99	90 - 110

Lab Sample ID: LCSD 280-672999/5

Matrix: Water

Analysis Batch: 672999

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	100	98.9		mg/L		99	90 - 110	0	10

Lab Sample ID: MRL 280-672999/3

Matrix: Water

Analysis Batch: 672999

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	5.00	4.93		mg/L		99	50 - 150

Lab Sample ID: 280-198296-1 MS

Matrix: Water

Analysis Batch: 672999

Client Sample ID: S-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	17		50.0	68.0		mg/L		101	80 - 120

Lab Sample ID: 280-198296-1 MSD

Matrix: Water

Analysis Batch: 672999

Client Sample ID: S-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	17		50.0	68.3		mg/L		102	80 - 120	0	20

Lab Sample ID: 280-198296-1 DU

Matrix: Water

Analysis Batch: 672999

Client Sample ID: S-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	17		17.2		mg/L		2	15

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 280-672368/3-A

Matrix: Water

Analysis Batch: 672602

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 672368

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Kjeldahl	ND		1.0	0.69	mg/L		10/24/24 15:40	10/26/24 13:53	1

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198296-1

Method: 351.2 - Nitrogen, Total Kjeldahl (Continued)

Lab Sample ID: LCS 280-672368/1-A
Matrix: Water
Analysis Batch: 672602

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 672368

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrogen, Kjeldahl	6.00	6.31		mg/L		105	90 - 110

Lab Sample ID: LCSD 280-672368/2-A
Matrix: Water
Analysis Batch: 672602

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 672368

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrogen, Kjeldahl	6.00	6.34		mg/L		106	90 - 110	0	25

Lab Sample ID: 280-198296-1 MS
Matrix: Water
Analysis Batch: 672602

Client Sample ID: S-1
Prep Type: Total/NA
Prep Batch: 672368

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrogen, Kjeldahl	ND		3.00	3.23		mg/L		108	90 - 110

Lab Sample ID: 280-198296-1 MSD
Matrix: Water
Analysis Batch: 672602

Client Sample ID: S-1
Prep Type: Total/NA
Prep Batch: 672368

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrogen, Kjeldahl	ND		3.00	3.25		mg/L		108	90 - 110	1	25

Method: 365.1 - Phosphorus, Ortho

Lab Sample ID: MB 280-671636/12
Matrix: Water
Analysis Batch: 671636

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ortho-Phosphate	ND		0.050	0.018	mg/L			10/18/24 14:22	1

Lab Sample ID: LCS 280-671636/10
Matrix: Water
Analysis Batch: 671636

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
ortho-Phosphate	0.500	0.502		mg/L		100	90 - 110

Lab Sample ID: LCSD 280-671636/11
Matrix: Water
Analysis Batch: 671636

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
ortho-Phosphate	0.500	0.505		mg/L		101	90 - 110	1	10

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198296-1

Method: 365.1 - Phosphorus, Ortho (Continued)

Lab Sample ID: 280-198296-1 MS

Matrix: Water

Analysis Batch: 671636

Client Sample ID: S-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
ortho-Phosphate	0.045	J	0.500	0.569		mg/L		105	90 - 110

Lab Sample ID: 280-198296-1 MSD

Matrix: Water

Analysis Batch: 671636

Client Sample ID: S-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
ortho-Phosphate	0.045	J	0.500	0.568		mg/L		104	90 - 110	0	10

Method: 365.1 - Phosphorus, Total

Lab Sample ID: MB 280-671859/5-A

Matrix: Water

Analysis Batch: 671991

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 671859

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phosphorus, Total	ND		0.050	0.025	mg/L		10/21/24 14:35	10/22/24 11:04	1

Lab Sample ID: LCS 280-671859/3-A

Matrix: Water

Analysis Batch: 671991

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 671859

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Phosphorus, Total	0.500	0.525		mg/L		105	90 - 110

Lab Sample ID: LCSD 280-671859/4-A

Matrix: Water

Analysis Batch: 671991

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 671859

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Phosphorus, Total	0.500	0.513		mg/L		103	90 - 110	2	10

Lab Sample ID: 280-198296-2 MS

Matrix: Water

Analysis Batch: 671991

Client Sample ID: S-2

Prep Type: Total/NA

Prep Batch: 671859

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Phosphorus, Total	0.033	J	0.500	0.567		mg/L		107	90 - 110

Lab Sample ID: 280-198296-2 MSD

Matrix: Water

Analysis Batch: 671991

Client Sample ID: S-2

Prep Type: Total/NA

Prep Batch: 671859

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Phosphorus, Total	0.033	J	0.500	0.556		mg/L		105	90 - 110	2	10

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198296-1

Method: SM5210B - BOD, 5 Day

Lab Sample ID: MB 280-671520/27

Matrix: Water

Analysis Batch: 671520

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		2.0	0.24	mg/L			10/18/24 12:46	1

Lab Sample ID: MB 280-671520/4

Matrix: Water

Analysis Batch: 671520

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		2.0	0.24	mg/L			10/18/24 07:52	1

Lab Sample ID: SCB 280-671520/1

Matrix: Water

Analysis Batch: 671520

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	SCB Result	SCB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	0.904	J	2.0	0.24	mg/L			10/18/24 07:52	1

Lab Sample ID: USB 280-671520/2

Matrix: Water

Analysis Batch: 671520

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		2.0	0.24	mg/L			10/18/24 07:52	1

Lab Sample ID: LCS 280-671520/26

Matrix: Water

Analysis Batch: 671520

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Biochemical Oxygen Demand	198	185		mg/L		94	85 - 115

Lab Sample ID: 280-198296-1 DU

Matrix: Water

Analysis Batch: 671520

Client Sample ID: S-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Biochemical Oxygen Demand	1.2	J	1.19	J	mg/L		2	20

QC Association Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198296-1

Metals

Prep Batch: 671657

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198296-1	S-1	Dissolved	Water	3005A	
280-198296-2	S-2	Dissolved	Water	3005A	
280-198296-3	S-4	Dissolved	Water	3005A	
MB 280-671657/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-671657/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-198313-D-11-B MS	Matrix Spike	Dissolved	Water	3005A	
280-198313-D-11-C MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	

Analysis Batch: 672293

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198296-1	S-1	Dissolved	Water	6010B	671657
280-198296-2	S-2	Dissolved	Water	6010B	671657
280-198296-3	S-4	Dissolved	Water	6010B	671657
MB 280-671657/1-A	Method Blank	Total Recoverable	Water	6010B	671657
LCS 280-671657/2-A	Lab Control Sample	Total Recoverable	Water	6010B	671657
280-198313-D-11-B MS	Matrix Spike	Dissolved	Water	6010B	671657
280-198313-D-11-C MSD	Matrix Spike Duplicate	Dissolved	Water	6010B	671657

General Chemistry

Analysis Batch: 671520

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198296-1	S-1	Total/NA	Water	SM5210B	
280-198296-2	S-2	Total/NA	Water	SM5210B	
280-198296-3	S-4	Total/NA	Water	SM5210B	
MB 280-671520/27	Method Blank	Total/NA	Water	SM5210B	
MB 280-671520/4	Method Blank	Total/NA	Water	SM5210B	
SCB 280-671520/1	Method Blank	Total/NA	Water	SM5210B	
USB 280-671520/2	Method Blank	Total/NA	Water	SM5210B	
LCS 280-671520/26	Lab Control Sample	Total/NA	Water	SM5210B	
280-198296-1 DU	S-1	Total/NA	Water	SM5210B	

Analysis Batch: 671636

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198296-1	S-1	Total/NA	Water	365.1	
280-198296-2	S-2	Total/NA	Water	365.1	
280-198296-3	S-4	Total/NA	Water	365.1	
MB 280-671636/12	Method Blank	Total/NA	Water	365.1	
LCS 280-671636/10	Lab Control Sample	Total/NA	Water	365.1	
LCSD 280-671636/11	Lab Control Sample Dup	Total/NA	Water	365.1	
280-198296-1 MS	S-1	Total/NA	Water	365.1	
280-198296-1 MSD	S-1	Total/NA	Water	365.1	

Prep Batch: 671859

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198296-1	S-1	Total/NA	Water	365.2/365.3/365	
280-198296-2	S-2	Total/NA	Water	365.2/365.3/365	
280-198296-3	S-4	Total/NA	Water	365.2/365.3/365	
MB 280-671859/5-A	Method Blank	Total/NA	Water	365.2/365.3/365	
LCS 280-671859/3-A	Lab Control Sample	Total/NA	Water	365.2/365.3/365	
LCSD 280-671859/4-A	Lab Control Sample Dup	Total/NA	Water	365.2/365.3/365	

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QC Association Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198296-1

General Chemistry (Continued)

Prep Batch: 671859 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198296-2 MS	S-2	Total/NA	Water	365.2/365.3/365	
280-198296-2 MSD	S-2	Total/NA	Water	365.2/365.3/365	

Analysis Batch: 671991

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198296-1	S-1	Total/NA	Water	365.1	671859
280-198296-2	S-2	Total/NA	Water	365.1	671859
280-198296-3	S-4	Total/NA	Water	365.1	671859
MB 280-671859/5-A	Method Blank	Total/NA	Water	365.1	671859
LCS 280-671859/3-A	Lab Control Sample	Total/NA	Water	365.1	671859
LCSD 280-671859/4-A	Lab Control Sample Dup	Total/NA	Water	365.1	671859
280-198296-2 MS	S-2	Total/NA	Water	365.1	671859
280-198296-2 MSD	S-2	Total/NA	Water	365.1	671859

Prep Batch: 672368

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198296-1	S-1	Total/NA	Water	351.2	
280-198296-2	S-2	Total/NA	Water	351.2	
280-198296-3	S-4	Total/NA	Water	351.2	
MB 280-672368/3-A	Method Blank	Total/NA	Water	351.2	
LCS 280-672368/1-A	Lab Control Sample	Total/NA	Water	351.2	
LCSD 280-672368/2-A	Lab Control Sample Dup	Total/NA	Water	351.2	
280-198296-1 MS	S-1	Total/NA	Water	351.2	
280-198296-1 MSD	S-1	Total/NA	Water	351.2	

Analysis Batch: 672602

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198296-1	S-1	Total/NA	Water	351.2	672368
280-198296-2	S-2	Total/NA	Water	351.2	672368
280-198296-3	S-4	Total/NA	Water	351.2	672368
MB 280-672368/3-A	Method Blank	Total/NA	Water	351.2	672368
LCS 280-672368/1-A	Lab Control Sample	Total/NA	Water	351.2	672368
LCSD 280-672368/2-A	Lab Control Sample Dup	Total/NA	Water	351.2	672368
280-198296-1 MS	S-1	Total/NA	Water	351.2	672368
280-198296-1 MSD	S-1	Total/NA	Water	351.2	672368

Analysis Batch: 672999

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198296-1	S-1	Total/NA	Water	300.0	
280-198296-2	S-2	Total/NA	Water	300.0	
280-198296-3	S-4	Total/NA	Water	300.0	
MB 280-672999/6	Method Blank	Total/NA	Water	300.0	
LCS 280-672999/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 280-672999/5	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 280-672999/3	Lab Control Sample	Total/NA	Water	300.0	
280-198296-1 MS	S-1	Total/NA	Water	300.0	
280-198296-1 MSD	S-1	Total/NA	Water	300.0	
280-198296-1 DU	S-1	Total/NA	Water	300.0	

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Lab Chronicle

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198296-1

Client Sample ID: S-1

Lab Sample ID: 280-198296-1

Date Collected: 10/17/24 08:25

Matrix: Water

Date Received: 10/18/24 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			50 mL	50 mL	671657	10/21/24 08:05	SMK	EET DEN
Dissolved	Analysis	6010B		1			672293	10/24/24 04:44	ADL	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	672999	10/30/24 23:28	IRC	EET DEN
Total/NA	Prep	351.2			25 mL	25 mL	672368	10/24/24 15:40	CLP	EET DEN
Total/NA	Analysis	351.2		1			672602	10/26/24 13:53	CLP	EET DEN
Total/NA	Analysis	365.1		1	2 mL	2 mL	671636	10/18/24 14:22	CLP	EET DEN
Total/NA	Prep	365.2/365.3/365			50 mL	50 mL	671859	10/21/24 14:36	ABW	EET DEN
Total/NA	Analysis	365.1		1	2 mL	2 mL	671991	10/22/24 11:06	ABW	EET DEN
Total/NA	Analysis	SM5210B		1	120 mL	300 mL	671520	10/18/24 12:46	MF	EET DEN

Client Sample ID: S-2

Lab Sample ID: 280-198296-2

Date Collected: 10/17/24 08:40

Matrix: Water

Date Received: 10/18/24 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			50 mL	50 mL	671657	10/21/24 08:05	SMK	EET DEN
Dissolved	Analysis	6010B		1			672293	10/24/24 04:48	ADL	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	672999	10/31/24 00:12	IRC	EET DEN
Total/NA	Prep	351.2			25 mL	25 mL	672368	10/24/24 15:40	CLP	EET DEN
Total/NA	Analysis	351.2		1			672602	10/26/24 13:55	CLP	EET DEN
Total/NA	Analysis	365.1		1	2 mL	2 mL	671636	10/18/24 14:22	CLP	EET DEN
Total/NA	Prep	365.2/365.3/365			50 mL	50 mL	671859	10/21/24 14:36	ABW	EET DEN
Total/NA	Analysis	365.1		1	2 mL	2 mL	671991	10/22/24 12:20	ABW	EET DEN
Total/NA	Analysis	SM5210B		1	120 mL	300 mL	671520	10/18/24 12:46	MF	EET DEN

Client Sample ID: S-4

Lab Sample ID: 280-198296-3

Date Collected: 10/17/24 09:05

Matrix: Water

Date Received: 10/18/24 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			50 mL	50 mL	671657	10/21/24 08:05	SMK	EET DEN
Dissolved	Analysis	6010B		1			672293	10/24/24 04:52	ADL	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	672999	10/31/24 00:23	IRC	EET DEN
Total/NA	Prep	351.2			25 mL	25 mL	672368	10/24/24 15:40	CLP	EET DEN
Total/NA	Analysis	351.2		1			672602	10/26/24 13:55	CLP	EET DEN
Total/NA	Analysis	365.1		1	2 mL	2 mL	671636	10/18/24 14:22	CLP	EET DEN
Total/NA	Prep	365.2/365.3/365			50 mL	50 mL	671859	10/21/24 14:37	ABW	EET DEN
Total/NA	Analysis	365.1		1	2 mL	2 mL	671991	10/22/24 12:21	ABW	EET DEN
Total/NA	Analysis	SM5210B		1	120 mL	300 mL	671520	10/18/24 14:34	MF	EET DEN

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Eurofins Denver

Environment Testing
TestAmerica

[illegible]

Login Sample Receipt Checklist

Client: Geo-Logic Associates

Job Number: 280-198296-1

Login Number: 198296

List Source: Eurofins Denver

List Number: 1

Creator: Roehsner, Karen P

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

ANALYTICAL REPORT

PREPARED FOR

Attn: Aaron Ogorzalek
Geo-Logic Associates
2777 East Guasti Road
Suite 1
Ontario, California 91761

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JOB DESCRIPTION

Valley LF - Republic Serv Coffin Butte

JOB NUMBER

280-198313-1

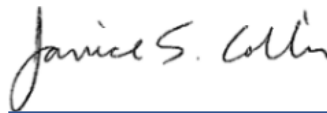
Eurofins Denver

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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Authorization



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Definitions/Glossary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Qualifiers

GC/MS VOA

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

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Case Narrative

Client: Geo-Logic Associates
Project: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Job ID: 280-198313-1

Eurofins Denver

Job Narrative 280-198313-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 10/17/2024 11:20 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 0.5°C, 1.1°C, 2.8°C and 5.0°C.

GC/MS VOA

Method 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 280-672423. The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch. 280-198313-1, 280-198313-2, 280-198313-3, 280-198313-4, 280-198313-5, 280-198313-6, 280-198313-7, 280-198313-8, 280-198313-9, 280-198313-10, 280-198313-11, 280-198313-12, 280-198313-13, 280-198313-14 and 280-198313-15

Method 8260B: The method blank associated with analytical batch 280-672423 contained Acetone greater than one-half the reporting limit (RL). The samples were not re-analyzed because this compound was not detected in the associated samples. The sample results have been qualified and reported. MB 280-672423/9

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

Metals

Method 200.8: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 280-671764 and analytical batch 280-672075 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference, high targets and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 6010B - Dissolved: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 280-671657 and analytical batch 280-673929 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

General Chemistry

Method 2540D: The sample duplicate (DUP) precision for analytical batch 280-671839 was outside control limits. Sample non-homogeneity is suspected.

Method 300.0_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 280-672673 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits. The associated samples are: 280-198289-B-1, 280-198289-B-1 MS and 280-198289-B-1 MSD.

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

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Detection Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Client Sample ID: MW-8s

Lab Sample ID: 280-198313-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	2.0	J	3.0	0.83	ug/L	1		200.8	Total/NA
Barium	1.1	J	3.0	0.38	ug/L	1		200.8	Total/NA
Chromium	1.1	J	3.0	0.50	ug/L	1		200.8	Total/NA
Copper	1.7	J	2.0	0.71	ug/L	1		200.8	Total/NA
Vanadium	48		5.0	1.1	ug/L	1		200.8	Total/NA
Chloride	25		3.0	1.0	mg/L	1		300.0	Total/NA
Sulfate	9.7		5.0	1.0	mg/L	1		300.0	Total/NA
Nitrate Nitrite as N	0.70		0.10	0.044	mg/L	1		353.2	Total/NA
Bicarbonate Alkalinity as CaCO3	140		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	230		10	4.7	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	4.0		4.0	1.1	mg/L	1		SM 2540D	Total/NA
TOC Result 1	0.50	J	1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 2	0.45	J	1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 3	0.41	J	1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 4	0.42	J	1.0	0.35	mg/L	1		SM 5310B	Total/NA
Total Organic Carbon - Quad	0.45	J	1.0	0.35	mg/L	1		SM 5310B	Total/NA

Client Sample ID: MW-9s

Lab Sample ID: 280-198313-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	27		5.0	0.50	ug/L	1		200.8	Total/NA
Nickel	0.95	J	3.0	0.83	ug/L	1		200.8	Total/NA
Barium	91		3.0	0.38	ug/L	1		200.8	Total/NA
Chloride	190		3.0	1.0	mg/L	1		300.0	Total/NA
Sulfate	2.1	J	5.0	1.0	mg/L	1		300.0	Total/NA
Ammonia	1.1		0.10	0.029	mg/L	1		350.1	Total/NA
Chemical Oxygen Demand	15	J	20	8.7	mg/L	1		410.4	Total/NA
Bicarbonate Alkalinity as CaCO3	310		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	710		20	9.4	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	11		4.0	1.1	mg/L	1		SM 2540D	Total/NA
TOC Result 1	2.3		1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 2	2.3		1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 3	2.3		1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 4	2.3		1.0	0.35	mg/L	1		SM 5310B	Total/NA
Total Organic Carbon - Quad	2.3		1.0	0.35	mg/L	1		SM 5310B	Total/NA

Client Sample ID: MW-10s

Lab Sample ID: 280-198313-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.30	J	1.0	0.22	ug/L	1		8260B	Total/NA
Nickel	21		3.0	0.83	ug/L	1		200.8	Total/NA
Barium	11		3.0	0.38	ug/L	1		200.8	Total/NA
Chromium	2.6	J	3.0	0.50	ug/L	1		200.8	Total/NA
Cobalt	1.3		1.0	0.33	ug/L	1		200.8	Total/NA
Vanadium	49		5.0	1.1	ug/L	1		200.8	Total/NA
Chloride	580		30	10	mg/L	10		300.0	Total/NA
Sulfate	44		5.0	1.0	mg/L	1		300.0	Total/NA
Ammonia	0.033	J	0.10	0.029	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	0.86		0.10	0.044	mg/L	1		353.2	Total/NA
Chemical Oxygen Demand	26		20	8.7	mg/L	1		410.4	Total/NA
Bicarbonate Alkalinity as CaCO3	580		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	1600		20	9.4	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Denver

Detection Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Client Sample ID: MW-10s (Continued)

Lab Sample ID: 280-198313-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Solids	2.0	J	4.0	1.1	mg/L	1		SM 2540D	Total/NA
TOC Result 1	3.6		1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 2	3.4		1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 3	3.4		1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 4	3.5		1.0	0.35	mg/L	1		SM 5310B	Total/NA
Total Organic Carbon - Quad	3.5		1.0	0.35	mg/L	1		SM 5310B	Total/NA

Client Sample ID: MW-10D

Lab Sample ID: 280-198313-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.26	J	1.0	0.22	ug/L	1		8260B	Total/NA
Nickel	11		3.0	0.83	ug/L	1		200.8	Total/NA
Barium	8.3		3.0	0.38	ug/L	1		200.8	Total/NA
Cobalt	0.60	J	1.0	0.33	ug/L	1		200.8	Total/NA
Copper	0.73	J	2.0	0.71	ug/L	1		200.8	Total/NA
Vanadium	16		5.0	1.1	ug/L	1		200.8	Total/NA
Chloride	85		3.0	1.0	mg/L	1		300.0	Total/NA
Sulfate	22		5.0	1.0	mg/L	1		300.0	Total/NA
Nitrate Nitrite as N	3.0		0.10	0.044	mg/L	1		353.2	Total/NA
Chemical Oxygen Demand	12	J	20	8.7	mg/L	1		410.4	Total/NA
Bicarbonate Alkalinity as CaCO3	350		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	540		10	4.7	mg/L	1		SM 2540C	Total/NA
TOC Result 1	1.9		1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 2	1.8		1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 3	1.8		1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 4	1.8		1.0	0.35	mg/L	1		SM 5310B	Total/NA
Total Organic Carbon - Quad	1.9		1.0	0.35	mg/L	1		SM 5310B	Total/NA

Client Sample ID: MW-11s

Lab Sample ID: 280-198313-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	4.5		3.0	0.83	ug/L	1		200.8	Total/NA
Barium	8.5		3.0	0.38	ug/L	1		200.8	Total/NA
Cobalt	0.56	J	1.0	0.33	ug/L	1		200.8	Total/NA
Copper	2.6		2.0	0.71	ug/L	1		200.8	Total/NA
Vanadium	43		5.0	1.1	ug/L	1		200.8	Total/NA
Zinc	2.8	J	10	2.0	ug/L	1		200.8	Total/NA
Chloride	49		3.0	1.0	mg/L	1		300.0	Total/NA
Sulfate	43		5.0	1.0	mg/L	1		300.0	Total/NA
Nitrate Nitrite as N	0.13		0.10	0.044	mg/L	1		353.2	Total/NA
Chemical Oxygen Demand	18	J	20	8.7	mg/L	1		410.4	Total/NA
Bicarbonate Alkalinity as CaCO3	750		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	880		20	9.4	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	3.6	J	4.0	1.1	mg/L	1		SM 2540D	Total/NA
TOC Result 1	3.4		1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 2	3.3		1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 3	3.1		1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 4	3.1		1.0	0.35	mg/L	1		SM 5310B	Total/NA
Total Organic Carbon - Quad	3.2		1.0	0.35	mg/L	1		SM 5310B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Denver

Detection Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Client Sample ID: MW-11D

Lab Sample ID: 280-198313-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Nickel	9.6		3.0	0.83	ug/L	1			200.8	Total/NA
Barium	6.4		3.0	0.38	ug/L	1			200.8	Total/NA
Cobalt	1.1		1.0	0.33	ug/L	1			200.8	Total/NA
Vanadium	46		5.0	1.1	ug/L	1			200.8	Total/NA
Chloride	100		3.0	1.0	mg/L	1			300.0	Total/NA
Sulfate	77		5.0	1.0	mg/L	1			300.0	Total/NA
Chemical Oxygen Demand	16	J	20	8.7	mg/L	1			410.4	Total/NA
Bicarbonate Alkalinity as CaCO3	830		10	3.1	mg/L	1			SM 2320B	Total/NA
Total Dissolved Solids	1100		20	9.4	mg/L	1			SM 2540C	Total/NA
Total Suspended Solids	1.2	J	4.0	1.1	mg/L	1			SM 2540D	Total/NA
TOC Result 1	3.2		1.0	0.35	mg/L	1			SM 5310B	Total/NA
TOC Result 2	3.2		1.0	0.35	mg/L	1			SM 5310B	Total/NA
TOC Result 3	3.3		1.0	0.35	mg/L	1			SM 5310B	Total/NA
TOC Result 4	3.2		1.0	0.35	mg/L	1			SM 5310B	Total/NA
Total Organic Carbon - Quad	3.2		1.0	0.35	mg/L	1			SM 5310B	Total/NA

Client Sample ID: MW-17

Lab Sample ID: 280-198313-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Nickel	1.4	J	3.0	0.83	ug/L	1			200.8	Total/NA
Barium	0.75	J	3.0	0.38	ug/L	1			200.8	Total/NA
Chromium	4.1		3.0	0.50	ug/L	1			200.8	Total/NA
Vanadium	56		5.0	1.1	ug/L	1			200.8	Total/NA
Chloride	8.3		3.0	1.0	mg/L	1			300.0	Total/NA
Sulfate	7.3		5.0	1.0	mg/L	1			300.0	Total/NA
Ammonia	0.037	J	0.10	0.029	mg/L	1			350.1	Total/NA
Nitrate Nitrite as N	3.1		0.50	0.22	mg/L	5			353.2	Total/NA
Chemical Oxygen Demand	11	J	20	8.7	mg/L	1			410.4	Total/NA
Bicarbonate Alkalinity as CaCO3	85		10	3.1	mg/L	1			SM 2320B	Total/NA
Total Dissolved Solids	250		10	4.7	mg/L	1			SM 2540C	Total/NA
Total Suspended Solids	4.0		4.0	1.1	mg/L	1			SM 2540D	Total/NA
TOC Result 4	0.35	J	1.0	0.35	mg/L	1			SM 5310B	Total/NA

Client Sample ID: MW-18

Lab Sample ID: 280-198313-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Barium	0.43	J	3.0	0.38	ug/L	1			200.8	Total/NA
Chromium	1.1	J	3.0	0.50	ug/L	1			200.8	Total/NA
Vanadium	13		5.0	1.1	ug/L	1			200.8	Total/NA
Chloride	3.1		3.0	1.0	mg/L	1			300.0	Total/NA
Sulfate	7.1		5.0	1.0	mg/L	1			300.0	Total/NA
Nitrate Nitrite as N	15		0.50	0.22	mg/L	5			353.2	Total/NA
Bicarbonate Alkalinity as CaCO3	79		10	3.1	mg/L	1			SM 2320B	Total/NA
Total Dissolved Solids	200		10	4.7	mg/L	1			SM 2540C	Total/NA

Client Sample ID: MW-19

Lab Sample ID: 280-198313-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
1,1-Dichloroethane	1.1		1.0	0.22	ug/L	1			8260B	Total/NA
cis-1,2-Dichloroethene	0.78	J	1.0	0.32	ug/L	1			8260B	Total/NA
Dichlorodifluoromethane	2.5		2.0	0.30	ug/L	1			8260B	Total/NA
Tetrachloroethene	0.78	J	1.0	0.40	ug/L	1			8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Denver

Detection Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Client Sample ID: MW-19 (Continued)

Lab Sample ID: 280-198313-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	1.2		1.0	0.30	ug/L	1		8260B	Total/NA
Barium	0.65	J	3.0	0.38	ug/L	1		200.8	Total/NA
Chromium	0.88	J	3.0	0.50	ug/L	1		200.8	Total/NA
Cobalt	0.92	J	1.0	0.33	ug/L	1		200.8	Total/NA
Vanadium	25		5.0	1.1	ug/L	1		200.8	Total/NA
Chloride	270		15	5.1	mg/L	5		300.0	Total/NA
Sulfate	30		5.0	1.0	mg/L	1		300.0	Total/NA
Nitrate Nitrite as N	0.23		0.10	0.044	mg/L	1		353.2	Total/NA
Chemical Oxygen Demand	11	J	20	8.7	mg/L	1		410.4	Total/NA
Bicarbonate Alkalinity as CaCO3	37		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	550		10	4.7	mg/L	1		SM 2540C	Total/NA
TOC Result 1	1.2		1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 2	1.2		1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 3	1.2		1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 4	1.2		1.0	0.35	mg/L	1		SM 5310B	Total/NA
Total Organic Carbon - Quad	1.2		1.0	0.35	mg/L	1		SM 5310B	Total/NA

Client Sample ID: MW-20

Lab Sample ID: 280-198313-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	0.96	J	3.0	0.83	ug/L	1		200.8	Total/NA
Barium	4.1		3.0	0.38	ug/L	1		200.8	Total/NA
Cobalt	0.35	J	1.0	0.33	ug/L	1		200.8	Total/NA
Copper	0.73	J	2.0	0.71	ug/L	1		200.8	Total/NA
Vanadium	12		5.0	1.1	ug/L	1		200.8	Total/NA
Chloride	120		3.0	1.0	mg/L	1		300.0	Total/NA
Sulfate	150		5.0	1.0	mg/L	1		300.0	Total/NA
Ammonia	0.086	J	0.10	0.029	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	0.096	J	0.10	0.044	mg/L	1		353.2	Total/NA
Chemical Oxygen Demand	13	J	20	8.7	mg/L	1		410.4	Total/NA
Bicarbonate Alkalinity as CaCO3	120		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	520		10	4.7	mg/L	1		SM 2540C	Total/NA
TOC Result 1	1.1		1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 2	1.1		1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 3	1.1		1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 4	1.1		1.0	0.35	mg/L	1		SM 5310B	Total/NA
Total Organic Carbon - Quad	1.1		1.0	0.35	mg/L	1		SM 5310B	Total/NA

Client Sample ID: MW-21

Lab Sample ID: 280-198313-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.42	J	2.0	0.40	ug/L	1		200.8	Total/NA
Lead	0.45	J	1.0	0.23	ug/L	1		200.8	Total/NA
Nickel	17		3.0	0.83	ug/L	1		200.8	Total/NA
Barium	12		3.0	0.38	ug/L	1		200.8	Total/NA
Chromium	4.7		3.0	0.50	ug/L	1		200.8	Total/NA
Cobalt	13		1.0	0.33	ug/L	1		200.8	Total/NA
Copper	41		2.0	0.71	ug/L	1		200.8	Total/NA
Silver	0.19	J	1.0	0.045	ug/L	1		200.8	Total/NA
Vanadium	15		5.0	1.1	ug/L	1		200.8	Total/NA
Zinc	17		10	2.0	ug/L	1		200.8	Total/NA
Calcium	120000		200	24	ug/L	1		6010B	Dissolved

This Detection Summary does not include radiochemical test results.

Eurofins Denver

Detection Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Client Sample ID: MW-21 (Continued)

Lab Sample ID: 280-198313-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	600		100	9.1	ug/L	1		6010B	Dissolved
Magnesium	56000		200	4.2	ug/L	1		6010B	Dissolved
Manganese	990		10	0.45	ug/L	1		6010B	Dissolved
Potassium	770	J	3000	240	ug/L	1		6010B	Dissolved
Silicon	18000	F1	500	16	ug/L	1		6010B	Dissolved
Sodium	27000		1000	97	ug/L	1		6010B	Dissolved
Chloride	76		3.0	1.0	mg/L	1		300.0	Total/NA
Sulfate	2.7	J	5.0	1.0	mg/L	1		300.0	Total/NA
Ammonia	1.4		0.10	0.029	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	0.26		0.10	0.044	mg/L	1		353.2	Total/NA
Chemical Oxygen Demand	30		20	8.7	mg/L	1		410.4	Total/NA
Bicarbonate Alkalinity as CaCO3	420		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	550		10	4.7	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	330		6.3	1.7	mg/L	1		SM 2540D	Total/NA
TOC Result 1	6.7		1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 2	6.9		1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 3	6.8		1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 4	6.8		1.0	0.35	mg/L	1		SM 5310B	Total/NA
Total Organic Carbon - Quad	6.8		1.0	0.35	mg/L	1		SM 5310B	Total/NA

Client Sample ID: Duplicate 1

Lab Sample ID: 280-198313-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	0.92	J	3.0	0.50	ug/L	1		200.8	Total/NA
Vanadium	13		5.0	1.1	ug/L	1		200.8	Total/NA
Chloride	3.0		3.0	1.0	mg/L	1		300.0	Total/NA
Sulfate	6.3		5.0	1.0	mg/L	1		300.0	Total/NA
Ammonia	0.14		0.10	0.029	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	15		1.0	0.44	mg/L	10		353.2	Total/NA
Chemical Oxygen Demand	11	J	20	8.7	mg/L	1		410.4	Total/NA
Bicarbonate Alkalinity as CaCO3	70		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	200		10	4.7	mg/L	1		SM 2540C	Total/NA

Client Sample ID: Duplicate 2

Lab Sample ID: 280-198313-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.44	J	1.0	0.23	ug/L	1		200.8	Total/NA
Nickel	17		3.0	0.83	ug/L	1		200.8	Total/NA
Barium	12		3.0	0.38	ug/L	1		200.8	Total/NA
Chromium	4.8		3.0	0.50	ug/L	1		200.8	Total/NA
Cobalt	13		1.0	0.33	ug/L	1		200.8	Total/NA
Copper	40		2.0	0.71	ug/L	1		200.8	Total/NA
Silver	0.18	J	1.0	0.045	ug/L	1		200.8	Total/NA
Vanadium	15		5.0	1.1	ug/L	1		200.8	Total/NA
Zinc	16		10	2.0	ug/L	1		200.8	Total/NA
Calcium	120000		200	24	ug/L	1		6010B	Dissolved
Iron	450		100	9.1	ug/L	1		6010B	Dissolved
Magnesium	56000		200	4.2	ug/L	1		6010B	Dissolved
Manganese	940		10	0.45	ug/L	1		6010B	Dissolved
Potassium	790	J	3000	240	ug/L	1		6010B	Dissolved
Silicon	16000		500	16	ug/L	1		6010B	Dissolved
Sodium	27000		1000	97	ug/L	1		6010B	Dissolved

This Detection Summary does not include radiochemical test results.

Eurofins Denver

Detection Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Client Sample ID: Duplicate 2 (Continued)

Lab Sample ID: 280-198313-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Chloride	85		3.0	1.0	mg/L	1			300.0	Total/NA
Sulfate	3.6	J	5.0	1.0	mg/L	1			300.0	Total/NA
Ammonia	1.3		0.10	0.029	mg/L	1			350.1	Total/NA
Nitrate Nitrite as N	0.29		0.10	0.044	mg/L	1			353.2	Total/NA
Chemical Oxygen Demand	30		20	8.7	mg/L	1			410.4	Total/NA
Bicarbonate Alkalinity as CaCO3	420		10	3.1	mg/L	1			SM 2320B	Total/NA
Total Dissolved Solids	570		10	4.7	mg/L	1			SM 2540C	Total/NA
Total Suspended Solids	160		6.3	1.7	mg/L	1			SM 2540D	Total/NA
TOC Result 1	6.6		1.0	0.35	mg/L	1			SM 5310B	Total/NA
TOC Result 2	6.8		1.0	0.35	mg/L	1			SM 5310B	Total/NA
TOC Result 3	6.9		1.0	0.35	mg/L	1			SM 5310B	Total/NA
TOC Result 4	6.8		1.0	0.35	mg/L	1			SM 5310B	Total/NA
Total Organic Carbon - Quad	6.8		1.0	0.35	mg/L	1			SM 5310B	Total/NA

Client Sample ID: QCAB

Lab Sample ID: 280-198313-14

No Detections.

Client Sample ID: QCTB

Lab Sample ID: 280-198313-15

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Denver

Method Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	EET DEN
200.8	Metals (ICP/MS)	EPA	EET DEN
6010B	Dissolved Metals	SW846	EET DEN
300.0	Anions, Ion Chromatography	EPA	EET DEN
350.1	Nitrogen, Ammonia	EPA	EET DEN
353.2	Nitrogen, Nitrate-Nitrite	EPA	EET DEN
410.4	COD	EPA	EET DEN
SM 2320B	Alkalinity	SM	EET DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET DEN
SM 2540D	Solids, Total Suspended (TSS)	SM	EET DEN
SM 5310B	Organic Carbon, Total (TOC)	SM	EET DEN
200.8	Preparation, Total Metals	EPA	EET DEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET DEN
5030B	Purge and Trap	SW846	EET DEN

Protocol References:

EPA = US Environmental Protection Agency

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

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

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Sample Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-198313-1	MW-8s	Water	10/15/24 14:40	10/17/24 11:20
280-198313-2	MW-9s	Water	10/15/24 16:45	10/17/24 11:20
280-198313-3	MW-10s	Water	10/15/24 15:57	10/17/24 11:20
280-198313-4	MW-10D	Water	10/16/24 09:15	10/17/24 11:20
280-198313-5	MW-11s	Water	10/16/24 11:55	10/17/24 11:20
280-198313-6	MW-11D	Water	10/16/24 11:05	10/17/24 11:20
280-198313-7	MW-17	Water	10/16/24 13:28	10/17/24 11:20
280-198313-8	MW-18	Water	10/16/24 12:59	10/17/24 11:20
280-198313-9	MW-19	Water	10/16/24 12:23	10/17/24 11:20
280-198313-10	MW-20	Water	10/16/24 11:22	10/17/24 11:20
280-198313-11	MW-21	Water	10/16/24 10:12	10/17/24 11:20
280-198313-12	Duplicate 1	Water	10/16/24 00:00	10/17/24 11:20
280-198313-13	Duplicate 2	Water	10/16/24 00:00	10/17/24 11:20
280-198313-14	QCAB	Water	10/16/24 00:00	10/17/24 11:20
280-198313-15	QCTB	Water	10/16/24 09:15	10/17/24 11:20

Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: MW-8s
Date Collected: 10/15/24 14:40
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			10/25/24 11:20	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			10/25/24 11:20	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/25/24 11:20	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			10/25/24 11:20	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			10/25/24 11:20	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			10/25/24 11:20	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			10/25/24 11:20	1
1,2,3-Trichlorobenzene	ND		4.0	1.2	ug/L			10/25/24 11:20	1
1,2,3-Trichloropropane	ND		2.5	0.28	ug/L			10/25/24 11:20	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			10/25/24 11:20	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			10/25/24 11:20	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.42	ug/L			10/25/24 11:20	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			10/25/24 11:20	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			10/25/24 11:20	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			10/25/24 11:20	1
1,2-Dichloropropane	ND		1.0	0.24	ug/L			10/25/24 11:20	1
1,3,5-Trimethylbenzene	ND		1.0	0.12	ug/L			10/25/24 11:20	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			10/25/24 11:20	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			10/25/24 11:20	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			10/25/24 11:20	1
2,2-Dichloropropane	ND		1.0	0.17	ug/L			10/25/24 11:20	1
2-Butanone (MEK)	ND		10	4.6	ug/L			10/25/24 11:20	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			10/25/24 11:20	1
2-Hexanone	ND		5.0	0.81	ug/L			10/25/24 11:20	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			10/25/24 11:20	1
4-Isopropyltoluene	ND		1.0	0.19	ug/L			10/25/24 11:20	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			10/25/24 11:20	1
Acetone	ND		15	6.6	ug/L			10/25/24 11:20	1
Benzene	ND		1.0	0.14	ug/L			10/25/24 11:20	1
Bromobenzene	ND		1.0	0.19	ug/L			10/25/24 11:20	1
Bromochloromethane	ND		1.0	0.40	ug/L			10/25/24 11:20	1
Bromodichloromethane	ND		1.0	0.19	ug/L			10/25/24 11:20	1
Bromoform	ND		2.0	0.25	ug/L			10/25/24 11:20	1
Bromomethane	ND		5.0	2.4	ug/L			10/25/24 11:20	1
Carbon disulfide	ND		2.0	0.26	ug/L			10/25/24 11:20	1
Carbon tetrachloride	ND		1.0	0.23	ug/L			10/25/24 11:20	1
Chlorobenzene	ND		1.0	0.092	ug/L			10/25/24 11:20	1
Chloroethane	ND		2.0	0.64	ug/L			10/25/24 11:20	1
Chloroform	ND		1.0	0.36	ug/L			10/25/24 11:20	1
Chloromethane	ND		2.0	0.23	ug/L			10/25/24 11:20	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			10/25/24 11:20	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			10/25/24 11:20	1
Dibromochloromethane	ND		1.0	0.28	ug/L			10/25/24 11:20	1
Dibromomethane	ND		1.0	0.34	ug/L			10/25/24 11:20	1
Dichlorodifluoromethane	ND		2.0	0.30	ug/L			10/25/24 11:20	1
Ethylbenzene	ND		1.0	0.14	ug/L			10/25/24 11:20	1
Hexachlorobutadiene	ND		2.0	0.53	ug/L			10/25/24 11:20	1
Isopropylbenzene	ND		1.0	0.16	ug/L			10/25/24 11:20	1
Methylene Chloride	ND		2.0	0.94	ug/L			10/25/24 11:20	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: MW-8s
Date Collected: 10/15/24 14:40
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			10/25/24 11:20	1
Naphthalene	ND		3.0	0.99	ug/L			10/25/24 11:20	1
n-Butylbenzene	ND		1.0	0.23	ug/L			10/25/24 11:20	1
N-Propylbenzene	ND		1.0	0.18	ug/L			10/25/24 11:20	1
o-Xylene	ND		1.0	0.11	ug/L			10/25/24 11:20	1
sec-Butylbenzene	ND		1.0	0.20	ug/L			10/25/24 11:20	1
Styrene	ND		1.0	0.13	ug/L			10/25/24 11:20	1
tert-Butylbenzene	ND		1.0	0.18	ug/L			10/25/24 11:20	1
Tetrachloroethene	ND		1.0	0.40	ug/L			10/25/24 11:20	1
Toluene	ND		1.0	0.32	ug/L			10/25/24 11:20	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			10/25/24 11:20	1
trans-1,3-Dichloropropene	ND		1.0	0.14	ug/L			10/25/24 11:20	1
Trichloroethene	ND		1.0	0.30	ug/L			10/25/24 11:20	1
Trichlorofluoromethane	ND		2.0	0.20	ug/L			10/25/24 11:20	1
Vinyl chloride	ND		1.0	0.23	ug/L			10/25/24 11:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		70 - 127					10/25/24 11:20	1
4-Bromofluorobenzene (Surr)	106		78 - 120					10/25/24 11:20	1
Dibromofluoromethane (Surr)	96		77 - 120					10/25/24 11:20	1
Toluene-d8 (Surr)	103		80 - 125					10/25/24 11:20	1

Client Sample ID: MW-9s
Date Collected: 10/15/24 16:45
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			10/25/24 11:41	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			10/25/24 11:41	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/25/24 11:41	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			10/25/24 11:41	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			10/25/24 11:41	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			10/25/24 11:41	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			10/25/24 11:41	1
1,2,3-Trichlorobenzene	ND		4.0	1.2	ug/L			10/25/24 11:41	1
1,2,3-Trichloropropane	ND		2.5	0.28	ug/L			10/25/24 11:41	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			10/25/24 11:41	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			10/25/24 11:41	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.42	ug/L			10/25/24 11:41	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			10/25/24 11:41	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			10/25/24 11:41	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			10/25/24 11:41	1
1,2-Dichloropropane	ND		1.0	0.24	ug/L			10/25/24 11:41	1
1,3,5-Trimethylbenzene	ND		1.0	0.12	ug/L			10/25/24 11:41	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			10/25/24 11:41	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			10/25/24 11:41	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			10/25/24 11:41	1
2,2-Dichloropropane	ND		1.0	0.17	ug/L			10/25/24 11:41	1
2-Butanone (MEK)	ND		10	4.6	ug/L			10/25/24 11:41	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			10/25/24 11:41	1
2-Hexanone	ND		5.0	0.81	ug/L			10/25/24 11:41	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: MW-9s
Date Collected: 10/15/24 16:45
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			10/25/24 11:41	1
4-Isopropyltoluene	ND		1.0	0.19	ug/L			10/25/24 11:41	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			10/25/24 11:41	1
Acetone	ND		15	6.6	ug/L			10/25/24 11:41	1
Benzene	ND		1.0	0.14	ug/L			10/25/24 11:41	1
Bromobenzene	ND		1.0	0.19	ug/L			10/25/24 11:41	1
Bromochloromethane	ND		1.0	0.40	ug/L			10/25/24 11:41	1
Bromodichloromethane	ND		1.0	0.19	ug/L			10/25/24 11:41	1
Bromoform	ND		2.0	0.25	ug/L			10/25/24 11:41	1
Bromomethane	ND		5.0	2.4	ug/L			10/25/24 11:41	1
Carbon disulfide	ND		2.0	0.26	ug/L			10/25/24 11:41	1
Carbon tetrachloride	ND		1.0	0.23	ug/L			10/25/24 11:41	1
Chlorobenzene	ND		1.0	0.092	ug/L			10/25/24 11:41	1
Chloroethane	ND		2.0	0.64	ug/L			10/25/24 11:41	1
Chloroform	ND		1.0	0.36	ug/L			10/25/24 11:41	1
Chloromethane	ND		2.0	0.23	ug/L			10/25/24 11:41	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			10/25/24 11:41	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			10/25/24 11:41	1
Dibromochloromethane	ND		1.0	0.28	ug/L			10/25/24 11:41	1
Dibromomethane	ND		1.0	0.34	ug/L			10/25/24 11:41	1
Dichlorodifluoromethane	ND		2.0	0.30	ug/L			10/25/24 11:41	1
Ethylbenzene	ND		1.0	0.14	ug/L			10/25/24 11:41	1
Hexachlorobutadiene	ND		2.0	0.53	ug/L			10/25/24 11:41	1
Isopropylbenzene	ND		1.0	0.16	ug/L			10/25/24 11:41	1
Methylene Chloride	ND		2.0	0.94	ug/L			10/25/24 11:41	1
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			10/25/24 11:41	1
Naphthalene	ND		3.0	0.99	ug/L			10/25/24 11:41	1
n-Butylbenzene	ND		1.0	0.23	ug/L			10/25/24 11:41	1
N-Propylbenzene	ND		1.0	0.18	ug/L			10/25/24 11:41	1
o-Xylene	ND		1.0	0.11	ug/L			10/25/24 11:41	1
sec-Butylbenzene	ND		1.0	0.20	ug/L			10/25/24 11:41	1
Styrene	ND		1.0	0.13	ug/L			10/25/24 11:41	1
tert-Butylbenzene	ND		1.0	0.18	ug/L			10/25/24 11:41	1
Tetrachloroethene	ND		1.0	0.40	ug/L			10/25/24 11:41	1
Toluene	ND		1.0	0.32	ug/L			10/25/24 11:41	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			10/25/24 11:41	1
trans-1,3-Dichloropropene	ND		1.0	0.14	ug/L			10/25/24 11:41	1
Trichloroethene	ND		1.0	0.30	ug/L			10/25/24 11:41	1
Trichlorofluoromethane	ND		2.0	0.20	ug/L			10/25/24 11:41	1
Vinyl chloride	ND		1.0	0.23	ug/L			10/25/24 11:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		70 - 127		10/25/24 11:41	1
4-Bromofluorobenzene (Surr)	105		78 - 120		10/25/24 11:41	1
Dibromofluoromethane (Surr)	96		77 - 120		10/25/24 11:41	1
Toluene-d8 (Surr)	104		80 - 125		10/25/24 11:41	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: MW-10s
Date Collected: 10/15/24 15:57
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			10/25/24 12:03	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			10/25/24 12:03	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/25/24 12:03	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			10/25/24 12:03	1
1,1-Dichloroethane	0.30	J	1.0	0.22	ug/L			10/25/24 12:03	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			10/25/24 12:03	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			10/25/24 12:03	1
1,2,3-Trichlorobenzene	ND		4.0	1.2	ug/L			10/25/24 12:03	1
1,2,3-Trichloropropane	ND		2.5	0.28	ug/L			10/25/24 12:03	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			10/25/24 12:03	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			10/25/24 12:03	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.42	ug/L			10/25/24 12:03	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			10/25/24 12:03	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			10/25/24 12:03	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			10/25/24 12:03	1
1,2-Dichloropropane	ND		1.0	0.24	ug/L			10/25/24 12:03	1
1,3,5-Trimethylbenzene	ND		1.0	0.12	ug/L			10/25/24 12:03	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			10/25/24 12:03	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			10/25/24 12:03	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			10/25/24 12:03	1
2,2-Dichloropropane	ND		1.0	0.17	ug/L			10/25/24 12:03	1
2-Butanone (MEK)	ND		10	4.6	ug/L			10/25/24 12:03	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			10/25/24 12:03	1
2-Hexanone	ND		5.0	0.81	ug/L			10/25/24 12:03	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			10/25/24 12:03	1
4-Isopropyltoluene	ND		1.0	0.19	ug/L			10/25/24 12:03	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			10/25/24 12:03	1
Acetone	ND		15	6.6	ug/L			10/25/24 12:03	1
Benzene	ND		1.0	0.14	ug/L			10/25/24 12:03	1
Bromobenzene	ND		1.0	0.19	ug/L			10/25/24 12:03	1
Bromochloromethane	ND		1.0	0.40	ug/L			10/25/24 12:03	1
Bromodichloromethane	ND		1.0	0.19	ug/L			10/25/24 12:03	1
Bromoform	ND		2.0	0.25	ug/L			10/25/24 12:03	1
Bromomethane	ND		5.0	2.4	ug/L			10/25/24 12:03	1
Carbon disulfide	ND		2.0	0.26	ug/L			10/25/24 12:03	1
Carbon tetrachloride	ND		1.0	0.23	ug/L			10/25/24 12:03	1
Chlorobenzene	ND		1.0	0.092	ug/L			10/25/24 12:03	1
Chloroethane	ND		2.0	0.64	ug/L			10/25/24 12:03	1
Chloroform	ND		1.0	0.36	ug/L			10/25/24 12:03	1
Chloromethane	ND		2.0	0.23	ug/L			10/25/24 12:03	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			10/25/24 12:03	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			10/25/24 12:03	1
Dibromochloromethane	ND		1.0	0.28	ug/L			10/25/24 12:03	1
Dibromomethane	ND		1.0	0.34	ug/L			10/25/24 12:03	1
Dichlorodifluoromethane	ND		2.0	0.30	ug/L			10/25/24 12:03	1
Ethylbenzene	ND		1.0	0.14	ug/L			10/25/24 12:03	1
Hexachlorobutadiene	ND		2.0	0.53	ug/L			10/25/24 12:03	1
Isopropylbenzene	ND		1.0	0.16	ug/L			10/25/24 12:03	1
Methylene Chloride	ND		2.0	0.94	ug/L			10/25/24 12:03	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: MW-10s
Date Collected: 10/15/24 15:57
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			10/25/24 12:03	1
Naphthalene	ND		3.0	0.99	ug/L			10/25/24 12:03	1
n-Butylbenzene	ND		1.0	0.23	ug/L			10/25/24 12:03	1
N-Propylbenzene	ND		1.0	0.18	ug/L			10/25/24 12:03	1
o-Xylene	ND		1.0	0.11	ug/L			10/25/24 12:03	1
sec-Butylbenzene	ND		1.0	0.20	ug/L			10/25/24 12:03	1
Styrene	ND		1.0	0.13	ug/L			10/25/24 12:03	1
tert-Butylbenzene	ND		1.0	0.18	ug/L			10/25/24 12:03	1
Tetrachloroethene	ND		1.0	0.40	ug/L			10/25/24 12:03	1
Toluene	ND		1.0	0.32	ug/L			10/25/24 12:03	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			10/25/24 12:03	1
trans-1,3-Dichloropropene	ND		1.0	0.14	ug/L			10/25/24 12:03	1
Trichloroethene	ND		1.0	0.30	ug/L			10/25/24 12:03	1
Trichlorofluoromethane	ND		2.0	0.20	ug/L			10/25/24 12:03	1
Vinyl chloride	ND		1.0	0.23	ug/L			10/25/24 12:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		70 - 127					10/25/24 12:03	1
4-Bromofluorobenzene (Surr)	105		78 - 120					10/25/24 12:03	1
Dibromofluoromethane (Surr)	94		77 - 120					10/25/24 12:03	1
Toluene-d8 (Surr)	107		80 - 125					10/25/24 12:03	1

Client Sample ID: MW-10D
Date Collected: 10/16/24 09:15
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			10/25/24 12:25	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			10/25/24 12:25	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/25/24 12:25	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			10/25/24 12:25	1
1,1-Dichloroethane	0.26	J	1.0	0.22	ug/L			10/25/24 12:25	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			10/25/24 12:25	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			10/25/24 12:25	1
1,2,3-Trichlorobenzene	ND		4.0	1.2	ug/L			10/25/24 12:25	1
1,2,3-Trichloropropane	ND		2.5	0.28	ug/L			10/25/24 12:25	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			10/25/24 12:25	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			10/25/24 12:25	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.42	ug/L			10/25/24 12:25	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			10/25/24 12:25	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			10/25/24 12:25	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			10/25/24 12:25	1
1,2-Dichloropropane	ND		1.0	0.24	ug/L			10/25/24 12:25	1
1,3,5-Trimethylbenzene	ND		1.0	0.12	ug/L			10/25/24 12:25	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			10/25/24 12:25	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			10/25/24 12:25	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			10/25/24 12:25	1
2,2-Dichloropropane	ND		1.0	0.17	ug/L			10/25/24 12:25	1
2-Butanone (MEK)	ND		10	4.6	ug/L			10/25/24 12:25	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			10/25/24 12:25	1
2-Hexanone	ND		5.0	0.81	ug/L			10/25/24 12:25	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: MW-10D
Date Collected: 10/16/24 09:15
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			10/25/24 12:25	1
4-Isopropyltoluene	ND		1.0	0.19	ug/L			10/25/24 12:25	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			10/25/24 12:25	1
Acetone	ND		15	6.6	ug/L			10/25/24 12:25	1
Benzene	ND		1.0	0.14	ug/L			10/25/24 12:25	1
Bromobenzene	ND		1.0	0.19	ug/L			10/25/24 12:25	1
Bromochloromethane	ND		1.0	0.40	ug/L			10/25/24 12:25	1
Bromodichloromethane	ND		1.0	0.19	ug/L			10/25/24 12:25	1
Bromoform	ND		2.0	0.25	ug/L			10/25/24 12:25	1
Bromomethane	ND		5.0	2.4	ug/L			10/25/24 12:25	1
Carbon disulfide	ND		2.0	0.26	ug/L			10/25/24 12:25	1
Carbon tetrachloride	ND		1.0	0.23	ug/L			10/25/24 12:25	1
Chlorobenzene	ND		1.0	0.092	ug/L			10/25/24 12:25	1
Chloroethane	ND		2.0	0.64	ug/L			10/25/24 12:25	1
Chloroform	ND		1.0	0.36	ug/L			10/25/24 12:25	1
Chloromethane	ND		2.0	0.23	ug/L			10/25/24 12:25	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			10/25/24 12:25	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			10/25/24 12:25	1
Dibromochloromethane	ND		1.0	0.28	ug/L			10/25/24 12:25	1
Dibromomethane	ND		1.0	0.34	ug/L			10/25/24 12:25	1
Dichlorodifluoromethane	ND		2.0	0.30	ug/L			10/25/24 12:25	1
Ethylbenzene	ND		1.0	0.14	ug/L			10/25/24 12:25	1
Hexachlorobutadiene	ND		2.0	0.53	ug/L			10/25/24 12:25	1
Isopropylbenzene	ND		1.0	0.16	ug/L			10/25/24 12:25	1
Methylene Chloride	ND		2.0	0.94	ug/L			10/25/24 12:25	1
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			10/25/24 12:25	1
Naphthalene	ND		3.0	0.99	ug/L			10/25/24 12:25	1
n-Butylbenzene	ND		1.0	0.23	ug/L			10/25/24 12:25	1
N-Propylbenzene	ND		1.0	0.18	ug/L			10/25/24 12:25	1
o-Xylene	ND		1.0	0.11	ug/L			10/25/24 12:25	1
sec-Butylbenzene	ND		1.0	0.20	ug/L			10/25/24 12:25	1
Styrene	ND		1.0	0.13	ug/L			10/25/24 12:25	1
tert-Butylbenzene	ND		1.0	0.18	ug/L			10/25/24 12:25	1
Tetrachloroethene	ND		1.0	0.40	ug/L			10/25/24 12:25	1
Toluene	ND		1.0	0.32	ug/L			10/25/24 12:25	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			10/25/24 12:25	1
trans-1,3-Dichloropropene	ND		1.0	0.14	ug/L			10/25/24 12:25	1
Trichloroethene	ND		1.0	0.30	ug/L			10/25/24 12:25	1
Trichlorofluoromethane	ND		2.0	0.20	ug/L			10/25/24 12:25	1
Vinyl chloride	ND		1.0	0.23	ug/L			10/25/24 12:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		70 - 127		10/25/24 12:25	1
4-Bromofluorobenzene (Surr)	105		78 - 120		10/25/24 12:25	1
Dibromofluoromethane (Surr)	95		77 - 120		10/25/24 12:25	1
Toluene-d8 (Surr)	107		80 - 125		10/25/24 12:25	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: MW-11s
Date Collected: 10/16/24 11:55
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			10/25/24 12:46	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			10/25/24 12:46	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/25/24 12:46	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			10/25/24 12:46	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			10/25/24 12:46	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			10/25/24 12:46	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			10/25/24 12:46	1
1,2,3-Trichlorobenzene	ND		4.0	1.2	ug/L			10/25/24 12:46	1
1,2,3-Trichloropropane	ND		2.5	0.28	ug/L			10/25/24 12:46	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			10/25/24 12:46	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			10/25/24 12:46	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.42	ug/L			10/25/24 12:46	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			10/25/24 12:46	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			10/25/24 12:46	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			10/25/24 12:46	1
1,2-Dichloropropane	ND		1.0	0.24	ug/L			10/25/24 12:46	1
1,3,5-Trimethylbenzene	ND		1.0	0.12	ug/L			10/25/24 12:46	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			10/25/24 12:46	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			10/25/24 12:46	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			10/25/24 12:46	1
2,2-Dichloropropane	ND		1.0	0.17	ug/L			10/25/24 12:46	1
2-Butanone (MEK)	ND		10	4.6	ug/L			10/25/24 12:46	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			10/25/24 12:46	1
2-Hexanone	ND		5.0	0.81	ug/L			10/25/24 12:46	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			10/25/24 12:46	1
4-Isopropyltoluene	ND		1.0	0.19	ug/L			10/25/24 12:46	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			10/25/24 12:46	1
Acetone	ND		15	6.6	ug/L			10/25/24 12:46	1
Benzene	ND		1.0	0.14	ug/L			10/25/24 12:46	1
Bromobenzene	ND		1.0	0.19	ug/L			10/25/24 12:46	1
Bromochloromethane	ND		1.0	0.40	ug/L			10/25/24 12:46	1
Bromodichloromethane	ND		1.0	0.19	ug/L			10/25/24 12:46	1
Bromoform	ND		2.0	0.25	ug/L			10/25/24 12:46	1
Bromomethane	ND		5.0	2.4	ug/L			10/25/24 12:46	1
Carbon disulfide	ND		2.0	0.26	ug/L			10/25/24 12:46	1
Carbon tetrachloride	ND		1.0	0.23	ug/L			10/25/24 12:46	1
Chlorobenzene	ND		1.0	0.092	ug/L			10/25/24 12:46	1
Chloroethane	ND		2.0	0.64	ug/L			10/25/24 12:46	1
Chloroform	ND		1.0	0.36	ug/L			10/25/24 12:46	1
Chloromethane	ND		2.0	0.23	ug/L			10/25/24 12:46	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			10/25/24 12:46	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			10/25/24 12:46	1
Dibromochloromethane	ND		1.0	0.28	ug/L			10/25/24 12:46	1
Dibromomethane	ND		1.0	0.34	ug/L			10/25/24 12:46	1
Dichlorodifluoromethane	ND		2.0	0.30	ug/L			10/25/24 12:46	1
Ethylbenzene	ND		1.0	0.14	ug/L			10/25/24 12:46	1
Hexachlorobutadiene	ND		2.0	0.53	ug/L			10/25/24 12:46	1
Isopropylbenzene	ND		1.0	0.16	ug/L			10/25/24 12:46	1
Methylene Chloride	ND		2.0	0.94	ug/L			10/25/24 12:46	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: MW-11s
Date Collected: 10/16/24 11:55
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			10/25/24 12:46	1
Naphthalene	ND		3.0	0.99	ug/L			10/25/24 12:46	1
n-Butylbenzene	ND		1.0	0.23	ug/L			10/25/24 12:46	1
N-Propylbenzene	ND		1.0	0.18	ug/L			10/25/24 12:46	1
o-Xylene	ND		1.0	0.11	ug/L			10/25/24 12:46	1
sec-Butylbenzene	ND		1.0	0.20	ug/L			10/25/24 12:46	1
Styrene	ND		1.0	0.13	ug/L			10/25/24 12:46	1
tert-Butylbenzene	ND		1.0	0.18	ug/L			10/25/24 12:46	1
Tetrachloroethene	ND		1.0	0.40	ug/L			10/25/24 12:46	1
Toluene	ND		1.0	0.32	ug/L			10/25/24 12:46	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			10/25/24 12:46	1
trans-1,3-Dichloropropene	ND		1.0	0.14	ug/L			10/25/24 12:46	1
Trichloroethene	ND		1.0	0.30	ug/L			10/25/24 12:46	1
Trichlorofluoromethane	ND		2.0	0.20	ug/L			10/25/24 12:46	1
Vinyl chloride	ND		1.0	0.23	ug/L			10/25/24 12:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		70 - 127		10/25/24 12:46	1
4-Bromofluorobenzene (Surr)	105		78 - 120		10/25/24 12:46	1
Dibromofluoromethane (Surr)	95		77 - 120		10/25/24 12:46	1
Toluene-d8 (Surr)	107		80 - 125		10/25/24 12:46	1

Client Sample ID: MW-11D
Date Collected: 10/16/24 11:05
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			10/25/24 13:08	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			10/25/24 13:08	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/25/24 13:08	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			10/25/24 13:08	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			10/25/24 13:08	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			10/25/24 13:08	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			10/25/24 13:08	1
1,2,3-Trichlorobenzene	ND		4.0	1.2	ug/L			10/25/24 13:08	1
1,2,3-Trichloropropane	ND		2.5	0.28	ug/L			10/25/24 13:08	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			10/25/24 13:08	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			10/25/24 13:08	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.42	ug/L			10/25/24 13:08	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			10/25/24 13:08	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			10/25/24 13:08	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			10/25/24 13:08	1
1,2-Dichloropropane	ND		1.0	0.24	ug/L			10/25/24 13:08	1
1,3,5-Trimethylbenzene	ND		1.0	0.12	ug/L			10/25/24 13:08	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			10/25/24 13:08	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			10/25/24 13:08	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			10/25/24 13:08	1
2,2-Dichloropropane	ND		1.0	0.17	ug/L			10/25/24 13:08	1
2-Butanone (MEK)	ND		10	4.6	ug/L			10/25/24 13:08	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			10/25/24 13:08	1
2-Hexanone	ND		5.0	0.81	ug/L			10/25/24 13:08	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: MW-11D
Date Collected: 10/16/24 11:05
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			10/25/24 13:08	1
4-Isopropyltoluene	ND		1.0	0.19	ug/L			10/25/24 13:08	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			10/25/24 13:08	1
Acetone	ND		15	6.6	ug/L			10/25/24 13:08	1
Benzene	ND		1.0	0.14	ug/L			10/25/24 13:08	1
Bromobenzene	ND		1.0	0.19	ug/L			10/25/24 13:08	1
Bromochloromethane	ND		1.0	0.40	ug/L			10/25/24 13:08	1
Bromodichloromethane	ND		1.0	0.19	ug/L			10/25/24 13:08	1
Bromoform	ND		2.0	0.25	ug/L			10/25/24 13:08	1
Bromomethane	ND		5.0	2.4	ug/L			10/25/24 13:08	1
Carbon disulfide	ND		2.0	0.26	ug/L			10/25/24 13:08	1
Carbon tetrachloride	ND		1.0	0.23	ug/L			10/25/24 13:08	1
Chlorobenzene	ND		1.0	0.092	ug/L			10/25/24 13:08	1
Chloroethane	ND		2.0	0.64	ug/L			10/25/24 13:08	1
Chloroform	ND		1.0	0.36	ug/L			10/25/24 13:08	1
Chloromethane	ND		2.0	0.23	ug/L			10/25/24 13:08	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			10/25/24 13:08	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			10/25/24 13:08	1
Dibromochloromethane	ND		1.0	0.28	ug/L			10/25/24 13:08	1
Dibromomethane	ND		1.0	0.34	ug/L			10/25/24 13:08	1
Dichlorodifluoromethane	ND		2.0	0.30	ug/L			10/25/24 13:08	1
Ethylbenzene	ND		1.0	0.14	ug/L			10/25/24 13:08	1
Hexachlorobutadiene	ND		2.0	0.53	ug/L			10/25/24 13:08	1
Isopropylbenzene	ND		1.0	0.16	ug/L			10/25/24 13:08	1
Methylene Chloride	ND		2.0	0.94	ug/L			10/25/24 13:08	1
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			10/25/24 13:08	1
Naphthalene	ND		3.0	0.99	ug/L			10/25/24 13:08	1
n-Butylbenzene	ND		1.0	0.23	ug/L			10/25/24 13:08	1
N-Propylbenzene	ND		1.0	0.18	ug/L			10/25/24 13:08	1
o-Xylene	ND		1.0	0.11	ug/L			10/25/24 13:08	1
sec-Butylbenzene	ND		1.0	0.20	ug/L			10/25/24 13:08	1
Styrene	ND		1.0	0.13	ug/L			10/25/24 13:08	1
tert-Butylbenzene	ND		1.0	0.18	ug/L			10/25/24 13:08	1
Tetrachloroethene	ND		1.0	0.40	ug/L			10/25/24 13:08	1
Toluene	ND		1.0	0.32	ug/L			10/25/24 13:08	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			10/25/24 13:08	1
trans-1,3-Dichloropropene	ND		1.0	0.14	ug/L			10/25/24 13:08	1
Trichloroethene	ND		1.0	0.30	ug/L			10/25/24 13:08	1
Trichlorofluoromethane	ND		2.0	0.20	ug/L			10/25/24 13:08	1
Vinyl chloride	ND		1.0	0.23	ug/L			10/25/24 13:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		70 - 127		10/25/24 13:08	1
4-Bromofluorobenzene (Surr)	104		78 - 120		10/25/24 13:08	1
Dibromofluoromethane (Surr)	94		77 - 120		10/25/24 13:08	1
Toluene-d8 (Surr)	105		80 - 125		10/25/24 13:08	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: MW-17
Date Collected: 10/16/24 13:28
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			10/25/24 13:30	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			10/25/24 13:30	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/25/24 13:30	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			10/25/24 13:30	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			10/25/24 13:30	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			10/25/24 13:30	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			10/25/24 13:30	1
1,2,3-Trichlorobenzene	ND		4.0	1.2	ug/L			10/25/24 13:30	1
1,2,3-Trichloropropane	ND		2.5	0.28	ug/L			10/25/24 13:30	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			10/25/24 13:30	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			10/25/24 13:30	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.42	ug/L			10/25/24 13:30	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			10/25/24 13:30	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			10/25/24 13:30	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			10/25/24 13:30	1
1,2-Dichloropropane	ND		1.0	0.24	ug/L			10/25/24 13:30	1
1,3,5-Trimethylbenzene	ND		1.0	0.12	ug/L			10/25/24 13:30	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			10/25/24 13:30	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			10/25/24 13:30	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			10/25/24 13:30	1
2,2-Dichloropropane	ND		1.0	0.17	ug/L			10/25/24 13:30	1
2-Butanone (MEK)	ND		10	4.6	ug/L			10/25/24 13:30	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			10/25/24 13:30	1
2-Hexanone	ND		5.0	0.81	ug/L			10/25/24 13:30	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			10/25/24 13:30	1
4-Isopropyltoluene	ND		1.0	0.19	ug/L			10/25/24 13:30	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			10/25/24 13:30	1
Acetone	ND		15	6.6	ug/L			10/25/24 13:30	1
Benzene	ND		1.0	0.14	ug/L			10/25/24 13:30	1
Bromobenzene	ND		1.0	0.19	ug/L			10/25/24 13:30	1
Bromochloromethane	ND		1.0	0.40	ug/L			10/25/24 13:30	1
Bromodichloromethane	ND		1.0	0.19	ug/L			10/25/24 13:30	1
Bromoform	ND		2.0	0.25	ug/L			10/25/24 13:30	1
Bromomethane	ND		5.0	2.4	ug/L			10/25/24 13:30	1
Carbon disulfide	ND		2.0	0.26	ug/L			10/25/24 13:30	1
Carbon tetrachloride	ND		1.0	0.23	ug/L			10/25/24 13:30	1
Chlorobenzene	ND		1.0	0.092	ug/L			10/25/24 13:30	1
Chloroethane	ND		2.0	0.64	ug/L			10/25/24 13:30	1
Chloroform	ND		1.0	0.36	ug/L			10/25/24 13:30	1
Chloromethane	ND		2.0	0.23	ug/L			10/25/24 13:30	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			10/25/24 13:30	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			10/25/24 13:30	1
Dibromochloromethane	ND		1.0	0.28	ug/L			10/25/24 13:30	1
Dibromomethane	ND		1.0	0.34	ug/L			10/25/24 13:30	1
Dichlorodifluoromethane	ND		2.0	0.30	ug/L			10/25/24 13:30	1
Ethylbenzene	ND		1.0	0.14	ug/L			10/25/24 13:30	1
Hexachlorobutadiene	ND		2.0	0.53	ug/L			10/25/24 13:30	1
Isopropylbenzene	ND		1.0	0.16	ug/L			10/25/24 13:30	1
Methylene Chloride	ND		2.0	0.94	ug/L			10/25/24 13:30	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: MW-17
Date Collected: 10/16/24 13:28
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			10/25/24 13:30	1
Naphthalene	ND		3.0	0.99	ug/L			10/25/24 13:30	1
n-Butylbenzene	ND		1.0	0.23	ug/L			10/25/24 13:30	1
N-Propylbenzene	ND		1.0	0.18	ug/L			10/25/24 13:30	1
o-Xylene	ND		1.0	0.11	ug/L			10/25/24 13:30	1
sec-Butylbenzene	ND		1.0	0.20	ug/L			10/25/24 13:30	1
Styrene	ND		1.0	0.13	ug/L			10/25/24 13:30	1
tert-Butylbenzene	ND		1.0	0.18	ug/L			10/25/24 13:30	1
Tetrachloroethene	ND		1.0	0.40	ug/L			10/25/24 13:30	1
Toluene	ND		1.0	0.32	ug/L			10/25/24 13:30	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			10/25/24 13:30	1
trans-1,3-Dichloropropene	ND		1.0	0.14	ug/L			10/25/24 13:30	1
Trichloroethene	ND		1.0	0.30	ug/L			10/25/24 13:30	1
Trichlorofluoromethane	ND		2.0	0.20	ug/L			10/25/24 13:30	1
Vinyl chloride	ND		1.0	0.23	ug/L			10/25/24 13:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		70 - 127					10/25/24 13:30	1
4-Bromofluorobenzene (Surr)	107		78 - 120					10/25/24 13:30	1
Dibromofluoromethane (Surr)	96		77 - 120					10/25/24 13:30	1
Toluene-d8 (Surr)	106		80 - 125					10/25/24 13:30	1

Client Sample ID: MW-18
Date Collected: 10/16/24 12:59
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			10/25/24 13:52	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			10/25/24 13:52	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/25/24 13:52	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			10/25/24 13:52	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			10/25/24 13:52	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			10/25/24 13:52	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			10/25/24 13:52	1
1,2,3-Trichlorobenzene	ND		4.0	1.2	ug/L			10/25/24 13:52	1
1,2,3-Trichloropropane	ND		2.5	0.28	ug/L			10/25/24 13:52	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			10/25/24 13:52	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			10/25/24 13:52	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.42	ug/L			10/25/24 13:52	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			10/25/24 13:52	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			10/25/24 13:52	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			10/25/24 13:52	1
1,2-Dichloropropane	ND		1.0	0.24	ug/L			10/25/24 13:52	1
1,3,5-Trimethylbenzene	ND		1.0	0.12	ug/L			10/25/24 13:52	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			10/25/24 13:52	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			10/25/24 13:52	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			10/25/24 13:52	1
2,2-Dichloropropane	ND		1.0	0.17	ug/L			10/25/24 13:52	1
2-Butanone (MEK)	ND		10	4.6	ug/L			10/25/24 13:52	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			10/25/24 13:52	1
2-Hexanone	ND		5.0	0.81	ug/L			10/25/24 13:52	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: MW-18
Date Collected: 10/16/24 12:59
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			10/25/24 13:52	1
4-Isopropyltoluene	ND		1.0	0.19	ug/L			10/25/24 13:52	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			10/25/24 13:52	1
Acetone	ND		15	6.6	ug/L			10/25/24 13:52	1
Benzene	ND		1.0	0.14	ug/L			10/25/24 13:52	1
Bromobenzene	ND		1.0	0.19	ug/L			10/25/24 13:52	1
Bromochloromethane	ND		1.0	0.40	ug/L			10/25/24 13:52	1
Bromodichloromethane	ND		1.0	0.19	ug/L			10/25/24 13:52	1
Bromoform	ND		2.0	0.25	ug/L			10/25/24 13:52	1
Bromomethane	ND		5.0	2.4	ug/L			10/25/24 13:52	1
Carbon disulfide	ND		2.0	0.26	ug/L			10/25/24 13:52	1
Carbon tetrachloride	ND		1.0	0.23	ug/L			10/25/24 13:52	1
Chlorobenzene	ND		1.0	0.092	ug/L			10/25/24 13:52	1
Chloroethane	ND		2.0	0.64	ug/L			10/25/24 13:52	1
Chloroform	ND		1.0	0.36	ug/L			10/25/24 13:52	1
Chloromethane	ND		2.0	0.23	ug/L			10/25/24 13:52	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			10/25/24 13:52	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			10/25/24 13:52	1
Dibromochloromethane	ND		1.0	0.28	ug/L			10/25/24 13:52	1
Dibromomethane	ND		1.0	0.34	ug/L			10/25/24 13:52	1
Dichlorodifluoromethane	ND		2.0	0.30	ug/L			10/25/24 13:52	1
Ethylbenzene	ND		1.0	0.14	ug/L			10/25/24 13:52	1
Hexachlorobutadiene	ND		2.0	0.53	ug/L			10/25/24 13:52	1
Isopropylbenzene	ND		1.0	0.16	ug/L			10/25/24 13:52	1
Methylene Chloride	ND		2.0	0.94	ug/L			10/25/24 13:52	1
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			10/25/24 13:52	1
Naphthalene	ND		3.0	0.99	ug/L			10/25/24 13:52	1
n-Butylbenzene	ND		1.0	0.23	ug/L			10/25/24 13:52	1
N-Propylbenzene	ND		1.0	0.18	ug/L			10/25/24 13:52	1
o-Xylene	ND		1.0	0.11	ug/L			10/25/24 13:52	1
sec-Butylbenzene	ND		1.0	0.20	ug/L			10/25/24 13:52	1
Styrene	ND		1.0	0.13	ug/L			10/25/24 13:52	1
tert-Butylbenzene	ND		1.0	0.18	ug/L			10/25/24 13:52	1
Tetrachloroethene	ND		1.0	0.40	ug/L			10/25/24 13:52	1
Toluene	ND		1.0	0.32	ug/L			10/25/24 13:52	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			10/25/24 13:52	1
trans-1,3-Dichloropropene	ND		1.0	0.14	ug/L			10/25/24 13:52	1
Trichloroethene	ND		1.0	0.30	ug/L			10/25/24 13:52	1
Trichlorofluoromethane	ND		2.0	0.20	ug/L			10/25/24 13:52	1
Vinyl chloride	ND		1.0	0.23	ug/L			10/25/24 13:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		70 - 127		10/25/24 13:52	1
4-Bromofluorobenzene (Surr)	106		78 - 120		10/25/24 13:52	1
Dibromofluoromethane (Surr)	96		77 - 120		10/25/24 13:52	1
Toluene-d8 (Surr)	106		80 - 125		10/25/24 13:52	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: MW-19
Date Collected: 10/16/24 12:23
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			10/25/24 14:13	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			10/25/24 14:13	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/25/24 14:13	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			10/25/24 14:13	1
1,1-Dichloroethane	1.1		1.0	0.22	ug/L			10/25/24 14:13	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			10/25/24 14:13	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			10/25/24 14:13	1
1,2,3-Trichlorobenzene	ND		4.0	1.2	ug/L			10/25/24 14:13	1
1,2,3-Trichloropropane	ND		2.5	0.28	ug/L			10/25/24 14:13	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			10/25/24 14:13	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			10/25/24 14:13	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.42	ug/L			10/25/24 14:13	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			10/25/24 14:13	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			10/25/24 14:13	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			10/25/24 14:13	1
1,2-Dichloropropane	ND		1.0	0.24	ug/L			10/25/24 14:13	1
1,3,5-Trimethylbenzene	ND		1.0	0.12	ug/L			10/25/24 14:13	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			10/25/24 14:13	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			10/25/24 14:13	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			10/25/24 14:13	1
2,2-Dichloropropane	ND		1.0	0.17	ug/L			10/25/24 14:13	1
2-Butanone (MEK)	ND		10	4.6	ug/L			10/25/24 14:13	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			10/25/24 14:13	1
2-Hexanone	ND		5.0	0.81	ug/L			10/25/24 14:13	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			10/25/24 14:13	1
4-Isopropyltoluene	ND		1.0	0.19	ug/L			10/25/24 14:13	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			10/25/24 14:13	1
Acetone	ND		15	6.6	ug/L			10/25/24 14:13	1
Benzene	ND		1.0	0.14	ug/L			10/25/24 14:13	1
Bromobenzene	ND		1.0	0.19	ug/L			10/25/24 14:13	1
Bromochloromethane	ND		1.0	0.40	ug/L			10/25/24 14:13	1
Bromodichloromethane	ND		1.0	0.19	ug/L			10/25/24 14:13	1
Bromoform	ND		2.0	0.25	ug/L			10/25/24 14:13	1
Bromomethane	ND		5.0	2.4	ug/L			10/25/24 14:13	1
Carbon disulfide	ND		2.0	0.26	ug/L			10/25/24 14:13	1
Carbon tetrachloride	ND		1.0	0.23	ug/L			10/25/24 14:13	1
Chlorobenzene	ND		1.0	0.092	ug/L			10/25/24 14:13	1
Chloroethane	ND		2.0	0.64	ug/L			10/25/24 14:13	1
Chloroform	ND		1.0	0.36	ug/L			10/25/24 14:13	1
Chloromethane	ND		2.0	0.23	ug/L			10/25/24 14:13	1
cis-1,2-Dichloroethene	0.78	J	1.0	0.32	ug/L			10/25/24 14:13	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			10/25/24 14:13	1
Dibromochloromethane	ND		1.0	0.28	ug/L			10/25/24 14:13	1
Dibromomethane	ND		1.0	0.34	ug/L			10/25/24 14:13	1
Dichlorodifluoromethane	2.5		2.0	0.30	ug/L			10/25/24 14:13	1
Ethylbenzene	ND		1.0	0.14	ug/L			10/25/24 14:13	1
Hexachlorobutadiene	ND		2.0	0.53	ug/L			10/25/24 14:13	1
Isopropylbenzene	ND		1.0	0.16	ug/L			10/25/24 14:13	1
Methylene Chloride	ND		2.0	0.94	ug/L			10/25/24 14:13	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: MW-19
Date Collected: 10/16/24 12:23
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			10/25/24 14:13	1
Naphthalene	ND		3.0	0.99	ug/L			10/25/24 14:13	1
n-Butylbenzene	ND		1.0	0.23	ug/L			10/25/24 14:13	1
N-Propylbenzene	ND		1.0	0.18	ug/L			10/25/24 14:13	1
o-Xylene	ND		1.0	0.11	ug/L			10/25/24 14:13	1
sec-Butylbenzene	ND		1.0	0.20	ug/L			10/25/24 14:13	1
Styrene	ND		1.0	0.13	ug/L			10/25/24 14:13	1
tert-Butylbenzene	ND		1.0	0.18	ug/L			10/25/24 14:13	1
Tetrachloroethene	0.78	J	1.0	0.40	ug/L			10/25/24 14:13	1
Toluene	ND		1.0	0.32	ug/L			10/25/24 14:13	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			10/25/24 14:13	1
trans-1,3-Dichloropropene	ND		1.0	0.14	ug/L			10/25/24 14:13	1
Trichloroethene	1.2		1.0	0.30	ug/L			10/25/24 14:13	1
Trichlorofluoromethane	ND		2.0	0.20	ug/L			10/25/24 14:13	1
Vinyl chloride	ND		1.0	0.23	ug/L			10/25/24 14:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		70 - 127					10/25/24 14:13	1
4-Bromofluorobenzene (Surr)	105		78 - 120					10/25/24 14:13	1
Dibromofluoromethane (Surr)	97		77 - 120					10/25/24 14:13	1
Toluene-d8 (Surr)	105		80 - 125					10/25/24 14:13	1

Client Sample ID: MW-20
Date Collected: 10/16/24 11:22
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			10/25/24 14:36	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			10/25/24 14:36	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/25/24 14:36	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			10/25/24 14:36	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			10/25/24 14:36	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			10/25/24 14:36	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			10/25/24 14:36	1
1,2,3-Trichlorobenzene	ND		4.0	1.2	ug/L			10/25/24 14:36	1
1,2,3-Trichloropropane	ND		2.5	0.28	ug/L			10/25/24 14:36	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			10/25/24 14:36	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			10/25/24 14:36	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.42	ug/L			10/25/24 14:36	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			10/25/24 14:36	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			10/25/24 14:36	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			10/25/24 14:36	1
1,2-Dichloropropane	ND		1.0	0.24	ug/L			10/25/24 14:36	1
1,3,5-Trimethylbenzene	ND		1.0	0.12	ug/L			10/25/24 14:36	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			10/25/24 14:36	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			10/25/24 14:36	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			10/25/24 14:36	1
2,2-Dichloropropane	ND		1.0	0.17	ug/L			10/25/24 14:36	1
2-Butanone (MEK)	ND		10	4.6	ug/L			10/25/24 14:36	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			10/25/24 14:36	1
2-Hexanone	ND		5.0	0.81	ug/L			10/25/24 14:36	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: MW-20
Date Collected: 10/16/24 11:22
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			10/25/24 14:36	1
4-Isopropyltoluene	ND		1.0	0.19	ug/L			10/25/24 14:36	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			10/25/24 14:36	1
Acetone	ND		15	6.6	ug/L			10/25/24 14:36	1
Benzene	ND		1.0	0.14	ug/L			10/25/24 14:36	1
Bromobenzene	ND		1.0	0.19	ug/L			10/25/24 14:36	1
Bromochloromethane	ND		1.0	0.40	ug/L			10/25/24 14:36	1
Bromodichloromethane	ND		1.0	0.19	ug/L			10/25/24 14:36	1
Bromoform	ND		2.0	0.25	ug/L			10/25/24 14:36	1
Bromomethane	ND		5.0	2.4	ug/L			10/25/24 14:36	1
Carbon disulfide	ND		2.0	0.26	ug/L			10/25/24 14:36	1
Carbon tetrachloride	ND		1.0	0.23	ug/L			10/25/24 14:36	1
Chlorobenzene	ND		1.0	0.092	ug/L			10/25/24 14:36	1
Chloroethane	ND		2.0	0.64	ug/L			10/25/24 14:36	1
Chloroform	ND		1.0	0.36	ug/L			10/25/24 14:36	1
Chloromethane	ND		2.0	0.23	ug/L			10/25/24 14:36	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			10/25/24 14:36	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			10/25/24 14:36	1
Dibromochloromethane	ND		1.0	0.28	ug/L			10/25/24 14:36	1
Dibromomethane	ND		1.0	0.34	ug/L			10/25/24 14:36	1
Dichlorodifluoromethane	ND		2.0	0.30	ug/L			10/25/24 14:36	1
Ethylbenzene	ND		1.0	0.14	ug/L			10/25/24 14:36	1
Hexachlorobutadiene	ND		2.0	0.53	ug/L			10/25/24 14:36	1
Isopropylbenzene	ND		1.0	0.16	ug/L			10/25/24 14:36	1
Methylene Chloride	ND		2.0	0.94	ug/L			10/25/24 14:36	1
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			10/25/24 14:36	1
Naphthalene	ND		3.0	0.99	ug/L			10/25/24 14:36	1
n-Butylbenzene	ND		1.0	0.23	ug/L			10/25/24 14:36	1
N-Propylbenzene	ND		1.0	0.18	ug/L			10/25/24 14:36	1
o-Xylene	ND		1.0	0.11	ug/L			10/25/24 14:36	1
sec-Butylbenzene	ND		1.0	0.20	ug/L			10/25/24 14:36	1
Styrene	ND		1.0	0.13	ug/L			10/25/24 14:36	1
tert-Butylbenzene	ND		1.0	0.18	ug/L			10/25/24 14:36	1
Tetrachloroethene	ND		1.0	0.40	ug/L			10/25/24 14:36	1
Toluene	ND		1.0	0.32	ug/L			10/25/24 14:36	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			10/25/24 14:36	1
trans-1,3-Dichloropropene	ND		1.0	0.14	ug/L			10/25/24 14:36	1
Trichloroethene	ND		1.0	0.30	ug/L			10/25/24 14:36	1
Trichlorofluoromethane	ND		2.0	0.20	ug/L			10/25/24 14:36	1
Vinyl chloride	ND		1.0	0.23	ug/L			10/25/24 14:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		70 - 127		10/25/24 14:36	1
4-Bromofluorobenzene (Surr)	106		78 - 120		10/25/24 14:36	1
Dibromofluoromethane (Surr)	97		77 - 120		10/25/24 14:36	1
Toluene-d8 (Surr)	106		80 - 125		10/25/24 14:36	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: MW-21
Date Collected: 10/16/24 10:12
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			10/25/24 14:58	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			10/25/24 14:58	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/25/24 14:58	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			10/25/24 14:58	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			10/25/24 14:58	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			10/25/24 14:58	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			10/25/24 14:58	1
1,2,3-Trichlorobenzene	ND		4.0	1.2	ug/L			10/25/24 14:58	1
1,2,3-Trichloropropane	ND		2.5	0.28	ug/L			10/25/24 14:58	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			10/25/24 14:58	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			10/25/24 14:58	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.42	ug/L			10/25/24 14:58	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			10/25/24 14:58	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			10/25/24 14:58	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			10/25/24 14:58	1
1,2-Dichloropropane	ND		1.0	0.24	ug/L			10/25/24 14:58	1
1,3,5-Trimethylbenzene	ND		1.0	0.12	ug/L			10/25/24 14:58	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			10/25/24 14:58	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			10/25/24 14:58	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			10/25/24 14:58	1
2,2-Dichloropropane	ND		1.0	0.17	ug/L			10/25/24 14:58	1
2-Butanone (MEK)	ND		10	4.6	ug/L			10/25/24 14:58	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			10/25/24 14:58	1
2-Hexanone	ND		5.0	0.81	ug/L			10/25/24 14:58	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			10/25/24 14:58	1
4-Isopropyltoluene	ND		1.0	0.19	ug/L			10/25/24 14:58	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			10/25/24 14:58	1
Acetone	ND		15	6.6	ug/L			10/25/24 14:58	1
Benzene	ND		1.0	0.14	ug/L			10/25/24 14:58	1
Bromobenzene	ND		1.0	0.19	ug/L			10/25/24 14:58	1
Bromochloromethane	ND		1.0	0.40	ug/L			10/25/24 14:58	1
Bromodichloromethane	ND		1.0	0.19	ug/L			10/25/24 14:58	1
Bromoform	ND		2.0	0.25	ug/L			10/25/24 14:58	1
Bromomethane	ND		5.0	2.4	ug/L			10/25/24 14:58	1
Carbon disulfide	ND		2.0	0.26	ug/L			10/25/24 14:58	1
Carbon tetrachloride	ND		1.0	0.23	ug/L			10/25/24 14:58	1
Chlorobenzene	ND		1.0	0.092	ug/L			10/25/24 14:58	1
Chloroethane	ND		2.0	0.64	ug/L			10/25/24 14:58	1
Chloroform	ND		1.0	0.36	ug/L			10/25/24 14:58	1
Chloromethane	ND		2.0	0.23	ug/L			10/25/24 14:58	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			10/25/24 14:58	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			10/25/24 14:58	1
Dibromochloromethane	ND		1.0	0.28	ug/L			10/25/24 14:58	1
Dibromomethane	ND		1.0	0.34	ug/L			10/25/24 14:58	1
Dichlorodifluoromethane	ND		2.0	0.30	ug/L			10/25/24 14:58	1
Ethylbenzene	ND		1.0	0.14	ug/L			10/25/24 14:58	1
Hexachlorobutadiene	ND		2.0	0.53	ug/L			10/25/24 14:58	1
Isopropylbenzene	ND		1.0	0.16	ug/L			10/25/24 14:58	1
Methylene Chloride	ND		2.0	0.94	ug/L			10/25/24 14:58	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: MW-21
Date Collected: 10/16/24 10:12
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			10/25/24 14:58	1
Naphthalene	ND		3.0	0.99	ug/L			10/25/24 14:58	1
n-Butylbenzene	ND		1.0	0.23	ug/L			10/25/24 14:58	1
N-Propylbenzene	ND		1.0	0.18	ug/L			10/25/24 14:58	1
o-Xylene	ND		1.0	0.11	ug/L			10/25/24 14:58	1
sec-Butylbenzene	ND		1.0	0.20	ug/L			10/25/24 14:58	1
Styrene	ND		1.0	0.13	ug/L			10/25/24 14:58	1
tert-Butylbenzene	ND		1.0	0.18	ug/L			10/25/24 14:58	1
Tetrachloroethene	ND		1.0	0.40	ug/L			10/25/24 14:58	1
Toluene	ND		1.0	0.32	ug/L			10/25/24 14:58	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			10/25/24 14:58	1
trans-1,3-Dichloropropene	ND		1.0	0.14	ug/L			10/25/24 14:58	1
Trichloroethene	ND		1.0	0.30	ug/L			10/25/24 14:58	1
Trichlorofluoromethane	ND		2.0	0.20	ug/L			10/25/24 14:58	1
Vinyl chloride	ND		1.0	0.23	ug/L			10/25/24 14:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		70 - 127					10/25/24 14:58	1
4-Bromofluorobenzene (Surr)	105		78 - 120					10/25/24 14:58	1
Dibromofluoromethane (Surr)	96		77 - 120					10/25/24 14:58	1
Toluene-d8 (Surr)	105		80 - 125					10/25/24 14:58	1

Client Sample ID: Duplicate 1
Date Collected: 10/16/24 00:00
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			10/25/24 15:20	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			10/25/24 15:20	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/25/24 15:20	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			10/25/24 15:20	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			10/25/24 15:20	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			10/25/24 15:20	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			10/25/24 15:20	1
1,2,3-Trichlorobenzene	ND		4.0	1.2	ug/L			10/25/24 15:20	1
1,2,3-Trichloropropane	ND		2.5	0.28	ug/L			10/25/24 15:20	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			10/25/24 15:20	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			10/25/24 15:20	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.42	ug/L			10/25/24 15:20	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			10/25/24 15:20	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			10/25/24 15:20	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			10/25/24 15:20	1
1,2-Dichloropropane	ND		1.0	0.24	ug/L			10/25/24 15:20	1
1,3,5-Trimethylbenzene	ND		1.0	0.12	ug/L			10/25/24 15:20	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			10/25/24 15:20	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			10/25/24 15:20	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			10/25/24 15:20	1
2,2-Dichloropropane	ND		1.0	0.17	ug/L			10/25/24 15:20	1
2-Butanone (MEK)	ND		10	4.6	ug/L			10/25/24 15:20	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			10/25/24 15:20	1
2-Hexanone	ND		5.0	0.81	ug/L			10/25/24 15:20	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: Duplicate 1
Date Collected: 10/16/24 00:00
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			10/25/24 15:20	1
4-Isopropyltoluene	ND		1.0	0.19	ug/L			10/25/24 15:20	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			10/25/24 15:20	1
Acetone	ND		15	6.6	ug/L			10/25/24 15:20	1
Benzene	ND		1.0	0.14	ug/L			10/25/24 15:20	1
Bromobenzene	ND		1.0	0.19	ug/L			10/25/24 15:20	1
Bromochloromethane	ND		1.0	0.40	ug/L			10/25/24 15:20	1
Bromodichloromethane	ND		1.0	0.19	ug/L			10/25/24 15:20	1
Bromoform	ND		2.0	0.25	ug/L			10/25/24 15:20	1
Bromomethane	ND		5.0	2.4	ug/L			10/25/24 15:20	1
Carbon disulfide	ND		2.0	0.26	ug/L			10/25/24 15:20	1
Carbon tetrachloride	ND		1.0	0.23	ug/L			10/25/24 15:20	1
Chlorobenzene	ND		1.0	0.092	ug/L			10/25/24 15:20	1
Chloroethane	ND		2.0	0.64	ug/L			10/25/24 15:20	1
Chloroform	ND		1.0	0.36	ug/L			10/25/24 15:20	1
Chloromethane	ND		2.0	0.23	ug/L			10/25/24 15:20	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			10/25/24 15:20	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			10/25/24 15:20	1
Dibromochloromethane	ND		1.0	0.28	ug/L			10/25/24 15:20	1
Dibromomethane	ND		1.0	0.34	ug/L			10/25/24 15:20	1
Dichlorodifluoromethane	ND		2.0	0.30	ug/L			10/25/24 15:20	1
Ethylbenzene	ND		1.0	0.14	ug/L			10/25/24 15:20	1
Hexachlorobutadiene	ND		2.0	0.53	ug/L			10/25/24 15:20	1
Isopropylbenzene	ND		1.0	0.16	ug/L			10/25/24 15:20	1
Methylene Chloride	ND		2.0	0.94	ug/L			10/25/24 15:20	1
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			10/25/24 15:20	1
Naphthalene	ND		3.0	0.99	ug/L			10/25/24 15:20	1
n-Butylbenzene	ND		1.0	0.23	ug/L			10/25/24 15:20	1
N-Propylbenzene	ND		1.0	0.18	ug/L			10/25/24 15:20	1
o-Xylene	ND		1.0	0.11	ug/L			10/25/24 15:20	1
sec-Butylbenzene	ND		1.0	0.20	ug/L			10/25/24 15:20	1
Styrene	ND		1.0	0.13	ug/L			10/25/24 15:20	1
tert-Butylbenzene	ND		1.0	0.18	ug/L			10/25/24 15:20	1
Tetrachloroethene	ND		1.0	0.40	ug/L			10/25/24 15:20	1
Toluene	ND		1.0	0.32	ug/L			10/25/24 15:20	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			10/25/24 15:20	1
trans-1,3-Dichloropropene	ND		1.0	0.14	ug/L			10/25/24 15:20	1
Trichloroethene	ND		1.0	0.30	ug/L			10/25/24 15:20	1
Trichlorofluoromethane	ND		2.0	0.20	ug/L			10/25/24 15:20	1
Vinyl chloride	ND		1.0	0.23	ug/L			10/25/24 15:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		70 - 127		10/25/24 15:20	1
4-Bromofluorobenzene (Surr)	106		78 - 120		10/25/24 15:20	1
Dibromofluoromethane (Surr)	96		77 - 120		10/25/24 15:20	1
Toluene-d8 (Surr)	104		80 - 125		10/25/24 15:20	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: Duplicate 2
Date Collected: 10/16/24 00:00
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			10/25/24 15:42	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			10/25/24 15:42	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/25/24 15:42	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			10/25/24 15:42	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			10/25/24 15:42	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			10/25/24 15:42	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			10/25/24 15:42	1
1,2,3-Trichlorobenzene	ND		4.0	1.2	ug/L			10/25/24 15:42	1
1,2,3-Trichloropropane	ND		2.5	0.28	ug/L			10/25/24 15:42	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			10/25/24 15:42	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			10/25/24 15:42	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.42	ug/L			10/25/24 15:42	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			10/25/24 15:42	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			10/25/24 15:42	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			10/25/24 15:42	1
1,2-Dichloropropane	ND		1.0	0.24	ug/L			10/25/24 15:42	1
1,3,5-Trimethylbenzene	ND		1.0	0.12	ug/L			10/25/24 15:42	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			10/25/24 15:42	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			10/25/24 15:42	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			10/25/24 15:42	1
2,2-Dichloropropane	ND		1.0	0.17	ug/L			10/25/24 15:42	1
2-Butanone (MEK)	ND		10	4.6	ug/L			10/25/24 15:42	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			10/25/24 15:42	1
2-Hexanone	ND		5.0	0.81	ug/L			10/25/24 15:42	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			10/25/24 15:42	1
4-Isopropyltoluene	ND		1.0	0.19	ug/L			10/25/24 15:42	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			10/25/24 15:42	1
Acetone	ND		15	6.6	ug/L			10/25/24 15:42	1
Benzene	ND		1.0	0.14	ug/L			10/25/24 15:42	1
Bromobenzene	ND		1.0	0.19	ug/L			10/25/24 15:42	1
Bromochloromethane	ND		1.0	0.40	ug/L			10/25/24 15:42	1
Bromodichloromethane	ND		1.0	0.19	ug/L			10/25/24 15:42	1
Bromoform	ND		2.0	0.25	ug/L			10/25/24 15:42	1
Bromomethane	ND		5.0	2.4	ug/L			10/25/24 15:42	1
Carbon disulfide	ND		2.0	0.26	ug/L			10/25/24 15:42	1
Carbon tetrachloride	ND		1.0	0.23	ug/L			10/25/24 15:42	1
Chlorobenzene	ND		1.0	0.092	ug/L			10/25/24 15:42	1
Chloroethane	ND		2.0	0.64	ug/L			10/25/24 15:42	1
Chloroform	ND		1.0	0.36	ug/L			10/25/24 15:42	1
Chloromethane	ND		2.0	0.23	ug/L			10/25/24 15:42	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			10/25/24 15:42	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			10/25/24 15:42	1
Dibromochloromethane	ND		1.0	0.28	ug/L			10/25/24 15:42	1
Dibromomethane	ND		1.0	0.34	ug/L			10/25/24 15:42	1
Dichlorodifluoromethane	ND		2.0	0.30	ug/L			10/25/24 15:42	1
Ethylbenzene	ND		1.0	0.14	ug/L			10/25/24 15:42	1
Hexachlorobutadiene	ND		2.0	0.53	ug/L			10/25/24 15:42	1
Isopropylbenzene	ND		1.0	0.16	ug/L			10/25/24 15:42	1
Methylene Chloride	ND		2.0	0.94	ug/L			10/25/24 15:42	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: Duplicate 2
Date Collected: 10/16/24 00:00
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			10/25/24 15:42	1
Naphthalene	ND		3.0	0.99	ug/L			10/25/24 15:42	1
n-Butylbenzene	ND		1.0	0.23	ug/L			10/25/24 15:42	1
N-Propylbenzene	ND		1.0	0.18	ug/L			10/25/24 15:42	1
o-Xylene	ND		1.0	0.11	ug/L			10/25/24 15:42	1
sec-Butylbenzene	ND		1.0	0.20	ug/L			10/25/24 15:42	1
Styrene	ND		1.0	0.13	ug/L			10/25/24 15:42	1
tert-Butylbenzene	ND		1.0	0.18	ug/L			10/25/24 15:42	1
Tetrachloroethene	ND		1.0	0.40	ug/L			10/25/24 15:42	1
Toluene	ND		1.0	0.32	ug/L			10/25/24 15:42	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			10/25/24 15:42	1
trans-1,3-Dichloropropene	ND		1.0	0.14	ug/L			10/25/24 15:42	1
Trichloroethene	ND		1.0	0.30	ug/L			10/25/24 15:42	1
Trichlorofluoromethane	ND		2.0	0.20	ug/L			10/25/24 15:42	1
Vinyl chloride	ND		1.0	0.23	ug/L			10/25/24 15:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		70 - 127					10/25/24 15:42	1
4-Bromofluorobenzene (Surr)	104		78 - 120					10/25/24 15:42	1
Dibromofluoromethane (Surr)	96		77 - 120					10/25/24 15:42	1
Toluene-d8 (Surr)	106		80 - 125					10/25/24 15:42	1

Client Sample ID: QCAB
Date Collected: 10/16/24 00:00
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-14
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			10/25/24 16:04	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			10/25/24 16:04	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/25/24 16:04	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			10/25/24 16:04	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			10/25/24 16:04	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			10/25/24 16:04	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			10/25/24 16:04	1
1,2,3-Trichlorobenzene	ND		4.0	1.2	ug/L			10/25/24 16:04	1
1,2,3-Trichloropropane	ND		2.5	0.28	ug/L			10/25/24 16:04	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			10/25/24 16:04	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			10/25/24 16:04	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.42	ug/L			10/25/24 16:04	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			10/25/24 16:04	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			10/25/24 16:04	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			10/25/24 16:04	1
1,2-Dichloropropane	ND		1.0	0.24	ug/L			10/25/24 16:04	1
1,3,5-Trimethylbenzene	ND		1.0	0.12	ug/L			10/25/24 16:04	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			10/25/24 16:04	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			10/25/24 16:04	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			10/25/24 16:04	1
2,2-Dichloropropane	ND		1.0	0.17	ug/L			10/25/24 16:04	1
2-Butanone (MEK)	ND		10	4.6	ug/L			10/25/24 16:04	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			10/25/24 16:04	1
2-Hexanone	ND		5.0	0.81	ug/L			10/25/24 16:04	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: QCAB
Date Collected: 10/16/24 00:00
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-14
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			10/25/24 16:04	1
4-Isopropyltoluene	ND		1.0	0.19	ug/L			10/25/24 16:04	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			10/25/24 16:04	1
Acetone	ND		15	6.6	ug/L			10/25/24 16:04	1
Benzene	ND		1.0	0.14	ug/L			10/25/24 16:04	1
Bromobenzene	ND		1.0	0.19	ug/L			10/25/24 16:04	1
Bromochloromethane	ND		1.0	0.40	ug/L			10/25/24 16:04	1
Bromodichloromethane	ND		1.0	0.19	ug/L			10/25/24 16:04	1
Bromoform	ND		2.0	0.25	ug/L			10/25/24 16:04	1
Bromomethane	ND		5.0	2.4	ug/L			10/25/24 16:04	1
Carbon disulfide	ND		2.0	0.26	ug/L			10/25/24 16:04	1
Carbon tetrachloride	ND		1.0	0.23	ug/L			10/25/24 16:04	1
Chlorobenzene	ND		1.0	0.092	ug/L			10/25/24 16:04	1
Chloroethane	ND		2.0	0.64	ug/L			10/25/24 16:04	1
Chloroform	ND		1.0	0.36	ug/L			10/25/24 16:04	1
Chloromethane	ND		2.0	0.23	ug/L			10/25/24 16:04	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			10/25/24 16:04	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			10/25/24 16:04	1
Dibromochloromethane	ND		1.0	0.28	ug/L			10/25/24 16:04	1
Dibromomethane	ND		1.0	0.34	ug/L			10/25/24 16:04	1
Dichlorodifluoromethane	ND		2.0	0.30	ug/L			10/25/24 16:04	1
Ethylbenzene	ND		1.0	0.14	ug/L			10/25/24 16:04	1
Hexachlorobutadiene	ND		2.0	0.53	ug/L			10/25/24 16:04	1
Isopropylbenzene	ND		1.0	0.16	ug/L			10/25/24 16:04	1
Methylene Chloride	ND		2.0	0.94	ug/L			10/25/24 16:04	1
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			10/25/24 16:04	1
Naphthalene	ND		3.0	0.99	ug/L			10/25/24 16:04	1
n-Butylbenzene	ND		1.0	0.23	ug/L			10/25/24 16:04	1
N-Propylbenzene	ND		1.0	0.18	ug/L			10/25/24 16:04	1
o-Xylene	ND		1.0	0.11	ug/L			10/25/24 16:04	1
sec-Butylbenzene	ND		1.0	0.20	ug/L			10/25/24 16:04	1
Styrene	ND		1.0	0.13	ug/L			10/25/24 16:04	1
tert-Butylbenzene	ND		1.0	0.18	ug/L			10/25/24 16:04	1
Tetrachloroethene	ND		1.0	0.40	ug/L			10/25/24 16:04	1
Toluene	ND		1.0	0.32	ug/L			10/25/24 16:04	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			10/25/24 16:04	1
trans-1,3-Dichloropropene	ND		1.0	0.14	ug/L			10/25/24 16:04	1
Trichloroethene	ND		1.0	0.30	ug/L			10/25/24 16:04	1
Trichlorofluoromethane	ND		2.0	0.20	ug/L			10/25/24 16:04	1
Vinyl chloride	ND		1.0	0.23	ug/L			10/25/24 16:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		70 - 127		10/25/24 16:04	1
4-Bromofluorobenzene (Surr)	105		78 - 120		10/25/24 16:04	1
Dibromofluoromethane (Surr)	95		77 - 120		10/25/24 16:04	1
Toluene-d8 (Surr)	106		80 - 125		10/25/24 16:04	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: QCTB
Date Collected: 10/16/24 09:15
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-15
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			10/25/24 10:58	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			10/25/24 10:58	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/25/24 10:58	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			10/25/24 10:58	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			10/25/24 10:58	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			10/25/24 10:58	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			10/25/24 10:58	1
1,2,3-Trichlorobenzene	ND		4.0	1.2	ug/L			10/25/24 10:58	1
1,2,3-Trichloropropane	ND		2.5	0.28	ug/L			10/25/24 10:58	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			10/25/24 10:58	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			10/25/24 10:58	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.42	ug/L			10/25/24 10:58	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			10/25/24 10:58	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			10/25/24 10:58	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			10/25/24 10:58	1
1,2-Dichloropropane	ND		1.0	0.24	ug/L			10/25/24 10:58	1
1,3,5-Trimethylbenzene	ND		1.0	0.12	ug/L			10/25/24 10:58	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			10/25/24 10:58	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			10/25/24 10:58	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			10/25/24 10:58	1
2,2-Dichloropropane	ND		1.0	0.17	ug/L			10/25/24 10:58	1
2-Butanone (MEK)	ND		10	4.6	ug/L			10/25/24 10:58	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			10/25/24 10:58	1
2-Hexanone	ND		5.0	0.81	ug/L			10/25/24 10:58	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			10/25/24 10:58	1
4-Isopropyltoluene	ND		1.0	0.19	ug/L			10/25/24 10:58	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			10/25/24 10:58	1
Acetone	ND		15	6.6	ug/L			10/25/24 10:58	1
Benzene	ND		1.0	0.14	ug/L			10/25/24 10:58	1
Bromobenzene	ND		1.0	0.19	ug/L			10/25/24 10:58	1
Bromochloromethane	ND		1.0	0.40	ug/L			10/25/24 10:58	1
Bromodichloromethane	ND		1.0	0.19	ug/L			10/25/24 10:58	1
Bromoform	ND		2.0	0.25	ug/L			10/25/24 10:58	1
Bromomethane	ND		5.0	2.4	ug/L			10/25/24 10:58	1
Carbon disulfide	ND		2.0	0.26	ug/L			10/25/24 10:58	1
Carbon tetrachloride	ND		1.0	0.23	ug/L			10/25/24 10:58	1
Chlorobenzene	ND		1.0	0.092	ug/L			10/25/24 10:58	1
Chloroethane	ND		2.0	0.64	ug/L			10/25/24 10:58	1
Chloroform	ND		1.0	0.36	ug/L			10/25/24 10:58	1
Chloromethane	ND		2.0	0.23	ug/L			10/25/24 10:58	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			10/25/24 10:58	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			10/25/24 10:58	1
Dibromochloromethane	ND		1.0	0.28	ug/L			10/25/24 10:58	1
Dibromomethane	ND		1.0	0.34	ug/L			10/25/24 10:58	1
Dichlorodifluoromethane	ND		2.0	0.30	ug/L			10/25/24 10:58	1
Ethylbenzene	ND		1.0	0.14	ug/L			10/25/24 10:58	1
Hexachlorobutadiene	ND		2.0	0.53	ug/L			10/25/24 10:58	1
Isopropylbenzene	ND		1.0	0.16	ug/L			10/25/24 10:58	1
Methylene Chloride	ND		2.0	0.94	ug/L			10/25/24 10:58	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: QCTB
Date Collected: 10/16/24 09:15
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-15
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			10/25/24 10:58	1
Naphthalene	ND		3.0	0.99	ug/L			10/25/24 10:58	1
n-Butylbenzene	ND		1.0	0.23	ug/L			10/25/24 10:58	1
N-Propylbenzene	ND		1.0	0.18	ug/L			10/25/24 10:58	1
o-Xylene	ND		1.0	0.11	ug/L			10/25/24 10:58	1
sec-Butylbenzene	ND		1.0	0.20	ug/L			10/25/24 10:58	1
Styrene	ND		1.0	0.13	ug/L			10/25/24 10:58	1
tert-Butylbenzene	ND		1.0	0.18	ug/L			10/25/24 10:58	1
Tetrachloroethene	ND		1.0	0.40	ug/L			10/25/24 10:58	1
Toluene	ND		1.0	0.32	ug/L			10/25/24 10:58	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			10/25/24 10:58	1
trans-1,3-Dichloropropene	ND		1.0	0.14	ug/L			10/25/24 10:58	1
Trichloroethene	ND		1.0	0.30	ug/L			10/25/24 10:58	1
Trichlorofluoromethane	ND		2.0	0.20	ug/L			10/25/24 10:58	1
Vinyl chloride	ND		1.0	0.23	ug/L			10/25/24 10:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		70 - 127					10/25/24 10:58	1
4-Bromofluorobenzene (Surr)	106		78 - 120					10/25/24 10:58	1
Dibromofluoromethane (Surr)	95		77 - 120					10/25/24 10:58	1
Toluene-d8 (Surr)	107		80 - 125					10/25/24 10:58	1

Method: EPA 200.8 - Metals (ICP/MS)

Client Sample ID: MW-8s
Date Collected: 10/15/24 14:40
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.40	ug/L		10/21/24 14:56	10/23/24 02:32	1
Arsenic	ND		5.0	0.50	ug/L		10/21/24 14:56	10/23/24 02:32	1
Lead	ND		1.0	0.23	ug/L		10/21/24 14:56	10/23/24 02:32	1
Nickel	2.0	J	3.0	0.83	ug/L		10/21/24 14:56	10/23/24 02:32	1
Barium	1.1	J	3.0	0.38	ug/L		10/21/24 14:56	10/23/24 02:32	1
Selenium	ND		5.0	1.0	ug/L		10/21/24 14:56	10/23/24 02:32	1
Beryllium	ND		1.0	0.30	ug/L		10/21/24 14:56	10/23/24 02:32	1
Cadmium	ND		1.0	0.19	ug/L		10/21/24 14:56	10/23/24 02:32	1
Chromium	1.1	J	3.0	0.50	ug/L		10/21/24 14:56	10/23/24 02:32	1
Cobalt	ND		1.0	0.33	ug/L		10/21/24 14:56	10/23/24 02:32	1
Copper	1.7	J	2.0	0.71	ug/L		10/21/24 14:56	10/23/24 02:32	1
Silver	ND		1.0	0.045	ug/L		10/21/24 14:56	10/23/24 02:32	1
Thallium	ND		1.0	0.21	ug/L		10/21/24 14:56	10/23/24 02:32	1
Vanadium	48		5.0	1.1	ug/L		10/21/24 14:56	10/23/24 02:32	1
Zinc	ND		10	2.0	ug/L		10/21/24 14:56	10/23/24 02:32	1

Client Sample ID: MW-9s
Date Collected: 10/15/24 16:45
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.40	ug/L		10/21/24 14:56	10/23/24 02:36	1
Arsenic	27		5.0	0.50	ug/L		10/21/24 14:56	10/23/24 02:36	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Method: EPA 200.8 - Metals (ICP/MS) (Continued)

Client Sample ID: MW-9s
Date Collected: 10/15/24 16:45
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.0	0.23	ug/L		10/21/24 14:56	10/23/24 02:36	1
Nickel	0.95	J	3.0	0.83	ug/L		10/21/24 14:56	10/23/24 02:36	1
Barium	91		3.0	0.38	ug/L		10/21/24 14:56	10/23/24 02:36	1
Selenium	ND		5.0	1.0	ug/L		10/21/24 14:56	10/23/24 02:36	1
Beryllium	ND		1.0	0.30	ug/L		10/21/24 14:56	10/23/24 02:36	1
Cadmium	ND		1.0	0.19	ug/L		10/21/24 14:56	10/23/24 02:36	1
Chromium	ND		3.0	0.50	ug/L		10/21/24 14:56	10/23/24 02:36	1
Cobalt	ND		1.0	0.33	ug/L		10/21/24 14:56	10/23/24 02:36	1
Copper	ND		2.0	0.71	ug/L		10/21/24 14:56	10/23/24 02:36	1
Silver	ND		1.0	0.045	ug/L		10/21/24 14:56	10/23/24 02:36	1
Thallium	ND		1.0	0.21	ug/L		10/21/24 14:56	10/23/24 02:36	1
Vanadium	ND		5.0	1.1	ug/L		10/21/24 14:56	10/23/24 02:36	1
Zinc	ND		10	2.0	ug/L		10/21/24 14:56	10/23/24 02:36	1

Client Sample ID: MW-10s
Date Collected: 10/15/24 15:57
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.40	ug/L		10/21/24 14:56	10/23/24 02:39	1
Arsenic	ND		5.0	0.50	ug/L		10/21/24 14:56	10/23/24 02:39	1
Lead	ND		1.0	0.23	ug/L		10/21/24 14:56	10/23/24 02:39	1
Nickel	21		3.0	0.83	ug/L		10/21/24 14:56	10/23/24 02:39	1
Barium	11		3.0	0.38	ug/L		10/21/24 14:56	10/23/24 02:39	1
Selenium	ND		5.0	1.0	ug/L		10/21/24 14:56	10/23/24 02:39	1
Beryllium	ND		1.0	0.30	ug/L		10/21/24 14:56	10/23/24 02:39	1
Cadmium	ND		1.0	0.19	ug/L		10/21/24 14:56	10/23/24 02:39	1
Chromium	2.6	J	3.0	0.50	ug/L		10/21/24 14:56	10/23/24 02:39	1
Cobalt	1.3		1.0	0.33	ug/L		10/21/24 14:56	10/23/24 02:39	1
Copper	ND		2.0	0.71	ug/L		10/21/24 14:56	10/23/24 02:39	1
Silver	ND		1.0	0.045	ug/L		10/21/24 14:56	10/23/24 02:39	1
Thallium	ND		1.0	0.21	ug/L		10/21/24 14:56	10/23/24 02:39	1
Vanadium	49		5.0	1.1	ug/L		10/21/24 14:56	10/23/24 02:39	1
Zinc	ND		10	2.0	ug/L		10/21/24 14:56	10/23/24 02:39	1

Client Sample ID: MW-10D
Date Collected: 10/16/24 09:15
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.40	ug/L		10/21/24 14:56	10/23/24 02:43	1
Arsenic	ND		5.0	0.50	ug/L		10/21/24 14:56	10/23/24 02:43	1
Lead	ND		1.0	0.23	ug/L		10/21/24 14:56	10/23/24 02:43	1
Nickel	11		3.0	0.83	ug/L		10/21/24 14:56	10/23/24 02:43	1
Barium	8.3		3.0	0.38	ug/L		10/21/24 14:56	10/23/24 02:43	1
Selenium	ND		5.0	1.0	ug/L		10/21/24 14:56	10/23/24 02:43	1
Beryllium	ND		1.0	0.30	ug/L		10/21/24 14:56	10/23/24 02:43	1
Cadmium	ND		1.0	0.19	ug/L		10/21/24 14:56	10/23/24 02:43	1
Chromium	ND		3.0	0.50	ug/L		10/21/24 14:56	10/23/24 02:43	1
Cobalt	0.60	J	1.0	0.33	ug/L		10/21/24 14:56	10/23/24 02:43	1
Copper	0.73	J	2.0	0.71	ug/L		10/21/24 14:56	10/23/24 02:43	1
Silver	ND		1.0	0.045	ug/L		10/21/24 14:56	10/23/24 02:43	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Method: EPA 200.8 - Metals (ICP/MS) (Continued)

Client Sample ID: MW-10D
Date Collected: 10/16/24 09:15
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	ND		1.0	0.21	ug/L		10/21/24 14:56	10/23/24 02:43	1
Vanadium	16		5.0	1.1	ug/L		10/21/24 14:56	10/23/24 02:43	1
Zinc	ND		10	2.0	ug/L		10/21/24 14:56	10/23/24 02:43	1

Client Sample ID: MW-11s
Date Collected: 10/16/24 11:55
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.40	ug/L		10/21/24 14:56	10/23/24 02:47	1
Arsenic	ND		5.0	0.50	ug/L		10/21/24 14:56	10/23/24 02:47	1
Lead	ND		1.0	0.23	ug/L		10/21/24 14:56	10/23/24 02:47	1
Nickel	4.5		3.0	0.83	ug/L		10/21/24 14:56	10/23/24 02:47	1
Barium	8.5		3.0	0.38	ug/L		10/21/24 14:56	10/23/24 02:47	1
Selenium	ND		5.0	1.0	ug/L		10/21/24 14:56	10/23/24 02:47	1
Beryllium	ND		1.0	0.30	ug/L		10/21/24 14:56	10/23/24 02:47	1
Cadmium	ND		1.0	0.19	ug/L		10/21/24 14:56	10/23/24 02:47	1
Chromium	ND		3.0	0.50	ug/L		10/21/24 14:56	10/23/24 02:47	1
Cobalt	0.56	J	1.0	0.33	ug/L		10/21/24 14:56	10/23/24 02:47	1
Copper	2.6		2.0	0.71	ug/L		10/21/24 14:56	10/23/24 02:47	1
Silver	ND		1.0	0.045	ug/L		10/21/24 14:56	10/23/24 02:47	1
Thallium	ND		1.0	0.21	ug/L		10/21/24 14:56	10/23/24 02:47	1
Vanadium	43		5.0	1.1	ug/L		10/21/24 14:56	10/23/24 02:47	1
Zinc	2.8	J	10	2.0	ug/L		10/21/24 14:56	10/23/24 02:47	1

Client Sample ID: MW-11D
Date Collected: 10/16/24 11:05
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.40	ug/L		10/21/24 14:56	10/23/24 02:50	1
Arsenic	ND		5.0	0.50	ug/L		10/21/24 14:56	10/23/24 02:50	1
Lead	ND		1.0	0.23	ug/L		10/21/24 14:56	10/23/24 02:50	1
Nickel	9.6		3.0	0.83	ug/L		10/21/24 14:56	10/23/24 02:50	1
Barium	6.4		3.0	0.38	ug/L		10/21/24 14:56	10/23/24 02:50	1
Selenium	ND		5.0	1.0	ug/L		10/21/24 14:56	10/23/24 02:50	1
Beryllium	ND		1.0	0.30	ug/L		10/21/24 14:56	10/23/24 02:50	1
Cadmium	ND		1.0	0.19	ug/L		10/21/24 14:56	10/23/24 02:50	1
Chromium	ND		3.0	0.50	ug/L		10/21/24 14:56	10/23/24 02:50	1
Cobalt	1.1		1.0	0.33	ug/L		10/21/24 14:56	10/23/24 02:50	1
Copper	ND		2.0	0.71	ug/L		10/21/24 14:56	10/23/24 02:50	1
Silver	ND		1.0	0.045	ug/L		10/21/24 14:56	10/23/24 02:50	1
Thallium	ND		1.0	0.21	ug/L		10/21/24 14:56	10/23/24 02:50	1
Vanadium	46		5.0	1.1	ug/L		10/21/24 14:56	10/23/24 02:50	1
Zinc	ND		10	2.0	ug/L		10/21/24 14:56	10/23/24 02:50	1

Client Sample ID: MW-17
Date Collected: 10/16/24 13:28
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.40	ug/L		10/21/24 14:56	10/23/24 02:54	1
Arsenic	ND		5.0	0.50	ug/L		10/21/24 14:56	10/23/24 02:54	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Method: EPA 200.8 - Metals (ICP/MS) (Continued)

Client Sample ID: MW-17
Date Collected: 10/16/24 13:28
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.0	0.23	ug/L		10/21/24 14:56	10/23/24 02:54	1
Nickel	1.4	J	3.0	0.83	ug/L		10/21/24 14:56	10/23/24 02:54	1
Barium	0.75	J	3.0	0.38	ug/L		10/21/24 14:56	10/23/24 02:54	1
Selenium	ND		5.0	1.0	ug/L		10/21/24 14:56	10/23/24 02:54	1
Beryllium	ND		1.0	0.30	ug/L		10/21/24 14:56	10/23/24 02:54	1
Cadmium	ND		1.0	0.19	ug/L		10/21/24 14:56	10/23/24 02:54	1
Chromium	4.1		3.0	0.50	ug/L		10/21/24 14:56	10/23/24 02:54	1
Cobalt	ND		1.0	0.33	ug/L		10/21/24 14:56	10/23/24 02:54	1
Copper	ND		2.0	0.71	ug/L		10/21/24 14:56	10/23/24 02:54	1
Silver	ND		1.0	0.045	ug/L		10/21/24 14:56	10/23/24 02:54	1
Thallium	ND		1.0	0.21	ug/L		10/21/24 14:56	10/23/24 02:54	1
Vanadium	56		5.0	1.1	ug/L		10/21/24 14:56	10/23/24 02:54	1
Zinc	ND		10	2.0	ug/L		10/21/24 14:56	10/23/24 02:54	1

Client Sample ID: MW-18
Date Collected: 10/16/24 12:59
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.40	ug/L		10/21/24 14:56	10/23/24 02:57	1
Arsenic	ND		5.0	0.50	ug/L		10/21/24 14:56	10/23/24 02:57	1
Lead	ND		1.0	0.23	ug/L		10/21/24 14:56	10/23/24 02:57	1
Nickel	ND		3.0	0.83	ug/L		10/21/24 14:56	10/23/24 02:57	1
Barium	0.43	J	3.0	0.38	ug/L		10/21/24 14:56	10/23/24 02:57	1
Selenium	ND		5.0	1.0	ug/L		10/21/24 14:56	10/23/24 02:57	1
Beryllium	ND		1.0	0.30	ug/L		10/21/24 14:56	10/23/24 02:57	1
Cadmium	ND		1.0	0.19	ug/L		10/21/24 14:56	10/23/24 02:57	1
Chromium	1.1	J	3.0	0.50	ug/L		10/21/24 14:56	10/23/24 02:57	1
Cobalt	ND		1.0	0.33	ug/L		10/21/24 14:56	10/23/24 02:57	1
Copper	ND		2.0	0.71	ug/L		10/21/24 14:56	10/23/24 02:57	1
Silver	ND		1.0	0.045	ug/L		10/21/24 14:56	10/23/24 02:57	1
Thallium	ND		1.0	0.21	ug/L		10/21/24 14:56	10/23/24 02:57	1
Vanadium	13		5.0	1.1	ug/L		10/21/24 14:56	10/23/24 02:57	1
Zinc	ND		10	2.0	ug/L		10/21/24 14:56	10/23/24 02:57	1

Client Sample ID: MW-19
Date Collected: 10/16/24 12:23
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.40	ug/L		10/21/24 14:56	10/23/24 03:58	1
Arsenic	ND		5.0	0.50	ug/L		10/21/24 14:56	10/23/24 03:58	1
Lead	ND		1.0	0.23	ug/L		10/21/24 14:56	10/23/24 03:58	1
Nickel	ND		3.0	0.83	ug/L		10/21/24 14:56	10/23/24 03:58	1
Barium	0.65	J	3.0	0.38	ug/L		10/21/24 14:56	10/23/24 03:58	1
Selenium	ND		5.0	1.0	ug/L		10/21/24 14:56	10/23/24 03:58	1
Beryllium	ND		1.0	0.30	ug/L		10/21/24 14:56	10/23/24 03:58	1
Cadmium	ND		1.0	0.19	ug/L		10/21/24 14:56	10/23/24 03:58	1
Chromium	0.88	J	3.0	0.50	ug/L		10/21/24 14:56	10/23/24 03:58	1
Cobalt	0.92	J	1.0	0.33	ug/L		10/21/24 14:56	10/23/24 03:58	1
Copper	ND		2.0	0.71	ug/L		10/21/24 14:56	10/23/24 03:58	1
Silver	ND		1.0	0.045	ug/L		10/21/24 14:56	10/23/24 03:58	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Method: EPA 200.8 - Metals (ICP/MS) (Continued)

Client Sample ID: MW-19
Date Collected: 10/16/24 12:23
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	ND		1.0	0.21	ug/L		10/21/24 14:56	10/23/24 03:58	1
Vanadium	25		5.0	1.1	ug/L		10/21/24 14:56	10/23/24 03:58	1
Zinc	ND		10	2.0	ug/L		10/21/24 14:56	10/23/24 03:58	1

Client Sample ID: MW-20
Date Collected: 10/16/24 11:22
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.40	ug/L		10/21/24 14:56	10/23/24 04:02	1
Arsenic	ND		5.0	0.50	ug/L		10/21/24 14:56	10/23/24 04:02	1
Lead	ND		1.0	0.23	ug/L		10/21/24 14:56	10/23/24 04:02	1
Nickel	0.96	J	3.0	0.83	ug/L		10/21/24 14:56	10/23/24 04:02	1
Barium	4.1		3.0	0.38	ug/L		10/21/24 14:56	10/23/24 04:02	1
Selenium	ND		5.0	1.0	ug/L		10/21/24 14:56	10/23/24 04:02	1
Beryllium	ND		1.0	0.30	ug/L		10/21/24 14:56	10/23/24 04:02	1
Cadmium	ND		1.0	0.19	ug/L		10/21/24 14:56	10/23/24 04:02	1
Chromium	ND		3.0	0.50	ug/L		10/21/24 14:56	10/23/24 04:02	1
Cobalt	0.35	J	1.0	0.33	ug/L		10/21/24 14:56	10/23/24 04:02	1
Copper	0.73	J	2.0	0.71	ug/L		10/21/24 14:56	10/23/24 04:02	1
Silver	ND		1.0	0.045	ug/L		10/21/24 14:56	10/23/24 04:02	1
Thallium	ND		1.0	0.21	ug/L		10/21/24 14:56	10/23/24 04:02	1
Vanadium	12		5.0	1.1	ug/L		10/21/24 14:56	10/23/24 04:02	1
Zinc	ND		10	2.0	ug/L		10/21/24 14:56	10/23/24 04:02	1

Client Sample ID: MW-21
Date Collected: 10/16/24 10:12
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.42	J	2.0	0.40	ug/L		10/21/24 14:56	10/23/24 04:06	1
Arsenic	ND		5.0	0.50	ug/L		10/21/24 14:56	10/23/24 04:06	1
Lead	0.45	J	1.0	0.23	ug/L		10/21/24 14:56	10/23/24 04:06	1
Nickel	17		3.0	0.83	ug/L		10/21/24 14:56	10/23/24 04:06	1
Barium	12		3.0	0.38	ug/L		10/21/24 14:56	10/23/24 04:06	1
Selenium	ND		5.0	1.0	ug/L		10/21/24 14:56	10/23/24 04:06	1
Beryllium	ND		1.0	0.30	ug/L		10/21/24 14:56	10/23/24 04:06	1
Cadmium	ND		1.0	0.19	ug/L		10/21/24 14:56	10/23/24 04:06	1
Chromium	4.7		3.0	0.50	ug/L		10/21/24 14:56	10/23/24 04:06	1
Cobalt	13		1.0	0.33	ug/L		10/21/24 14:56	10/23/24 04:06	1
Copper	41		2.0	0.71	ug/L		10/21/24 14:56	10/23/24 04:06	1
Silver	0.19	J	1.0	0.045	ug/L		10/21/24 14:56	10/23/24 04:06	1
Thallium	ND		1.0	0.21	ug/L		10/21/24 14:56	10/23/24 04:06	1
Vanadium	15		5.0	1.1	ug/L		10/21/24 14:56	10/23/24 04:06	1
Zinc	17		10	2.0	ug/L		10/21/24 14:56	10/23/24 04:06	1

Client Sample ID: Duplicate 1
Date Collected: 10/16/24 00:00
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.40	ug/L		10/21/24 14:56	10/23/24 04:09	1
Arsenic	ND		5.0	0.50	ug/L		10/21/24 14:56	10/23/24 04:09	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Method: EPA 200.8 - Metals (ICP/MS) (Continued)

Client Sample ID: Duplicate 1
Date Collected: 10/16/24 00:00
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.0	0.23	ug/L		10/21/24 14:56	10/23/24 04:09	1
Nickel	ND		3.0	0.83	ug/L		10/21/24 14:56	10/23/24 04:09	1
Barium	ND		3.0	0.38	ug/L		10/21/24 14:56	10/23/24 04:09	1
Selenium	ND		5.0	1.0	ug/L		10/21/24 14:56	10/23/24 04:09	1
Beryllium	ND		1.0	0.30	ug/L		10/21/24 14:56	10/23/24 04:09	1
Cadmium	ND		1.0	0.19	ug/L		10/21/24 14:56	10/23/24 04:09	1
Chromium	0.92	J	3.0	0.50	ug/L		10/21/24 14:56	10/23/24 04:09	1
Cobalt	ND		1.0	0.33	ug/L		10/21/24 14:56	10/23/24 04:09	1
Copper	ND		2.0	0.71	ug/L		10/21/24 14:56	10/23/24 04:09	1
Silver	ND		1.0	0.045	ug/L		10/21/24 14:56	10/23/24 04:09	1
Thallium	ND		1.0	0.21	ug/L		10/21/24 14:56	10/23/24 04:09	1
Vanadium	13		5.0	1.1	ug/L		10/21/24 14:56	10/23/24 04:09	1
Zinc	ND		10	2.0	ug/L		10/21/24 14:56	10/23/24 04:09	1

Client Sample ID: Duplicate 2
Date Collected: 10/16/24 00:00
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.40	ug/L		10/21/24 14:56	10/23/24 04:13	1
Arsenic	ND		5.0	0.50	ug/L		10/21/24 14:56	10/23/24 04:13	1
Lead	0.44	J	1.0	0.23	ug/L		10/21/24 14:56	10/23/24 04:13	1
Nickel	17		3.0	0.83	ug/L		10/21/24 14:56	10/23/24 04:13	1
Barium	12		3.0	0.38	ug/L		10/21/24 14:56	10/23/24 04:13	1
Selenium	ND		5.0	1.0	ug/L		10/21/24 14:56	10/23/24 04:13	1
Beryllium	ND		1.0	0.30	ug/L		10/21/24 14:56	10/23/24 04:13	1
Cadmium	ND		1.0	0.19	ug/L		10/21/24 14:56	10/23/24 04:13	1
Chromium	4.8		3.0	0.50	ug/L		10/21/24 14:56	10/23/24 04:13	1
Cobalt	13		1.0	0.33	ug/L		10/21/24 14:56	10/23/24 04:13	1
Copper	40		2.0	0.71	ug/L		10/21/24 14:56	10/23/24 04:13	1
Silver	0.18	J	1.0	0.045	ug/L		10/21/24 14:56	10/23/24 04:13	1
Thallium	ND		1.0	0.21	ug/L		10/21/24 14:56	10/23/24 04:13	1
Vanadium	15		5.0	1.1	ug/L		10/21/24 14:56	10/23/24 04:13	1
Zinc	16		10	2.0	ug/L		10/21/24 14:56	10/23/24 04:13	1

Method: SW846 6010B - Dissolved Metals - Dissolved

Client Sample ID: MW-21
Date Collected: 10/16/24 10:12
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	120000		200	24	ug/L		10/21/24 08:05	11/04/24 19:41	1
Iron	600		100	9.1	ug/L		10/21/24 08:05	11/04/24 19:41	1
Magnesium	56000		200	4.2	ug/L		10/21/24 08:05	11/04/24 19:41	1
Manganese	990		10	0.45	ug/L		10/21/24 08:05	11/04/24 19:41	1
Potassium	770	J	3000	240	ug/L		10/21/24 08:05	11/04/24 19:41	1
Silicon	18000	F1	500	16	ug/L		10/21/24 08:05	11/05/24 17:46	1
Sodium	27000		1000	97	ug/L		10/21/24 08:05	11/04/24 19:41	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Method: SW846 6010B - Dissolved Metals - Dissolved

Client Sample ID: Duplicate 2
Date Collected: 10/16/24 00:00
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	120000		200	24	ug/L		10/21/24 08:05	11/04/24 20:07	1
Iron	450		100	9.1	ug/L		10/21/24 08:05	11/04/24 20:07	1
Magnesium	56000		200	4.2	ug/L		10/21/24 08:05	11/04/24 20:07	1
Manganese	940		10	0.45	ug/L		10/21/24 08:05	11/04/24 20:07	1
Potassium	790	J	3000	240	ug/L		10/21/24 08:05	11/04/24 20:07	1
Silicon	16000		500	16	ug/L		10/21/24 08:05	11/05/24 17:59	1
Sodium	27000		1000	97	ug/L		10/21/24 08:05	11/04/24 20:07	1

General Chemistry

Client Sample ID: MW-8s
Date Collected: 10/15/24 14:40
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	25		3.0	1.0	mg/L			10/30/24 07:11	1
Sulfate (EPA 300.0)	9.7		5.0	1.0	mg/L			10/30/24 07:11	1
Ammonia (EPA 350.1)	ND		0.10	0.029	mg/L			10/25/24 12:38	1
Nitrate Nitrite as N (EPA 353.2)	0.70		0.10	0.044	mg/L			10/28/24 13:07	1
Chemical Oxygen Demand (EPA 410.4)	ND		20	8.7	mg/L			10/24/24 09:06	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	140		10	3.1	mg/L			10/22/24 02:14	1
Total Dissolved Solids (SM 2540C)	230		10	4.7	mg/L			10/22/24 09:41	1
Total Suspended Solids (SM 2540D)	4.0		4.0	1.1	mg/L			10/22/24 13:38	1
TOC Result 1 (SM 5310B)	0.50	J	1.0	0.35	mg/L			10/26/24 16:32	1
TOC Result 2 (SM 5310B)	0.45	J	1.0	0.35	mg/L			10/26/24 16:32	1
TOC Result 3 (SM 5310B)	0.41	J	1.0	0.35	mg/L			10/26/24 16:32	1
TOC Result 4 (SM 5310B)	0.42	J	1.0	0.35	mg/L			10/26/24 16:32	1
Total Organic Carbon - Quad (SM 5310B)	0.45	J	1.0	0.35	mg/L			10/26/24 16:32	1

Client Sample ID: MW-9s
Date Collected: 10/15/24 16:45
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	190		3.0	1.0	mg/L			10/29/24 03:51	1
Sulfate (EPA 300.0)	2.1	J	5.0	1.0	mg/L			10/29/24 03:51	1
Ammonia (EPA 350.1)	1.1		0.10	0.029	mg/L			10/25/24 12:40	1
Nitrate Nitrite as N (EPA 353.2)	ND		0.10	0.044	mg/L			10/28/24 13:08	1
Chemical Oxygen Demand (EPA 410.4)	15	J	20	8.7	mg/L			10/24/24 09:06	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	310		10	3.1	mg/L			10/22/24 02:21	1
Total Dissolved Solids (SM 2540C)	710		20	9.4	mg/L			10/22/24 15:13	1
Total Suspended Solids (SM 2540D)	11		4.0	1.1	mg/L			10/21/24 13:37	1
TOC Result 1 (SM 5310B)	2.3		1.0	0.35	mg/L			10/26/24 11:49	1
TOC Result 2 (SM 5310B)	2.3		1.0	0.35	mg/L			10/26/24 11:49	1
TOC Result 3 (SM 5310B)	2.3		1.0	0.35	mg/L			10/26/24 11:49	1
TOC Result 4 (SM 5310B)	2.3		1.0	0.35	mg/L			10/26/24 11:49	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

General Chemistry (Continued)

Client Sample ID: MW-9s
Date Collected: 10/15/24 16:45
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Quad (SM 5310B)	2.3		1.0	0.35	mg/L			10/26/24 11:49	1

Client Sample ID: MW-10s
Date Collected: 10/15/24 15:57
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	580		30	10	mg/L			10/30/24 07:33	10
Sulfate (EPA 300.0)	44		5.0	1.0	mg/L			10/30/24 07:22	1
Ammonia (EPA 350.1)	0.033	J	0.10	0.029	mg/L			10/25/24 12:42	1
Nitrate Nitrite as N (EPA 353.2)	0.86		0.10	0.044	mg/L			10/28/24 13:09	1
Chemical Oxygen Demand (EPA 410.4)	26		20	8.7	mg/L			10/24/24 09:06	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	580		10	3.1	mg/L			10/22/24 02:29	1
Total Dissolved Solids (SM 2540C)	1600		20	9.4	mg/L			10/22/24 09:41	1
Total Suspended Solids (SM 2540D)	2.0	J	4.0	1.1	mg/L			10/21/24 13:37	1
TOC Result 1 (SM 5310B)	3.6		1.0	0.35	mg/L			10/26/24 12:06	1
TOC Result 2 (SM 5310B)	3.4		1.0	0.35	mg/L			10/26/24 12:06	1
TOC Result 3 (SM 5310B)	3.4		1.0	0.35	mg/L			10/26/24 12:06	1
TOC Result 4 (SM 5310B)	3.5		1.0	0.35	mg/L			10/26/24 12:06	1
Total Organic Carbon - Quad (SM 5310B)	3.5		1.0	0.35	mg/L			10/26/24 12:06	1

Client Sample ID: MW-10D
Date Collected: 10/16/24 09:15
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	85		3.0	1.0	mg/L			10/30/24 07:44	1
Sulfate (EPA 300.0)	22		5.0	1.0	mg/L			10/30/24 07:44	1
Ammonia (EPA 350.1)	ND		0.10	0.029	mg/L			10/28/24 18:44	1
Nitrate Nitrite as N (EPA 353.2)	3.0		0.10	0.044	mg/L			10/28/24 15:34	1
Chemical Oxygen Demand (EPA 410.4)	12	J	20	8.7	mg/L			10/24/24 09:06	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	350		10	3.1	mg/L			10/22/24 02:38	1
Total Dissolved Solids (SM 2540C)	540		10	4.7	mg/L			10/23/24 09:48	1
Total Suspended Solids (SM 2540D)	ND		4.0	1.1	mg/L			10/23/24 15:23	1
TOC Result 1 (SM 5310B)	1.9		1.0	0.35	mg/L			10/26/24 12:52	1
TOC Result 2 (SM 5310B)	1.8		1.0	0.35	mg/L			10/26/24 12:52	1
TOC Result 3 (SM 5310B)	1.8		1.0	0.35	mg/L			10/26/24 12:52	1
TOC Result 4 (SM 5310B)	1.8		1.0	0.35	mg/L			10/26/24 12:52	1
Total Organic Carbon - Quad (SM 5310B)	1.9		1.0	0.35	mg/L			10/26/24 12:52	1

Client Sample ID: MW-11s
Date Collected: 10/16/24 11:55
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	49		3.0	1.0	mg/L			10/30/24 08:27	1
Sulfate (EPA 300.0)	43		5.0	1.0	mg/L			10/30/24 08:27	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

General Chemistry (Continued)

Client Sample ID: MW-11s
Date Collected: 10/16/24 11:55
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	ND		0.10	0.029	mg/L			10/28/24 18:46	1
Nitrate Nitrite as N (EPA 353.2)	0.13		0.10	0.044	mg/L			10/28/24 15:36	1
Chemical Oxygen Demand (EPA 410.4)	18	J	20	8.7	mg/L			10/24/24 09:06	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	750		10	3.1	mg/L			10/22/24 02:46	1
Total Dissolved Solids (SM 2540C)	880		20	9.4	mg/L			10/22/24 09:41	1
Total Suspended Solids (SM 2540D)	3.6	J	4.0	1.1	mg/L			10/23/24 15:23	1
TOC Result 1 (SM 5310B)	3.4		1.0	0.35	mg/L			10/26/24 13:10	1
TOC Result 2 (SM 5310B)	3.3		1.0	0.35	mg/L			10/26/24 13:10	1
TOC Result 3 (SM 5310B)	3.1		1.0	0.35	mg/L			10/26/24 13:10	1
TOC Result 4 (SM 5310B)	3.1		1.0	0.35	mg/L			10/26/24 13:10	1
Total Organic Carbon - Quad (SM 5310B)	3.2		1.0	0.35	mg/L			10/26/24 13:10	1

Client Sample ID: MW-11D
Date Collected: 10/16/24 11:05
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	100		3.0	1.0	mg/L			10/29/24 06:03	1
Sulfate (EPA 300.0)	77		5.0	1.0	mg/L			10/29/24 06:03	1
Ammonia (EPA 350.1)	ND		0.10	0.029	mg/L			10/28/24 18:48	1
Nitrate Nitrite as N (EPA 353.2)	ND		0.10	0.044	mg/L			10/28/24 15:37	1
Chemical Oxygen Demand (EPA 410.4)	16	J	20	8.7	mg/L			10/24/24 09:06	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	830		10	3.1	mg/L			10/22/24 02:56	1
Total Dissolved Solids (SM 2540C)	1100		20	9.4	mg/L			10/23/24 09:48	1
Total Suspended Solids (SM 2540D)	1.2	J	4.0	1.1	mg/L			10/23/24 15:23	1
TOC Result 1 (SM 5310B)	3.2		1.0	0.35	mg/L			10/26/24 01:29	1
TOC Result 2 (SM 5310B)	3.2		1.0	0.35	mg/L			10/26/24 01:29	1
TOC Result 3 (SM 5310B)	3.3		1.0	0.35	mg/L			10/26/24 01:29	1
TOC Result 4 (SM 5310B)	3.2		1.0	0.35	mg/L			10/26/24 01:29	1
Total Organic Carbon - Quad (SM 5310B)	3.2		1.0	0.35	mg/L			10/26/24 01:29	1

Client Sample ID: MW-17
Date Collected: 10/16/24 13:28
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	8.3		3.0	1.0	mg/L			10/30/24 09:11	1
Sulfate (EPA 300.0)	7.3		5.0	1.0	mg/L			10/30/24 09:11	1
Ammonia (EPA 350.1)	0.037	J	0.10	0.029	mg/L			10/28/24 18:50	1
Nitrate Nitrite as N (EPA 353.2)	3.1		0.50	0.22	mg/L			10/28/24 15:51	5
Chemical Oxygen Demand (EPA 410.4)	11	J	20	8.7	mg/L			10/24/24 09:06	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	85		10	3.1	mg/L			10/22/24 03:20	1
Total Dissolved Solids (SM 2540C)	250		10	4.7	mg/L			10/23/24 09:48	1
Total Suspended Solids (SM 2540D)	4.0		4.0	1.1	mg/L			10/23/24 15:23	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

General Chemistry (Continued)

Client Sample ID: MW-17
Date Collected: 10/16/24 13:28
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TOC Result 1 (SM 5310B)	ND		1.0	0.35	mg/L			10/26/24 02:47	1
TOC Result 2 (SM 5310B)	ND		1.0	0.35	mg/L			10/26/24 02:47	1
TOC Result 3 (SM 5310B)	ND		1.0	0.35	mg/L			10/26/24 02:47	1
TOC Result 4 (SM 5310B)	0.35	J	1.0	0.35	mg/L			10/26/24 02:47	1
Total Organic Carbon - Quad (SM 5310B)	ND		1.0	0.35	mg/L			10/26/24 02:47	1

Client Sample ID: MW-18
Date Collected: 10/16/24 12:59
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	3.1		3.0	1.0	mg/L			10/30/24 09:22	1
Sulfate (EPA 300.0)	7.1		5.0	1.0	mg/L			10/30/24 09:22	1
Ammonia (EPA 350.1)	ND		0.10	0.029	mg/L			10/28/24 18:52	1
Nitrate Nitrite as N (EPA 353.2)	15		0.50	0.22	mg/L			10/28/24 15:52	5
Chemical Oxygen Demand (EPA 410.4)	ND		20	8.7	mg/L			10/24/24 09:06	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	79		10	3.1	mg/L			10/22/24 03:27	1
Total Dissolved Solids (SM 2540C)	200		10	4.7	mg/L			10/23/24 09:48	1
Total Suspended Solids (SM 2540D)	ND		4.0	1.1	mg/L			10/23/24 15:23	1
TOC Result 1 (SM 5310B)	ND		1.0	0.35	mg/L			10/26/24 03:03	1
TOC Result 2 (SM 5310B)	ND		1.0	0.35	mg/L			10/26/24 03:03	1
TOC Result 3 (SM 5310B)	ND		1.0	0.35	mg/L			10/26/24 03:03	1
TOC Result 4 (SM 5310B)	ND		1.0	0.35	mg/L			10/26/24 03:03	1
Total Organic Carbon - Quad (SM 5310B)	ND		1.0	0.35	mg/L			10/26/24 03:03	1

Client Sample ID: MW-19
Date Collected: 10/16/24 12:23
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	270		15	5.1	mg/L			10/29/24 05:52	5
Sulfate (EPA 300.0)	30		5.0	1.0	mg/L			10/29/24 05:41	1
Ammonia (EPA 350.1)	ND		0.10	0.029	mg/L			10/28/24 18:55	1
Nitrate Nitrite as N (EPA 353.2)	0.23		0.10	0.044	mg/L			10/25/24 15:49	1
Chemical Oxygen Demand (EPA 410.4)	11	J	20	8.7	mg/L			10/24/24 09:06	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	37		10	3.1	mg/L			10/22/24 03:35	1
Total Dissolved Solids (SM 2540C)	550		10	4.7	mg/L			10/23/24 09:48	1
Total Suspended Solids (SM 2540D)	ND		4.0	1.1	mg/L			10/23/24 15:23	1
TOC Result 1 (SM 5310B)	1.2		1.0	0.35	mg/L			10/26/24 03:17	1
TOC Result 2 (SM 5310B)	1.2		1.0	0.35	mg/L			10/26/24 03:17	1
TOC Result 3 (SM 5310B)	1.2		1.0	0.35	mg/L			10/26/24 03:17	1
TOC Result 4 (SM 5310B)	1.2		1.0	0.35	mg/L			10/26/24 03:17	1
Total Organic Carbon - Quad (SM 5310B)	1.2		1.0	0.35	mg/L			10/26/24 03:17	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

General Chemistry

Client Sample ID: MW-20
Date Collected: 10/16/24 11:22
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	120		3.0	1.0	mg/L			10/29/24 04:57	1
Sulfate (EPA 300.0)	150		5.0	1.0	mg/L			10/29/24 04:57	1
Ammonia (EPA 350.1)	0.086	J	0.10	0.029	mg/L			10/28/24 19:19	1
Nitrate Nitrite as N (EPA 353.2)	0.096	J	0.10	0.044	mg/L			10/25/24 15:50	1
Chemical Oxygen Demand (EPA 410.4)	13	J	20	8.7	mg/L			10/24/24 09:06	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	120		10	3.1	mg/L			10/22/24 03:41	1
Total Dissolved Solids (SM 2540C)	520		10	4.7	mg/L			10/23/24 09:48	1
Total Suspended Solids (SM 2540D)	ND		4.0	1.1	mg/L			10/23/24 15:23	1
TOC Result 1 (SM 5310B)	1.1		1.0	0.35	mg/L			10/26/24 03:32	1
TOC Result 2 (SM 5310B)	1.1		1.0	0.35	mg/L			10/26/24 03:32	1
TOC Result 3 (SM 5310B)	1.1		1.0	0.35	mg/L			10/26/24 03:32	1
TOC Result 4 (SM 5310B)	1.1		1.0	0.35	mg/L			10/26/24 03:32	1
Total Organic Carbon - Quad (SM 5310B)	1.1		1.0	0.35	mg/L			10/26/24 03:32	1

Client Sample ID: MW-21
Date Collected: 10/16/24 10:12
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	76		3.0	1.0	mg/L			10/29/24 04:13	1
Sulfate (EPA 300.0)	2.7	J	5.0	1.0	mg/L			10/29/24 04:13	1
Ammonia (EPA 350.1)	1.4		0.10	0.029	mg/L			10/28/24 19:21	1
Nitrate Nitrite as N (EPA 353.2)	0.26		0.10	0.044	mg/L			10/25/24 15:51	1
Chemical Oxygen Demand (EPA 410.4)	30		20	8.7	mg/L			10/24/24 09:06	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	420		10	3.1	mg/L			10/22/24 03:49	1
Total Dissolved Solids (SM 2540C)	550		10	4.7	mg/L			10/23/24 09:48	1
Total Suspended Solids (SM 2540D)	330		6.3	1.7	mg/L			10/23/24 15:23	1
TOC Result 1 (SM 5310B)	6.7		1.0	0.35	mg/L			10/26/24 03:48	1
TOC Result 2 (SM 5310B)	6.9		1.0	0.35	mg/L			10/26/24 03:48	1
TOC Result 3 (SM 5310B)	6.8		1.0	0.35	mg/L			10/26/24 03:48	1
TOC Result 4 (SM 5310B)	6.8		1.0	0.35	mg/L			10/26/24 03:48	1
Total Organic Carbon - Quad (SM 5310B)	6.8		1.0	0.35	mg/L			10/26/24 03:48	1

Client Sample ID: Duplicate 1
Date Collected: 10/16/24 00:00
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	3.0		3.0	1.0	mg/L			10/30/24 09:33	1
Sulfate (EPA 300.0)	6.3		5.0	1.0	mg/L			10/30/24 09:33	1
Ammonia (EPA 350.1)	0.14		0.10	0.029	mg/L			10/28/24 19:23	1
Nitrate Nitrite as N (EPA 353.2)	15		1.0	0.44	mg/L			10/28/24 15:53	10
Chemical Oxygen Demand (EPA 410.4)	11	J	20	8.7	mg/L			10/24/24 09:06	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	70		10	3.1	mg/L			10/22/24 03:57	1
Total Dissolved Solids (SM 2540C)	200		10	4.7	mg/L			10/23/24 09:54	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

General Chemistry (Continued)

Client Sample ID: Duplicate 1
Date Collected: 10/16/24 00:00
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (SM 2540D)	ND		4.0	1.1	mg/L			10/23/24 15:23	1
TOC Result 1 (SM 5310B)	ND		1.0	0.35	mg/L			10/26/24 04:02	1
TOC Result 2 (SM 5310B)	ND		1.0	0.35	mg/L			10/26/24 04:02	1
TOC Result 3 (SM 5310B)	ND		1.0	0.35	mg/L			10/26/24 04:02	1
TOC Result 4 (SM 5310B)	ND		1.0	0.35	mg/L			10/26/24 04:02	1
Total Organic Carbon - Quad (SM 5310B)	ND		1.0	0.35	mg/L			10/26/24 04:02	1

Client Sample ID: Duplicate 2
Date Collected: 10/16/24 00:00
Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	85		3.0	1.0	mg/L			10/29/24 04:35	1
Sulfate (EPA 300.0)	3.6	J	5.0	1.0	mg/L			10/29/24 04:35	1
Ammonia (EPA 350.1)	1.3		0.10	0.029	mg/L			10/28/24 19:25	1
Nitrate Nitrite as N (EPA 353.2)	0.29		0.10	0.044	mg/L			10/25/24 16:05	1
Chemical Oxygen Demand (EPA 410.4)	30		20	8.7	mg/L			10/24/24 09:06	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	420		10	3.1	mg/L			10/22/24 04:04	1
Total Dissolved Solids (SM 2540C)	570		10	4.7	mg/L			10/23/24 09:54	1
Total Suspended Solids (SM 2540D)	160		6.3	1.7	mg/L			10/23/24 15:23	1
TOC Result 1 (SM 5310B)	6.6		1.0	0.35	mg/L			10/26/24 04:18	1
TOC Result 2 (SM 5310B)	6.8		1.0	0.35	mg/L			10/26/24 04:18	1
TOC Result 3 (SM 5310B)	6.9		1.0	0.35	mg/L			10/26/24 04:18	1
TOC Result 4 (SM 5310B)	6.8		1.0	0.35	mg/L			10/26/24 04:18	1
Total Organic Carbon - Quad (SM 5310B)	6.8		1.0	0.35	mg/L			10/26/24 04:18	1

Surrogate Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (70-127)	BFB (78-120)	DBFM (77-120)	TOL (80-125)
280-198313-1	MW-8s	100	106	96	103
280-198313-2	MW-9s	102	105	96	104
280-198313-3	MW-10s	100	105	94	107
280-198313-4	MW-10D	100	105	95	107
280-198313-5	MW-11s	102	105	95	107
280-198313-6	MW-11D	101	104	94	105
280-198313-7	MW-17	102	107	96	106
280-198313-8	MW-18	103	106	96	106
280-198313-9	MW-19	102	105	97	105
280-198313-10	MW-20	101	106	97	106
280-198313-11	MW-21	104	105	96	105
280-198313-12	Duplicate 1	101	106	96	104
280-198313-13	Duplicate 2	103	104	96	106
280-198313-14	QCAB	101	105	95	106
280-198313-15	QCTB	99	106	95	107
LCS 280-672423/4	Lab Control Sample	102	104	100	104
LCSD 280-672423/6	Lab Control Sample Dup	101	106	99	103
MB 280-672423/9	Method Blank	101	107	97	104

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

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

Lab Sample ID: MB 280-672423/9

Matrix: Water

Analysis Batch: 672423

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			10/25/24 10:35	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			10/25/24 10:35	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/25/24 10:35	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			10/25/24 10:35	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			10/25/24 10:35	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			10/25/24 10:35	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			10/25/24 10:35	1
1,2,3-Trichlorobenzene	ND		4.0	1.2	ug/L			10/25/24 10:35	1
1,2,3-Trichloropropane	ND		2.5	0.28	ug/L			10/25/24 10:35	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			10/25/24 10:35	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			10/25/24 10:35	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.42	ug/L			10/25/24 10:35	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			10/25/24 10:35	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			10/25/24 10:35	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			10/25/24 10:35	1
1,2-Dichloropropane	ND		1.0	0.24	ug/L			10/25/24 10:35	1
1,3,5-Trimethylbenzene	ND		1.0	0.12	ug/L			10/25/24 10:35	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			10/25/24 10:35	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			10/25/24 10:35	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			10/25/24 10:35	1
2,2-Dichloropropane	ND		1.0	0.17	ug/L			10/25/24 10:35	1
2-Butanone (MEK)	ND		10	4.6	ug/L			10/25/24 10:35	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			10/25/24 10:35	1
2-Hexanone	ND		5.0	0.81	ug/L			10/25/24 10:35	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			10/25/24 10:35	1
4-Isopropyltoluene	ND		1.0	0.19	ug/L			10/25/24 10:35	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			10/25/24 10:35	1
Acetone	8.13	J	15	6.6	ug/L			10/25/24 10:35	1
Benzene	ND		1.0	0.14	ug/L			10/25/24 10:35	1
Bromobenzene	ND		1.0	0.19	ug/L			10/25/24 10:35	1
Bromochloromethane	ND		1.0	0.40	ug/L			10/25/24 10:35	1
Bromodichloromethane	ND		1.0	0.19	ug/L			10/25/24 10:35	1
Bromoform	ND		2.0	0.25	ug/L			10/25/24 10:35	1
Bromomethane	ND		5.0	2.4	ug/L			10/25/24 10:35	1
Carbon disulfide	ND		2.0	0.26	ug/L			10/25/24 10:35	1
Carbon tetrachloride	ND		1.0	0.23	ug/L			10/25/24 10:35	1
Chlorobenzene	ND		1.0	0.092	ug/L			10/25/24 10:35	1
Chloroethane	ND		2.0	0.64	ug/L			10/25/24 10:35	1
Chloroform	ND		1.0	0.36	ug/L			10/25/24 10:35	1
Chloromethane	ND		2.0	0.23	ug/L			10/25/24 10:35	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			10/25/24 10:35	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			10/25/24 10:35	1
Dibromochloromethane	ND		1.0	0.28	ug/L			10/25/24 10:35	1
Dibromomethane	ND		1.0	0.34	ug/L			10/25/24 10:35	1
Dichlorodifluoromethane	ND		2.0	0.30	ug/L			10/25/24 10:35	1
Ethylbenzene	ND		1.0	0.14	ug/L			10/25/24 10:35	1
Hexachlorobutadiene	ND		2.0	0.53	ug/L			10/25/24 10:35	1
Isopropylbenzene	ND		1.0	0.16	ug/L			10/25/24 10:35	1

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

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

Lab Sample ID: MB 280-672423/9

Matrix: Water

Analysis Batch: 672423

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		2.0	0.94	ug/L			10/25/24 10:35	1
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			10/25/24 10:35	1
Naphthalene	ND		3.0	0.99	ug/L			10/25/24 10:35	1
n-Butylbenzene	ND		1.0	0.23	ug/L			10/25/24 10:35	1
N-Propylbenzene	ND		1.0	0.18	ug/L			10/25/24 10:35	1
o-Xylene	ND		1.0	0.11	ug/L			10/25/24 10:35	1
sec-Butylbenzene	ND		1.0	0.20	ug/L			10/25/24 10:35	1
Styrene	ND		1.0	0.13	ug/L			10/25/24 10:35	1
tert-Butylbenzene	ND		1.0	0.18	ug/L			10/25/24 10:35	1
Tetrachloroethene	ND		1.0	0.40	ug/L			10/25/24 10:35	1
Toluene	ND		1.0	0.32	ug/L			10/25/24 10:35	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			10/25/24 10:35	1
trans-1,3-Dichloropropene	ND		1.0	0.14	ug/L			10/25/24 10:35	1
Trichloroethene	ND		1.0	0.30	ug/L			10/25/24 10:35	1
Trichlorofluoromethane	ND		2.0	0.20	ug/L			10/25/24 10:35	1
Vinyl chloride	ND		1.0	0.23	ug/L			10/25/24 10:35	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		70 - 127		10/25/24 10:35	1
4-Bromofluorobenzene (Surr)	107		78 - 120		10/25/24 10:35	1
Dibromofluoromethane (Surr)	97		77 - 120		10/25/24 10:35	1
Toluene-d8 (Surr)	104		80 - 125		10/25/24 10:35	1

Lab Sample ID: LCS 280-672423/4

Matrix: Water

Analysis Batch: 672423

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	50.0	49.7		ug/L		99	80 - 124
1,1,1-Trichloroethane	50.0	45.4		ug/L		91	80 - 123
1,1,2,2-Tetrachloroethane	50.0	51.3		ug/L		103	74 - 123
1,1,2-Trichloroethane	50.0	46.6		ug/L		93	80 - 120
1,1-Dichloroethane	50.0	47.8		ug/L		96	78 - 121
1,1-Dichloroethene	50.0	45.7		ug/L		91	77 - 121
1,1-Dichloropropene	50.0	46.2		ug/L		92	77 - 123
1,2,3-Trichlorobenzene	50.0	45.7		ug/L		91	65 - 129
1,2,3-Trichloropropane	50.0	50.8		ug/L		102	80 - 120
1,2,4-Trichlorobenzene	50.0	44.9		ug/L		90	74 - 126
1,2,4-Trimethylbenzene	50.0	47.0		ug/L		94	79 - 124
1,2-Dibromo-3-Chloropropane	50.0	50.2		ug/L		100	73 - 128
1,2-Dibromoethane	50.0	48.9		ug/L		98	80 - 120
1,2-Dichlorobenzene	50.0	45.7		ug/L		91	80 - 120
1,2-Dichloroethane	50.0	44.5		ug/L		89	71 - 121
1,2-Dichloropropane	50.0	50.9		ug/L		102	78 - 120
1,3,5-Trimethylbenzene	50.0	47.8		ug/L		96	80 - 122
1,3-Dichlorobenzene	50.0	45.5		ug/L		91	80 - 120
1,3-Dichloropropane	50.0	48.9		ug/L		98	77 - 122
1,4-Dichlorobenzene	50.0	44.7		ug/L		89	80 - 120

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

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

Lab Sample ID: LCS 280-672423/4

Matrix: Water

Analysis Batch: 672423

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,2-Dichloropropane	50.0	46.8		ug/L		94	75 - 131
2-Butanone (MEK)	200	202		ug/L		101	58 - 135
2-Chlorotoluene	50.0	47.8		ug/L		96	80 - 120
2-Hexanone	200	217		ug/L		109	62 - 137
4-Chlorotoluene	50.0	45.7		ug/L		91	80 - 120
4-Isopropyltoluene	50.0	47.1		ug/L		94	80 - 122
4-Methyl-2-pentanone (MIBK)	200	212		ug/L		106	66 - 135
Acetone	200	216		ug/L		108	61 - 134
Benzene	50.0	46.2		ug/L		92	80 - 120
Bromobenzene	50.0	45.5		ug/L		91	80 - 120
Bromochloromethane	50.0	43.7		ug/L		87	80 - 123
Bromodichloromethane	50.0	47.7		ug/L		95	80 - 123
Bromoform	50.0	39.3		ug/L		79	79 - 138
Bromomethane	50.0	48.8		ug/L		98	29 - 148
Carbon disulfide	50.0	46.9		ug/L		94	70 - 121
Carbon tetrachloride	50.0	45.5		ug/L		91	79 - 127
Chlorobenzene	50.0	45.7		ug/L		91	80 - 120
Chloroethane	50.0	51.4		ug/L		103	56 - 141
Chloroform	50.0	46.4		ug/L		93	80 - 120
Chloromethane	50.0	53.3		ug/L		107	56 - 133
cis-1,2-Dichloroethene	50.0	45.1		ug/L		90	80 - 120
cis-1,3-Dichloropropene	50.0	53.1		ug/L		106	76 - 129
Dibromochloromethane	50.0	50.0		ug/L		100	80 - 125
Dibromomethane	50.0	46.0		ug/L		92	80 - 120
Dichlorodifluoromethane	50.0	51.3		ug/L		103	47 - 135
Ethylbenzene	50.0	45.8		ug/L		92	80 - 120
Hexachlorobutadiene	50.0	43.6		ug/L		87	73 - 128
Isopropylbenzene	50.0	47.7		ug/L		95	78 - 122
Methylene Chloride	50.0	48.9		ug/L		98	78 - 120
m-Xylene & p-Xylene	50.0	47.1		ug/L		94	80 - 120
Naphthalene	50.0	47.7		ug/L		95	60 - 124
n-Butylbenzene	50.0	46.6		ug/L		93	59 - 140
N-Propylbenzene	50.0	46.5		ug/L		93	80 - 123
o-Xylene	50.0	46.1		ug/L		92	80 - 120
sec-Butylbenzene	50.0	46.7		ug/L		93	80 - 123
Styrene	50.0	47.6		ug/L		95	80 - 120
tert-Butylbenzene	50.0	45.8		ug/L		92	80 - 120
Tetrachloroethene	50.0	42.9		ug/L		86	80 - 121
Toluene	50.0	45.2		ug/L		90	80 - 120
trans-1,2-Dichloroethene	50.0	45.6		ug/L		91	79 - 121
trans-1,3-Dichloropropene	50.0	53.1		ug/L		106	80 - 123
Trichloroethene	50.0	47.9		ug/L		96	80 - 120
Trichlorofluoromethane	50.0	46.2		ug/L		92	54 - 144
Vinyl chloride	50.0	53.5		ug/L		107	67 - 127

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102		70 - 127
4-Bromofluorobenzene (Surr)	104		78 - 120

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

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

Lab Sample ID: LCS 280-672423/4

Matrix: Water

Analysis Batch: 672423

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
Dibromofluoromethane (Surr)	100		77 - 120
Toluene-d8 (Surr)	104		80 - 125

Lab Sample ID: LCSD 280-672423/6

Matrix: Water

Analysis Batch: 672423

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	50.0	50.4		ug/L		101	80 - 124	1	20
1,1,1-Trichloroethane	50.0	46.4		ug/L		93	80 - 123	2	20
1,1,2,2-Tetrachloroethane	50.0	53.1		ug/L		106	74 - 123	4	20
1,1,2-Trichloroethane	50.0	47.1		ug/L		94	80 - 120	1	20
1,1-Dichloroethane	50.0	48.5		ug/L		97	78 - 121	1	20
1,1-Dichloroethene	50.0	45.5		ug/L		91	77 - 121	1	21
1,1-Dichloropropene	50.0	47.7		ug/L		95	77 - 123	3	20
1,2,3-Trichlorobenzene	50.0	49.1		ug/L		98	65 - 129	7	20
1,2,3-Trichloropropane	50.0	53.9		ug/L		108	80 - 120	6	20
1,2,4-Trichlorobenzene	50.0	47.8		ug/L		96	74 - 126	6	20
1,2,4-Trimethylbenzene	50.0	49.5		ug/L		99	79 - 124	5	20
1,2-Dibromo-3-Chloropropane	50.0	52.5		ug/L		105	73 - 128	5	21
1,2-Dibromoethane	50.0	50.0		ug/L		100	80 - 120	2	20
1,2-Dichlorobenzene	50.0	47.6		ug/L		95	80 - 120	4	20
1,2-Dichloroethane	50.0	43.9		ug/L		88	71 - 121	1	20
1,2-Dichloropropane	50.0	50.6		ug/L		101	78 - 120	1	20
1,3,5-Trimethylbenzene	50.0	49.7		ug/L		99	80 - 122	4	20
1,3-Dichlorobenzene	50.0	47.2		ug/L		94	80 - 120	4	20
1,3-Dichloropropane	50.0	50.3		ug/L		101	77 - 122	3	20
1,4-Dichlorobenzene	50.0	47.5		ug/L		95	80 - 120	6	20
2,2-Dichloropropane	50.0	51.6		ug/L		103	75 - 131	10	22
2-Butanone (MEK)	200	202		ug/L		101	58 - 135	0	20
2-Chlorotoluene	50.0	49.7		ug/L		99	80 - 120	4	20
2-Hexanone	200	218		ug/L		109	62 - 137	0	21
4-Chlorotoluene	50.0	47.3		ug/L		95	80 - 120	3	20
4-Isopropyltoluene	50.0	49.0		ug/L		98	80 - 122	4	20
4-Methyl-2-pentanone (MIBK)	200	213		ug/L		106	66 - 135	0	20
Acetone	200	217		ug/L		109	61 - 134	1	21
Benzene	50.0	46.8		ug/L		94	80 - 120	1	20
Bromobenzene	50.0	47.0		ug/L		94	80 - 120	3	20
Bromochloromethane	50.0	44.7		ug/L		89	80 - 123	2	20
Bromodichloromethane	50.0	48.0		ug/L		96	80 - 123	1	20
Bromoform	50.0	40.4		ug/L		81	79 - 138	3	20
Bromomethane	50.0	52.1		ug/L		104	29 - 148	7	40
Carbon disulfide	50.0	47.1		ug/L		94	70 - 121	1	20
Carbon tetrachloride	50.0	46.4		ug/L		93	79 - 127	2	20
Chlorobenzene	50.0	47.1		ug/L		94	80 - 120	3	20
Chloroethane	50.0	55.0		ug/L		110	56 - 141	7	30
Chloroform	50.0	46.4		ug/L		93	80 - 120	0	20
Chloromethane	50.0	56.7		ug/L		113	56 - 133	6	20

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

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

Lab Sample ID: LCSD 280-672423/6

Matrix: Water

Analysis Batch: 672423

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	50.0	46.3		ug/L		93	80 - 120	3	20
cis-1,3-Dichloropropene	50.0	54.9		ug/L		110	76 - 129	3	20
Dibromochloromethane	50.0	51.1		ug/L		102	80 - 125	2	20
Dibromomethane	50.0	46.6		ug/L		93	80 - 120	1	20
Dichlorodifluoromethane	50.0	52.4		ug/L		105	47 - 135	2	21
Ethylbenzene	50.0	46.1		ug/L		92	80 - 120	1	20
Hexachlorobutadiene	50.0	45.1		ug/L		90	73 - 128	3	20
Isopropylbenzene	50.0	50.0		ug/L		100	78 - 122	5	20
Methylene Chloride	50.0	50.3		ug/L		101	78 - 120	3	20
m-Xylene & p-Xylene	50.0	48.2		ug/L		96	80 - 120	2	20
Naphthalene	50.0	51.8		ug/L		104	60 - 124	8	21
n-Butylbenzene	50.0	50.1		ug/L		100	59 - 140	7	20
N-Propylbenzene	50.0	47.4		ug/L		95	80 - 123	2	20
o-Xylene	50.0	47.8		ug/L		96	80 - 120	4	20
sec-Butylbenzene	50.0	49.1		ug/L		98	80 - 123	5	20
Styrene	50.0	48.1		ug/L		96	80 - 120	1	20
tert-Butylbenzene	50.0	48.4		ug/L		97	80 - 120	5	20
Tetrachloroethene	50.0	44.1		ug/L		88	80 - 121	3	20
Toluene	50.0	45.7		ug/L		91	80 - 120	1	20
trans-1,2-Dichloroethene	50.0	46.7		ug/L		93	79 - 121	2	20
trans-1,3-Dichloropropene	50.0	55.0		ug/L		110	80 - 123	4	20
Trichloroethene	50.0	48.5		ug/L		97	80 - 120	1	20
Trichlorofluoromethane	50.0	47.7		ug/L		95	54 - 144	3	28
Vinyl chloride	50.0	56.6		ug/L		113	67 - 127	6	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		70 - 127
4-Bromofluorobenzene (Surr)	106		78 - 120
Dibromofluoromethane (Surr)	99		77 - 120
Toluene-d8 (Surr)	103		80 - 125

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 280-671758/1-A

Matrix: Water

Analysis Batch: 672075

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 671758

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.40	ug/L		10/21/24 14:56	10/23/24 01:13	1
Arsenic	ND		5.0	0.50	ug/L		10/21/24 14:56	10/23/24 01:13	1
Lead	ND		1.0	0.23	ug/L		10/21/24 14:56	10/23/24 01:13	1
Nickel	ND		3.0	0.83	ug/L		10/21/24 14:56	10/23/24 01:13	1
Barium	ND		3.0	0.38	ug/L		10/21/24 14:56	10/23/24 01:13	1
Selenium	ND		5.0	1.0	ug/L		10/21/24 14:56	10/23/24 01:13	1
Beryllium	ND		1.0	0.30	ug/L		10/21/24 14:56	10/23/24 01:13	1
Cadmium	ND		1.0	0.19	ug/L		10/21/24 14:56	10/23/24 01:13	1
Chromium	ND		3.0	0.50	ug/L		10/21/24 14:56	10/23/24 01:13	1
Cobalt	ND		1.0	0.33	ug/L		10/21/24 14:56	10/23/24 01:13	1
Copper	ND		2.0	0.71	ug/L		10/21/24 14:56	10/23/24 01:13	1

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 280-671758/1-A

Matrix: Water

Analysis Batch: 672075

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 671758

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		1.0	0.045	ug/L		10/21/24 14:56	10/23/24 01:13	1
Thallium	ND		1.0	0.21	ug/L		10/21/24 14:56	10/23/24 01:13	1
Vanadium	ND		5.0	1.1	ug/L		10/21/24 14:56	10/23/24 01:13	1
Zinc	ND		10	2.0	ug/L		10/21/24 14:56	10/23/24 01:13	1

Lab Sample ID: LCS 280-671758/24-A

Matrix: Water

Analysis Batch: 672075

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 671758

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	40.0	39.3		ug/L		98	85 - 115
Arsenic	40.0	40.9		ug/L		102	89 - 111
Lead	40.0	39.6		ug/L		99	88 - 115
Nickel	40.0	41.7		ug/L		104	86 - 115
Barium	40.0	40.3		ug/L		101	89 - 115
Selenium	40.0	41.9		ug/L		105	85 - 114
Beryllium	40.0	37.3		ug/L		93	85 - 115
Cadmium	40.0	40.1		ug/L		100	89 - 111
Chromium	40.0	41.6		ug/L		104	86 - 115
Cobalt	40.0	42.1		ug/L		105	92 - 115
Copper	40.0	42.2		ug/L		106	90 - 115
Silver	40.0	41.9		ug/L		105	90 - 114
Thallium	40.0	39.4		ug/L		98	86 - 115
Vanadium	40.0	41.0		ug/L		103	90 - 115
Zinc	40.0	41.8		ug/L		104	88 - 115

Lab Sample ID: 280-198368-A-13-B MS

Matrix: Water

Analysis Batch: 672075

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 671758

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.52	J	40.0	40.6		ug/L		100	85 - 115
Arsenic	38		40.0	79.7		ug/L		105	79 - 120
Lead	0.63	J	40.0	39.2		ug/L		97	88 - 115
Nickel	1.5	J	40.0	41.7		ug/L		101	86 - 115
Barium	190		40.0	229	4	ug/L		92	89 - 115
Selenium	ND		40.0	41.5		ug/L		104	85 - 114
Beryllium	ND		40.0	41.6		ug/L		104	85 - 115
Cadmium	ND		40.0	41.5		ug/L		104	89 - 111
Chromium	ND		40.0	41.4		ug/L		103	86 - 115
Cobalt	ND		40.0	40.3		ug/L		101	92 - 115
Copper	ND		40.0	41.8		ug/L		105	90 - 115
Silver	ND		40.0	40.8		ug/L		102	70 - 130
Thallium	ND		40.0	38.9		ug/L		97	86 - 115
Vanadium	ND		40.0	41.7		ug/L		104	90 - 115
Zinc	3.1	J	40.0	42.9		ug/L		100	88 - 115

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: 280-198368-A-13-C MSD

Matrix: Water

Analysis Batch: 672075

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 671758

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	0.52	J	40.0	41.2		ug/L		102	85 - 115	2	20
Arsenic	38		40.0	79.5		ug/L		105	79 - 120	0	20
Lead	0.63	J	40.0	39.2		ug/L		97	88 - 115	0	20
Nickel	1.5	J	40.0	40.7		ug/L		98	86 - 115	2	20
Barium	190		40.0	235	4	ug/L		109	89 - 115	3	20
Selenium	ND		40.0	43.1		ug/L		108	85 - 114	4	20
Beryllium	ND		40.0	39.7		ug/L		99	85 - 115	5	20
Cadmium	ND		40.0	40.8		ug/L		102	89 - 111	2	20
Chromium	ND		40.0	42.1		ug/L		105	86 - 115	2	20
Cobalt	ND		40.0	40.1		ug/L		100	92 - 115	0	20
Copper	ND		40.0	41.9		ug/L		105	90 - 115	0	20
Silver	ND		40.0	41.0		ug/L		103	70 - 130	1	20
Thallium	ND		40.0	39.0		ug/L		98	86 - 115	0	20
Vanadium	ND		40.0	42.7		ug/L		107	90 - 115	3	20
Zinc	3.1	J	40.0	42.9		ug/L		99	88 - 115	0	20

Lab Sample ID: MB 280-671764/1-A

Matrix: Water

Analysis Batch: 672075

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 671764

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.40	ug/L		10/21/24 14:56	10/23/24 03:08	1
Arsenic	ND		5.0	0.50	ug/L		10/21/24 14:56	10/23/24 03:08	1
Lead	ND		1.0	0.23	ug/L		10/21/24 14:56	10/23/24 03:08	1
Nickel	ND		3.0	0.83	ug/L		10/21/24 14:56	10/23/24 03:08	1
Barium	ND		3.0	0.38	ug/L		10/21/24 14:56	10/23/24 03:08	1
Selenium	ND		5.0	1.0	ug/L		10/21/24 14:56	10/23/24 03:08	1
Beryllium	ND		1.0	0.30	ug/L		10/21/24 14:56	10/23/24 03:08	1
Cadmium	ND		1.0	0.19	ug/L		10/21/24 14:56	10/23/24 03:08	1
Chromium	ND		3.0	0.50	ug/L		10/21/24 14:56	10/23/24 03:08	1
Cobalt	ND		1.0	0.33	ug/L		10/21/24 14:56	10/23/24 03:08	1
Copper	ND		2.0	0.71	ug/L		10/21/24 14:56	10/23/24 03:08	1
Silver	ND		1.0	0.045	ug/L		10/21/24 14:56	10/23/24 03:08	1
Thallium	ND		1.0	0.21	ug/L		10/21/24 14:56	10/23/24 03:08	1
Vanadium	ND		5.0	1.1	ug/L		10/21/24 14:56	10/23/24 03:08	1
Zinc	ND		10	2.0	ug/L		10/21/24 14:56	10/23/24 03:08	1

Lab Sample ID: LCS 280-671764/2-A

Matrix: Water

Analysis Batch: 672075

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 671764

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	40.0	39.2		ug/L		98	85 - 115
Arsenic	40.0	40.6		ug/L		102	89 - 111
Lead	40.0	39.2		ug/L		98	88 - 115
Nickel	40.0	42.0		ug/L		105	86 - 115
Barium	40.0	40.5		ug/L		101	89 - 115
Selenium	40.0	41.6		ug/L		104	85 - 114
Beryllium	40.0	37.8		ug/L		94	85 - 115

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 280-671764/2-A

Matrix: Water

Analysis Batch: 672075

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 671764

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	40.0	41.0		ug/L		103	89 - 111
Chromium	40.0	41.2		ug/L		103	86 - 115
Cobalt	40.0	41.0		ug/L		103	92 - 115
Copper	40.0	41.8		ug/L		104	90 - 115
Silver	40.0	41.9		ug/L		105	90 - 114
Thallium	40.0	39.4		ug/L		99	86 - 115
Vanadium	40.0	40.8		ug/L		102	90 - 115
Zinc	40.0	44.1		ug/L		110	88 - 115

Lab Sample ID: 280-198286-A-5-E MS

Matrix: Water

Analysis Batch: 672075

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 671764

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	3.5		40.0	39.3		ug/L		90	85 - 115
Arsenic	6.7		40.0	47.5		ug/L		102	79 - 120
Lead	5.9		40.0	42.9		ug/L		92	88 - 115
Nickel	41		40.0	78.6		ug/L		95	86 - 115
Barium	62		40.0	104		ug/L		107	89 - 115
Selenium	27		40.0	72.5		ug/L		113	85 - 114
Cadmium	0.67	J	40.0	37.6		ug/L		92	89 - 111
Chromium	3.9		40.0	44.6		ug/L		102	86 - 115
Cobalt	7.7		40.0	46.4		ug/L		97	92 - 115
Copper	7.1		40.0	45.2		ug/L		95	90 - 115
Silver	0.048	J	40.0	36.2		ug/L		90	70 - 130
Thallium	0.23	J	40.0	36.9		ug/L		92	86 - 115
Vanadium	16	F1	40.0	62.1		ug/L		115	90 - 115
Zinc	32	F1	40.0	70.9		ug/L		97	88 - 115

Lab Sample ID: 280-198286-A-5-E MS ^10

Matrix: Water

Analysis Batch: 672416

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 671764

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Beryllium	ND		40.0	36.3		ug/L		91	85 - 115

Lab Sample ID: 280-198286-A-5-F MSD

Matrix: Water

Analysis Batch: 672075

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 671764

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	3.5		40.0	39.2		ug/L		89	85 - 115	0	20
Arsenic	6.7		40.0	47.0		ug/L		101	79 - 120	1	20
Lead	5.9		40.0	42.0		ug/L		90	88 - 115	2	20
Nickel	41		40.0	78.3		ug/L		94	86 - 115	0	20
Barium	62		40.0	105		ug/L		108	89 - 115	0	20
Selenium	27		40.0	68.5		ug/L		103	85 - 114	6	20
Cadmium	0.67	J	40.0	37.7		ug/L		93	89 - 111	0	20
Chromium	3.9		40.0	46.0		ug/L		105	86 - 115	3	20

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: 280-198286-A-5-F MSD

Matrix: Water

Analysis Batch: 672075

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 671764

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cobalt	7.7		40.0	46.0		ug/L		96	92 - 115	1	20
Copper	7.1		40.0	44.9		ug/L		95	90 - 115	1	20
Silver	0.048	J	40.0	35.4		ug/L		88	70 - 130	2	20
Thallium	0.23	J	40.0	36.2		ug/L		90	86 - 115	2	20
Vanadium	16	F1	40.0	62.8	F1	ug/L		117	90 - 115	1	20
Zinc	32	F1	40.0	67.0	F1	ug/L		87	88 - 115	6	20

Lab Sample ID: 280-198286-A-5-F MSD ^10

Matrix: Water

Analysis Batch: 672416

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 671764

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Beryllium	ND		40.0	44.2		ug/L		110	85 - 115	20	20

Method: 6010B - Dissolved Metals

Lab Sample ID: MB 280-671657/1-A

Matrix: Water

Analysis Batch: 673722

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 671657

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		200	24	ug/L		10/21/24 08:05	11/04/24 19:33	1
Iron	ND		100	9.1	ug/L		10/21/24 08:05	11/04/24 19:33	1
Magnesium	ND		200	4.2	ug/L		10/21/24 08:05	11/04/24 19:33	1
Manganese	ND		10	0.45	ug/L		10/21/24 08:05	11/04/24 19:33	1
Potassium	ND		3000	240	ug/L		10/21/24 08:05	11/04/24 19:33	1
Sodium	ND		1000	97	ug/L		10/21/24 08:05	11/04/24 19:33	1

Lab Sample ID: MB 280-671657/1-A

Matrix: Water

Analysis Batch: 673929

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 671657

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	ND		500	16	ug/L		10/21/24 08:05	11/05/24 17:38	1

Lab Sample ID: LCS 280-671657/2-A

Matrix: Water

Analysis Batch: 673722

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 671657

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	50000	52400		ug/L		105	90 - 111
Iron	10000	10600		ug/L		106	89 - 115
Magnesium	50000	52000		ug/L		104	90 - 113
Manganese	1000	992		ug/L		99	90 - 110
Potassium	50000	53100		ug/L		106	89 - 114
Sodium	50000	50700		ug/L		101	90 - 115

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Method: 6010B - Dissolved Metals (Continued)

Lab Sample ID: LCS 280-671657/2-A
Matrix: Water
Analysis Batch: 673929

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 671657

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Silicon	10000	10300		ug/L		103	90 - 110

Lab Sample ID: 280-198313-11 MS
Matrix: Water
Analysis Batch: 673722

Client Sample ID: MW-21
Prep Type: Dissolved
Prep Batch: 671657

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	120000		50000	173000		ug/L		105	48 - 153
Iron	600		10000	11200		ug/L		106	52 - 155
Magnesium	56000		50000	110000		ug/L		108	62 - 146
Manganese	990		1000	1980		ug/L		98	79 - 121
Potassium	770 J		50000	56000		ug/L		111	76 - 132
Sodium	27000		50000	79400		ug/L		104	70 - 203

Lab Sample ID: 280-198313-11 MS
Matrix: Water
Analysis Batch: 673929

Client Sample ID: MW-21
Prep Type: Dissolved
Prep Batch: 671657

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Silicon	18000	F1	10000	22600	F1	ug/L		43	79 - 140

Lab Sample ID: 280-198313-11 MSD
Matrix: Water
Analysis Batch: 673722

Client Sample ID: MW-21
Prep Type: Dissolved
Prep Batch: 671657

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Calcium	120000		50000	172000		ug/L		103	48 - 153	0	20
Iron	600		10000	11000		ug/L		104	52 - 155	1	20
Magnesium	56000		50000	109000		ug/L		107	62 - 146	1	20
Manganese	990		1000	1960		ug/L		97	79 - 121	1	20
Potassium	770 J		50000	55500		ug/L		109	76 - 132	1	20
Sodium	27000		50000	78700		ug/L		103	70 - 203	1	20

Lab Sample ID: 280-198313-11 MSD
Matrix: Water
Analysis Batch: 673929

Client Sample ID: MW-21
Prep Type: Dissolved
Prep Batch: 671657

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Silicon	18000	F1	10000	22500	F1	ug/L		42	79 - 140	0	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MRL 280-672673/3
Matrix: Water
Analysis Batch: 672673

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	5.00	5.00		mg/L		100	50 - 150
Sulfate	5.00	4.93 J		mg/L		99	50 - 150

Eurofins Denver

QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 280-198289-B-1 MS

Matrix: Water

Analysis Batch: 672673

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	1000	F1	500	1280	F1	mg/L		53	80 - 120
Sulfate	600	F1	500	888	F1	mg/L		58	80 - 120

Lab Sample ID: 280-198289-B-1 MSD

Matrix: Water

Analysis Batch: 672673

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1000	F1	500	1350	F1	mg/L		67	80 - 120	5	20
Sulfate	600	F1	500	963	F1	mg/L		73	80 - 120	8	20

Lab Sample ID: 280-198289-B-1 DU

Matrix: Water

Analysis Batch: 672673

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	1000	F1	1040		mg/L		3	15
Sulfate	600	F1	622		mg/L		4	15

Lab Sample ID: MB 280-672842/39

Matrix: Water

Analysis Batch: 672842

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0	1.0	mg/L			10/30/24 01:19	1
Sulfate	ND		5.0	1.0	mg/L			10/30/24 01:19	1

Lab Sample ID: MB 280-672842/77

Matrix: Water

Analysis Batch: 672842

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0	1.0	mg/L			10/30/24 08:17	1
Sulfate	ND		5.0	1.0	mg/L			10/30/24 08:17	1

Lab Sample ID: LCS 280-672842/37

Matrix: Water

Analysis Batch: 672842

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	100	101		mg/L		101	90 - 110
Sulfate	100	101		mg/L		101	90 - 110

Lab Sample ID: LCS 280-672842/75

Matrix: Water

Analysis Batch: 672842

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	100	103		mg/L		103	90 - 110
Sulfate	100	103		mg/L		103	90 - 110

Eurofins Denver

QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCSD 280-672842/38

Matrix: Water

Analysis Batch: 672842

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	100	99.8		mg/L		100	90 - 110	2	10
Sulfate	100	98.7		mg/L		99	90 - 110	2	10

Lab Sample ID: LCSD 280-672842/76

Matrix: Water

Analysis Batch: 672842

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	100	103		mg/L		103	90 - 110	0	10
Sulfate	100	102		mg/L		102	90 - 110	1	10

Lab Sample ID: MRL 280-672842/3

Matrix: Water

Analysis Batch: 672842

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	5.00	5.11		mg/L		102	50 - 150		
Sulfate	5.00	4.96	J	mg/L		99	50 - 150		

Lab Sample ID: 280-198313-5 MS

Matrix: Water

Analysis Batch: 672842

Client Sample ID: MW-11s

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	49		50.0	104		mg/L		109	80 - 120		
Sulfate	43		50.0	95.1		mg/L		105	80 - 120		

Lab Sample ID: 280-198313-5 MSD

Matrix: Water

Analysis Batch: 672842

Client Sample ID: MW-11s

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	49		50.0	105		mg/L		111	80 - 120	1	20
Sulfate	43		50.0	97.0		mg/L		109	80 - 120	2	20

Lab Sample ID: 280-198313-5 DU

Matrix: Water

Analysis Batch: 672842

Client Sample ID: MW-11s

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chloride	49			49.4		mg/L				0.1	15
Sulfate	43			42.7		mg/L				0	15

Eurofins Denver

QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-672563/18

Matrix: Water

Analysis Batch: 672563

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.10	0.029	mg/L			10/25/24 12:22	1

Lab Sample ID: LCS 280-672563/19

Matrix: Water

Analysis Batch: 672563

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	2.51	2.51		mg/L		100	90 - 110

Lab Sample ID: MB 280-672781/94

Matrix: Water

Analysis Batch: 672781

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.10	0.029	mg/L			10/28/24 18:27	1

Lab Sample ID: LCS 280-672781/95

Matrix: Water

Analysis Batch: 672781

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	2.51	2.55		mg/L		102	90 - 110

Lab Sample ID: 280-198407-A-1 MS

Matrix: Water

Analysis Batch: 672781

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	0.88	F1	1.00	1.77	F1	mg/L		88	90 - 110

Lab Sample ID: 280-198407-A-1 MSD

Matrix: Water

Analysis Batch: 672781

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ammonia	0.88	F1	1.00	1.83		mg/L		94	90 - 110	3	10

Lab Sample ID: 280-198415-B-1 MS

Matrix: Water

Analysis Batch: 672781

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	ND	F1	1.00	1.00		mg/L		100	90 - 110

Lab Sample ID: 280-198415-B-1 MSD

Matrix: Water

Analysis Batch: 672781

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ammonia	ND	F1	1.00	1.03		mg/L		102	90 - 110	2	10

Eurofins Denver

QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-672560/59

Matrix: Water

Analysis Batch: 672560

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	ND		0.10	0.044	mg/L			10/25/24 15:36	1

Lab Sample ID: LCS 280-672560/57

Matrix: Water

Analysis Batch: 672560

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	1.00	1.00		mg/L		100	90 - 110

Lab Sample ID: LCSD 280-672560/58

Matrix: Water

Analysis Batch: 672560

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate Nitrite as N	1.00	0.988		mg/L		99	90 - 110	3	10

Lab Sample ID: 280-198166-A-1 MS

Matrix: Water

Analysis Batch: 672560

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	ND	F1	2.00	2.32	F1	mg/L		116	90 - 110

Lab Sample ID: 280-198166-A-1 MSD

Matrix: Water

Analysis Batch: 672560

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate Nitrite as N	ND	F1	2.00	2.32	F1	mg/L		116	90 - 110	0	10

Lab Sample ID: 280-198231-B-10 MS

Matrix: Water

Analysis Batch: 672560

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	11		10.0	22.1		mg/L		107	90 - 110

Lab Sample ID: 280-198231-B-10 MSD

Matrix: Water

Analysis Batch: 672560

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate Nitrite as N	11		10.0	21.9		mg/L					

Lab Sample ID: MB 280-672766/153

Matrix: Water

Analysis Batch: 672766

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	ND		0.10	0.044	mg/L			10/28/24 15:21	1

Eurofins Denver

QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-672766/20

Matrix: Water

Analysis Batch: 672766

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	ND		0.10	0.044	mg/L			10/28/24 12:34	1

Lab Sample ID: LCS 280-672766/154

Matrix: Water

Analysis Batch: 672766

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	1.00	1.04		mg/L		104	90 - 110

Lab Sample ID: LCS 280-672766/18

Matrix: Water

Analysis Batch: 672766

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	1.00	1.06		mg/L		106	90 - 110

Lab Sample ID: LCSD 280-672766/155

Matrix: Water

Analysis Batch: 672766

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate Nitrite as N	1.00	1.08		mg/L		108	90 - 110	3	10

Lab Sample ID: LCSD 280-672766/19

Matrix: Water

Analysis Batch: 672766

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate Nitrite as N	1.00	1.05		mg/L		105	90 - 110	0	10

Lab Sample ID: 280-197748-A-4 MS

Matrix: Water

Analysis Batch: 672766

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	0.56	F1	2.00	2.94	F1	mg/L		119	90 - 110

Lab Sample ID: 280-197748-A-4 MSD

Matrix: Water

Analysis Batch: 672766

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate Nitrite as N	0.56	F1	2.00	2.99	F1	mg/L		122	90 - 110	2	10

Lab Sample ID: 280-198275-A-1 MS

Matrix: Water

Analysis Batch: 672766

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	460	F1	200	659		mg/L		99	90 - 110

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: 280-198275-A-1 MSD

Matrix: Water

Analysis Batch: 672766

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate Nitrite as N	460	F1	200	663		mg/L		101	90 - 110	1	10

Method: 410.4 - COD

Lab Sample ID: MB 280-672276/32

Matrix: Water

Analysis Batch: 672276

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		20	8.7	mg/L			10/24/24 09:06	1

Lab Sample ID: MB 280-672276/4

Matrix: Water

Analysis Batch: 672276

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		20	8.7	mg/L			10/24/24 09:06	1

Lab Sample ID: LCS 280-672276/3

Matrix: Water

Analysis Batch: 672276

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	100	109		mg/L		109	90 - 110

Lab Sample ID: LCS 280-672276/31

Matrix: Water

Analysis Batch: 672276

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	100	110		mg/L		110	90 - 110

Lab Sample ID: 280-198077-D-1 MS

Matrix: Water

Analysis Batch: 672276

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	21		50.0	70.3		mg/L		99	90 - 110

Lab Sample ID: 280-198077-D-1 MSD

Matrix: Water

Analysis Batch: 672276

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chemical Oxygen Demand	21		50.0	67.7		mg/L		94	90 - 110	4	11

Eurofins Denver

QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Method: 410.4 - COD (Continued)

Lab Sample ID: 280-198227-H-2 MS

Matrix: Water

Analysis Batch: 672276

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	32		50.0	79.8		mg/L		95	90 - 110

Lab Sample ID: 280-198227-H-2 MSD

Matrix: Water

Analysis Batch: 672276

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chemical Oxygen Demand	32		50.0	77.3		mg/L		90	90 - 110	3	11

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-671985/34

Matrix: Water

Analysis Batch: 671985

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		10	3.1	mg/L			10/22/24 01:30	1

Lab Sample ID: 280-198283-K-1 DU

Matrix: Water

Analysis Batch: 671985

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	470		464		mg/L		0.3	20

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

Lab Sample ID: MB 280-671954/1

Matrix: Water

Analysis Batch: 671954

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	4.7	mg/L			10/22/24 09:41	1

Lab Sample ID: LCS 280-671954/2

Matrix: Water

Analysis Batch: 671954

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	501	503		mg/L		100	88 - 114

Lab Sample ID: 280-198231-A-8 DU

Matrix: Water

Analysis Batch: 671954

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	5.0	J	5.00	J	mg/L		0	10

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

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

Lab Sample ID: MB 280-671956/1

Matrix: Water

Analysis Batch: 671956

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	4.7	mg/L			10/22/24 09:46	1

Lab Sample ID: LCS 280-671956/2

Matrix: Water

Analysis Batch: 671956

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	501	501		mg/L		100	88 - 114

Lab Sample ID: 280-198189-A-4 DU

Matrix: Water

Analysis Batch: 671956

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	5800		5700		mg/L		2	10

Lab Sample ID: MB 280-672131/1

Matrix: Water

Analysis Batch: 672131

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	4.7	mg/L			10/23/24 09:48	1

Lab Sample ID: LCS 280-672131/2

Matrix: Water

Analysis Batch: 672131

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	504	495		mg/L		98	88 - 114

Lab Sample ID: 280-198313-11 DU

Matrix: Water

Analysis Batch: 672131

Client Sample ID: MW-21

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	550		554		mg/L		0.4	10

Lab Sample ID: MB 280-672134/1

Matrix: Water

Analysis Batch: 672134

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	4.7	mg/L			10/23/24 09:54	1

Lab Sample ID: LCS 280-672134/2

Matrix: Water

Analysis Batch: 672134

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	504	497		mg/L		99	88 - 114

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

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

Lab Sample ID: 280-198327-B-1 DU

Matrix: Water

Analysis Batch: 672134

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	6000		6460		mg/L		7	10

Lab Sample ID: 280-198345-A-7 DU

Matrix: Water

Analysis Batch: 672134

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	5800		5660		mg/L		2	10

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 280-671839/1

Matrix: Water

Analysis Batch: 671839

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	1.1	mg/L			10/21/24 13:37	1

Lab Sample ID: LCS 280-671839/2

Matrix: Water

Analysis Batch: 671839

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	503	444		mg/L		88	79 - 114

Lab Sample ID: 280-198313-2 DU

Matrix: Water

Analysis Batch: 671839

Client Sample ID: MW-9s

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	11		6.80	F5	mg/L		45	10

Lab Sample ID: MB 280-672002/1

Matrix: Water

Analysis Batch: 672002

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	1.1	mg/L			10/22/24 13:38	1

Lab Sample ID: LCS 280-672002/2

Matrix: Water

Analysis Batch: 672002

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	503	450		mg/L		89	79 - 114

Eurofins Denver

QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Method: SM 2540D - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: 160-55876-I-16 DU

Matrix: Water

Analysis Batch: 672002

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	15		15.6		mg/L		3	10

Lab Sample ID: MB 280-672212/1

Matrix: Water

Analysis Batch: 672212

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	1.1	mg/L			10/23/24 15:23	1

Lab Sample ID: LCS 280-672212/2

Matrix: Water

Analysis Batch: 672212

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	503	480		mg/L		95	79 - 114

Lab Sample ID: 280-198308-A-11 DU

Matrix: Water

Analysis Batch: 672212

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	2.8	J	2.80	J	mg/L		0	10

Method: SM 5310B - Organic Carbon, Total (TOC)

Lab Sample ID: MB 280-672638/35

Matrix: Water

Analysis Batch: 672638

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TOC Result 1	ND		1.0	0.35	mg/L			10/26/24 01:50	1
TOC Result 2	ND		1.0	0.35	mg/L			10/26/24 01:50	1
TOC Result 3	ND		1.0	0.35	mg/L			10/26/24 01:50	1
TOC Result 4	ND		1.0	0.35	mg/L			10/26/24 01:50	1
Total Organic Carbon - Quad	ND		1.0	0.35	mg/L			10/26/24 01:50	1

Lab Sample ID: LCS 280-672638/34

Matrix: Water

Analysis Batch: 672638

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
TOC Result 1	25.0	26.6		mg/L		107	88 - 112
TOC Result 2	25.0	25.8		mg/L		103	88 - 112
TOC Result 3	25.0	25.1		mg/L		100	88 - 112
TOC Result 4	25.0	25.1		mg/L		100	88 - 112
Total Organic Carbon - Quad	25.0	25.7		mg/L		103	88 - 112

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Method: SM 5310B - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: 280-198139-A-1 MS

Matrix: Water

Analysis Batch: 672638

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
TOC Result 1	5.7		25.0	31.9		mg/L		105	88 - 112
TOC Result 2	5.7		25.0	31.7		mg/L		104	88 - 112
TOC Result 3	5.6		25.0	31.1		mg/L		102	88 - 112
TOC Result 4	5.5		25.0	29.9		mg/L		98	88 - 112
Total Organic Carbon - Quad	5.6		25.0	31.1		mg/L		102	88 - 112

Lab Sample ID: 280-198139-A-1 MSD

Matrix: Water

Analysis Batch: 672638

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
TOC Result 1	5.7		25.0	31.8		mg/L		104	88 - 112	0	15
TOC Result 2	5.7		25.0	32.0		mg/L		105	88 - 112	1	15
TOC Result 3	5.6		25.0	31.6		mg/L		104	88 - 112	2	15
TOC Result 4	5.5		25.0	30.4		mg/L		100	88 - 112	2	15
Total Organic Carbon - Quad	5.6		25.0	31.5		mg/L		103	88 - 112	1	15

Lab Sample ID: MB 280-672640/35

Matrix: Water

Analysis Batch: 672640

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TOC Result 1	ND		1.0	0.35	mg/L			10/26/24 01:01	1
TOC Result 2	ND		1.0	0.35	mg/L			10/26/24 01:01	1
TOC Result 3	ND		1.0	0.35	mg/L			10/26/24 01:01	1
TOC Result 4	ND		1.0	0.35	mg/L			10/26/24 01:01	1
Total Organic Carbon - Quad	ND		1.0	0.35	mg/L			10/26/24 01:01	1

Lab Sample ID: LCS 280-672640/34

Matrix: Water

Analysis Batch: 672640

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
TOC Result 1	25.0	24.9		mg/L		100	88 - 112
TOC Result 2	25.0	24.8		mg/L		99	88 - 112
TOC Result 3	25.0	24.9		mg/L		100	88 - 112
TOC Result 4	25.0	24.9		mg/L		100	88 - 112
Total Organic Carbon - Quad	25.0	24.9		mg/L		100	88 - 112

Lab Sample ID: 280-198313-6 MS

Matrix: Water

Analysis Batch: 672640

Client Sample ID: MW-11D

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
TOC Result 1	3.2		25.0	28.5		mg/L		101	88 - 112
TOC Result 2	3.2		25.0	28.0		mg/L		99	88 - 112
TOC Result 3	3.3		25.0	28.1		mg/L		99	88 - 112
TOC Result 4	3.2		25.0	28.0		mg/L		99	88 - 112
Total Organic Carbon - Quad	3.2		25.0	28.1		mg/L		100	88 - 112

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Method: SM 5310B - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: 280-198313-6 MSD

Matrix: Water

Analysis Batch: 672640

Client Sample ID: MW-11D

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
TOC Result 1	3.2		25.0	27.9		mg/L		99	88 - 112	2	15
TOC Result 2	3.2		25.0	28.2		mg/L		100	88 - 112	1	15
TOC Result 3	3.3		25.0	28.2		mg/L		100	88 - 112	0	15
TOC Result 4	3.2		25.0	28.2		mg/L		100	88 - 112	1	15
Total Organic Carbon - Quad	3.2		25.0	28.1		mg/L		100	88 - 112	0	15

QC Association Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

GC/MS VOA

Analysis Batch: 672423

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198313-1	MW-8s	Total/NA	Water	8260B	
280-198313-2	MW-9s	Total/NA	Water	8260B	
280-198313-3	MW-10s	Total/NA	Water	8260B	
280-198313-4	MW-10D	Total/NA	Water	8260B	
280-198313-5	MW-11s	Total/NA	Water	8260B	
280-198313-6	MW-11D	Total/NA	Water	8260B	
280-198313-7	MW-17	Total/NA	Water	8260B	
280-198313-8	MW-18	Total/NA	Water	8260B	
280-198313-9	MW-19	Total/NA	Water	8260B	
280-198313-10	MW-20	Total/NA	Water	8260B	
280-198313-11	MW-21	Total/NA	Water	8260B	
280-198313-12	Duplicate 1	Total/NA	Water	8260B	
280-198313-13	Duplicate 2	Total/NA	Water	8260B	
280-198313-14	QCAB	Total/NA	Water	8260B	
280-198313-15	QCTB	Total/NA	Water	8260B	
MB 280-672423/9	Method Blank	Total/NA	Water	8260B	
LCS 280-672423/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-672423/6	Lab Control Sample Dup	Total/NA	Water	8260B	

Metals

Prep Batch: 671657

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198313-11	MW-21	Dissolved	Water	3005A	
280-198313-13	Duplicate 2	Dissolved	Water	3005A	
MB 280-671657/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-671657/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-198313-11 MS	MW-21	Dissolved	Water	3005A	
280-198313-11 MSD	MW-21	Dissolved	Water	3005A	

Prep Batch: 671758

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198313-1	MW-8s	Total/NA	Water	200.8	
280-198313-2	MW-9s	Total/NA	Water	200.8	
280-198313-3	MW-10s	Total/NA	Water	200.8	
280-198313-4	MW-10D	Total/NA	Water	200.8	
280-198313-5	MW-11s	Total/NA	Water	200.8	
280-198313-6	MW-11D	Total/NA	Water	200.8	
280-198313-7	MW-17	Total/NA	Water	200.8	
280-198313-8	MW-18	Total/NA	Water	200.8	
MB 280-671758/1-A	Method Blank	Total/NA	Water	200.8	
LCS 280-671758/24-A	Lab Control Sample	Total/NA	Water	200.8	
280-198368-A-13-B MS	Matrix Spike	Total/NA	Water	200.8	
280-198368-A-13-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.8	

Prep Batch: 671764

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198313-9	MW-19	Total/NA	Water	200.8	
280-198313-10	MW-20	Total/NA	Water	200.8	
280-198313-11	MW-21	Total/NA	Water	200.8	
280-198313-12	Duplicate 1	Total/NA	Water	200.8	

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QC Association Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Metals (Continued)

Prep Batch: 671764 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198313-13	Duplicate 2	Total/NA	Water	200.8	
MB 280-671764/1-A	Method Blank	Total/NA	Water	200.8	
LCS 280-671764/2-A	Lab Control Sample	Total/NA	Water	200.8	
280-198286-A-5-E MS	Matrix Spike	Total/NA	Water	200.8	
280-198286-A-5-E MS ^10	Matrix Spike	Total/NA	Water	200.8	
280-198286-A-5-F MSD	Matrix Spike Duplicate	Total/NA	Water	200.8	
280-198286-A-5-F MSD ^10	Matrix Spike Duplicate	Total/NA	Water	200.8	

Analysis Batch: 672075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198313-1	MW-8s	Total/NA	Water	200.8	671758
280-198313-2	MW-9s	Total/NA	Water	200.8	671758
280-198313-3	MW-10s	Total/NA	Water	200.8	671758
280-198313-4	MW-10D	Total/NA	Water	200.8	671758
280-198313-5	MW-11s	Total/NA	Water	200.8	671758
280-198313-6	MW-11D	Total/NA	Water	200.8	671758
280-198313-7	MW-17	Total/NA	Water	200.8	671758
280-198313-8	MW-18	Total/NA	Water	200.8	671758
280-198313-9	MW-19	Total/NA	Water	200.8	671764
280-198313-10	MW-20	Total/NA	Water	200.8	671764
280-198313-11	MW-21	Total/NA	Water	200.8	671764
280-198313-12	Duplicate 1	Total/NA	Water	200.8	671764
280-198313-13	Duplicate 2	Total/NA	Water	200.8	671764
MB 280-671758/1-A	Method Blank	Total/NA	Water	200.8	671758
MB 280-671764/1-A	Method Blank	Total/NA	Water	200.8	671764
LCS 280-671758/24-A	Lab Control Sample	Total/NA	Water	200.8	671758
LCS 280-671764/2-A	Lab Control Sample	Total/NA	Water	200.8	671764
280-198286-A-5-E MS	Matrix Spike	Total/NA	Water	200.8	671764
280-198286-A-5-F MSD	Matrix Spike Duplicate	Total/NA	Water	200.8	671764
280-198368-A-13-B MS	Matrix Spike	Total/NA	Water	200.8	671758
280-198368-A-13-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.8	671758

Analysis Batch: 672416

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198286-A-5-E MS ^10	Matrix Spike	Total/NA	Water	200.8	671764
280-198286-A-5-F MSD ^10	Matrix Spike Duplicate	Total/NA	Water	200.8	671764

Analysis Batch: 673722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198313-11	MW-21	Dissolved	Water	6010B	671657
280-198313-13	Duplicate 2	Dissolved	Water	6010B	671657
MB 280-671657/1-A	Method Blank	Total Recoverable	Water	6010B	671657
LCS 280-671657/2-A	Lab Control Sample	Total Recoverable	Water	6010B	671657
280-198313-11 MS	MW-21	Dissolved	Water	6010B	671657
280-198313-11 MSD	MW-21	Dissolved	Water	6010B	671657

Analysis Batch: 673929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198313-11	MW-21	Dissolved	Water	6010B	671657
280-198313-13	Duplicate 2	Dissolved	Water	6010B	671657
MB 280-671657/1-A	Method Blank	Total Recoverable	Water	6010B	671657

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QC Association Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Metals (Continued)

Analysis Batch: 673929 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 280-671657/2-A	Lab Control Sample	Total Recoverable	Water	6010B	671657
280-198313-11 MS	MW-21	Dissolved	Water	6010B	671657
280-198313-11 MSD	MW-21	Dissolved	Water	6010B	671657

General Chemistry

Analysis Batch: 671839

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198313-2	MW-9s	Total/NA	Water	SM 2540D	
280-198313-3	MW-10s	Total/NA	Water	SM 2540D	
MB 280-671839/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 280-671839/2	Lab Control Sample	Total/NA	Water	SM 2540D	
280-198313-2 DU	MW-9s	Total/NA	Water	SM 2540D	

Analysis Batch: 671954

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198313-1	MW-8s	Total/NA	Water	SM 2540C	
280-198313-3	MW-10s	Total/NA	Water	SM 2540C	
280-198313-5	MW-11s	Total/NA	Water	SM 2540C	
MB 280-671954/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-671954/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-198231-A-8 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 671956

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198313-2	MW-9s	Total/NA	Water	SM 2540C	
MB 280-671956/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-671956/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-198189-A-4 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 671985

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198313-1	MW-8s	Total/NA	Water	SM 2320B	
280-198313-2	MW-9s	Total/NA	Water	SM 2320B	
280-198313-3	MW-10s	Total/NA	Water	SM 2320B	
280-198313-4	MW-10D	Total/NA	Water	SM 2320B	
280-198313-5	MW-11s	Total/NA	Water	SM 2320B	
280-198313-6	MW-11D	Total/NA	Water	SM 2320B	
280-198313-7	MW-17	Total/NA	Water	SM 2320B	
280-198313-8	MW-18	Total/NA	Water	SM 2320B	
280-198313-9	MW-19	Total/NA	Water	SM 2320B	
280-198313-10	MW-20	Total/NA	Water	SM 2320B	
280-198313-11	MW-21	Total/NA	Water	SM 2320B	
280-198313-12	Duplicate 1	Total/NA	Water	SM 2320B	
280-198313-13	Duplicate 2	Total/NA	Water	SM 2320B	
MB 280-671985/34	Method Blank	Total/NA	Water	SM 2320B	
280-198283-K-1 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 672002

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198313-1	MW-8s	Total/NA	Water	SM 2540D	

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QC Association Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

General Chemistry (Continued)

Analysis Batch: 672002 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-672002/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 280-672002/2	Lab Control Sample	Total/NA	Water	SM 2540D	
160-55876-I-16 DU	Duplicate	Total/NA	Water	SM 2540D	

Analysis Batch: 672131

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198313-4	MW-10D	Total/NA	Water	SM 2540C	
280-198313-6	MW-11D	Total/NA	Water	SM 2540C	
280-198313-7	MW-17	Total/NA	Water	SM 2540C	
280-198313-8	MW-18	Total/NA	Water	SM 2540C	
280-198313-9	MW-19	Total/NA	Water	SM 2540C	
280-198313-10	MW-20	Total/NA	Water	SM 2540C	
280-198313-11	MW-21	Total/NA	Water	SM 2540C	
MB 280-672131/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-672131/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-198313-11 DU	MW-21	Total/NA	Water	SM 2540C	

Analysis Batch: 672134

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198313-12	Duplicate 1	Total/NA	Water	SM 2540C	
280-198313-13	Duplicate 2	Total/NA	Water	SM 2540C	
MB 280-672134/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-672134/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-198327-B-1 DU	Duplicate	Total/NA	Water	SM 2540C	
280-198345-A-7 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 672212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198313-4	MW-10D	Total/NA	Water	SM 2540D	
280-198313-5	MW-11s	Total/NA	Water	SM 2540D	
280-198313-6	MW-11D	Total/NA	Water	SM 2540D	
280-198313-7	MW-17	Total/NA	Water	SM 2540D	
280-198313-8	MW-18	Total/NA	Water	SM 2540D	
280-198313-9	MW-19	Total/NA	Water	SM 2540D	
280-198313-10	MW-20	Total/NA	Water	SM 2540D	
280-198313-11	MW-21	Total/NA	Water	SM 2540D	
280-198313-12	Duplicate 1	Total/NA	Water	SM 2540D	
280-198313-13	Duplicate 2	Total/NA	Water	SM 2540D	
MB 280-672212/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 280-672212/2	Lab Control Sample	Total/NA	Water	SM 2540D	
280-198308-A-11 DU	Duplicate	Total/NA	Water	SM 2540D	

Analysis Batch: 672276

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198313-1	MW-8s	Total/NA	Water	410.4	
280-198313-2	MW-9s	Total/NA	Water	410.4	
280-198313-3	MW-10s	Total/NA	Water	410.4	
280-198313-4	MW-10D	Total/NA	Water	410.4	
280-198313-5	MW-11s	Total/NA	Water	410.4	
280-198313-6	MW-11D	Total/NA	Water	410.4	
280-198313-7	MW-17	Total/NA	Water	410.4	

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QC Association Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

General Chemistry (Continued)

Analysis Batch: 672276 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198313-8	MW-18	Total/NA	Water	410.4	
280-198313-9	MW-19	Total/NA	Water	410.4	
280-198313-10	MW-20	Total/NA	Water	410.4	
280-198313-11	MW-21	Total/NA	Water	410.4	
280-198313-12	Duplicate 1	Total/NA	Water	410.4	
280-198313-13	Duplicate 2	Total/NA	Water	410.4	
MB 280-672276/32	Method Blank	Total/NA	Water	410.4	
MB 280-672276/4	Method Blank	Total/NA	Water	410.4	
LCS 280-672276/3	Lab Control Sample	Total/NA	Water	410.4	
LCS 280-672276/31	Lab Control Sample	Total/NA	Water	410.4	
280-198077-D-1 MS	Matrix Spike	Total/NA	Water	410.4	
280-198077-D-1 MSD	Matrix Spike Duplicate	Total/NA	Water	410.4	
280-198227-H-2 MS	Matrix Spike	Total/NA	Water	410.4	
280-198227-H-2 MSD	Matrix Spike Duplicate	Total/NA	Water	410.4	

Analysis Batch: 672560

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198313-9	MW-19	Total/NA	Water	353.2	
280-198313-10	MW-20	Total/NA	Water	353.2	
280-198313-11	MW-21	Total/NA	Water	353.2	
280-198313-13	Duplicate 2	Total/NA	Water	353.2	
MB 280-672560/59	Method Blank	Total/NA	Water	353.2	
LCS 280-672560/57	Lab Control Sample	Total/NA	Water	353.2	
LCSD 280-672560/58	Lab Control Sample Dup	Total/NA	Water	353.2	
280-198166-A-1 MS	Matrix Spike	Total/NA	Water	353.2	
280-198166-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	
280-198231-B-10 MS	Matrix Spike	Total/NA	Water	353.2	
280-198231-B-10 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	

Analysis Batch: 672563

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198313-1	MW-8s	Total/NA	Water	350.1	
280-198313-2	MW-9s	Total/NA	Water	350.1	
280-198313-3	MW-10s	Total/NA	Water	350.1	
MB 280-672563/18	Method Blank	Total/NA	Water	350.1	
LCS 280-672563/19	Lab Control Sample	Total/NA	Water	350.1	

Analysis Batch: 672638

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198313-1	MW-8s	Total/NA	Water	SM 5310B	
280-198313-2	MW-9s	Total/NA	Water	SM 5310B	
280-198313-3	MW-10s	Total/NA	Water	SM 5310B	
280-198313-4	MW-10D	Total/NA	Water	SM 5310B	
280-198313-5	MW-11s	Total/NA	Water	SM 5310B	
MB 280-672638/35	Method Blank	Total/NA	Water	SM 5310B	
LCS 280-672638/34	Lab Control Sample	Total/NA	Water	SM 5310B	
280-198139-A-1 MS	Matrix Spike	Total/NA	Water	SM 5310B	
280-198139-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 5310B	

Eurofins Denver

QC Association Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

General Chemistry

Analysis Batch: 672640

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198313-6	MW-11D	Total/NA	Water	SM 5310B	
280-198313-7	MW-17	Total/NA	Water	SM 5310B	
280-198313-8	MW-18	Total/NA	Water	SM 5310B	
280-198313-9	MW-19	Total/NA	Water	SM 5310B	
280-198313-10	MW-20	Total/NA	Water	SM 5310B	
280-198313-11	MW-21	Total/NA	Water	SM 5310B	
280-198313-12	Duplicate 1	Total/NA	Water	SM 5310B	
280-198313-13	Duplicate 2	Total/NA	Water	SM 5310B	
MB 280-672640/35	Method Blank	Total/NA	Water	SM 5310B	
LCS 280-672640/34	Lab Control Sample	Total/NA	Water	SM 5310B	
280-198313-6 MS	MW-11D	Total/NA	Water	SM 5310B	
280-198313-6 MSD	MW-11D	Total/NA	Water	SM 5310B	

Analysis Batch: 672673

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198313-2	MW-9s	Total/NA	Water	300.0	
280-198313-6	MW-11D	Total/NA	Water	300.0	
280-198313-9	MW-19	Total/NA	Water	300.0	
280-198313-9	MW-19	Total/NA	Water	300.0	
280-198313-10	MW-20	Total/NA	Water	300.0	
280-198313-11	MW-21	Total/NA	Water	300.0	
280-198313-13	Duplicate 2	Total/NA	Water	300.0	
MRL 280-672673/3	Lab Control Sample	Total/NA	Water	300.0	
280-198289-B-1 MS	Matrix Spike	Total/NA	Water	300.0	
280-198289-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
280-198289-B-1 DU	Duplicate	Total/NA	Water	300.0	

Analysis Batch: 672766

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198313-1	MW-8s	Total/NA	Water	353.2	
280-198313-2	MW-9s	Total/NA	Water	353.2	
280-198313-3	MW-10s	Total/NA	Water	353.2	
280-198313-4	MW-10D	Total/NA	Water	353.2	
280-198313-5	MW-11s	Total/NA	Water	353.2	
280-198313-6	MW-11D	Total/NA	Water	353.2	
280-198313-7	MW-17	Total/NA	Water	353.2	
280-198313-8	MW-18	Total/NA	Water	353.2	
280-198313-12	Duplicate 1	Total/NA	Water	353.2	
MB 280-672766/153	Method Blank	Total/NA	Water	353.2	
MB 280-672766/20	Method Blank	Total/NA	Water	353.2	
LCS 280-672766/154	Lab Control Sample	Total/NA	Water	353.2	
LCS 280-672766/18	Lab Control Sample	Total/NA	Water	353.2	
LCSD 280-672766/155	Lab Control Sample Dup	Total/NA	Water	353.2	
LCSD 280-672766/19	Lab Control Sample Dup	Total/NA	Water	353.2	
280-197748-A-4 MS	Matrix Spike	Total/NA	Water	353.2	
280-197748-A-4 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	
280-198275-A-1 MS	Matrix Spike	Total/NA	Water	353.2	
280-198275-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	

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QC Association Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

General Chemistry

Analysis Batch: 672781

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198313-4	MW-10D	Total/NA	Water	350.1	
280-198313-5	MW-11s	Total/NA	Water	350.1	
280-198313-6	MW-11D	Total/NA	Water	350.1	
280-198313-7	MW-17	Total/NA	Water	350.1	
280-198313-8	MW-18	Total/NA	Water	350.1	
280-198313-9	MW-19	Total/NA	Water	350.1	
280-198313-10	MW-20	Total/NA	Water	350.1	
280-198313-11	MW-21	Total/NA	Water	350.1	
280-198313-12	Duplicate 1	Total/NA	Water	350.1	
280-198313-13	Duplicate 2	Total/NA	Water	350.1	
MB 280-672781/94	Method Blank	Total/NA	Water	350.1	
LCS 280-672781/95	Lab Control Sample	Total/NA	Water	350.1	
280-198407-A-1 MS	Matrix Spike	Total/NA	Water	350.1	
280-198407-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	
280-198415-B-1 MS	Matrix Spike	Total/NA	Water	350.1	
280-198415-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	

Analysis Batch: 672842

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198313-1	MW-8s	Total/NA	Water	300.0	
280-198313-3	MW-10s	Total/NA	Water	300.0	
280-198313-3	MW-10s	Total/NA	Water	300.0	
280-198313-4	MW-10D	Total/NA	Water	300.0	
280-198313-5	MW-11s	Total/NA	Water	300.0	
280-198313-7	MW-17	Total/NA	Water	300.0	
280-198313-8	MW-18	Total/NA	Water	300.0	
280-198313-12	Duplicate 1	Total/NA	Water	300.0	
MB 280-672842/39	Method Blank	Total/NA	Water	300.0	
MB 280-672842/77	Method Blank	Total/NA	Water	300.0	
LCS 280-672842/37	Lab Control Sample	Total/NA	Water	300.0	
LCS 280-672842/75	Lab Control Sample	Total/NA	Water	300.0	
LCSD 280-672842/38	Lab Control Sample Dup	Total/NA	Water	300.0	
LCSD 280-672842/76	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 280-672842/3	Lab Control Sample	Total/NA	Water	300.0	
280-198313-5 MS	MW-11s	Total/NA	Water	300.0	
280-198313-5 MSD	MW-11s	Total/NA	Water	300.0	
280-198313-5 DU	MW-11s	Total/NA	Water	300.0	

Lab Chronicle

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Client Sample ID: MW-8s

Date Collected: 10/15/24 14:40

Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	672423	10/25/24 11:20	DMC	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	671758	10/21/24 14:56	KLG	EET DEN
Total/NA	Analysis	200.8		1			672075	10/23/24 02:32	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	672842	10/30/24 07:11	IRC	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	672563	10/25/24 12:38	LBR	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	672766	10/28/24 13:07	AKF	EET DEN
Total/NA	Analysis	410.4		1	2 mL	2 mL	672276	10/24/24 09:06	MF	EET DEN
Total/NA	Analysis	SM 2320B		1			671985	10/22/24 02:14	EL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	671954	10/22/24 09:41	BRD	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	672002	10/22/24 13:38	BRD	EET DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	672638	10/26/24 16:32	GMW	EET DEN

Client Sample ID: MW-9s

Date Collected: 10/15/24 16:45

Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	672423	10/25/24 11:41	DMC	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	671758	10/21/24 14:56	KLG	EET DEN
Total/NA	Analysis	200.8		1			672075	10/23/24 02:36	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	672673	10/29/24 03:51	IRC	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	672563	10/25/24 12:40	LBR	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	672766	10/28/24 13:08	AKF	EET DEN
Total/NA	Analysis	410.4		1	2 mL	2 mL	672276	10/24/24 09:06	MF	EET DEN
Total/NA	Analysis	SM 2320B		1			671985	10/22/24 02:21	EL	EET DEN
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	671956	10/22/24 15:13	BRD	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	671839	10/21/24 13:37	BRD	EET DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	672638	10/26/24 11:49	GMW	EET DEN

Client Sample ID: MW-10s

Date Collected: 10/15/24 15:57

Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	672423	10/25/24 12:03	DMC	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	671758	10/21/24 14:56	KLG	EET DEN
Total/NA	Analysis	200.8		1			672075	10/23/24 02:39	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	672842	10/30/24 07:22	IRC	EET DEN
Total/NA	Analysis	300.0		10	10 mL	10 mL	672842	10/30/24 07:33	IRC	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	672563	10/25/24 12:42	LBR	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	672766	10/28/24 13:09	AKF	EET DEN
Total/NA	Analysis	410.4		1	2 mL	2 mL	672276	10/24/24 09:06	MF	EET DEN

Eurofins Denver

Lab Chronicle

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Client Sample ID: MW-10s

Lab Sample ID: 280-198313-3

Date Collected: 10/15/24 15:57

Matrix: Water

Date Received: 10/17/24 11:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2320B		1			671985	10/22/24 02:29	EL	EET DEN
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	671954	10/22/24 09:41	BRD	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	671839	10/21/24 13:37	BRD	EET DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	672638	10/26/24 12:06	GMW	EET DEN

Client Sample ID: MW-10D

Lab Sample ID: 280-198313-4

Date Collected: 10/16/24 09:15

Matrix: Water

Date Received: 10/17/24 11:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	672423	10/25/24 12:25	DMC	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	671758	10/21/24 14:56	KLG	EET DEN
Total/NA	Analysis	200.8		1			672075	10/23/24 02:43	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	672842	10/30/24 07:44	IRC	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	672781	10/28/24 18:44	BCR	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	672766	10/28/24 15:34	AKF	EET DEN
Total/NA	Analysis	410.4		1	2 mL	2 mL	672276	10/24/24 09:06	MF	EET DEN
Total/NA	Analysis	SM 2320B		1			671985	10/22/24 02:38	EL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	672131	10/23/24 09:48	BRD	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	672212	10/23/24 15:23	BRD	EET DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	672638	10/26/24 12:52	GMW	EET DEN

Client Sample ID: MW-11s

Lab Sample ID: 280-198313-5

Date Collected: 10/16/24 11:55

Matrix: Water

Date Received: 10/17/24 11:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	672423	10/25/24 12:46	DMC	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	671758	10/21/24 14:56	KLG	EET DEN
Total/NA	Analysis	200.8		1			672075	10/23/24 02:47	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	672842	10/30/24 08:27	IRC	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	672781	10/28/24 18:46	BCR	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	672766	10/28/24 15:36	AKF	EET DEN
Total/NA	Analysis	410.4		1	2 mL	2 mL	672276	10/24/24 09:06	MF	EET DEN
Total/NA	Analysis	SM 2320B		1			671985	10/22/24 02:46	EL	EET DEN
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	671954	10/22/24 09:41	BRD	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	672212	10/23/24 15:23	BRD	EET DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	672638	10/26/24 13:10	GMW	EET DEN

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Lab Chronicle

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Client Sample ID: MW-11D

Lab Sample ID: 280-198313-6

Date Collected: 10/16/24 11:05

Matrix: Water

Date Received: 10/17/24 11:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	672423	10/25/24 13:08	DMC	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	671758	10/21/24 14:56	KLG	EET DEN
Total/NA	Analysis	200.8		1			672075	10/23/24 02:50	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	672673	10/29/24 06:03	IRC	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	672781	10/28/24 18:48	BCR	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	672766	10/28/24 15:37	AKF	EET DEN
Total/NA	Analysis	410.4		1	2 mL	2 mL	672276	10/24/24 09:06	MF	EET DEN
Total/NA	Analysis	SM 2320B		1			671985	10/22/24 02:56	EL	EET DEN
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	672131	10/23/24 09:48	BRD	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	672212	10/23/24 15:23	BRD	EET DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	672640	10/26/24 01:29	GMW	EET DEN

Client Sample ID: MW-17

Lab Sample ID: 280-198313-7

Date Collected: 10/16/24 13:28

Matrix: Water

Date Received: 10/17/24 11:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	672423	10/25/24 13:30	DMC	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	671758	10/21/24 14:56	KLG	EET DEN
Total/NA	Analysis	200.8		1			672075	10/23/24 02:54	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	672842	10/30/24 09:11	IRC	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	672781	10/28/24 18:50	BCR	EET DEN
Total/NA	Analysis	353.2		5	100 mL	100 mL	672766	10/28/24 15:51	AKF	EET DEN
Total/NA	Analysis	410.4		1	2 mL	2 mL	672276	10/24/24 09:06	MF	EET DEN
Total/NA	Analysis	SM 2320B		1			671985	10/22/24 03:20	EL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	672131	10/23/24 09:48	BRD	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	672212	10/23/24 15:23	BRD	EET DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	672640	10/26/24 02:47	GMW	EET DEN

Client Sample ID: MW-18

Lab Sample ID: 280-198313-8

Date Collected: 10/16/24 12:59

Matrix: Water

Date Received: 10/17/24 11:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	672423	10/25/24 13:52	DMC	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	671758	10/21/24 14:56	KLG	EET DEN
Total/NA	Analysis	200.8		1			672075	10/23/24 02:57	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	672842	10/30/24 09:22	IRC	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	672781	10/28/24 18:52	BCR	EET DEN
Total/NA	Analysis	353.2		5	100 mL	100 mL	672766	10/28/24 15:52	AKF	EET DEN
Total/NA	Analysis	410.4		1	2 mL	2 mL	672276	10/24/24 09:06	MF	EET DEN
Total/NA	Analysis	SM 2320B		1			671985	10/22/24 03:27	EL	EET DEN

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Lab Chronicle

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Client Sample ID: MW-18

Date Collected: 10/16/24 12:59

Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	672131	10/23/24 09:48	BRD	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	672212	10/23/24 15:23	BRD	EET DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	672640	10/26/24 03:03	GMW	EET DEN

Client Sample ID: MW-19

Date Collected: 10/16/24 12:23

Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	672423	10/25/24 14:13	DMC	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	671764	10/21/24 14:56	KLG	EET DEN
Total/NA	Analysis	200.8		1			672075	10/23/24 03:58	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	672673	10/29/24 05:41	IRC	EET DEN
Total/NA	Analysis	300.0		5	10 mL	10 mL	672673	10/29/24 05:52	IRC	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	672781	10/28/24 18:55	BCR	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	672560	10/25/24 15:49	AKF	EET DEN
Total/NA	Analysis	410.4		1	2 mL	2 mL	672276	10/24/24 09:06	MF	EET DEN
Total/NA	Analysis	SM 2320B		1			671985	10/22/24 03:35	EL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	672131	10/23/24 09:48	BRD	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	672212	10/23/24 15:23	BRD	EET DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	672640	10/26/24 03:17	GMW	EET DEN

Client Sample ID: MW-20

Date Collected: 10/16/24 11:22

Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	672423	10/25/24 14:36	DMC	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	671764	10/21/24 14:56	KLG	EET DEN
Total/NA	Analysis	200.8		1			672075	10/23/24 04:02	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	672673	10/29/24 04:57	IRC	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	672781	10/28/24 19:19	BCR	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	672560	10/25/24 15:50	AKF	EET DEN
Total/NA	Analysis	410.4		1	2 mL	2 mL	672276	10/24/24 09:06	MF	EET DEN
Total/NA	Analysis	SM 2320B		1			671985	10/22/24 03:41	EL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	672131	10/23/24 09:48	BRD	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	672212	10/23/24 15:23	BRD	EET DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	672640	10/26/24 03:32	GMW	EET DEN

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Lab Chronicle

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Client Sample ID: MW-21

Date Collected: 10/16/24 10:12

Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	672423	10/25/24 14:58	DMC	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	671764	10/21/24 14:56	KLG	EET DEN
Total/NA	Analysis	200.8		1			672075	10/23/24 04:06	LMT	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	671657	10/21/24 08:05	SMK	EET DEN
Dissolved	Analysis	6010B		1			673722	11/04/24 19:41	ADL	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	671657	10/21/24 08:05	SMK	EET DEN
Dissolved	Analysis	6010B		1			673929	11/05/24 17:46	ADL	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	672673	10/29/24 04:13	IRC	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	672781	10/28/24 19:21	BCR	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	672560	10/25/24 15:51	AKF	EET DEN
Total/NA	Analysis	410.4		1	2 mL	2 mL	672276	10/24/24 09:06	MF	EET DEN
Total/NA	Analysis	SM 2320B		1			671985	10/22/24 03:49	EL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	672131	10/23/24 09:48	BRD	EET DEN
Total/NA	Analysis	SM 2540D		1	160 mL	250 mL	672212	10/23/24 15:23	BRD	EET DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	672640	10/26/24 03:48	GMW	EET DEN

Client Sample ID: Duplicate 1

Date Collected: 10/16/24 00:00

Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	672423	10/25/24 15:20	DMC	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	671764	10/21/24 14:56	KLG	EET DEN
Total/NA	Analysis	200.8		1			672075	10/23/24 04:09	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	672842	10/30/24 09:33	IRC	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	672781	10/28/24 19:23	BCR	EET DEN
Total/NA	Analysis	353.2		10	100 mL	100 mL	672766	10/28/24 15:53	AKF	EET DEN
Total/NA	Analysis	410.4		1	2 mL	2 mL	672276	10/24/24 09:06	MF	EET DEN
Total/NA	Analysis	SM 2320B		1			671985	10/22/24 03:57	EL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	672134	10/23/24 09:54	BRD	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	672212	10/23/24 15:23	BRD	EET DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	672640	10/26/24 04:02	GMW	EET DEN

Client Sample ID: Duplicate 2

Date Collected: 10/16/24 00:00

Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	672423	10/25/24 15:42	DMC	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	671764	10/21/24 14:56	KLG	EET DEN
Total/NA	Analysis	200.8		1			672075	10/23/24 04:13	LMT	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	671657	10/21/24 08:05	SMK	EET DEN
Dissolved	Analysis	6010B		1			673722	11/04/24 20:07	ADL	EET DEN

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Lab Chronicle

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198313-1

Client Sample ID: Duplicate 2

Date Collected: 10/16/24 00:00

Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			50 mL	50 mL	671657	10/21/24 08:05	SMK	EET DEN
Dissolved	Analysis	6010B		1			673929	11/05/24 17:59	ADL	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	672673	10/29/24 04:35	IRC	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	672781	10/28/24 19:25	BCR	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	672560	10/25/24 16:05	AKF	EET DEN
Total/NA	Analysis	410.4		1	2 mL	2 mL	672276	10/24/24 09:06	MF	EET DEN
Total/NA	Analysis	SM 2320B		1			671985	10/22/24 04:04	EL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	672134	10/23/24 09:54	BRD	EET DEN
Total/NA	Analysis	SM 2540D		1	160 mL	250 mL	672212	10/23/24 15:23	BRD	EET DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	672640	10/26/24 04:18	GMW	EET DEN

Client Sample ID: QCAB

Date Collected: 10/16/24 00:00

Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-14

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	672423	10/25/24 16:04	DMC	EET DEN

Client Sample ID: QCTB

Date Collected: 10/16/24 09:15

Date Received: 10/17/24 11:20

Lab Sample ID: 280-198313-15

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	672423	10/25/24 10:58	DMC	EET DEN

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Eurofins Denver

4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Fax (303) 431-7171

Chain of Custody Record



Environment Testing
TestAmerica

Client Information		Sampler: <u>NR, NR</u>		Lab PM: Collins, Janice S		Carrier Tracking No(s):		COC No: 280-97584-22898.1					
Client Contact: <u>GLA</u>		Phone:		E-Mail: Janice.Collins@et.eurofinsus.com				Page: <u>1 of 2</u>					
Company: Valley Landfills, Inc. Republic Services				Analysis Requested						Job #:			
Address: 28972 Coffin Butte Road		Due Date Requested:		Field Filtered Sample (Yes or No) ☒ Perform MS/MSD (Yes or No) ☒ Bicarb Alk/Cl/ISO4/TDS ☒ 6010B- Dissolved Metals ☒ 200.8- Total Metals ☒ TSS ☒ 8260B- VOCs - All samples except Phillips ☒ 524.2 (Calciscience) - Sample Phillips only ☒ Ammonia, COD, TOC, NOX ☒ Total Number of containers ☒						Preservation Codes:			
City: Corvallis		TAT Requested (days):								A - HCL M - Hexane			
State, Zip: OR, 97330		Compliance Project: ☐ Yes ☐ No								B - NaOH N - None			
Phone: 503-675-1335(Tel)		PO #:								C - Zn Acetate O - AsNaO2			
Email:		WO #:								D - Nitric Acid P - Na2O4S			
Project Name: Coffin Butte/Valley Landfills		Project #:								E - NaHSO4 Q - Na2SO3			
Site:		SSOW#:								F - MeOH R - Na2S2O3			
										G - Amchlor S - H2SO4			
										H - Ascorbic Acid T - TSP Dodecahydrate			
										I - Ice U - Acetone			
										J - DI Water V - MCAA			
										K - EDTA W - pH 4-5			
										L - EDA Z - other (specify)			
										Other:			
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)		Preservation Code:		Special Instructions/Note:	
MW-83		10-15-24		1440		G		W					
MW-95		10-15-24		1645		G		W					
MW-103		10-15-24		1557		G		W					
MW-10D		10-16-24		0915		G		W					
MW-115		10-16-24		1155		G		W					
MW-115		10-16-24		1105		G		W					
MW-17		10-16-24		1328		G		W					
MW-18		10-16-24		1259		G		W					
MW-19		10-16-24		1223		G		W					
MW-20		10-16-24		1122		G		W					
MW-21		10-16-24		1012		G		W					
Possible Hazard Identification												Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological												☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months	
Deliverable Requested: I, II, III, IV, Other (specify)												Special Instructions/QC Requirements:	
Empty Kit Relinquished by:				Date:		Time:		Method of Shipment:					
Relinquished by: <u>GLA</u>				Date/Time: 10-16-24/1430		Company: GLA		Received by: <u>[Signature]</u> Date/Time: 10/17/24 11:20 Company: EET DEN					
Relinquished by:				Date/Time:		Company:		Received by: <u>[Signature]</u> Date/Time: 10/18/24 09:05 Company: EET DEN					
Relinquished by:				Date/Time:		Company:		Received by: Date/Time: Company:					
Custody Seals Intact: ☐ Yes ☐ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 10/17/24 2.7 IRC TUE CF +0.2 10/18/24 0.4/4.9/1.0 IRC TUE CF +0.2									

280-198313 Chain of Custody



Ver: 01/16/2019



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TestAmerica

[illegible]

Login Sample Receipt Checklist

Client: Geo-Logic Associates

Job Number: 280-198313-1

Login Number: 198313

List Number: 1

Creator: Roehsner, Karen P

List Source: Eurofins Denver

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

Login Sample Receipt Checklist

Client: Geo-Logic Associates

Job Number: 280-198313-1

Login Number: 198313

List Number: 2

Creator: Roehsner, Karen P

List Source: Eurofins Denver

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

ANALYTICAL REPORT

PREPARED FOR

Attn: Aaron Ogorzalek
Geo-Logic Associates
2777 East Guasti Road
Suite 1
Ontario, California 91761

Generated 11/1/2024 1:15:13 PM

JOB DESCRIPTION

Valley LF - Republic Serv Coffin Butte

JOB NUMBER

280-198319-1

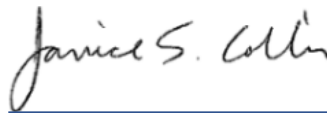
Eurofins Denver

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

Authorization



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Authorized for release by
Janice Collins, Project Manager
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(303)736-0100

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Definitions/Glossary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

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

General Chemistry

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Case Narrative

Client: Geo-Logic Associates
Project: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Job ID: 280-198319-1

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Job Narrative 280-198319-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 10/18/2024 9:05 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 0.2°C, 0.4°C and 0.7°C.

Receipt Exceptions

The Chain-of-Custody (COC) was received improperly completed. 8260 and 524 methods are requested on all samples per the COC. 524 is only needed for sample "Phillips", while 8260 will be applied to all other samples. Logged per PM instruction.

The following samples were listed on the Chain-of-Custody (COC) however no volume was received: 280-198319-10 and 280-198319-11. Therefore no analyses were logged for the samples.

GC/MS VOA

Method 524.2_Preserved: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for the following sample associated with analytical batch 570-494969 were outside control limits: 570-203315-E-1 MS and 570-203315-E-1 MSD. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method 524.2_Preserved: The method blank for analytical batch 570-494969 contained Chloroform above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 280-672790. The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch. 280-198319-1 and 280-198319-2

Method 8260B: The continuing calibration verification (CCV) associated with batch 280-672790 recovered outside the control limit 20%D for Bromomethane -36.9%D. This analyte is a poor performer. The LCS/LCSD recovered within control limits therefore the data were reported. 280-198319-1, 280-198319-2 and CCV 280-672790/2

Method 8260B: The continuing calibration verification (CCV) associated with batch 280-672950 recovered outside the control limit 20%D for Bromomethane -49.5%D. This analyte is a poor performer. The LCS/LCSD recovered within control limits therefore the data were reported. 280-198319-4, 280-198319-5, 280-198319-6, 280-198319-7, 280-198319-8, 280-198319-9 and CCV 280-672950/2

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

Metals

Method 200.8: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 280-671652 and analytical batch 280-671904 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference, high targets and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 200.8: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 280-671652 and analytical batch 280-672074 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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Case Narrative

Client: Geo-Logic Associates
Project: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Job ID: 280-198319-1 (Continued)

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

General Chemistry

Method 353.2_Pres: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 280-672766 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

Eurofins Denver

Detection Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Client Sample ID: MW-1D

Lab Sample ID: 280-198319-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.97	J	1.0	0.23	ug/L	1		200.8	Total/NA
Barium	4.1	B	3.0	0.38	ug/L	1		200.8	Total/NA
Copper	27		2.0	0.71	ug/L	1		200.8	Total/NA
Vanadium	56		5.0	1.1	ug/L	1		200.8	Total/NA
Zinc	17		10	2.0	ug/L	1		200.8	Total/NA
Chloride	6.7		3.0	1.0	mg/L	1		300.0	Total/NA
Sulfate	7.9		5.0	1.0	mg/L	1		300.0	Total/NA
Ammonia	0.15		0.10	0.029	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	0.50		0.10	0.044	mg/L	1		353.2	Total/NA
Chemical Oxygen Demand	11	J	20	8.7	mg/L	1		410.4	Total/NA
Bicarbonate Alkalinity as CaCO3	160		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	210		10	4.7	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	2.8	J	4.0	1.1	mg/L	1		SM 2540D	Total/NA
TOC Result 1	0.49	J	1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 2	0.43	J	1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 3	0.43	J	1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 4	0.44	J	1.0	0.35	mg/L	1		SM 5310B	Total/NA
Total Organic Carbon - Quad	0.45	J	1.0	0.35	mg/L	1		SM 5310B	Total/NA

Client Sample ID: MW-3D

Lab Sample ID: 280-198319-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	5.7	B	3.0	0.38	ug/L	1		200.8	Total/NA
Vanadium	47		5.0	1.1	ug/L	1		200.8	Total/NA
Zinc	5.4	J	10	2.0	ug/L	1		200.8	Total/NA
Chloride	49		3.0	1.0	mg/L	1		300.0	Total/NA
Sulfate	3.3	J	5.0	1.0	mg/L	1		300.0	Total/NA
Ammonia	0.062	J	0.10	0.029	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	0.15		0.10	0.044	mg/L	1		353.2	Total/NA
Chemical Oxygen Demand	9.8	J	20	8.7	mg/L	1		410.4	Total/NA
Bicarbonate Alkalinity as CaCO3	160		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	270		10	4.7	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	1.2	J	4.0	1.1	mg/L	1		SM 2540D	Total/NA
TOC Result 1	0.54	J	1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 2	0.59	J	1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 3	0.56	J	1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 4	0.52	J	1.0	0.35	mg/L	1		SM 5310B	Total/NA
Total Organic Carbon - Quad	0.55	J	1.0	0.35	mg/L	1		SM 5310B	Total/NA

Client Sample ID: PHILLIPS

Lab Sample ID: 280-198319-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.52	J	5.0	0.50	ug/L	1		200.8	Total/NA
Chromium	0.64	J	3.0	0.50	ug/L	1		200.8	Total/NA
Copper	0.73	J	2.0	0.71	ug/L	1		200.8	Total/NA
Vanadium	45		5.0	1.1	ug/L	1		200.8	Total/NA
Zinc	4.5	J	10	2.0	ug/L	1		200.8	Total/NA
Chloride	7.6		3.0	1.0	mg/L	1		300.0	Total/NA
Sulfate	5.7		5.0	1.0	mg/L	1		300.0	Total/NA
Ammonia	0.052	J	0.10	0.029	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	0.45		0.10	0.044	mg/L	1		353.2	Total/NA
Chemical Oxygen Demand	11	J	20	8.7	mg/L	1		410.4	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Denver

Detection Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Client Sample ID: PHILLIPS (Continued)

Lab Sample ID: 280-198319-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bicarbonate Alkalinity as CaCO3	130		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	190		10	4.7	mg/L	1		SM 2540C	Total/NA
TOC Result 1	0.43	J	1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 2	0.45	J	1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 3	0.41	J	1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 4	0.38	J	1.0	0.35	mg/L	1		SM 5310B	Total/NA
Total Organic Carbon - Quad	0.42	J	1.0	0.35	mg/L	1		SM 5310B	Total/NA

Client Sample ID: P-8

Lab Sample ID: 280-198319-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.64	J B	3.0	0.38	ug/L	1		200.8	Total/NA
Chromium	0.57	J	3.0	0.50	ug/L	1		200.8	Total/NA
Vanadium	41		5.0	1.1	ug/L	1		200.8	Total/NA
Chloride	10		3.0	1.0	mg/L	1		300.0	Total/NA
Sulfate	10		5.0	1.0	mg/L	1		300.0	Total/NA
Ammonia	0.039	J	0.10	0.029	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	0.73		0.10	0.044	mg/L	1		353.2	Total/NA
Bicarbonate Alkalinity as CaCO3	150		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	220		10	4.7	mg/L	1		SM 2540C	Total/NA
TOC Result 1	0.40	J	1.0	0.35	mg/L	1		SM 5310B	Total/NA

Client Sample ID: MW-15

Lab Sample ID: 280-198319-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	11	B	3.0	0.38	ug/L	1		200.8	Total/NA
Vanadium	6.5		5.0	1.1	ug/L	1		200.8	Total/NA
Zinc	2.6	J	10	2.0	ug/L	1		200.8	Total/NA
Chloride	63		3.0	1.0	mg/L	1		300.0	Total/NA
Sulfate	2.1	J	5.0	1.0	mg/L	1		300.0	Total/NA
Ammonia	0.046	J	0.10	0.029	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	0.19		0.10	0.044	mg/L	1		353.2	Total/NA
Chemical Oxygen Demand	9.4	J	20	8.7	mg/L	1		410.4	Total/NA
Bicarbonate Alkalinity as CaCO3	180		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	320		10	4.7	mg/L	1		SM 2540C	Total/NA
TOC Result 1	0.48	J	1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 2	0.40	J	1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 3	0.45	J	1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 4	0.44	J	1.0	0.35	mg/L	1		SM 5310B	Total/NA
Total Organic Carbon - Quad	0.44	J	1.0	0.35	mg/L	1		SM 5310B	Total/NA

Client Sample ID: MW-23

Lab Sample ID: 280-198319-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	20		5.0	0.50	ug/L	1		200.8	Total/NA
Lead	0.44	J	1.0	0.23	ug/L	1		200.8	Total/NA
Barium	50	B	3.0	0.38	ug/L	1		200.8	Total/NA
Cobalt	0.38	J	1.0	0.33	ug/L	1		200.8	Total/NA
Copper	1.4	J	2.0	0.71	ug/L	1		200.8	Total/NA
Vanadium	2.3	J	5.0	1.1	ug/L	1		200.8	Total/NA
Zinc	6.6	J	10	2.0	ug/L	1		200.8	Total/NA
Chloride	19		3.0	1.0	mg/L	1		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Denver

Detection Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Client Sample ID: MW-23 (Continued)

Lab Sample ID: 280-198319-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	1.2	J	5.0	1.0	mg/L	1		300.0	Total/NA
Ammonia	0.32		0.10	0.029	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	0.056	J	0.10	0.044	mg/L	1		353.2	Total/NA
Chemical Oxygen Demand	15	J	20	8.7	mg/L	1		410.4	Total/NA
Bicarbonate Alkalinity as CaCO3	160		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	220		10	4.7	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	16		4.0	1.1	mg/L	1		SM 2540D	Total/NA
TOC Result 1	1.3		1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 2	1.1		1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 3	1.2		1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 4	1.2		1.0	0.35	mg/L	1		SM 5310B	Total/NA
Total Organic Carbon - Quad	1.2		1.0	0.35	mg/L	1		SM 5310B	Total/NA

Client Sample ID: MW-24

Lab Sample ID: 280-198319-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.50	J	5.0	0.50	ug/L	1		200.8	Total/NA
Barium	0.44	J B	3.0	0.38	ug/L	1		200.8	Total/NA
Vanadium	33		5.0	1.1	ug/L	1		200.8	Total/NA
Chloride	5.6		3.0	1.0	mg/L	1		300.0	Total/NA
Sulfate	7.5		5.0	1.0	mg/L	1		300.0	Total/NA
Ammonia	0.092	J	0.10	0.029	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	0.41		0.10	0.044	mg/L	1		353.2	Total/NA
Chemical Oxygen Demand	10	J	20	8.7	mg/L	1		410.4	Total/NA
Bicarbonate Alkalinity as CaCO3	160		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	220		10	4.7	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	1.2	J	4.0	1.1	mg/L	1		SM 2540D	Total/NA
TOC Result 1	0.42	J	1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 2	0.36	J	1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 4	0.36	J	1.0	0.35	mg/L	1		SM 5310B	Total/NA
Total Organic Carbon - Quad	0.37	J	1.0	0.35	mg/L	1		SM 5310B	Total/NA

Client Sample ID: MW-26

Lab Sample ID: 280-198319-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	13		5.0	0.50	ug/L	1		200.8	Total/NA
Barium	25	B	3.0	0.38	ug/L	1		200.8	Total/NA
Chloride	5.7		3.0	1.0	mg/L	1		300.0	Total/NA
Ammonia	1.2		0.10	0.029	mg/L	1		350.1	Total/NA
Chemical Oxygen Demand	15	J	20	8.7	mg/L	1		410.4	Total/NA
Bicarbonate Alkalinity as CaCO3	150		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	200		10	4.7	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	6.4		4.0	1.1	mg/L	1		SM 2540D	Total/NA
TOC Result 1	1.8		1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 2	1.7		1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 3	1.7		1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 4	1.7		1.0	0.35	mg/L	1		SM 5310B	Total/NA
Total Organic Carbon - Quad	1.7		1.0	0.35	mg/L	1		SM 5310B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Denver

Detection Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Client Sample ID: DUPLICATE

Lab Sample ID: 280-198319-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	14		5.0	0.50	ug/L	1		200.8	Total/NA
Barium	27	B	3.0	0.38	ug/L	1		200.8	Total/NA
Chromium	0.77	J	3.0	0.50	ug/L	1		200.8	Total/NA
Vanadium	1.3	J	5.0	1.1	ug/L	1		200.8	Total/NA
Zinc	3.1	J	10	2.0	ug/L	1		200.8	Total/NA
Chloride	5.7		3.0	1.0	mg/L	1		300.0	Total/NA
Ammonia	1.2		0.10	0.029	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	4.7	*1	0.10	0.044	mg/L	1		353.2	Total/NA
Chemical Oxygen Demand	13	J	20	8.7	mg/L	1		410.4	Total/NA
Bicarbonate Alkalinity as CaCO3	150		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	200		10	4.7	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	6.0		4.0	1.1	mg/L	1		SM 2540D	Total/NA
TOC Result 1	1.7		1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 2	1.8		1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 3	1.7		1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 4	1.7		1.0	0.35	mg/L	1		SM 5310B	Total/NA
Total Organic Carbon - Quad	1.7		1.0	0.35	mg/L	1		SM 5310B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Denver

Method Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Method	Method Description	Protocol	Laboratory
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	EET CAL 4
8260B	Volatile Organic Compounds (GC/MS)	SW846	EET DEN
200.8	Metals (ICP/MS)	EPA	EET DEN
300.0	Anions, Ion Chromatography	EPA	EET DEN
350.1	Nitrogen, Ammonia	EPA	EET DEN
353.2	Nitrogen, Nitrate-Nitrite	EPA	EET DEN
410.4	COD	EPA	EET DEN
SM 2320B	Alkalinity	SM	EET DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET DEN
SM 2540D	Solids, Total Suspended (TSS)	SM	EET DEN
SM 5310B	Organic Carbon, Total (TOC)	SM	EET DEN
200.8	Preparation, Total Metals	EPA	EET DEN
5030B	Purge and Trap	SW846	EET DEN

Protocol References:

EPA = US Environmental Protection Agency

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

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

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

Laboratory References:

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Sample Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-198319-1	MW-1D	Water	10/16/24 16:25	10/18/24 09:05
280-198319-2	MW-3D	Water	10/16/24 15:20	10/18/24 09:05
280-198319-3	PHILLIPS	Water	10/17/24 09:45	10/18/24 09:05
280-198319-4	P-8	Water	10/17/24 11:02	10/18/24 09:05
280-198319-5	MW-15	Water	10/17/24 12:14	10/18/24 09:05
280-198319-6	MW-23	Water	10/17/24 13:13	10/18/24 09:05
280-198319-7	MW-24	Water	10/17/24 12:40	10/18/24 09:05
280-198319-8	MW-26	Water	10/17/24 11:05	10/18/24 09:05
280-198319-9	DUPLICATE	Water	10/17/24 00:00	10/18/24 09:05

Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Method: EPA-DW 524.2 - Volatile Organic Compounds (GC/MS)

Client Sample ID: PHILLIPS
Date Collected: 10/17/24 09:45
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.21	ug/L			10/24/24 10:51	1
1,1,1-Trichloroethane	ND		0.50	0.012	ug/L			10/24/24 10:51	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.021	ug/L			10/24/24 10:51	1
1,1,2-Trichloroethane	ND		0.50	0.020	ug/L			10/24/24 10:51	1
1,1-Dichloroethane	ND		0.50	0.018	ug/L			10/24/24 10:51	1
1,1-Dichloroethene	ND		0.50	0.050	ug/L			10/24/24 10:51	1
1,1-Dichloropropene	ND		0.50	0.23	ug/L			10/24/24 10:51	1
1,2,3-Trichlorobenzene	ND		0.50	0.21	ug/L			10/24/24 10:51	1
1,2,3-Trichloropropane	ND		0.50	0.11	ug/L			10/24/24 10:51	1
1,2,4-Trichlorobenzene	ND		0.50	0.31	ug/L			10/24/24 10:51	1
1,2,4-Trimethylbenzene	ND		0.50	0.31	ug/L			10/24/24 10:51	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.20	ug/L			10/24/24 10:51	1
1,2-Dibromoethane (EDB)	ND		0.50	0.021	ug/L			10/24/24 10:51	1
1,2-Dichlorobenzene	ND		0.50	0.015	ug/L			10/24/24 10:51	1
1,2-Dichloroethane	ND		0.50	0.014	ug/L			10/24/24 10:51	1
1,2-Dichloropropane	ND		0.50	0.015	ug/L			10/24/24 10:51	1
1,3,5-Trimethylbenzene	ND		0.50	0.30	ug/L			10/24/24 10:51	1
1,3-Dichlorobenzene	ND		0.50	0.018	ug/L			10/24/24 10:51	1
1,3-Dichloropropane	ND		0.50	0.18	ug/L			10/24/24 10:51	1
1,4-Dichlorobenzene	ND		0.50	0.023	ug/L			10/24/24 10:51	1
2,2-Dichloropropane	ND		0.50	0.13	ug/L			10/24/24 10:51	1
2-Chlorotoluene	ND		0.50	0.24	ug/L			10/24/24 10:51	1
4-Chlorotoluene	ND		0.50	0.24	ug/L			10/24/24 10:51	1
Benzene	ND		0.50	0.14	ug/L			10/24/24 10:51	1
Bromobenzene	ND		0.50	0.14	ug/L			10/24/24 10:51	1
Bromochloromethane	ND		0.50	0.11	ug/L			10/24/24 10:51	1
Bromodichloromethane	ND		0.50	0.019	ug/L			10/24/24 10:51	1
Bromoform	ND		0.50	0.075	ug/L			10/24/24 10:51	1
Bromomethane	ND		0.50	0.023	ug/L			10/24/24 10:51	1
Carbon tetrachloride	ND		0.50	0.014	ug/L			10/24/24 10:51	1
Chlorobenzene	ND		0.50	0.016	ug/L			10/24/24 10:51	1
Chloroethane	ND		0.50	0.028	ug/L			10/24/24 10:51	1
Chloroform	ND		0.50	0.016	ug/L			10/24/24 10:51	1
Chloromethane	ND		0.50	0.20	ug/L			10/24/24 10:51	1
cis-1,2-Dichloroethene	ND		0.50	0.023	ug/L			10/24/24 10:51	1
cis-1,3-Dichloropropene	ND		0.50	0.021	ug/L			10/24/24 10:51	1
Dibromochloromethane	ND		0.50	0.026	ug/L			10/24/24 10:51	1
Dibromomethane	ND		0.50	0.17	ug/L			10/24/24 10:51	1
Dichlorodifluoromethane	ND		0.50	0.24	ug/L			10/24/24 10:51	1
Ethylbenzene	ND		0.50	0.33	ug/L			10/24/24 10:51	1
Hexachlorobutadiene	ND		0.50	0.13	ug/L			10/24/24 10:51	1
Isopropylbenzene	ND		0.50	0.32	ug/L			10/24/24 10:51	1
m,p-Xylene	ND		0.50	0.12	ug/L			10/24/24 10:51	1
Methylene Chloride	ND		0.50	0.21	ug/L			10/24/24 10:51	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.12	ug/L			10/24/24 10:51	1
Naphthalene	ND		0.50	0.27	ug/L			10/24/24 10:51	1
n-Butylbenzene	ND		0.50	0.27	ug/L			10/24/24 10:51	1
N-Propylbenzene	ND		0.50	0.28	ug/L			10/24/24 10:51	1
o-Xylene	ND		0.50	0.24	ug/L			10/24/24 10:51	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Method: EPA-DW 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: PHILLIPS
Date Collected: 10/17/24 09:45
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		0.50	0.25	ug/L			10/24/24 10:51	1
sec-Butylbenzene	ND		0.50	0.25	ug/L			10/24/24 10:51	1
Styrene	ND		0.50	0.16	ug/L			10/24/24 10:51	1
tert-Butylbenzene	ND		0.50	0.31	ug/L			10/24/24 10:51	1
Tetrachloroethene	ND		0.50	0.014	ug/L			10/24/24 10:51	1
Toluene	ND		0.50	0.29	ug/L			10/24/24 10:51	1
trans-1,2-Dichloroethene	ND		0.50	0.025	ug/L			10/24/24 10:51	1
trans-1,3-Dichloropropene	ND		0.50	0.032	ug/L			10/24/24 10:51	1
Trichloroethene	ND		0.50	0.028	ug/L			10/24/24 10:51	1
Trichlorofluoromethane	ND		0.50	0.037	ug/L			10/24/24 10:51	1
Vinyl chloride	ND		0.50	0.035	ug/L			10/24/24 10:51	1
Xylenes, Total	ND		0.50	0.24	ug/L			10/24/24 10:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene-d4	93		70 - 130					10/24/24 10:51	1
4-Bromofluorobenzene (Surr)	80		70 - 130					10/24/24 10:51	1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: MW-1D
Date Collected: 10/16/24 16:25
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			10/29/24 12:13	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			10/29/24 12:13	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/29/24 12:13	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			10/29/24 12:13	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			10/29/24 12:13	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			10/29/24 12:13	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			10/29/24 12:13	1
1,2,3-Trichlorobenzene	ND		4.0	1.2	ug/L			10/29/24 12:13	1
1,2,3-Trichloropropane	ND		2.5	0.28	ug/L			10/29/24 12:13	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			10/29/24 12:13	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			10/29/24 12:13	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.42	ug/L			10/29/24 12:13	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			10/29/24 12:13	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			10/29/24 12:13	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			10/29/24 12:13	1
1,2-Dichloropropane	ND		1.0	0.24	ug/L			10/29/24 12:13	1
1,3,5-Trimethylbenzene	ND		1.0	0.12	ug/L			10/29/24 12:13	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			10/29/24 12:13	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			10/29/24 12:13	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			10/29/24 12:13	1
2,2-Dichloropropane	ND		1.0	0.17	ug/L			10/29/24 12:13	1
2-Butanone (MEK)	ND		10	4.6	ug/L			10/29/24 12:13	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			10/29/24 12:13	1
2-Hexanone	ND		5.0	0.81	ug/L			10/29/24 12:13	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			10/29/24 12:13	1
4-Isopropyltoluene	ND		1.0	0.19	ug/L			10/29/24 12:13	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			10/29/24 12:13	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: MW-1D
Date Collected: 10/16/24 16:25
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		15	6.6	ug/L			10/29/24 12:13	1
Benzene	ND		1.0	0.14	ug/L			10/29/24 12:13	1
Bromobenzene	ND		1.0	0.19	ug/L			10/29/24 12:13	1
Bromochloromethane	ND		1.0	0.40	ug/L			10/29/24 12:13	1
Bromodichloromethane	ND		1.0	0.19	ug/L			10/29/24 12:13	1
Bromoform	ND		2.0	0.25	ug/L			10/29/24 12:13	1
Bromomethane	ND		5.0	2.4	ug/L			10/29/24 12:13	1
Carbon disulfide	ND		2.0	0.26	ug/L			10/29/24 12:13	1
Carbon tetrachloride	ND		1.0	0.23	ug/L			10/29/24 12:13	1
Chlorobenzene	ND		1.0	0.092	ug/L			10/29/24 12:13	1
Chloroethane	ND		2.0	0.64	ug/L			10/29/24 12:13	1
Chloroform	ND		1.0	0.36	ug/L			10/29/24 12:13	1
Chloromethane	ND		2.0	0.23	ug/L			10/29/24 12:13	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			10/29/24 12:13	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			10/29/24 12:13	1
Dibromochloromethane	ND		1.0	0.28	ug/L			10/29/24 12:13	1
Dibromomethane	ND		1.0	0.34	ug/L			10/29/24 12:13	1
Dichlorodifluoromethane	ND		2.0	0.30	ug/L			10/29/24 12:13	1
Ethylbenzene	ND		1.0	0.14	ug/L			10/29/24 12:13	1
Hexachlorobutadiene	ND		2.0	0.53	ug/L			10/29/24 12:13	1
Isopropylbenzene	ND		1.0	0.16	ug/L			10/29/24 12:13	1
Methylene Chloride	ND		2.0	0.94	ug/L			10/29/24 12:13	1
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			10/29/24 12:13	1
Naphthalene	ND		3.0	0.99	ug/L			10/29/24 12:13	1
n-Butylbenzene	ND		1.0	0.23	ug/L			10/29/24 12:13	1
N-Propylbenzene	ND		1.0	0.18	ug/L			10/29/24 12:13	1
o-Xylene	ND		1.0	0.11	ug/L			10/29/24 12:13	1
sec-Butylbenzene	ND		1.0	0.20	ug/L			10/29/24 12:13	1
Styrene	ND		1.0	0.13	ug/L			10/29/24 12:13	1
tert-Butylbenzene	ND		1.0	0.18	ug/L			10/29/24 12:13	1
Tetrachloroethene	ND		1.0	0.40	ug/L			10/29/24 12:13	1
Toluene	ND		1.0	0.32	ug/L			10/29/24 12:13	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			10/29/24 12:13	1
trans-1,3-Dichloropropene	ND		1.0	0.14	ug/L			10/29/24 12:13	1
Trichloroethene	ND		1.0	0.30	ug/L			10/29/24 12:13	1
Trichlorofluoromethane	ND		2.0	0.20	ug/L			10/29/24 12:13	1
Vinyl chloride	ND		1.0	0.23	ug/L			10/29/24 12:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		70 - 127		10/29/24 12:13	1
4-Bromofluorobenzene (Surr)	98		78 - 120		10/29/24 12:13	1
Dibromofluoromethane (Surr)	103		77 - 120		10/29/24 12:13	1
Toluene-d8 (Surr)	97		80 - 125		10/29/24 12:13	1

Client Sample ID: MW-3D
Date Collected: 10/16/24 15:20
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			10/29/24 12:35	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			10/29/24 12:35	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: MW-3D
Date Collected: 10/16/24 15:20
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/29/24 12:35	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			10/29/24 12:35	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			10/29/24 12:35	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			10/29/24 12:35	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			10/29/24 12:35	1
1,2,3-Trichlorobenzene	ND		4.0	1.2	ug/L			10/29/24 12:35	1
1,2,3-Trichloropropane	ND		2.5	0.28	ug/L			10/29/24 12:35	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			10/29/24 12:35	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			10/29/24 12:35	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.42	ug/L			10/29/24 12:35	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			10/29/24 12:35	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			10/29/24 12:35	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			10/29/24 12:35	1
1,2-Dichloropropane	ND		1.0	0.24	ug/L			10/29/24 12:35	1
1,3,5-Trimethylbenzene	ND		1.0	0.12	ug/L			10/29/24 12:35	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			10/29/24 12:35	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			10/29/24 12:35	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			10/29/24 12:35	1
2,2-Dichloropropane	ND		1.0	0.17	ug/L			10/29/24 12:35	1
2-Butanone (MEK)	ND		10	4.6	ug/L			10/29/24 12:35	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			10/29/24 12:35	1
2-Hexanone	ND		5.0	0.81	ug/L			10/29/24 12:35	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			10/29/24 12:35	1
4-Isopropyltoluene	ND		1.0	0.19	ug/L			10/29/24 12:35	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			10/29/24 12:35	1
Acetone	ND		15	6.6	ug/L			10/29/24 12:35	1
Benzene	ND		1.0	0.14	ug/L			10/29/24 12:35	1
Bromobenzene	ND		1.0	0.19	ug/L			10/29/24 12:35	1
Bromochloromethane	ND		1.0	0.40	ug/L			10/29/24 12:35	1
Bromodichloromethane	ND		1.0	0.19	ug/L			10/29/24 12:35	1
Bromoform	ND		2.0	0.25	ug/L			10/29/24 12:35	1
Bromomethane	ND		5.0	2.4	ug/L			10/29/24 12:35	1
Carbon disulfide	ND		2.0	0.26	ug/L			10/29/24 12:35	1
Carbon tetrachloride	ND		1.0	0.23	ug/L			10/29/24 12:35	1
Chlorobenzene	ND		1.0	0.092	ug/L			10/29/24 12:35	1
Chloroethane	ND		2.0	0.64	ug/L			10/29/24 12:35	1
Chloroform	ND		1.0	0.36	ug/L			10/29/24 12:35	1
Chloromethane	ND		2.0	0.23	ug/L			10/29/24 12:35	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			10/29/24 12:35	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			10/29/24 12:35	1
Dibromochloromethane	ND		1.0	0.28	ug/L			10/29/24 12:35	1
Dibromomethane	ND		1.0	0.34	ug/L			10/29/24 12:35	1
Dichlorodifluoromethane	ND		2.0	0.30	ug/L			10/29/24 12:35	1
Ethylbenzene	ND		1.0	0.14	ug/L			10/29/24 12:35	1
Hexachlorobutadiene	ND		2.0	0.53	ug/L			10/29/24 12:35	1
Isopropylbenzene	ND		1.0	0.16	ug/L			10/29/24 12:35	1
Methylene Chloride	ND		2.0	0.94	ug/L			10/29/24 12:35	1
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			10/29/24 12:35	1
Naphthalene	ND		3.0	0.99	ug/L			10/29/24 12:35	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: MW-3D
Date Collected: 10/16/24 15:20
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		1.0	0.23	ug/L			10/29/24 12:35	1
N-Propylbenzene	ND		1.0	0.18	ug/L			10/29/24 12:35	1
o-Xylene	ND		1.0	0.11	ug/L			10/29/24 12:35	1
sec-Butylbenzene	ND		1.0	0.20	ug/L			10/29/24 12:35	1
Styrene	ND		1.0	0.13	ug/L			10/29/24 12:35	1
tert-Butylbenzene	ND		1.0	0.18	ug/L			10/29/24 12:35	1
Tetrachloroethene	ND		1.0	0.40	ug/L			10/29/24 12:35	1
Toluene	ND		1.0	0.32	ug/L			10/29/24 12:35	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			10/29/24 12:35	1
trans-1,3-Dichloropropene	ND		1.0	0.14	ug/L			10/29/24 12:35	1
Trichloroethene	ND		1.0	0.30	ug/L			10/29/24 12:35	1
Trichlorofluoromethane	ND		2.0	0.20	ug/L			10/29/24 12:35	1
Vinyl chloride	ND		1.0	0.23	ug/L			10/29/24 12:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		70 - 127		10/29/24 12:35	1
4-Bromofluorobenzene (Surr)	99		78 - 120		10/29/24 12:35	1
Dibromofluoromethane (Surr)	100		77 - 120		10/29/24 12:35	1
Toluene-d8 (Surr)	98		80 - 125		10/29/24 12:35	1

Client Sample ID: P-8
Date Collected: 10/17/24 11:02
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			10/30/24 13:15	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			10/30/24 13:15	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/30/24 13:15	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			10/30/24 13:15	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			10/30/24 13:15	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			10/30/24 13:15	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			10/30/24 13:15	1
1,2,3-Trichlorobenzene	ND		4.0	1.2	ug/L			10/30/24 13:15	1
1,2,3-Trichloropropane	ND		2.5	0.28	ug/L			10/30/24 13:15	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			10/30/24 13:15	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			10/30/24 13:15	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.42	ug/L			10/30/24 13:15	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			10/30/24 13:15	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			10/30/24 13:15	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			10/30/24 13:15	1
1,2-Dichloropropane	ND		1.0	0.24	ug/L			10/30/24 13:15	1
1,3,5-Trimethylbenzene	ND		1.0	0.12	ug/L			10/30/24 13:15	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			10/30/24 13:15	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			10/30/24 13:15	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			10/30/24 13:15	1
2,2-Dichloropropane	ND		1.0	0.17	ug/L			10/30/24 13:15	1
2-Butanone (MEK)	ND		10	4.6	ug/L			10/30/24 13:15	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			10/30/24 13:15	1
2-Hexanone	ND		5.0	0.81	ug/L			10/30/24 13:15	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			10/30/24 13:15	1
4-Isopropyltoluene	ND		1.0	0.19	ug/L			10/30/24 13:15	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: P-8

Date Collected: 10/17/24 11:02

Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			10/30/24 13:15	1
Acetone	ND		15	6.6	ug/L			10/30/24 13:15	1
Benzene	ND		1.0	0.14	ug/L			10/30/24 13:15	1
Bromobenzene	ND		1.0	0.19	ug/L			10/30/24 13:15	1
Bromochloromethane	ND		1.0	0.40	ug/L			10/30/24 13:15	1
Bromodichloromethane	ND		1.0	0.19	ug/L			10/30/24 13:15	1
Bromoform	ND		2.0	0.25	ug/L			10/30/24 13:15	1
Bromomethane	ND		5.0	2.4	ug/L			10/30/24 13:15	1
Carbon disulfide	ND		2.0	0.26	ug/L			10/30/24 13:15	1
Carbon tetrachloride	ND		1.0	0.23	ug/L			10/30/24 13:15	1
Chlorobenzene	ND		1.0	0.092	ug/L			10/30/24 13:15	1
Chloroethane	ND		2.0	0.64	ug/L			10/30/24 13:15	1
Chloroform	ND		1.0	0.36	ug/L			10/30/24 13:15	1
Chloromethane	ND		2.0	0.23	ug/L			10/30/24 13:15	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			10/30/24 13:15	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			10/30/24 13:15	1
Dibromochloromethane	ND		1.0	0.28	ug/L			10/30/24 13:15	1
Dibromomethane	ND		1.0	0.34	ug/L			10/30/24 13:15	1
Dichlorodifluoromethane	ND		2.0	0.30	ug/L			10/30/24 13:15	1
Ethylbenzene	ND		1.0	0.14	ug/L			10/30/24 13:15	1
Hexachlorobutadiene	ND		2.0	0.53	ug/L			10/30/24 13:15	1
Isopropylbenzene	ND		1.0	0.16	ug/L			10/30/24 13:15	1
Methylene Chloride	ND		2.0	0.94	ug/L			10/30/24 13:15	1
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			10/30/24 13:15	1
Naphthalene	ND		3.0	0.99	ug/L			10/30/24 13:15	1
n-Butylbenzene	ND		1.0	0.23	ug/L			10/30/24 13:15	1
N-Propylbenzene	ND		1.0	0.18	ug/L			10/30/24 13:15	1
o-Xylene	ND		1.0	0.11	ug/L			10/30/24 13:15	1
sec-Butylbenzene	ND		1.0	0.20	ug/L			10/30/24 13:15	1
Styrene	ND		1.0	0.13	ug/L			10/30/24 13:15	1
tert-Butylbenzene	ND		1.0	0.18	ug/L			10/30/24 13:15	1
Tetrachloroethene	ND		1.0	0.40	ug/L			10/30/24 13:15	1
Toluene	ND		1.0	0.32	ug/L			10/30/24 13:15	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			10/30/24 13:15	1
trans-1,3-Dichloropropene	ND		1.0	0.14	ug/L			10/30/24 13:15	1
Trichloroethene	ND		1.0	0.30	ug/L			10/30/24 13:15	1
Trichlorofluoromethane	ND		2.0	0.20	ug/L			10/30/24 13:15	1
Vinyl chloride	ND		1.0	0.23	ug/L			10/30/24 13:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		70 - 127		10/30/24 13:15	1
4-Bromofluorobenzene (Surr)	100		78 - 120		10/30/24 13:15	1
Dibromofluoromethane (Surr)	100		77 - 120		10/30/24 13:15	1
Toluene-d8 (Surr)	98		80 - 125		10/30/24 13:15	1

Client Sample ID: MW-15

Date Collected: 10/17/24 12:14

Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-5

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			10/30/24 13:36	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: MW-15
Date Collected: 10/17/24 12:14
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			10/30/24 13:36	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/30/24 13:36	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			10/30/24 13:36	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			10/30/24 13:36	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			10/30/24 13:36	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			10/30/24 13:36	1
1,2,3-Trichlorobenzene	ND		4.0	1.2	ug/L			10/30/24 13:36	1
1,2,3-Trichloropropane	ND		2.5	0.28	ug/L			10/30/24 13:36	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			10/30/24 13:36	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			10/30/24 13:36	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.42	ug/L			10/30/24 13:36	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			10/30/24 13:36	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			10/30/24 13:36	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			10/30/24 13:36	1
1,2-Dichloropropane	ND		1.0	0.24	ug/L			10/30/24 13:36	1
1,3,5-Trimethylbenzene	ND		1.0	0.12	ug/L			10/30/24 13:36	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			10/30/24 13:36	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			10/30/24 13:36	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			10/30/24 13:36	1
2,2-Dichloropropane	ND		1.0	0.17	ug/L			10/30/24 13:36	1
2-Butanone (MEK)	ND		10	4.6	ug/L			10/30/24 13:36	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			10/30/24 13:36	1
2-Hexanone	ND		5.0	0.81	ug/L			10/30/24 13:36	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			10/30/24 13:36	1
4-Isopropyltoluene	ND		1.0	0.19	ug/L			10/30/24 13:36	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			10/30/24 13:36	1
Acetone	ND		15	6.6	ug/L			10/30/24 13:36	1
Benzene	ND		1.0	0.14	ug/L			10/30/24 13:36	1
Bromobenzene	ND		1.0	0.19	ug/L			10/30/24 13:36	1
Bromochloromethane	ND		1.0	0.40	ug/L			10/30/24 13:36	1
Bromodichloromethane	ND		1.0	0.19	ug/L			10/30/24 13:36	1
Bromoform	ND		2.0	0.25	ug/L			10/30/24 13:36	1
Bromomethane	ND		5.0	2.4	ug/L			10/30/24 13:36	1
Carbon disulfide	ND		2.0	0.26	ug/L			10/30/24 13:36	1
Carbon tetrachloride	ND		1.0	0.23	ug/L			10/30/24 13:36	1
Chlorobenzene	ND		1.0	0.092	ug/L			10/30/24 13:36	1
Chloroethane	ND		2.0	0.64	ug/L			10/30/24 13:36	1
Chloroform	ND		1.0	0.36	ug/L			10/30/24 13:36	1
Chloromethane	ND		2.0	0.23	ug/L			10/30/24 13:36	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			10/30/24 13:36	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			10/30/24 13:36	1
Dibromochloromethane	ND		1.0	0.28	ug/L			10/30/24 13:36	1
Dibromomethane	ND		1.0	0.34	ug/L			10/30/24 13:36	1
Dichlorodifluoromethane	ND		2.0	0.30	ug/L			10/30/24 13:36	1
Ethylbenzene	ND		1.0	0.14	ug/L			10/30/24 13:36	1
Hexachlorobutadiene	ND		2.0	0.53	ug/L			10/30/24 13:36	1
Isopropylbenzene	ND		1.0	0.16	ug/L			10/30/24 13:36	1
Methylene Chloride	ND		2.0	0.94	ug/L			10/30/24 13:36	1
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			10/30/24 13:36	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: MW-15
Date Collected: 10/17/24 12:14
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		3.0	0.99	ug/L			10/30/24 13:36	1
n-Butylbenzene	ND		1.0	0.23	ug/L			10/30/24 13:36	1
N-Propylbenzene	ND		1.0	0.18	ug/L			10/30/24 13:36	1
o-Xylene	ND		1.0	0.11	ug/L			10/30/24 13:36	1
sec-Butylbenzene	ND		1.0	0.20	ug/L			10/30/24 13:36	1
Styrene	ND		1.0	0.13	ug/L			10/30/24 13:36	1
tert-Butylbenzene	ND		1.0	0.18	ug/L			10/30/24 13:36	1
Tetrachloroethene	ND		1.0	0.40	ug/L			10/30/24 13:36	1
Toluene	ND		1.0	0.32	ug/L			10/30/24 13:36	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			10/30/24 13:36	1
trans-1,3-Dichloropropene	ND		1.0	0.14	ug/L			10/30/24 13:36	1
Trichloroethene	ND		1.0	0.30	ug/L			10/30/24 13:36	1
Trichlorofluoromethane	ND		2.0	0.20	ug/L			10/30/24 13:36	1
Vinyl chloride	ND		1.0	0.23	ug/L			10/30/24 13:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		70 - 127					10/30/24 13:36	1
4-Bromofluorobenzene (Surr)	101		78 - 120					10/30/24 13:36	1
Dibromofluoromethane (Surr)	101		77 - 120					10/30/24 13:36	1
Toluene-d8 (Surr)	98		80 - 125					10/30/24 13:36	1

Client Sample ID: MW-23
Date Collected: 10/17/24 13:13
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			10/30/24 13:57	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			10/30/24 13:57	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/30/24 13:57	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			10/30/24 13:57	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			10/30/24 13:57	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			10/30/24 13:57	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			10/30/24 13:57	1
1,2,3-Trichlorobenzene	ND		4.0	1.2	ug/L			10/30/24 13:57	1
1,2,3-Trichloropropane	ND		2.5	0.28	ug/L			10/30/24 13:57	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			10/30/24 13:57	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			10/30/24 13:57	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.42	ug/L			10/30/24 13:57	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			10/30/24 13:57	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			10/30/24 13:57	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			10/30/24 13:57	1
1,2-Dichloropropane	ND		1.0	0.24	ug/L			10/30/24 13:57	1
1,3,5-Trimethylbenzene	ND		1.0	0.12	ug/L			10/30/24 13:57	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			10/30/24 13:57	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			10/30/24 13:57	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			10/30/24 13:57	1
2,2-Dichloropropane	ND		1.0	0.17	ug/L			10/30/24 13:57	1
2-Butanone (MEK)	ND		10	4.6	ug/L			10/30/24 13:57	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			10/30/24 13:57	1
2-Hexanone	ND		5.0	0.81	ug/L			10/30/24 13:57	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			10/30/24 13:57	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: MW-23
Date Collected: 10/17/24 13:13
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	ND		1.0	0.19	ug/L			10/30/24 13:57	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			10/30/24 13:57	1
Acetone	ND		15	6.6	ug/L			10/30/24 13:57	1
Benzene	ND		1.0	0.14	ug/L			10/30/24 13:57	1
Bromobenzene	ND		1.0	0.19	ug/L			10/30/24 13:57	1
Bromochloromethane	ND		1.0	0.40	ug/L			10/30/24 13:57	1
Bromodichloromethane	ND		1.0	0.19	ug/L			10/30/24 13:57	1
Bromoform	ND		2.0	0.25	ug/L			10/30/24 13:57	1
Bromomethane	ND		5.0	2.4	ug/L			10/30/24 13:57	1
Carbon disulfide	ND		2.0	0.26	ug/L			10/30/24 13:57	1
Carbon tetrachloride	ND		1.0	0.23	ug/L			10/30/24 13:57	1
Chlorobenzene	ND		1.0	0.092	ug/L			10/30/24 13:57	1
Chloroethane	ND		2.0	0.64	ug/L			10/30/24 13:57	1
Chloroform	ND		1.0	0.36	ug/L			10/30/24 13:57	1
Chloromethane	ND		2.0	0.23	ug/L			10/30/24 13:57	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			10/30/24 13:57	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			10/30/24 13:57	1
Dibromochloromethane	ND		1.0	0.28	ug/L			10/30/24 13:57	1
Dibromomethane	ND		1.0	0.34	ug/L			10/30/24 13:57	1
Dichlorodifluoromethane	ND		2.0	0.30	ug/L			10/30/24 13:57	1
Ethylbenzene	ND		1.0	0.14	ug/L			10/30/24 13:57	1
Hexachlorobutadiene	ND		2.0	0.53	ug/L			10/30/24 13:57	1
Isopropylbenzene	ND		1.0	0.16	ug/L			10/30/24 13:57	1
Methylene Chloride	ND		2.0	0.94	ug/L			10/30/24 13:57	1
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			10/30/24 13:57	1
Naphthalene	ND		3.0	0.99	ug/L			10/30/24 13:57	1
n-Butylbenzene	ND		1.0	0.23	ug/L			10/30/24 13:57	1
N-Propylbenzene	ND		1.0	0.18	ug/L			10/30/24 13:57	1
o-Xylene	ND		1.0	0.11	ug/L			10/30/24 13:57	1
sec-Butylbenzene	ND		1.0	0.20	ug/L			10/30/24 13:57	1
Styrene	ND		1.0	0.13	ug/L			10/30/24 13:57	1
tert-Butylbenzene	ND		1.0	0.18	ug/L			10/30/24 13:57	1
Tetrachloroethene	ND		1.0	0.40	ug/L			10/30/24 13:57	1
Toluene	ND		1.0	0.32	ug/L			10/30/24 13:57	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			10/30/24 13:57	1
trans-1,3-Dichloropropene	ND		1.0	0.14	ug/L			10/30/24 13:57	1
Trichloroethene	ND		1.0	0.30	ug/L			10/30/24 13:57	1
Trichlorofluoromethane	ND		2.0	0.20	ug/L			10/30/24 13:57	1
Vinyl chloride	ND		1.0	0.23	ug/L			10/30/24 13:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		70 - 127		10/30/24 13:57	1
4-Bromofluorobenzene (Surr)	99		78 - 120		10/30/24 13:57	1
Dibromofluoromethane (Surr)	101		77 - 120		10/30/24 13:57	1
Toluene-d8 (Surr)	98		80 - 125		10/30/24 13:57	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: MW-24
Date Collected: 10/17/24 12:40
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			10/30/24 14:18	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			10/30/24 14:18	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/30/24 14:18	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			10/30/24 14:18	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			10/30/24 14:18	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			10/30/24 14:18	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			10/30/24 14:18	1
1,2,3-Trichlorobenzene	ND		4.0	1.2	ug/L			10/30/24 14:18	1
1,2,3-Trichloropropane	ND		2.5	0.28	ug/L			10/30/24 14:18	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			10/30/24 14:18	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			10/30/24 14:18	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.42	ug/L			10/30/24 14:18	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			10/30/24 14:18	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			10/30/24 14:18	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			10/30/24 14:18	1
1,2-Dichloropropane	ND		1.0	0.24	ug/L			10/30/24 14:18	1
1,3,5-Trimethylbenzene	ND		1.0	0.12	ug/L			10/30/24 14:18	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			10/30/24 14:18	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			10/30/24 14:18	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			10/30/24 14:18	1
2,2-Dichloropropane	ND		1.0	0.17	ug/L			10/30/24 14:18	1
2-Butanone (MEK)	ND		10	4.6	ug/L			10/30/24 14:18	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			10/30/24 14:18	1
2-Hexanone	ND		5.0	0.81	ug/L			10/30/24 14:18	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			10/30/24 14:18	1
4-Isopropyltoluene	ND		1.0	0.19	ug/L			10/30/24 14:18	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			10/30/24 14:18	1
Acetone	ND		15	6.6	ug/L			10/30/24 14:18	1
Benzene	ND		1.0	0.14	ug/L			10/30/24 14:18	1
Bromobenzene	ND		1.0	0.19	ug/L			10/30/24 14:18	1
Bromochloromethane	ND		1.0	0.40	ug/L			10/30/24 14:18	1
Bromodichloromethane	ND		1.0	0.19	ug/L			10/30/24 14:18	1
Bromoform	ND		2.0	0.25	ug/L			10/30/24 14:18	1
Bromomethane	ND		5.0	2.4	ug/L			10/30/24 14:18	1
Carbon disulfide	ND		2.0	0.26	ug/L			10/30/24 14:18	1
Carbon tetrachloride	ND		1.0	0.23	ug/L			10/30/24 14:18	1
Chlorobenzene	ND		1.0	0.092	ug/L			10/30/24 14:18	1
Chloroethane	ND		2.0	0.64	ug/L			10/30/24 14:18	1
Chloroform	ND		1.0	0.36	ug/L			10/30/24 14:18	1
Chloromethane	ND		2.0	0.23	ug/L			10/30/24 14:18	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			10/30/24 14:18	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			10/30/24 14:18	1
Dibromochloromethane	ND		1.0	0.28	ug/L			10/30/24 14:18	1
Dibromomethane	ND		1.0	0.34	ug/L			10/30/24 14:18	1
Dichlorodifluoromethane	ND		2.0	0.30	ug/L			10/30/24 14:18	1
Ethylbenzene	ND		1.0	0.14	ug/L			10/30/24 14:18	1
Hexachlorobutadiene	ND		2.0	0.53	ug/L			10/30/24 14:18	1
Isopropylbenzene	ND		1.0	0.16	ug/L			10/30/24 14:18	1
Methylene Chloride	ND		2.0	0.94	ug/L			10/30/24 14:18	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: MW-24
Date Collected: 10/17/24 12:40
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			10/30/24 14:18	1
Naphthalene	ND		3.0	0.99	ug/L			10/30/24 14:18	1
n-Butylbenzene	ND		1.0	0.23	ug/L			10/30/24 14:18	1
N-Propylbenzene	ND		1.0	0.18	ug/L			10/30/24 14:18	1
o-Xylene	ND		1.0	0.11	ug/L			10/30/24 14:18	1
sec-Butylbenzene	ND		1.0	0.20	ug/L			10/30/24 14:18	1
Styrene	ND		1.0	0.13	ug/L			10/30/24 14:18	1
tert-Butylbenzene	ND		1.0	0.18	ug/L			10/30/24 14:18	1
Tetrachloroethene	ND		1.0	0.40	ug/L			10/30/24 14:18	1
Toluene	ND		1.0	0.32	ug/L			10/30/24 14:18	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			10/30/24 14:18	1
trans-1,3-Dichloropropene	ND		1.0	0.14	ug/L			10/30/24 14:18	1
Trichloroethene	ND		1.0	0.30	ug/L			10/30/24 14:18	1
Trichlorofluoromethane	ND		2.0	0.20	ug/L			10/30/24 14:18	1
Vinyl chloride	ND		1.0	0.23	ug/L			10/30/24 14:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		70 - 127					10/30/24 14:18	1
4-Bromofluorobenzene (Surr)	99		78 - 120					10/30/24 14:18	1
Dibromofluoromethane (Surr)	104		77 - 120					10/30/24 14:18	1
Toluene-d8 (Surr)	100		80 - 125					10/30/24 14:18	1

Client Sample ID: MW-26
Date Collected: 10/17/24 11:05
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			10/30/24 14:39	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			10/30/24 14:39	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/30/24 14:39	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			10/30/24 14:39	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			10/30/24 14:39	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			10/30/24 14:39	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			10/30/24 14:39	1
1,2,3-Trichlorobenzene	ND		4.0	1.2	ug/L			10/30/24 14:39	1
1,2,3-Trichloropropane	ND		2.5	0.28	ug/L			10/30/24 14:39	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			10/30/24 14:39	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			10/30/24 14:39	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.42	ug/L			10/30/24 14:39	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			10/30/24 14:39	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			10/30/24 14:39	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			10/30/24 14:39	1
1,2-Dichloropropane	ND		1.0	0.24	ug/L			10/30/24 14:39	1
1,3,5-Trimethylbenzene	ND		1.0	0.12	ug/L			10/30/24 14:39	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			10/30/24 14:39	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			10/30/24 14:39	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			10/30/24 14:39	1
2,2-Dichloropropane	ND		1.0	0.17	ug/L			10/30/24 14:39	1
2-Butanone (MEK)	ND		10	4.6	ug/L			10/30/24 14:39	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			10/30/24 14:39	1
2-Hexanone	ND		5.0	0.81	ug/L			10/30/24 14:39	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: MW-26
Date Collected: 10/17/24 11:05
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			10/30/24 14:39	1
4-Isopropyltoluene	ND		1.0	0.19	ug/L			10/30/24 14:39	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			10/30/24 14:39	1
Acetone	ND		15	6.6	ug/L			10/30/24 14:39	1
Benzene	ND		1.0	0.14	ug/L			10/30/24 14:39	1
Bromobenzene	ND		1.0	0.19	ug/L			10/30/24 14:39	1
Bromochloromethane	ND		1.0	0.40	ug/L			10/30/24 14:39	1
Bromodichloromethane	ND		1.0	0.19	ug/L			10/30/24 14:39	1
Bromoform	ND		2.0	0.25	ug/L			10/30/24 14:39	1
Bromomethane	ND		5.0	2.4	ug/L			10/30/24 14:39	1
Carbon disulfide	ND		2.0	0.26	ug/L			10/30/24 14:39	1
Carbon tetrachloride	ND		1.0	0.23	ug/L			10/30/24 14:39	1
Chlorobenzene	ND		1.0	0.092	ug/L			10/30/24 14:39	1
Chloroethane	ND		2.0	0.64	ug/L			10/30/24 14:39	1
Chloroform	ND		1.0	0.36	ug/L			10/30/24 14:39	1
Chloromethane	ND		2.0	0.23	ug/L			10/30/24 14:39	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			10/30/24 14:39	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			10/30/24 14:39	1
Dibromochloromethane	ND		1.0	0.28	ug/L			10/30/24 14:39	1
Dibromomethane	ND		1.0	0.34	ug/L			10/30/24 14:39	1
Dichlorodifluoromethane	ND		2.0	0.30	ug/L			10/30/24 14:39	1
Ethylbenzene	ND		1.0	0.14	ug/L			10/30/24 14:39	1
Hexachlorobutadiene	ND		2.0	0.53	ug/L			10/30/24 14:39	1
Isopropylbenzene	ND		1.0	0.16	ug/L			10/30/24 14:39	1
Methylene Chloride	ND		2.0	0.94	ug/L			10/30/24 14:39	1
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			10/30/24 14:39	1
Naphthalene	ND		3.0	0.99	ug/L			10/30/24 14:39	1
n-Butylbenzene	ND		1.0	0.23	ug/L			10/30/24 14:39	1
N-Propylbenzene	ND		1.0	0.18	ug/L			10/30/24 14:39	1
o-Xylene	ND		1.0	0.11	ug/L			10/30/24 14:39	1
sec-Butylbenzene	ND		1.0	0.20	ug/L			10/30/24 14:39	1
Styrene	ND		1.0	0.13	ug/L			10/30/24 14:39	1
tert-Butylbenzene	ND		1.0	0.18	ug/L			10/30/24 14:39	1
Tetrachloroethene	ND		1.0	0.40	ug/L			10/30/24 14:39	1
Toluene	ND		1.0	0.32	ug/L			10/30/24 14:39	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			10/30/24 14:39	1
trans-1,3-Dichloropropene	ND		1.0	0.14	ug/L			10/30/24 14:39	1
Trichloroethene	ND		1.0	0.30	ug/L			10/30/24 14:39	1
Trichlorofluoromethane	ND		2.0	0.20	ug/L			10/30/24 14:39	1
Vinyl chloride	ND		1.0	0.23	ug/L			10/30/24 14:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		70 - 127		10/30/24 14:39	1
4-Bromofluorobenzene (Surr)	100		78 - 120		10/30/24 14:39	1
Dibromofluoromethane (Surr)	100		77 - 120		10/30/24 14:39	1
Toluene-d8 (Surr)	98		80 - 125		10/30/24 14:39	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: DUPLICATE
Date Collected: 10/17/24 00:00
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			10/30/24 15:00	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			10/30/24 15:00	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/30/24 15:00	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			10/30/24 15:00	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			10/30/24 15:00	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			10/30/24 15:00	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			10/30/24 15:00	1
1,2,3-Trichlorobenzene	ND		4.0	1.2	ug/L			10/30/24 15:00	1
1,2,3-Trichloropropane	ND		2.5	0.28	ug/L			10/30/24 15:00	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			10/30/24 15:00	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			10/30/24 15:00	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.42	ug/L			10/30/24 15:00	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			10/30/24 15:00	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			10/30/24 15:00	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			10/30/24 15:00	1
1,2-Dichloropropane	ND		1.0	0.24	ug/L			10/30/24 15:00	1
1,3,5-Trimethylbenzene	ND		1.0	0.12	ug/L			10/30/24 15:00	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			10/30/24 15:00	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			10/30/24 15:00	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			10/30/24 15:00	1
2,2-Dichloropropane	ND		1.0	0.17	ug/L			10/30/24 15:00	1
2-Butanone (MEK)	ND		10	4.6	ug/L			10/30/24 15:00	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			10/30/24 15:00	1
2-Hexanone	ND		5.0	0.81	ug/L			10/30/24 15:00	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			10/30/24 15:00	1
4-Isopropyltoluene	ND		1.0	0.19	ug/L			10/30/24 15:00	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			10/30/24 15:00	1
Acetone	ND		15	6.6	ug/L			10/30/24 15:00	1
Benzene	ND		1.0	0.14	ug/L			10/30/24 15:00	1
Bromobenzene	ND		1.0	0.19	ug/L			10/30/24 15:00	1
Bromochloromethane	ND		1.0	0.40	ug/L			10/30/24 15:00	1
Bromodichloromethane	ND		1.0	0.19	ug/L			10/30/24 15:00	1
Bromoform	ND		2.0	0.25	ug/L			10/30/24 15:00	1
Bromomethane	ND		5.0	2.4	ug/L			10/30/24 15:00	1
Carbon disulfide	ND		2.0	0.26	ug/L			10/30/24 15:00	1
Carbon tetrachloride	ND		1.0	0.23	ug/L			10/30/24 15:00	1
Chlorobenzene	ND		1.0	0.092	ug/L			10/30/24 15:00	1
Chloroethane	ND		2.0	0.64	ug/L			10/30/24 15:00	1
Chloroform	ND		1.0	0.36	ug/L			10/30/24 15:00	1
Chloromethane	ND		2.0	0.23	ug/L			10/30/24 15:00	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			10/30/24 15:00	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			10/30/24 15:00	1
Dibromochloromethane	ND		1.0	0.28	ug/L			10/30/24 15:00	1
Dibromomethane	ND		1.0	0.34	ug/L			10/30/24 15:00	1
Dichlorodifluoromethane	ND		2.0	0.30	ug/L			10/30/24 15:00	1
Ethylbenzene	ND		1.0	0.14	ug/L			10/30/24 15:00	1
Hexachlorobutadiene	ND		2.0	0.53	ug/L			10/30/24 15:00	1
Isopropylbenzene	ND		1.0	0.16	ug/L			10/30/24 15:00	1
Methylene Chloride	ND		2.0	0.94	ug/L			10/30/24 15:00	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: DUPLICATE
Date Collected: 10/17/24 00:00
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			10/30/24 15:00	1
Naphthalene	ND		3.0	0.99	ug/L			10/30/24 15:00	1
n-Butylbenzene	ND		1.0	0.23	ug/L			10/30/24 15:00	1
N-Propylbenzene	ND		1.0	0.18	ug/L			10/30/24 15:00	1
o-Xylene	ND		1.0	0.11	ug/L			10/30/24 15:00	1
sec-Butylbenzene	ND		1.0	0.20	ug/L			10/30/24 15:00	1
Styrene	ND		1.0	0.13	ug/L			10/30/24 15:00	1
tert-Butylbenzene	ND		1.0	0.18	ug/L			10/30/24 15:00	1
Tetrachloroethene	ND		1.0	0.40	ug/L			10/30/24 15:00	1
Toluene	ND		1.0	0.32	ug/L			10/30/24 15:00	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			10/30/24 15:00	1
trans-1,3-Dichloropropene	ND		1.0	0.14	ug/L			10/30/24 15:00	1
Trichloroethene	ND		1.0	0.30	ug/L			10/30/24 15:00	1
Trichlorofluoromethane	ND		2.0	0.20	ug/L			10/30/24 15:00	1
Vinyl chloride	ND		1.0	0.23	ug/L			10/30/24 15:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		70 - 127					10/30/24 15:00	1
4-Bromofluorobenzene (Surr)	100		78 - 120					10/30/24 15:00	1
Dibromofluoromethane (Surr)	101		77 - 120					10/30/24 15:00	1
Toluene-d8 (Surr)	97		80 - 125					10/30/24 15:00	1

Method: EPA 200.8 - Metals (ICP/MS)

Client Sample ID: MW-1D
Date Collected: 10/16/24 16:25
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.40	ug/L		10/20/24 11:32	10/22/24 01:21	1
Arsenic	ND		5.0	0.50	ug/L		10/20/24 11:32	10/22/24 01:21	1
Lead	0.97	J	1.0	0.23	ug/L		10/20/24 11:32	10/22/24 01:21	1
Nickel	ND		3.0	0.83	ug/L		10/20/24 11:32	10/22/24 01:21	1
Barium	4.1	B	3.0	0.38	ug/L		10/20/24 11:32	10/22/24 01:21	1
Selenium	ND		5.0	1.0	ug/L		10/20/24 11:32	10/22/24 01:21	1
Beryllium	ND		1.0	0.30	ug/L		10/20/24 11:32	10/22/24 01:21	1
Cadmium	ND		1.0	0.19	ug/L		10/20/24 11:32	10/22/24 01:21	1
Chromium	ND		3.0	0.50	ug/L		10/20/24 11:32	10/22/24 01:21	1
Cobalt	ND		1.0	0.33	ug/L		10/20/24 11:32	10/22/24 01:21	1
Copper	27		2.0	0.71	ug/L		10/20/24 11:32	10/22/24 01:21	1
Silver	ND		1.0	0.045	ug/L		10/20/24 11:32	10/22/24 01:21	1
Thallium	ND		1.0	0.21	ug/L		10/20/24 11:32	10/22/24 01:21	1
Vanadium	56		5.0	1.1	ug/L		10/20/24 11:32	10/22/24 01:21	1
Zinc	17		10	2.0	ug/L		10/20/24 11:32	10/22/24 01:21	1

Client Sample ID: MW-3D
Date Collected: 10/16/24 15:20
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.40	ug/L		10/20/24 11:32	10/22/24 01:24	1
Arsenic	ND		5.0	0.50	ug/L		10/20/24 11:32	10/22/24 01:24	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Method: EPA 200.8 - Metals (ICP/MS) (Continued)

Client Sample ID: MW-3D
Date Collected: 10/16/24 15:20
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.0	0.23	ug/L		10/20/24 11:32	10/22/24 01:24	1
Nickel	ND		3.0	0.83	ug/L		10/20/24 11:32	10/22/24 01:24	1
Barium	5.7	B	3.0	0.38	ug/L		10/20/24 11:32	10/22/24 01:24	1
Selenium	ND		5.0	1.0	ug/L		10/20/24 11:32	10/22/24 01:24	1
Beryllium	ND		1.0	0.30	ug/L		10/20/24 11:32	10/22/24 01:24	1
Cadmium	ND		1.0	0.19	ug/L		10/20/24 11:32	10/22/24 01:24	1
Chromium	ND		3.0	0.50	ug/L		10/20/24 11:32	10/22/24 01:24	1
Cobalt	ND		1.0	0.33	ug/L		10/20/24 11:32	10/22/24 01:24	1
Copper	ND		2.0	0.71	ug/L		10/20/24 11:32	10/22/24 01:24	1
Silver	ND		1.0	0.045	ug/L		10/20/24 11:32	10/22/24 01:24	1
Thallium	ND		1.0	0.21	ug/L		10/20/24 11:32	10/22/24 01:24	1
Vanadium	47		5.0	1.1	ug/L		10/20/24 11:32	10/22/24 01:24	1
Zinc	5.4	J	10	2.0	ug/L		10/20/24 11:32	10/22/24 01:24	1

Client Sample ID: PHILLIPS
Date Collected: 10/17/24 09:45
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.40	ug/L		10/20/24 11:32	10/22/24 01:28	1
Arsenic	0.52	J	5.0	0.50	ug/L		10/20/24 11:32	10/22/24 01:28	1
Lead	ND		1.0	0.23	ug/L		10/20/24 11:32	10/22/24 01:28	1
Nickel	ND		3.0	0.83	ug/L		10/20/24 11:32	10/22/24 01:28	1
Barium	ND		3.0	0.38	ug/L		10/20/24 11:32	10/22/24 01:28	1
Selenium	ND		5.0	1.0	ug/L		10/20/24 11:32	10/22/24 01:28	1
Beryllium	ND		1.0	0.30	ug/L		10/20/24 11:32	10/22/24 01:28	1
Cadmium	ND		1.0	0.19	ug/L		10/20/24 11:32	10/22/24 01:28	1
Chromium	0.64	J	3.0	0.50	ug/L		10/20/24 11:32	10/22/24 01:28	1
Cobalt	ND		1.0	0.33	ug/L		10/20/24 11:32	10/22/24 01:28	1
Copper	0.73	J	2.0	0.71	ug/L		10/20/24 11:32	10/22/24 01:28	1
Silver	ND		1.0	0.045	ug/L		10/20/24 11:32	10/22/24 01:28	1
Thallium	ND		1.0	0.21	ug/L		10/20/24 11:32	10/22/24 01:28	1
Vanadium	45		5.0	1.1	ug/L		10/20/24 11:32	10/22/24 01:28	1
Zinc	4.5	J	10	2.0	ug/L		10/20/24 11:32	10/22/24 01:28	1

Client Sample ID: P-8
Date Collected: 10/17/24 11:02
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.40	ug/L		10/20/24 11:32	10/22/24 01:31	1
Arsenic	ND		5.0	0.50	ug/L		10/20/24 11:32	10/22/24 01:31	1
Lead	ND		1.0	0.23	ug/L		10/20/24 11:32	10/22/24 01:31	1
Nickel	ND		3.0	0.83	ug/L		10/20/24 11:32	10/22/24 01:31	1
Barium	0.64	J B	3.0	0.38	ug/L		10/20/24 11:32	10/22/24 01:31	1
Selenium	ND		5.0	1.0	ug/L		10/20/24 11:32	10/22/24 01:31	1
Beryllium	ND		1.0	0.30	ug/L		10/20/24 11:32	10/22/24 01:31	1
Cadmium	ND		1.0	0.19	ug/L		10/20/24 11:32	10/22/24 01:31	1
Chromium	0.57	J	3.0	0.50	ug/L		10/20/24 11:32	10/22/24 01:31	1
Cobalt	ND		1.0	0.33	ug/L		10/20/24 11:32	10/22/24 01:31	1
Copper	ND		2.0	0.71	ug/L		10/20/24 11:32	10/22/24 01:31	1
Silver	ND		1.0	0.045	ug/L		10/20/24 11:32	10/22/24 01:31	1

Eurofins Denver

Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Method: EPA 200.8 - Metals (ICP/MS) (Continued)

Client Sample ID: P-8
Date Collected: 10/17/24 11:02
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	ND		1.0	0.21	ug/L		10/20/24 11:32	10/22/24 01:31	1
Vanadium	41		5.0	1.1	ug/L		10/20/24 11:32	10/22/24 01:31	1
Zinc	ND		10	2.0	ug/L		10/20/24 11:32	10/22/24 01:31	1

Client Sample ID: MW-15
Date Collected: 10/17/24 12:14
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.40	ug/L		10/20/24 11:32	10/22/24 01:35	1
Arsenic	ND		5.0	0.50	ug/L		10/20/24 11:32	10/22/24 01:35	1
Lead	ND		1.0	0.23	ug/L		10/20/24 11:32	10/22/24 01:35	1
Nickel	ND		3.0	0.83	ug/L		10/20/24 11:32	10/22/24 01:35	1
Barium	11	B	3.0	0.38	ug/L		10/20/24 11:32	10/22/24 01:35	1
Selenium	ND		5.0	1.0	ug/L		10/20/24 11:32	10/22/24 01:35	1
Beryllium	ND		1.0	0.30	ug/L		10/20/24 11:32	10/22/24 01:35	1
Cadmium	ND		1.0	0.19	ug/L		10/20/24 11:32	10/22/24 01:35	1
Chromium	ND		3.0	0.50	ug/L		10/20/24 11:32	10/22/24 01:35	1
Cobalt	ND		1.0	0.33	ug/L		10/20/24 11:32	10/22/24 01:35	1
Copper	ND		2.0	0.71	ug/L		10/20/24 11:32	10/22/24 01:35	1
Silver	ND		1.0	0.045	ug/L		10/20/24 11:32	10/22/24 01:35	1
Thallium	ND		1.0	0.21	ug/L		10/20/24 11:32	10/22/24 01:35	1
Vanadium	6.5		5.0	1.1	ug/L		10/20/24 11:32	10/22/24 01:35	1
Zinc	2.6	J	10	2.0	ug/L		10/20/24 11:32	10/22/24 01:35	1

Client Sample ID: MW-23
Date Collected: 10/17/24 13:13
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.40	ug/L		10/20/24 11:32	10/22/24 01:38	1
Arsenic	20		5.0	0.50	ug/L		10/20/24 11:32	10/22/24 01:38	1
Lead	0.44	J	1.0	0.23	ug/L		10/20/24 11:32	10/22/24 01:38	1
Nickel	ND		3.0	0.83	ug/L		10/20/24 11:32	10/22/24 01:38	1
Barium	50	B	3.0	0.38	ug/L		10/20/24 11:32	10/22/24 01:38	1
Selenium	ND		5.0	1.0	ug/L		10/20/24 11:32	10/22/24 01:38	1
Beryllium	ND		1.0	0.30	ug/L		10/20/24 11:32	10/22/24 01:38	1
Cadmium	ND		1.0	0.19	ug/L		10/20/24 11:32	10/22/24 01:38	1
Chromium	ND		3.0	0.50	ug/L		10/20/24 11:32	10/22/24 01:38	1
Cobalt	0.38	J	1.0	0.33	ug/L		10/20/24 11:32	10/22/24 01:38	1
Copper	1.4	J	2.0	0.71	ug/L		10/20/24 11:32	10/22/24 01:38	1
Silver	ND		1.0	0.045	ug/L		10/20/24 11:32	10/22/24 01:38	1
Thallium	ND		1.0	0.21	ug/L		10/20/24 11:32	10/22/24 01:38	1
Vanadium	2.3	J	5.0	1.1	ug/L		10/20/24 11:32	10/22/24 01:38	1
Zinc	6.6	J	10	2.0	ug/L		10/20/24 11:32	10/22/24 01:38	1

Client Sample ID: MW-24
Date Collected: 10/17/24 12:40
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.40	ug/L		10/20/24 11:32	10/22/24 01:42	1
Arsenic	0.50	J	5.0	0.50	ug/L		10/20/24 11:32	10/22/24 01:42	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Method: EPA 200.8 - Metals (ICP/MS) (Continued)

Client Sample ID: MW-24
Date Collected: 10/17/24 12:40
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.0	0.23	ug/L		10/20/24 11:32	10/22/24 01:42	1
Nickel	ND		3.0	0.83	ug/L		10/20/24 11:32	10/22/24 01:42	1
Barium	0.44	J B	3.0	0.38	ug/L		10/20/24 11:32	10/22/24 01:42	1
Selenium	ND		5.0	1.0	ug/L		10/20/24 11:32	10/22/24 01:42	1
Beryllium	ND		1.0	0.30	ug/L		10/20/24 11:32	10/22/24 01:42	1
Cadmium	ND		1.0	0.19	ug/L		10/20/24 11:32	10/22/24 01:42	1
Chromium	ND		3.0	0.50	ug/L		10/20/24 11:32	10/22/24 01:42	1
Cobalt	ND		1.0	0.33	ug/L		10/20/24 11:32	10/22/24 01:42	1
Copper	ND		2.0	0.71	ug/L		10/20/24 11:32	10/22/24 01:42	1
Silver	ND		1.0	0.045	ug/L		10/20/24 11:32	10/22/24 01:42	1
Thallium	ND		1.0	0.21	ug/L		10/20/24 11:32	10/22/24 01:42	1
Vanadium	33		5.0	1.1	ug/L		10/20/24 11:32	10/22/24 01:42	1
Zinc	ND		10	2.0	ug/L		10/20/24 11:32	10/22/24 01:42	1

Client Sample ID: MW-26
Date Collected: 10/17/24 11:05
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.40	ug/L		10/20/24 11:32	10/22/24 01:46	1
Arsenic	13		5.0	0.50	ug/L		10/20/24 11:32	10/22/24 01:46	1
Lead	ND		1.0	0.23	ug/L		10/20/24 11:32	10/22/24 01:46	1
Nickel	ND		3.0	0.83	ug/L		10/20/24 11:32	10/22/24 01:46	1
Barium	25	B	3.0	0.38	ug/L		10/20/24 11:32	10/22/24 01:46	1
Selenium	ND		5.0	1.0	ug/L		10/20/24 11:32	10/22/24 01:46	1
Beryllium	ND		1.0	0.30	ug/L		10/20/24 11:32	10/22/24 01:46	1
Cadmium	ND		1.0	0.19	ug/L		10/20/24 11:32	10/22/24 01:46	1
Chromium	ND		3.0	0.50	ug/L		10/20/24 11:32	10/22/24 01:46	1
Cobalt	ND		1.0	0.33	ug/L		10/20/24 11:32	10/22/24 01:46	1
Copper	ND		2.0	0.71	ug/L		10/20/24 11:32	10/22/24 01:46	1
Silver	ND		1.0	0.045	ug/L		10/20/24 11:32	10/22/24 01:46	1
Thallium	ND		1.0	0.21	ug/L		10/20/24 11:32	10/22/24 01:46	1
Vanadium	ND		5.0	1.1	ug/L		10/20/24 11:32	10/22/24 01:46	1
Zinc	ND		10	2.0	ug/L		10/20/24 11:32	10/22/24 01:46	1

Client Sample ID: DUPLICATE
Date Collected: 10/17/24 00:00
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.40	ug/L		10/20/24 11:32	10/22/24 01:56	1
Arsenic	14		5.0	0.50	ug/L		10/20/24 11:32	10/22/24 01:56	1
Lead	ND		1.0	0.23	ug/L		10/20/24 11:32	10/22/24 01:56	1
Nickel	ND		3.0	0.83	ug/L		10/20/24 11:32	10/22/24 01:56	1
Barium	27	B	3.0	0.38	ug/L		10/20/24 11:32	10/22/24 01:56	1
Selenium	ND		5.0	1.0	ug/L		10/20/24 11:32	10/22/24 01:56	1
Beryllium	ND		1.0	0.30	ug/L		10/20/24 11:32	10/22/24 01:56	1
Cadmium	ND		1.0	0.19	ug/L		10/20/24 11:32	10/22/24 01:56	1
Chromium	0.77	J	3.0	0.50	ug/L		10/20/24 11:32	10/22/24 01:56	1
Cobalt	ND		1.0	0.33	ug/L		10/20/24 11:32	10/22/24 01:56	1
Copper	ND		2.0	0.71	ug/L		10/20/24 11:32	10/22/24 01:56	1
Silver	ND		1.0	0.045	ug/L		10/20/24 11:32	10/22/24 01:56	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Method: EPA 200.8 - Metals (ICP/MS) (Continued)

Client Sample ID: DUPLICATE
Date Collected: 10/17/24 00:00
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	ND		1.0	0.21	ug/L		10/20/24 11:32	10/22/24 01:56	1
Vanadium	1.3	J	5.0	1.1	ug/L		10/20/24 11:32	10/22/24 01:56	1
Zinc	3.1	J	10	2.0	ug/L		10/20/24 11:32	10/22/24 01:56	1

General Chemistry

Client Sample ID: MW-1D
Date Collected: 10/16/24 16:25
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	6.7		3.0	1.0	mg/L			10/31/24 01:40	1
Sulfate (EPA 300.0)	7.9		5.0	1.0	mg/L			10/31/24 01:40	1
Ammonia (EPA 350.1)	0.15		0.10	0.029	mg/L			10/28/24 16:45	1
Nitrate Nitrite as N (EPA 353.2)	0.50		0.10	0.044	mg/L			10/28/24 14:22	1
Chemical Oxygen Demand (EPA 410.4)	11	J	20	8.7	mg/L			10/24/24 09:06	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	160		10	3.1	mg/L			10/24/24 22:38	1
Total Dissolved Solids (SM 2540C)	210		10	4.7	mg/L			10/23/24 09:51	1
Total Suspended Solids (SM 2540D)	2.8	J	4.0	1.1	mg/L			10/23/24 15:23	1
TOC Result 1 (SM 5310B)	0.49	J	1.0	0.35	mg/L			10/29/24 00:10	1
TOC Result 2 (SM 5310B)	0.43	J	1.0	0.35	mg/L			10/29/24 00:10	1
TOC Result 3 (SM 5310B)	0.43	J	1.0	0.35	mg/L			10/29/24 00:10	1
TOC Result 4 (SM 5310B)	0.44	J	1.0	0.35	mg/L			10/29/24 00:10	1
Total Organic Carbon - Quad (SM 5310B)	0.45	J	1.0	0.35	mg/L			10/29/24 00:10	1

Client Sample ID: MW-3D
Date Collected: 10/16/24 15:20
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	49		3.0	1.0	mg/L			10/31/24 03:08	1
Sulfate (EPA 300.0)	3.3	J	5.0	1.0	mg/L			10/31/24 03:08	1
Ammonia (EPA 350.1)	0.062	J	0.10	0.029	mg/L			10/28/24 16:47	1
Nitrate Nitrite as N (EPA 353.2)	0.15		0.10	0.044	mg/L			10/28/24 14:21	1
Chemical Oxygen Demand (EPA 410.4)	9.8	J	20	8.7	mg/L			10/24/24 09:06	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	160		10	3.1	mg/L			10/24/24 22:44	1
Total Dissolved Solids (SM 2540C)	270		10	4.7	mg/L			10/23/24 09:51	1
Total Suspended Solids (SM 2540D)	1.2	J	4.0	1.1	mg/L			10/23/24 15:23	1
TOC Result 1 (SM 5310B)	0.54	J	1.0	0.35	mg/L			10/29/24 00:26	1
TOC Result 2 (SM 5310B)	0.59	J	1.0	0.35	mg/L			10/29/24 00:26	1
TOC Result 3 (SM 5310B)	0.56	J	1.0	0.35	mg/L			10/29/24 00:26	1
TOC Result 4 (SM 5310B)	0.52	J	1.0	0.35	mg/L			10/29/24 00:26	1
Total Organic Carbon - Quad (SM 5310B)	0.55	J	1.0	0.35	mg/L			10/29/24 00:26	1

Eurofins Denver

Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

General Chemistry

Client Sample ID: PHILLIPS
Date Collected: 10/17/24 09:45
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	7.6		3.0	1.0	mg/L			10/31/24 04:14	1
Sulfate (EPA 300.0)	5.7		5.0	1.0	mg/L			10/31/24 04:14	1
Ammonia (EPA 350.1)	0.052	J	0.10	0.029	mg/L			10/28/24 16:49	1
Nitrate Nitrite as N (EPA 353.2)	0.45		0.10	0.044	mg/L			10/28/24 14:47	1
Chemical Oxygen Demand (EPA 410.4)	11	J	20	8.7	mg/L			10/24/24 09:06	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	130		10	3.1	mg/L			10/24/24 22:49	1
Total Dissolved Solids (SM 2540C)	190		10	4.7	mg/L			10/23/24 09:51	1
Total Suspended Solids (SM 2540D)	ND		4.0	1.1	mg/L			10/24/24 12:48	1
TOC Result 1 (SM 5310B)	0.43	J	1.0	0.35	mg/L			10/29/24 00:42	1
TOC Result 2 (SM 5310B)	0.45	J	1.0	0.35	mg/L			10/29/24 00:42	1
TOC Result 3 (SM 5310B)	0.41	J	1.0	0.35	mg/L			10/29/24 00:42	1
TOC Result 4 (SM 5310B)	0.38	J	1.0	0.35	mg/L			10/29/24 00:42	1
Total Organic Carbon - Quad (SM 5310B)	0.42	J	1.0	0.35	mg/L			10/29/24 00:42	1

Client Sample ID: P-8
Date Collected: 10/17/24 11:02
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	10		3.0	1.0	mg/L			10/31/24 04:25	1
Sulfate (EPA 300.0)	10		5.0	1.0	mg/L			10/31/24 04:25	1
Ammonia (EPA 350.1)	0.039	J	0.10	0.029	mg/L			10/28/24 17:17	1
Nitrate Nitrite as N (EPA 353.2)	0.73		0.10	0.044	mg/L			10/28/24 14:48	1
Chemical Oxygen Demand (EPA 410.4)	ND		20	8.7	mg/L			10/24/24 09:06	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	150		10	3.1	mg/L			10/24/24 22:54	1
Total Dissolved Solids (SM 2540C)	220		10	4.7	mg/L			10/23/24 09:51	1
Total Suspended Solids (SM 2540D)	ND		4.0	1.1	mg/L			10/24/24 12:48	1
TOC Result 1 (SM 5310B)	0.40	J	1.0	0.35	mg/L			10/29/24 00:56	1
TOC Result 2 (SM 5310B)	ND		1.0	0.35	mg/L			10/29/24 00:56	1
TOC Result 3 (SM 5310B)	ND		1.0	0.35	mg/L			10/29/24 00:56	1
TOC Result 4 (SM 5310B)	ND		1.0	0.35	mg/L			10/29/24 00:56	1
Total Organic Carbon - Quad (SM 5310B)	ND		1.0	0.35	mg/L			10/29/24 00:56	1

Client Sample ID: MW-15
Date Collected: 10/17/24 12:14
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	63		3.0	1.0	mg/L			10/31/24 04:58	1
Sulfate (EPA 300.0)	2.1	J	5.0	1.0	mg/L			10/31/24 04:58	1
Ammonia (EPA 350.1)	0.046	J	0.10	0.029	mg/L			10/28/24 17:19	1
Nitrate Nitrite as N (EPA 353.2)	0.19		0.10	0.044	mg/L			10/28/24 14:49	1
Chemical Oxygen Demand (EPA 410.4)	9.4	J	20	8.7	mg/L			10/24/24 09:06	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	180		10	3.1	mg/L			10/24/24 22:59	1
Total Dissolved Solids (SM 2540C)	320		10	4.7	mg/L			10/23/24 09:51	1
Total Suspended Solids (SM 2540D)	ND		4.0	1.1	mg/L			10/24/24 12:48	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

General Chemistry (Continued)

Client Sample ID: MW-15
Date Collected: 10/17/24 12:14
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TOC Result 1 (SM 5310B)	0.48	J	1.0	0.35	mg/L			10/29/24 01:11	1
TOC Result 2 (SM 5310B)	0.40	J	1.0	0.35	mg/L			10/29/24 01:11	1
TOC Result 3 (SM 5310B)	0.45	J	1.0	0.35	mg/L			10/29/24 01:11	1
TOC Result 4 (SM 5310B)	0.44	J	1.0	0.35	mg/L			10/29/24 01:11	1
Total Organic Carbon - Quad (SM 5310B)	0.44	J	1.0	0.35	mg/L			10/29/24 01:11	1

Client Sample ID: MW-23
Date Collected: 10/17/24 13:13
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	19		3.0	1.0	mg/L			10/31/24 05:20	1
Sulfate (EPA 300.0)	1.2	J	5.0	1.0	mg/L			10/31/24 05:20	1
Ammonia (EPA 350.1)	0.32		0.10	0.029	mg/L			10/28/24 17:22	1
Nitrate Nitrite as N (EPA 353.2)	0.056	J	0.10	0.044	mg/L			10/28/24 14:51	1
Chemical Oxygen Demand (EPA 410.4)	15	J	20	8.7	mg/L			10/24/24 09:06	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	160		10	3.1	mg/L			10/24/24 23:04	1
Total Dissolved Solids (SM 2540C)	220		10	4.7	mg/L			10/24/24 09:30	1
Total Suspended Solids (SM 2540D)	16		4.0	1.1	mg/L			10/24/24 12:48	1
TOC Result 1 (SM 5310B)	1.3		1.0	0.35	mg/L			10/29/24 01:27	1
TOC Result 2 (SM 5310B)	1.1		1.0	0.35	mg/L			10/29/24 01:27	1
TOC Result 3 (SM 5310B)	1.2		1.0	0.35	mg/L			10/29/24 01:27	1
TOC Result 4 (SM 5310B)	1.2		1.0	0.35	mg/L			10/29/24 01:27	1
Total Organic Carbon - Quad (SM 5310B)	1.2		1.0	0.35	mg/L			10/29/24 01:27	1

Client Sample ID: MW-24
Date Collected: 10/17/24 12:40
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	5.6		3.0	1.0	mg/L			10/31/24 05:31	1
Sulfate (EPA 300.0)	7.5		5.0	1.0	mg/L			10/31/24 05:31	1
Ammonia (EPA 350.1)	0.092	J	0.10	0.029	mg/L			10/28/24 17:24	1
Nitrate Nitrite as N (EPA 353.2)	0.41		0.10	0.044	mg/L			10/28/24 14:52	1
Chemical Oxygen Demand (EPA 410.4)	10	J	20	8.7	mg/L			10/29/24 08:59	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	160		10	3.1	mg/L			10/24/24 23:09	1
Total Dissolved Solids (SM 2540C)	220		10	4.7	mg/L			10/24/24 09:30	1
Total Suspended Solids (SM 2540D)	1.2	J	4.0	1.1	mg/L			10/24/24 12:48	1
TOC Result 1 (SM 5310B)	0.42	J	1.0	0.35	mg/L			10/29/24 01:41	1
TOC Result 2 (SM 5310B)	0.36	J	1.0	0.35	mg/L			10/29/24 01:41	1
TOC Result 3 (SM 5310B)	ND		1.0	0.35	mg/L			10/29/24 01:41	1
TOC Result 4 (SM 5310B)	0.36	J	1.0	0.35	mg/L			10/29/24 01:41	1
Total Organic Carbon - Quad (SM 5310B)	0.37	J	1.0	0.35	mg/L			10/29/24 01:41	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

General Chemistry

Client Sample ID: MW-26
Date Collected: 10/17/24 11:05
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	5.7		3.0	1.0	mg/L			10/31/24 05:42	1
Sulfate (EPA 300.0)	ND		5.0	1.0	mg/L			10/31/24 05:42	1
Ammonia (EPA 350.1)	1.2		0.10	0.029	mg/L			10/28/24 17:26	1
Nitrate Nitrite as N (EPA 353.2)	ND	F1 *1	0.10	0.044	mg/L			10/28/24 15:04	1
Chemical Oxygen Demand (EPA 410.4)	15	J	20	8.7	mg/L			10/29/24 08:59	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	150		10	3.1	mg/L			10/24/24 23:14	1
Total Dissolved Solids (SM 2540C)	200		10	4.7	mg/L			10/24/24 09:30	1
Total Suspended Solids (SM 2540D)	6.4		4.0	1.1	mg/L			10/24/24 12:48	1
TOC Result 1 (SM 5310B)	1.8		1.0	0.35	mg/L			10/29/24 01:57	1
TOC Result 2 (SM 5310B)	1.7		1.0	0.35	mg/L			10/29/24 01:57	1
TOC Result 3 (SM 5310B)	1.7		1.0	0.35	mg/L			10/29/24 01:57	1
TOC Result 4 (SM 5310B)	1.7		1.0	0.35	mg/L			10/29/24 01:57	1
Total Organic Carbon - Quad (SM 5310B)	1.7		1.0	0.35	mg/L			10/29/24 01:57	1

Client Sample ID: DUPLICATE
Date Collected: 10/17/24 00:00
Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	5.7		3.0	1.0	mg/L			10/31/24 05:53	1
Sulfate (EPA 300.0)	ND		5.0	1.0	mg/L			10/31/24 05:53	1
Ammonia (EPA 350.1)	1.2		0.10	0.029	mg/L			10/28/24 17:28	1
Nitrate Nitrite as N (EPA 353.2)	4.7	*1	0.10	0.044	mg/L			10/28/24 15:08	1
Chemical Oxygen Demand (EPA 410.4)	13	J	20	8.7	mg/L			10/29/24 08:59	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	150		10	3.1	mg/L			10/24/24 23:20	1
Total Dissolved Solids (SM 2540C)	200		10	4.7	mg/L			10/24/24 09:30	1
Total Suspended Solids (SM 2540D)	6.0		4.0	1.1	mg/L			10/24/24 12:48	1
TOC Result 1 (SM 5310B)	1.7		1.0	0.35	mg/L			10/29/24 02:13	1
TOC Result 2 (SM 5310B)	1.8		1.0	0.35	mg/L			10/29/24 02:13	1
TOC Result 3 (SM 5310B)	1.7		1.0	0.35	mg/L			10/29/24 02:13	1
TOC Result 4 (SM 5310B)	1.7		1.0	0.35	mg/L			10/29/24 02:13	1
Total Organic Carbon - Quad (SM 5310B)	1.7		1.0	0.35	mg/L			10/29/24 02:13	1

Surrogate Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCZ	BFB
		(70-130)	(70-130)
280-198319-3	PHILLIPS	93	80
570-203315-E-1 MS	Matrix Spike	114	107
570-203315-E-1 MSD	Matrix Spike Duplicate	115	106
LCS 570-494969/1003	Lab Control Sample	113	103
LCSD 570-494969/4	Lab Control Sample Dup	109	102
MB 570-494969/7	Method Blank	108	88

Surrogate Legend

DCZ = 1,2-Dichlorobenzene-d4

BFB = 4-Bromofluorobenzene (Surr)

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCA	BFB	DBFM	TOL
		(70-127)	(78-120)	(77-120)	(80-125)
280-198180-A-2 MS	Matrix Spike	99	101	99	99
280-198180-A-2 MSD	Matrix Spike Duplicate	102	100	101	98
280-198319-1	MW-1D	101	98	103	97
280-198319-2	MW-3D	99	99	100	98
280-198319-4	P-8	100	100	100	98
280-198319-5	MW-15	100	101	101	98
280-198319-6	MW-23	101	99	101	98
280-198319-7	MW-24	102	99	104	100
280-198319-8	MW-26	99	100	100	98
280-198319-9	DUPLICATE	104	100	101	97
LCS 280-672790/4	Lab Control Sample	98	98	99	97
LCS 280-672950/4	Lab Control Sample	101	100	100	98
LCSD 280-672790/5	Lab Control Sample Dup	98	99	98	99
LCSD 280-672950/5	Lab Control Sample Dup	99	103	102	98
MB 280-672790/9	Method Blank	100	95	103	97
MB 280-672950/9	Method Blank	98	102	99	97

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 570-494969/7

Matrix: Water

Analysis Batch: 494969

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.21	ug/L			10/24/24 09:02	1
1,1,1-Trichloroethane	ND		0.50	0.012	ug/L			10/24/24 09:02	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.021	ug/L			10/24/24 09:02	1
1,1,2-Trichloroethane	ND		0.50	0.020	ug/L			10/24/24 09:02	1
1,1-Dichloroethane	ND		0.50	0.018	ug/L			10/24/24 09:02	1
1,1-Dichloroethene	ND		0.50	0.050	ug/L			10/24/24 09:02	1
1,1-Dichloropropene	ND		0.50	0.23	ug/L			10/24/24 09:02	1
1,2,3-Trichlorobenzene	ND		0.50	0.21	ug/L			10/24/24 09:02	1
1,2,3-Trichloropropane	ND		0.50	0.11	ug/L			10/24/24 09:02	1
1,2,4-Trichlorobenzene	ND		0.50	0.31	ug/L			10/24/24 09:02	1
1,2,4-Trimethylbenzene	ND		0.50	0.31	ug/L			10/24/24 09:02	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.20	ug/L			10/24/24 09:02	1
1,2-Dibromoethane (EDB)	ND		0.50	0.021	ug/L			10/24/24 09:02	1
1,2-Dichlorobenzene	ND		0.50	0.015	ug/L			10/24/24 09:02	1
1,2-Dichloroethane	ND		0.50	0.014	ug/L			10/24/24 09:02	1
1,2-Dichloropropane	ND		0.50	0.015	ug/L			10/24/24 09:02	1
1,3,5-Trimethylbenzene	ND		0.50	0.30	ug/L			10/24/24 09:02	1
1,3-Dichlorobenzene	ND		0.50	0.018	ug/L			10/24/24 09:02	1
1,3-Dichloropropane	ND		0.50	0.18	ug/L			10/24/24 09:02	1
1,4-Dichlorobenzene	ND		0.50	0.023	ug/L			10/24/24 09:02	1
2,2-Dichloropropane	ND		0.50	0.13	ug/L			10/24/24 09:02	1
2-Chlorotoluene	ND		0.50	0.24	ug/L			10/24/24 09:02	1
4-Chlorotoluene	ND		0.50	0.24	ug/L			10/24/24 09:02	1
Benzene	ND		0.50	0.14	ug/L			10/24/24 09:02	1
Bromobenzene	ND		0.50	0.14	ug/L			10/24/24 09:02	1
Bromochloromethane	ND		0.50	0.11	ug/L			10/24/24 09:02	1
Bromodichloromethane	ND		0.50	0.019	ug/L			10/24/24 09:02	1
Bromoform	ND		0.50	0.075	ug/L			10/24/24 09:02	1
Bromomethane	ND		0.50	0.023	ug/L			10/24/24 09:02	1
Carbon tetrachloride	ND		0.50	0.014	ug/L			10/24/24 09:02	1
Chlorobenzene	ND		0.50	0.016	ug/L			10/24/24 09:02	1
Chloroethane	ND		0.50	0.028	ug/L			10/24/24 09:02	1
Chloroform	0.0886	J	0.50	0.016	ug/L			10/24/24 09:02	1
Chloromethane	ND		0.50	0.20	ug/L			10/24/24 09:02	1
cis-1,2-Dichloroethene	ND		0.50	0.023	ug/L			10/24/24 09:02	1
cis-1,3-Dichloropropene	ND		0.50	0.021	ug/L			10/24/24 09:02	1
Dibromochloromethane	ND		0.50	0.026	ug/L			10/24/24 09:02	1
Dibromomethane	ND		0.50	0.17	ug/L			10/24/24 09:02	1
Dichlorodifluoromethane	ND		0.50	0.24	ug/L			10/24/24 09:02	1
Ethylbenzene	ND		0.50	0.33	ug/L			10/24/24 09:02	1
Hexachlorobutadiene	ND		0.50	0.13	ug/L			10/24/24 09:02	1
Isopropylbenzene	ND		0.50	0.32	ug/L			10/24/24 09:02	1
m,p-Xylene	ND		0.50	0.12	ug/L			10/24/24 09:02	1
Methylene Chloride	ND		0.50	0.21	ug/L			10/24/24 09:02	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.12	ug/L			10/24/24 09:02	1
Naphthalene	ND		0.50	0.27	ug/L			10/24/24 09:02	1
n-Butylbenzene	ND		0.50	0.27	ug/L			10/24/24 09:02	1
N-Propylbenzene	ND		0.50	0.28	ug/L			10/24/24 09:02	1

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 570-494969/7

Matrix: Water

Analysis Batch: 494969

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		0.50	0.24	ug/L			10/24/24 09:02	1
p-Isopropyltoluene	ND		0.50	0.25	ug/L			10/24/24 09:02	1
sec-Butylbenzene	ND		0.50	0.25	ug/L			10/24/24 09:02	1
Styrene	ND		0.50	0.16	ug/L			10/24/24 09:02	1
tert-Butylbenzene	ND		0.50	0.31	ug/L			10/24/24 09:02	1
Tetrachloroethene	ND		0.50	0.014	ug/L			10/24/24 09:02	1
Toluene	ND		0.50	0.29	ug/L			10/24/24 09:02	1
trans-1,2-Dichloroethene	ND		0.50	0.025	ug/L			10/24/24 09:02	1
trans-1,3-Dichloropropene	ND		0.50	0.032	ug/L			10/24/24 09:02	1
Trichloroethene	ND		0.50	0.028	ug/L			10/24/24 09:02	1
Trichlorofluoromethane	ND		0.50	0.037	ug/L			10/24/24 09:02	1
Vinyl chloride	ND		0.50	0.035	ug/L			10/24/24 09:02	1
Xylenes, Total	ND		0.50	0.24	ug/L			10/24/24 09:02	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene-d4	108		70 - 130		10/24/24 09:02	1
4-Bromofluorobenzene (Surr)	88		70 - 130		10/24/24 09:02	1

Lab Sample ID: LCS 570-494969/1003

Matrix: Water

Analysis Batch: 494969

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	10.0	11.8		ug/L		118	70 - 130
1,1,1-Trichloroethane	10.0	10.4		ug/L		104	70 - 130
1,1,2,2-Tetrachloroethane	10.0	11.7		ug/L		117	70 - 130
1,1,2-Trichloroethane	10.0	11.1		ug/L		111	70 - 130
1,1-Dichloroethane	10.0	11.3		ug/L		113	70 - 130
1,1-Dichloropropene	10.0	11.1		ug/L		111	70 - 130
1,2,3-Trichlorobenzene	10.0	11.2		ug/L		112	70 - 130
1,2,3-Trichloropropane	10.0	10.8		ug/L		108	70 - 130
1,2,4-Trichlorobenzene	10.0	10.7		ug/L		107	70 - 130
1,2,4-Trimethylbenzene	10.0	10.7		ug/L		107	70 - 130
1,2-Dibromo-3-Chloropropane	10.0	11.6		ug/L		116	70 - 130
1,2-Dibromoethane (EDB)	10.0	10.9		ug/L		109	70 - 130
1,2-Dichlorobenzene	10.0	10.9		ug/L		109	70 - 130
1,2-Dichloroethane	10.0	10.7		ug/L		107	70 - 130
1,2-Dichloropropane	10.0	10.7		ug/L		107	70 - 130
1,3,5-Trimethylbenzene	10.0	10.4		ug/L		104	70 - 130
1,3-Dichlorobenzene	10.0	11.0		ug/L		110	70 - 130
1,3-Dichloropropane	10.0	11.0		ug/L		110	70 - 130
1,4-Dichlorobenzene	10.0	11.0		ug/L		110	70 - 130
2,2-Dichloropropane	10.0	10.7		ug/L		107	70 - 130
2-Chlorotoluene	10.0	10.4		ug/L		104	70 - 130
4-Chlorotoluene	10.0	10.5		ug/L		105	70 - 130
Benzene	10.0	10.7		ug/L		107	70 - 130
Bromobenzene	10.0	10.9		ug/L		109	70 - 130

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 570-494969/1003

Matrix: Water

Analysis Batch: 494969

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromochloromethane	10.0	11.2		ug/L		112	70 - 130
Bromodichloromethane	10.0	10.8		ug/L		108	70 - 130
Bromoform	10.0	12.1		ug/L		121	70 - 130
Bromomethane	10.0	9.94		ug/L		99	70 - 130
Carbon tetrachloride	10.0	11.0		ug/L		110	70 - 130
Chlorobenzene	10.0	10.7		ug/L		107	70 - 130
Chloroethane	10.0	11.0		ug/L		110	70 - 130
Chloroform	10.0	10.2		ug/L		102	70 - 130
Chloromethane	10.0	11.1		ug/L		111	70 - 130
cis-1,2-Dichloroethene	10.0	10.4		ug/L		104	70 - 130
cis-1,3-Dichloropropene	10.0	10.1		ug/L		101	70 - 130
Dibromochloromethane	10.0	12.3		ug/L		123	70 - 130
Dibromomethane	10.0	11.4		ug/L		114	70 - 130
Dichlorodifluoromethane	10.0	11.6		ug/L		116	70 - 130
Ethylbenzene	10.0	10.2		ug/L		102	70 - 130
Hexachlorobutadiene	10.0	11.0		ug/L		110	70 - 130
Isopropylbenzene	10.0	10.2		ug/L		102	70 - 130
m,p-Xylene	20.0	21.1		ug/L		105	70 - 130
Methylene Chloride	10.0	10.8		ug/L		108	70 - 130
Methyl-t-Butyl Ether (MTBE)	10.0	10.0		ug/L		100	70 - 130
Naphthalene	10.0	10.6		ug/L		106	70 - 130
n-Butylbenzene	10.0	10.8		ug/L		108	70 - 130
N-Propylbenzene	10.0	10.6		ug/L		106	70 - 130
o-Xylene	10.0	10.7		ug/L		107	70 - 130
p-Isopropyltoluene	10.0	10.6		ug/L		106	70 - 130
sec-Butylbenzene	10.0	10.9		ug/L		109	70 - 130
Styrene	10.0	9.87		ug/L		99	70 - 130
tert-Butylbenzene	10.0	10.2		ug/L		102	70 - 130
Tetrachloroethene	10.0	10.4		ug/L		104	70 - 130
Toluene	10.0	10.6		ug/L		106	70 - 130
trans-1,2-Dichloroethene	10.0	11.4		ug/L		114	70 - 130
trans-1,3-Dichloropropene	10.0	9.91		ug/L		99	70 - 130
Trichloroethene	10.0	10.7		ug/L		107	70 - 130
Trichlorofluoromethane	10.0	12.0		ug/L		120	70 - 130
Vinyl chloride	10.0	11.5		ug/L		115	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichlorobenzene-d4	113		70 - 130
4-Bromofluorobenzene (Surr)	103		70 - 130

Lab Sample ID: LCSD 570-494969/4

Matrix: Water

Analysis Batch: 494969

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	10.0	11.5		ug/L		115	70 - 130	2	20
1,1,1-Trichloroethane	10.0	10.3		ug/L		103	70 - 130	1	20
1,1,2,2-Tetrachloroethane	10.0	11.0		ug/L		110	70 - 130	6	20

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 570-494969/4

Matrix: Water

Analysis Batch: 494969

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,2-Trichloroethane	10.0	10.7		ug/L		107	70 - 130	4	20
1,1-Dichloroethane	10.0	11.4		ug/L		114	70 - 130	1	20
1,1-Dichloroethene	10.0	11.0		ug/L		110	70 - 130	1	20
1,1-Dichloropropene	10.0	9.45		ug/L		94	70 - 130	6	20
1,2,3-Trichlorobenzene	10.0	11.1		ug/L		111	70 - 130	1	20
1,2,3-Trichloropropane	10.0	10.6		ug/L		106	70 - 130	2	20
1,2,4-Trichlorobenzene	10.0	10.9		ug/L		109	70 - 130	2	20
1,2,4-Trimethylbenzene	10.0	10.6		ug/L		106	70 - 130	1	20
1,2-Dibromo-3-Chloropropane	10.0	11.3		ug/L		113	70 - 130	2	20
1,2-Dibromoethane (EDB)	10.0	10.8		ug/L		108	70 - 130	1	20
1,2-Dichlorobenzene	10.0	10.8		ug/L		108	70 - 130	1	20
1,2-Dichloroethane	10.0	9.97		ug/L		100	70 - 130	7	20
1,2-Dichloropropane	10.0	10.5		ug/L		105	70 - 130	1	20
1,3,5-Trimethylbenzene	10.0	10.5		ug/L		105	70 - 130	1	20
1,3-Dichlorobenzene	10.0	11.1		ug/L		111	70 - 130	1	20
1,3-Dichloropropane	10.0	10.9		ug/L		109	70 - 130	1	20
1,4-Dichlorobenzene	10.0	11.1		ug/L		111	70 - 130	0	20
2,2-Dichloropropane	10.0	10.9		ug/L		109	70 - 130	2	20
2-Chlorotoluene	10.0	10.4		ug/L		104	70 - 130	0	20
4-Chlorotoluene	10.0	10.6		ug/L		106	70 - 130	1	20
Benzene	10.0	10.3		ug/L		103	70 - 130	4	20
Bromobenzene	10.0	11.0		ug/L		110	70 - 130	1	20
Bromochloromethane	10.0	11.0		ug/L		110	70 - 130	2	20
Bromodichloromethane	10.0	10.6		ug/L		106	70 - 130	2	20
Bromoform	10.0	12.1		ug/L		121	70 - 130	0	20
Bromomethane	10.0	11.4		ug/L		114	70 - 130	14	20
Carbon tetrachloride	10.0	10.9		ug/L		109	70 - 130	1	20
Chlorobenzene	10.0	10.6		ug/L		106	70 - 130	2	20
Chloroethane	10.0	11.0		ug/L		110	70 - 130	1	20
Chloroform	10.0	10.1		ug/L		101	70 - 130	1	20
Chloromethane	10.0	12.1		ug/L		121	70 - 130	9	20
cis-1,2-Dichloroethene	10.0	10.5		ug/L		105	70 - 130	2	20
cis-1,3-Dichloropropene	10.0	10.2		ug/L		102	70 - 130	0	20
Dibromochloromethane	10.0	11.8		ug/L		118	70 - 130	4	20
Dibromomethane	10.0	10.8		ug/L		108	70 - 130	5	20
Dichlorodifluoromethane	10.0	12.4		ug/L		124	70 - 130	7	20
Ethylbenzene	10.0	10.5		ug/L		105	70 - 130	3	20
Hexachlorobutadiene	10.0	11.1		ug/L		111	70 - 130	2	20
Isopropylbenzene	10.0	10.4		ug/L		104	70 - 130	1	20
m,p-Xylene	20.0	21.0		ug/L		105	70 - 130	0	20
Methylene Chloride	10.0	10.5		ug/L		105	70 - 130	3	20
Methyl-t-Butyl Ether (MTBE)	10.0	9.71		ug/L		97	70 - 130	3	20
Naphthalene	10.0	10.7		ug/L		107	70 - 130	1	20
n-Butylbenzene	10.0	10.9		ug/L		109	70 - 130	1	20
N-Propylbenzene	10.0	10.7		ug/L		107	70 - 130	1	20
o-Xylene	10.0	10.7		ug/L		107	70 - 130	1	20
p-Isopropyltoluene	10.0	10.9		ug/L		109	70 - 130	3	20
sec-Butylbenzene	10.0	11.1		ug/L		111	70 - 130	2	20
Styrene	10.0	10.0		ug/L		100	70 - 130	1	20

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 570-494969/4

Matrix: Water

Analysis Batch: 494969

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
tert-Butylbenzene	10.0	10.5		ug/L		105	70 - 130	3	20
Tetrachloroethene	10.0	11.1		ug/L		111	70 - 130	6	20
Toluene	10.0	10.5		ug/L		105	70 - 130	0	20
trans-1,2-Dichloroethene	10.0	10.8		ug/L		108	70 - 130	5	20
trans-1,3-Dichloropropene	10.0	9.84		ug/L		98	70 - 130	1	20
Trichloroethene	10.0	10.9		ug/L		109	70 - 130	2	20
Trichlorofluoromethane	10.0	11.8		ug/L		118	70 - 130	2	20
Vinyl chloride	10.0	12.3		ug/L		123	70 - 130	7	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichlorobenzene-d4	109		70 - 130
4-Bromofluorobenzene (Surr)	102		70 - 130

Lab Sample ID: 570-203315-E-1 MS

Matrix: Water

Analysis Batch: 494969

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	ND		10.0	12.2		ug/L		122	70 - 130
1,1,1-Trichloroethane	0.033	J	10.0	11.3		ug/L		112	70 - 130
1,1,2,2-Tetrachloroethane	ND		10.0	11.8		ug/L		118	70 - 130
1,1,2-Trichloroethane	ND		10.0	11.0		ug/L		110	70 - 130
1,1-Dichloroethane	ND		10.0	11.1		ug/L		111	70 - 130
1,1-Dichloroethene	1.0		10.0	12.5		ug/L		115	70 - 130
1,1-Dichloropropene	ND		10.0	10.6		ug/L		106	70 - 130
1,2,3-Trichlorobenzene	ND		10.0	11.4		ug/L		114	70 - 130
1,2,3-Trichloropropane	ND		10.0	10.9		ug/L		109	70 - 130
1,2,4-Trichlorobenzene	ND		10.0	10.7		ug/L		107	70 - 130
1,2,4-Trimethylbenzene	ND		10.0	11.1		ug/L		111	70 - 130
1,2-Dibromo-3-Chloropropane	ND		10.0	11.7		ug/L		117	70 - 130
1,2-Dibromoethane (EDB)	ND		10.0	10.7		ug/L		107	70 - 130
1,2-Dichlorobenzene	ND		10.0	11.6		ug/L		116	70 - 130
1,2-Dichloroethane	ND		10.0	10.8		ug/L		108	70 - 130
1,2-Dichloropropane	ND		10.0	11.3		ug/L		113	70 - 130
1,3,5-Trimethylbenzene	ND		10.0	11.3		ug/L		113	70 - 130
1,3-Dichlorobenzene	ND		10.0	11.6		ug/L		116	70 - 130
1,3-Dichloropropane	ND		10.0	11.4		ug/L		114	70 - 130
1,4-Dichlorobenzene	ND		10.0	11.8		ug/L		118	70 - 130
2,2-Dichloropropane	ND		10.0	10.8		ug/L		108	70 - 130
2-Chlorotoluene	ND		10.0	10.7		ug/L		107	70 - 130
4-Chlorotoluene	ND		10.0	11.1		ug/L		111	70 - 130
Benzene	ND		10.0	11.3		ug/L		113	70 - 130
Bromobenzene	ND		10.0	11.2		ug/L		112	70 - 130
Bromochloromethane	ND		10.0	10.8		ug/L		108	70 - 130
Bromodichloromethane	ND		10.0	11.1		ug/L		111	70 - 130
Bromoform	ND		10.0	12.4		ug/L		124	70 - 130
Bromomethane	ND		10.0	11.0		ug/L		110	70 - 130
Carbon tetrachloride	ND		10.0	11.8		ug/L		118	70 - 130

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 570-203315-E-1 MS

Matrix: Water

Analysis Batch: 494969

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chlorobenzene	ND		10.0	11.3		ug/L		113	70 - 130
Chloroethane	ND		10.0	11.8		ug/L		118	70 - 130
Chloroform	0.028	J B	10.0	10.1		ug/L		100	70 - 130
Chloromethane	ND	F1	10.0	13.0		ug/L		130	70 - 130
cis-1,2-Dichloroethene	ND		10.0	10.6		ug/L		106	70 - 130
cis-1,3-Dichloropropene	ND		10.0	10.2		ug/L		102	70 - 130
Dibromochloromethane	ND		10.0	12.3		ug/L		123	70 - 130
Dibromomethane	ND		10.0	11.3		ug/L		113	70 - 130
Dichlorodifluoromethane	ND	F1	10.0	12.9		ug/L		129	70 - 130
Ethylbenzene	ND		10.0	10.6		ug/L		106	70 - 130
Hexachlorobutadiene	ND		10.0	11.4		ug/L		114	70 - 130
Isopropylbenzene	ND		10.0	10.7		ug/L		107	70 - 130
m,p-Xylene	ND		20.0	22.4		ug/L		112	70 - 130
Methylene Chloride	ND		10.0	10.7		ug/L		107	70 - 130
Methyl-t-Butyl Ether (MTBE)	ND		10.0	9.79		ug/L		98	70 - 130
Naphthalene	ND		10.0	10.3		ug/L		103	70 - 130
n-Butylbenzene	ND		10.0	11.9		ug/L		119	70 - 130
N-Propylbenzene	ND		10.0	11.2		ug/L		112	70 - 130
o-Xylene	ND		10.0	11.2		ug/L		112	70 - 130
p-Isopropyltoluene	ND		10.0	11.6		ug/L		116	70 - 130
sec-Butylbenzene	ND		10.0	11.6		ug/L		116	70 - 130
Styrene	ND		10.0	10.4		ug/L		104	70 - 130
tert-Butylbenzene	ND		10.0	11.1		ug/L		111	70 - 130
Tetrachloroethene	0.63		10.0	11.7		ug/L		111	70 - 130
Toluene	ND		10.0	10.9		ug/L		109	70 - 130
trans-1,2-Dichloroethene	ND		10.0	11.3		ug/L		113	70 - 130
trans-1,3-Dichloropropene	ND		10.0	9.76		ug/L		98	70 - 130
Trichloroethene	1.1		10.0	12.8		ug/L		117	70 - 130
Trichlorofluoromethane	ND		10.0	13.0		ug/L		130	70 - 130
Vinyl chloride	ND	F1	10.0	13.3	F1	ug/L		133	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichlorobenzene-d4	114		70 - 130
4-Bromofluorobenzene (Surr)	107		70 - 130

Lab Sample ID: 570-203315-E-1 MSD

Matrix: Water

Analysis Batch: 494969

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
1,1,1,2-Tetrachloroethane	ND		10.0	12.0		ug/L		120	70 - 130	2	20
1,1,1-Trichloroethane	0.033	J	10.0	11.2		ug/L		112	70 - 130	1	20
1,1,2,2-Tetrachloroethane	ND		10.0	12.2		ug/L		122	70 - 130	3	20
1,1,2-Trichloroethane	ND		10.0	11.4		ug/L		114	70 - 130	3	20
1,1-Dichloroethane	ND		10.0	11.3		ug/L		113	70 - 130	1	20
1,1-Dichloroethene	1.0		10.0	12.8		ug/L		118	70 - 130	2	20
1,1-Dichloropropene	ND		10.0	10.6		ug/L		106	70 - 130	0	20
1,2,3-Trichlorobenzene	ND		10.0	11.8		ug/L		118	70 - 130	4	20

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 570-203315-E-1 MSD

Matrix: Water

Analysis Batch: 494969

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2,3-Trichloropropane	ND		10.0	11.2		ug/L		112	70 - 130	3	20
1,2,4-Trichlorobenzene	ND		10.0	10.9		ug/L		109	70 - 130	2	20
1,2,4-Trimethylbenzene	ND		10.0	11.1		ug/L		111	70 - 130	1	20
1,2-Dibromo-3-Chloropropane	ND		10.0	12.2		ug/L		122	70 - 130	4	20
1,2-Dibromoethane (EDB)	ND		10.0	11.2		ug/L		112	70 - 130	5	20
1,2-Dichlorobenzene	ND		10.0	11.6		ug/L		116	70 - 130	0	20
1,2-Dichloroethane	ND		10.0	11.3		ug/L		113	70 - 130	4	20
1,2-Dichloropropane	ND		10.0	11.1		ug/L		111	70 - 130	2	20
1,3,5-Trimethylbenzene	ND		10.0	11.1		ug/L		111	70 - 130	1	20
1,3-Dichlorobenzene	ND		10.0	11.9		ug/L		119	70 - 130	2	20
1,3-Dichloropropane	ND		10.0	11.4		ug/L		114	70 - 130	0	20
1,4-Dichlorobenzene	ND		10.0	11.8		ug/L		118	70 - 130	0	20
2,2-Dichloropropane	ND		10.0	11.1		ug/L		111	70 - 130	3	20
2-Chlorotoluene	ND		10.0	11.0		ug/L		110	70 - 130	2	20
4-Chlorotoluene	ND		10.0	11.3		ug/L		113	70 - 130	2	20
Benzene	ND		10.0	11.2		ug/L		112	70 - 130	1	20
Bromobenzene	ND		10.0	11.3		ug/L		113	70 - 130	1	20
Bromochloromethane	ND		10.0	11.3		ug/L		113	70 - 130	4	20
Bromodichloromethane	ND		10.0	10.8		ug/L		108	70 - 130	3	20
Bromoform	ND		10.0	12.3		ug/L		123	70 - 130	0	20
Bromomethane	ND		10.0	12.1		ug/L		121	70 - 130	10	20
Carbon tetrachloride	ND		10.0	11.7		ug/L		117	70 - 130	0	20
Chlorobenzene	ND		10.0	11.4		ug/L		114	70 - 130	1	20
Chloroethane	ND		10.0	12.0		ug/L		120	70 - 130	1	20
Chloroform	0.028	J B	10.0	10.3		ug/L		103	70 - 130	2	20
Chloromethane	ND	F1	10.0	13.2	F1	ug/L		132	70 - 130	2	20
cis-1,2-Dichloroethene	ND		10.0	10.8		ug/L		108	70 - 130	2	20
cis-1,3-Dichloropropene	ND		10.0	10.7		ug/L		107	70 - 130	5	20
Dibromochloromethane	ND		10.0	12.4		ug/L		124	70 - 130	1	20
Dibromomethane	ND		10.0	11.0		ug/L		110	70 - 130	2	20
Dichlorodifluoromethane	ND	F1	10.0	13.2	F1	ug/L		132	70 - 130	3	20
Ethylbenzene	ND		10.0	10.8		ug/L		108	70 - 130	2	20
Hexachlorobutadiene	ND		10.0	11.7		ug/L		117	70 - 130	3	20
Isopropylbenzene	ND		10.0	10.8		ug/L		108	70 - 130	1	20
m,p-Xylene	ND		20.0	22.3		ug/L		111	70 - 130	0	20
Methylene Chloride	ND		10.0	11.1		ug/L		111	70 - 130	4	20
Methyl-t-Butyl Ether (MTBE)	ND		10.0	10.1		ug/L		101	70 - 130	4	20
Naphthalene	ND		10.0	11.0		ug/L		110	70 - 130	7	20
n-Butylbenzene	ND		10.0	11.6		ug/L		116	70 - 130	2	20
N-Propylbenzene	ND		10.0	11.1		ug/L		111	70 - 130	1	20
o-Xylene	ND		10.0	11.4		ug/L		114	70 - 130	1	20
p-Isopropyltoluene	ND		10.0	11.2		ug/L		112	70 - 130	3	20
sec-Butylbenzene	ND		10.0	11.4		ug/L		114	70 - 130	2	20
Styrene	ND		10.0	10.5		ug/L		105	70 - 130	1	20
tert-Butylbenzene	ND		10.0	11.0		ug/L		110	70 - 130	1	20
Tetrachloroethene	0.63		10.0	12.6		ug/L		120	70 - 130	7	20
Toluene	ND		10.0	11.1		ug/L		111	70 - 130	2	20
trans-1,2-Dichloroethene	ND		10.0	11.4		ug/L		114	70 - 130	0	20
trans-1,3-Dichloropropene	ND		10.0	10.4		ug/L		104	70 - 130	6	20

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 570-203315-E-1 MSD

Matrix: Water

Analysis Batch: 494969

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Trichloroethene	1.1		10.0	12.9		ug/L		117	70 - 130	1	20
Trichlorofluoromethane	ND		10.0	12.9		ug/L		129	70 - 130	0	20
Vinyl chloride	ND	F1	10.0	13.1	F1	ug/L		131	70 - 130	1	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1,2-Dichlorobenzene-d4	115		70 - 130								
4-Bromofluorobenzene (Surr)	106		70 - 130								

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

Lab Sample ID: MB 280-672790/9

Matrix: Water

Analysis Batch: 672790

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			10/29/24 08:41	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			10/29/24 08:41	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/29/24 08:41	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			10/29/24 08:41	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			10/29/24 08:41	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			10/29/24 08:41	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			10/29/24 08:41	1
1,2,3-Trichlorobenzene	ND		4.0	1.2	ug/L			10/29/24 08:41	1
1,2,3-Trichloropropane	ND		2.5	0.28	ug/L			10/29/24 08:41	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			10/29/24 08:41	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			10/29/24 08:41	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.42	ug/L			10/29/24 08:41	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			10/29/24 08:41	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			10/29/24 08:41	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			10/29/24 08:41	1
1,2-Dichloropropane	ND		1.0	0.24	ug/L			10/29/24 08:41	1
1,3,5-Trimethylbenzene	ND		1.0	0.12	ug/L			10/29/24 08:41	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			10/29/24 08:41	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			10/29/24 08:41	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			10/29/24 08:41	1
2,2-Dichloropropane	ND		1.0	0.17	ug/L			10/29/24 08:41	1
2-Butanone (MEK)	ND		10	4.6	ug/L			10/29/24 08:41	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			10/29/24 08:41	1
2-Hexanone	ND		5.0	0.81	ug/L			10/29/24 08:41	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			10/29/24 08:41	1
4-Isopropyltoluene	ND		1.0	0.19	ug/L			10/29/24 08:41	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			10/29/24 08:41	1
Acetone	ND		15	6.6	ug/L			10/29/24 08:41	1
Benzene	ND		1.0	0.14	ug/L			10/29/24 08:41	1
Bromobenzene	ND		1.0	0.19	ug/L			10/29/24 08:41	1
Bromochloromethane	ND		1.0	0.40	ug/L			10/29/24 08:41	1
Bromodichloromethane	ND		1.0	0.19	ug/L			10/29/24 08:41	1
Bromoform	ND		2.0	0.25	ug/L			10/29/24 08:41	1
Bromomethane	ND		5.0	2.4	ug/L			10/29/24 08:41	1

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

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

Lab Sample ID: MB 280-672790/9

Matrix: Water

Analysis Batch: 672790

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		2.0	0.26	ug/L			10/29/24 08:41	1
Carbon tetrachloride	ND		1.0	0.23	ug/L			10/29/24 08:41	1
Chlorobenzene	ND		1.0	0.092	ug/L			10/29/24 08:41	1
Chloroethane	ND		2.0	0.64	ug/L			10/29/24 08:41	1
Chloroform	ND		1.0	0.36	ug/L			10/29/24 08:41	1
Chloromethane	ND		2.0	0.23	ug/L			10/29/24 08:41	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			10/29/24 08:41	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			10/29/24 08:41	1
Dibromochloromethane	ND		1.0	0.28	ug/L			10/29/24 08:41	1
Dibromomethane	ND		1.0	0.34	ug/L			10/29/24 08:41	1
Dichlorodifluoromethane	ND		2.0	0.30	ug/L			10/29/24 08:41	1
Ethylbenzene	ND		1.0	0.14	ug/L			10/29/24 08:41	1
Hexachlorobutadiene	ND		2.0	0.53	ug/L			10/29/24 08:41	1
Isopropylbenzene	ND		1.0	0.16	ug/L			10/29/24 08:41	1
Methylene Chloride	ND		2.0	0.94	ug/L			10/29/24 08:41	1
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			10/29/24 08:41	1
Naphthalene	ND		3.0	0.99	ug/L			10/29/24 08:41	1
n-Butylbenzene	ND		1.0	0.23	ug/L			10/29/24 08:41	1
N-Propylbenzene	ND		1.0	0.18	ug/L			10/29/24 08:41	1
o-Xylene	ND		1.0	0.11	ug/L			10/29/24 08:41	1
sec-Butylbenzene	ND		1.0	0.20	ug/L			10/29/24 08:41	1
Styrene	ND		1.0	0.13	ug/L			10/29/24 08:41	1
tert-Butylbenzene	ND		1.0	0.18	ug/L			10/29/24 08:41	1
Tetrachloroethene	ND		1.0	0.40	ug/L			10/29/24 08:41	1
Toluene	ND		1.0	0.32	ug/L			10/29/24 08:41	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			10/29/24 08:41	1
trans-1,3-Dichloropropene	ND		1.0	0.14	ug/L			10/29/24 08:41	1
Trichloroethene	ND		1.0	0.30	ug/L			10/29/24 08:41	1
Trichlorofluoromethane	ND		2.0	0.20	ug/L			10/29/24 08:41	1
Vinyl chloride	ND		1.0	0.23	ug/L			10/29/24 08:41	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		70 - 127		10/29/24 08:41	1
4-Bromofluorobenzene (Surr)	95		78 - 120		10/29/24 08:41	1
Dibromofluoromethane (Surr)	103		77 - 120		10/29/24 08:41	1
Toluene-d8 (Surr)	97		80 - 125		10/29/24 08:41	1

Lab Sample ID: LCS 280-672790/4

Matrix: Water

Analysis Batch: 672790

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	50.0	47.2		ug/L		94	80 - 124
1,1,1-Trichloroethane	50.0	50.9		ug/L		102	80 - 123
1,1,2,2-Tetrachloroethane	50.0	47.6		ug/L		95	74 - 123
1,1,2-Trichloroethane	50.0	48.4		ug/L		97	80 - 120
1,1-Dichloroethane	50.0	49.6		ug/L		99	78 - 121
1,1-Dichloroethene	50.0	45.3		ug/L		91	77 - 121

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

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

Lab Sample ID: LCS 280-672790/4

Matrix: Water

Analysis Batch: 672790

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloropropene	50.0	45.9		ug/L		92	77 - 123
1,2,3-Trichlorobenzene	50.0	49.0		ug/L		98	65 - 129
1,2,3-Trichloropropane	50.0	49.9		ug/L		100	80 - 120
1,2,4-Trichlorobenzene	50.0	46.4		ug/L		93	74 - 126
1,2,4-Trimethylbenzene	50.0	45.5		ug/L		91	79 - 124
1,2-Dibromo-3-Chloropropane	50.0	48.5		ug/L		97	73 - 128
1,2-Dibromoethane	50.0	49.2		ug/L		98	80 - 120
1,2-Dichlorobenzene	50.0	46.7		ug/L		93	80 - 120
1,2-Dichloroethane	50.0	47.8		ug/L		96	71 - 121
1,2-Dichloropropane	50.0	46.5		ug/L		93	78 - 120
1,3,5-Trimethylbenzene	50.0	49.9		ug/L		100	80 - 122
1,3-Dichlorobenzene	50.0	47.2		ug/L		94	80 - 120
1,3-Dichloropropane	50.0	47.3		ug/L		95	77 - 122
1,4-Dichlorobenzene	50.0	52.1		ug/L		104	80 - 120
2,2-Dichloropropane	50.0	47.6		ug/L		95	75 - 131
2-Butanone (MEK)	200	202		ug/L		101	58 - 135
2-Chlorotoluene	50.0	48.3		ug/L		97	80 - 120
2-Hexanone	200	202		ug/L		101	62 - 137
4-Chlorotoluene	50.0	47.5		ug/L		95	80 - 120
4-Isopropyltoluene	50.0	45.5		ug/L		91	80 - 122
4-Methyl-2-pentanone (MIBK)	200	213		ug/L		106	66 - 135
Acetone	200	195		ug/L		98	61 - 134
Benzene	50.0	47.3		ug/L		95	80 - 120
Bromobenzene	50.0	52.3		ug/L		105	80 - 120
Bromochloromethane	50.0	53.9		ug/L		108	80 - 123
Bromodichloromethane	50.0	49.0		ug/L		98	80 - 123
Bromoform	50.0	50.7		ug/L		101	79 - 138
Bromomethane	50.0	31.6		ug/L		63	29 - 148
Carbon disulfide	50.0	47.7		ug/L		95	70 - 121
Carbon tetrachloride	50.0	46.1		ug/L		92	79 - 127
Chlorobenzene	50.0	47.6		ug/L		95	80 - 120
Chloroethane	50.0	48.3		ug/L		97	56 - 141
Chloroform	50.0	46.8		ug/L		94	80 - 120
Chloromethane	50.0	44.8		ug/L		90	56 - 133
cis-1,2-Dichloroethene	50.0	50.9		ug/L		102	80 - 120
cis-1,3-Dichloropropene	50.0	45.3		ug/L		91	76 - 129
Dibromochloromethane	50.0	50.1		ug/L		100	80 - 125
Dibromomethane	50.0	49.7		ug/L		99	80 - 120
Dichlorodifluoromethane	50.0	51.8		ug/L		104	47 - 135
Ethylbenzene	50.0	51.4		ug/L		103	80 - 120
Hexachlorobutadiene	50.0	44.9		ug/L		90	73 - 128
Isopropylbenzene	50.0	47.2		ug/L		94	78 - 122
Methylene Chloride	50.0	50.6		ug/L		101	78 - 120
m-Xylene & p-Xylene	50.0	46.6		ug/L		93	80 - 120
Naphthalene	50.0	47.5		ug/L		95	60 - 124
n-Butylbenzene	50.0	45.0		ug/L		90	59 - 140
N-Propylbenzene	50.0	51.3		ug/L		103	80 - 123
o-Xylene	50.0	46.9		ug/L		94	80 - 120
sec-Butylbenzene	50.0	47.8		ug/L		96	80 - 123

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

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

Lab Sample ID: LCS 280-672790/4

Matrix: Water

Analysis Batch: 672790

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Styrene	50.0	47.8		ug/L		96	80 - 120
tert-Butylbenzene	50.0	47.1		ug/L		94	80 - 120
Tetrachloroethene	50.0	49.5		ug/L		99	80 - 121
Toluene	50.0	47.2		ug/L		94	80 - 120
trans-1,2-Dichloroethene	50.0	48.3		ug/L		97	79 - 121
trans-1,3-Dichloropropene	50.0	47.4		ug/L		95	80 - 123
Trichloroethene	50.0	48.0		ug/L		96	80 - 120
Trichlorofluoromethane	50.0	47.2		ug/L		94	54 - 144
Vinyl chloride	50.0	44.4		ug/L		89	67 - 127

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		70 - 127
4-Bromofluorobenzene (Surr)	98		78 - 120
Dibromofluoromethane (Surr)	99		77 - 120
Toluene-d8 (Surr)	97		80 - 125

Lab Sample ID: LCSD 280-672790/5

Matrix: Water

Analysis Batch: 672790

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	50.0	49.6		ug/L		99	80 - 124	5	20
1,1,1-Trichloroethane	50.0	50.4		ug/L		101	80 - 123	1	20
1,1,2,2-Tetrachloroethane	50.0	46.7		ug/L		93	74 - 123	2	20
1,1,2-Trichloroethane	50.0	49.3		ug/L		99	80 - 120	2	20
1,1-Dichloroethane	50.0	49.2		ug/L		98	78 - 121	1	20
1,1-Dichloroethene	50.0	45.3		ug/L		91	77 - 121	0	21
1,1-Dichloropropene	50.0	46.2		ug/L		92	77 - 123	1	20
1,2,3-Trichlorobenzene	50.0	48.9		ug/L		98	65 - 129	0	20
1,2,3-Trichloropropane	50.0	48.6		ug/L		97	80 - 120	3	20
1,2,4-Trichlorobenzene	50.0	45.7		ug/L		91	74 - 126	1	20
1,2,4-Trimethylbenzene	50.0	45.8		ug/L		92	79 - 124	1	20
1,2-Dibromo-3-Chloropropane	50.0	48.7		ug/L		97	73 - 128	0	21
1,2-Dibromoethane	50.0	51.1		ug/L		102	80 - 120	4	20
1,2-Dichlorobenzene	50.0	47.1		ug/L		94	80 - 120	1	20
1,2-Dichloroethane	50.0	47.7		ug/L		95	71 - 121	0	20
1,2-Dichloropropane	50.0	46.6		ug/L		93	78 - 120	0	20
1,3,5-Trimethylbenzene	50.0	49.9		ug/L		100	80 - 122	0	20
1,3-Dichlorobenzene	50.0	46.4		ug/L		93	80 - 120	2	20
1,3-Dichloropropane	50.0	49.0		ug/L		98	77 - 122	4	20
1,4-Dichlorobenzene	50.0	51.3		ug/L		103	80 - 120	2	20
2,2-Dichloropropane	50.0	45.2		ug/L		90	75 - 131	5	22
2-Butanone (MEK)	200	197		ug/L		99	58 - 135	2	20
2-Chlorotoluene	50.0	46.9		ug/L		94	80 - 120	3	20
2-Hexanone	200	206		ug/L		103	62 - 137	2	21
4-Chlorotoluene	50.0	48.1		ug/L		96	80 - 120	1	20
4-Isopropyltoluene	50.0	45.6		ug/L		91	80 - 122	0	20
4-Methyl-2-pentanone (MIBK)	200	208		ug/L		104	66 - 135	2	20

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

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

Lab Sample ID: LCSD 280-672790/5

Matrix: Water

Analysis Batch: 672790

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acetone	200	187		ug/L		94	61 - 134	4	21
Benzene	50.0	46.7		ug/L		93	80 - 120	1	20
Bromobenzene	50.0	51.9		ug/L		104	80 - 120	1	20
Bromochloromethane	50.0	54.1		ug/L		108	80 - 123	0	20
Bromodichloromethane	50.0	47.2		ug/L		94	80 - 123	4	20
Bromoform	50.0	51.3		ug/L		103	79 - 138	1	20
Bromomethane	50.0	33.9		ug/L		68	29 - 148	7	40
Carbon disulfide	50.0	47.9		ug/L		96	70 - 121	1	20
Carbon tetrachloride	50.0	47.0		ug/L		94	79 - 127	2	20
Chlorobenzene	50.0	47.7		ug/L		95	80 - 120	0	20
Chloroethane	50.0	47.3		ug/L		95	56 - 141	2	30
Chloroform	50.0	45.7		ug/L		91	80 - 120	2	20
Chloromethane	50.0	44.0		ug/L		88	56 - 133	2	20
cis-1,2-Dichloroethene	50.0	51.1		ug/L		102	80 - 120	0	20
cis-1,3-Dichloropropene	50.0	46.8		ug/L		94	76 - 129	3	20
Dibromochloromethane	50.0	51.0		ug/L		102	80 - 125	2	20
Dibromomethane	50.0	49.2		ug/L		98	80 - 120	1	20
Dichlorodifluoromethane	50.0	49.5		ug/L		99	47 - 135	5	21
Ethylbenzene	50.0	52.2		ug/L		104	80 - 120	2	20
Hexachlorobutadiene	50.0	44.4		ug/L		89	73 - 128	1	20
Isopropylbenzene	50.0	46.9		ug/L		94	78 - 122	1	20
Methylene Chloride	50.0	51.4		ug/L		103	78 - 120	1	20
m-Xylene & p-Xylene	50.0	48.3		ug/L		97	80 - 120	4	20
Naphthalene	50.0	46.7		ug/L		93	60 - 124	2	21
n-Butylbenzene	50.0	45.6		ug/L		91	59 - 140	1	20
N-Propylbenzene	50.0	52.3		ug/L		105	80 - 123	2	20
o-Xylene	50.0	49.1		ug/L		98	80 - 120	5	20
sec-Butylbenzene	50.0	46.9		ug/L		94	80 - 123	2	20
Styrene	50.0	49.3		ug/L		99	80 - 120	3	20
tert-Butylbenzene	50.0	46.6		ug/L		93	80 - 120	1	20
Tetrachloroethene	50.0	52.4		ug/L		105	80 - 121	6	20
Toluene	50.0	46.5		ug/L		93	80 - 120	2	20
trans-1,2-Dichloroethene	50.0	47.8		ug/L		96	79 - 121	1	20
trans-1,3-Dichloropropene	50.0	47.6		ug/L		95	80 - 123	0	20
Trichloroethene	50.0	50.9		ug/L		102	80 - 120	6	20
Trichlorofluoromethane	50.0	47.0		ug/L		94	54 - 144	0	28
Vinyl chloride	50.0	44.2		ug/L		88	67 - 127	0	25

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
1,2-Dichloroethane-d4 (Surr)	98		70 - 127
4-Bromofluorobenzene (Surr)	99		78 - 120
Dibromofluoromethane (Surr)	98		77 - 120
Toluene-d8 (Surr)	99		80 - 125

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

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

Lab Sample ID: MB 280-672950/9

Matrix: Water

Analysis Batch: 672950

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			10/30/24 09:03	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			10/30/24 09:03	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/30/24 09:03	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			10/30/24 09:03	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			10/30/24 09:03	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			10/30/24 09:03	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			10/30/24 09:03	1
1,2,3-Trichlorobenzene	ND		4.0	1.2	ug/L			10/30/24 09:03	1
1,2,3-Trichloropropane	ND		2.5	0.28	ug/L			10/30/24 09:03	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			10/30/24 09:03	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			10/30/24 09:03	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.42	ug/L			10/30/24 09:03	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			10/30/24 09:03	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			10/30/24 09:03	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			10/30/24 09:03	1
1,2-Dichloropropane	ND		1.0	0.24	ug/L			10/30/24 09:03	1
1,3,5-Trimethylbenzene	ND		1.0	0.12	ug/L			10/30/24 09:03	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			10/30/24 09:03	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			10/30/24 09:03	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			10/30/24 09:03	1
2,2-Dichloropropane	ND		1.0	0.17	ug/L			10/30/24 09:03	1
2-Butanone (MEK)	ND		10	4.6	ug/L			10/30/24 09:03	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			10/30/24 09:03	1
2-Hexanone	ND		5.0	0.81	ug/L			10/30/24 09:03	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			10/30/24 09:03	1
4-Isopropyltoluene	ND		1.0	0.19	ug/L			10/30/24 09:03	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			10/30/24 09:03	1
Acetone	ND		15	6.6	ug/L			10/30/24 09:03	1
Benzene	ND		1.0	0.14	ug/L			10/30/24 09:03	1
Bromobenzene	ND		1.0	0.19	ug/L			10/30/24 09:03	1
Bromochloromethane	ND		1.0	0.40	ug/L			10/30/24 09:03	1
Bromodichloromethane	ND		1.0	0.19	ug/L			10/30/24 09:03	1
Bromoform	ND		2.0	0.25	ug/L			10/30/24 09:03	1
Bromomethane	ND		5.0	2.4	ug/L			10/30/24 09:03	1
Carbon disulfide	ND		2.0	0.26	ug/L			10/30/24 09:03	1
Carbon tetrachloride	ND		1.0	0.23	ug/L			10/30/24 09:03	1
Chlorobenzene	ND		1.0	0.092	ug/L			10/30/24 09:03	1
Chloroethane	ND		2.0	0.64	ug/L			10/30/24 09:03	1
Chloroform	ND		1.0	0.36	ug/L			10/30/24 09:03	1
Chloromethane	ND		2.0	0.23	ug/L			10/30/24 09:03	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			10/30/24 09:03	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			10/30/24 09:03	1
Dibromochloromethane	ND		1.0	0.28	ug/L			10/30/24 09:03	1
Dibromomethane	ND		1.0	0.34	ug/L			10/30/24 09:03	1
Dichlorodifluoromethane	ND		2.0	0.30	ug/L			10/30/24 09:03	1
Ethylbenzene	ND		1.0	0.14	ug/L			10/30/24 09:03	1
Hexachlorobutadiene	ND		2.0	0.53	ug/L			10/30/24 09:03	1
Isopropylbenzene	ND		1.0	0.16	ug/L			10/30/24 09:03	1

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

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

Lab Sample ID: MB 280-672950/9

Matrix: Water

Analysis Batch: 672950

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		2.0	0.94	ug/L			10/30/24 09:03	1
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			10/30/24 09:03	1
Naphthalene	ND		3.0	0.99	ug/L			10/30/24 09:03	1
n-Butylbenzene	ND		1.0	0.23	ug/L			10/30/24 09:03	1
N-Propylbenzene	ND		1.0	0.18	ug/L			10/30/24 09:03	1
o-Xylene	ND		1.0	0.11	ug/L			10/30/24 09:03	1
sec-Butylbenzene	ND		1.0	0.20	ug/L			10/30/24 09:03	1
Styrene	ND		1.0	0.13	ug/L			10/30/24 09:03	1
tert-Butylbenzene	ND		1.0	0.18	ug/L			10/30/24 09:03	1
Tetrachloroethene	ND		1.0	0.40	ug/L			10/30/24 09:03	1
Toluene	ND		1.0	0.32	ug/L			10/30/24 09:03	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			10/30/24 09:03	1
trans-1,3-Dichloropropene	ND		1.0	0.14	ug/L			10/30/24 09:03	1
Trichloroethene	ND		1.0	0.30	ug/L			10/30/24 09:03	1
Trichlorofluoromethane	ND		2.0	0.20	ug/L			10/30/24 09:03	1
Vinyl chloride	ND		1.0	0.23	ug/L			10/30/24 09:03	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		70 - 127		10/30/24 09:03	1
4-Bromofluorobenzene (Surr)	102		78 - 120		10/30/24 09:03	1
Dibromofluoromethane (Surr)	99		77 - 120		10/30/24 09:03	1
Toluene-d8 (Surr)	97		80 - 125		10/30/24 09:03	1

Lab Sample ID: LCS 280-672950/4

Matrix: Water

Analysis Batch: 672950

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	50.0	50.7		ug/L		101	80 - 124
1,1,1-Trichloroethane	50.0	49.8		ug/L		100	80 - 123
1,1,2,2-Tetrachloroethane	50.0	49.9		ug/L		100	74 - 123
1,1,2-Trichloroethane	50.0	50.3		ug/L		101	80 - 120
1,1-Dichloroethane	50.0	49.4		ug/L		99	78 - 121
1,1-Dichloroethene	50.0	47.6		ug/L		95	77 - 121
1,1-Dichloropropene	50.0	48.9		ug/L		98	77 - 123
1,2,3-Trichlorobenzene	50.0	41.9		ug/L		84	65 - 129
1,2,3-Trichloropropane	50.0	48.3		ug/L		97	80 - 120
1,2,4-Trichlorobenzene	50.0	42.4		ug/L		85	74 - 126
1,2,4-Trimethylbenzene	50.0	47.3		ug/L		95	79 - 124
1,2-Dibromo-3-Chloropropane	50.0	45.9		ug/L		92	73 - 128
1,2-Dibromoethane	50.0	46.8		ug/L		94	80 - 120
1,2-Dichlorobenzene	50.0	45.9		ug/L		92	80 - 120
1,2-Dichloroethane	50.0	49.1		ug/L		98	71 - 121
1,2-Dichloropropane	50.0	50.4		ug/L		101	78 - 120
1,3,5-Trimethylbenzene	50.0	47.7		ug/L		95	80 - 122
1,3-Dichlorobenzene	50.0	47.4		ug/L		95	80 - 120
1,3-Dichloropropane	50.0	49.8		ug/L		100	77 - 122
1,4-Dichlorobenzene	50.0	46.8		ug/L		94	80 - 120

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

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

Lab Sample ID: LCS 280-672950/4

Matrix: Water

Analysis Batch: 672950

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,2-Dichloropropane	50.0	47.7		ug/L		95	75 - 131
2-Butanone (MEK)	200	197		ug/L		99	58 - 135
2-Chlorotoluene	50.0	48.3		ug/L		97	80 - 120
2-Hexanone	200	199		ug/L		99	62 - 137
4-Chlorotoluene	50.0	47.6		ug/L		95	80 - 120
4-Isopropyltoluene	50.0	47.6		ug/L		95	80 - 122
4-Methyl-2-pentanone (MIBK)	200	214		ug/L		107	66 - 135
Acetone	200	186		ug/L		93	61 - 134
Benzene	50.0	50.1		ug/L		100	80 - 120
Bromobenzene	50.0	48.6		ug/L		97	80 - 120
Bromochloromethane	50.0	48.6		ug/L		97	80 - 123
Bromodichloromethane	50.0	50.5		ug/L		101	80 - 123
Bromoform	50.0	49.4		ug/L		99	79 - 138
Bromomethane	50.0	25.2		ug/L		50	29 - 148
Carbon disulfide	50.0	48.9		ug/L		98	70 - 121
Carbon tetrachloride	50.0	48.8		ug/L		98	79 - 127
Chlorobenzene	50.0	48.9		ug/L		98	80 - 120
Chloroethane	50.0	53.4		ug/L		107	56 - 141
Chloroform	50.0	49.4		ug/L		99	80 - 120
Chloromethane	50.0	51.3		ug/L		103	56 - 133
cis-1,2-Dichloroethene	50.0	49.5		ug/L		99	80 - 120
cis-1,3-Dichloropropene	50.0	50.4		ug/L		101	76 - 129
Dibromochloromethane	50.0	50.7		ug/L		101	80 - 125
Dibromomethane	50.0	45.8		ug/L		92	80 - 120
Dichlorodifluoromethane	50.0	49.0		ug/L		98	47 - 135
Ethylbenzene	50.0	49.3		ug/L		99	80 - 120
Hexachlorobutadiene	50.0	46.5		ug/L		93	73 - 128
Isopropylbenzene	50.0	48.9		ug/L		98	78 - 122
Methylene Chloride	50.0	47.9		ug/L		96	78 - 120
m-Xylene & p-Xylene	50.0	47.4		ug/L		95	80 - 120
Naphthalene	50.0	42.3		ug/L		85	60 - 124
n-Butylbenzene	50.0	46.6		ug/L		93	59 - 140
N-Propylbenzene	50.0	47.0		ug/L		94	80 - 123
o-Xylene	50.0	49.1		ug/L		98	80 - 120
sec-Butylbenzene	50.0	45.5		ug/L		91	80 - 123
Styrene	50.0	49.5		ug/L		99	80 - 120
tert-Butylbenzene	50.0	47.3		ug/L		95	80 - 120
Tetrachloroethene	50.0	49.0		ug/L		98	80 - 121
Toluene	50.0	49.6		ug/L		99	80 - 120
trans-1,2-Dichloroethene	50.0	48.4		ug/L		97	79 - 121
trans-1,3-Dichloropropene	50.0	50.1		ug/L		100	80 - 123
Trichloroethene	50.0	47.1		ug/L		94	80 - 120
Trichlorofluoromethane	50.0	48.2		ug/L		96	54 - 144
Vinyl chloride	50.0	52.2		ug/L		104	67 - 127

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		70 - 127
4-Bromofluorobenzene (Surr)	100		78 - 120

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

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

Lab Sample ID: LCS 280-672950/4

Matrix: Water

Analysis Batch: 672950

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Dibromofluoromethane (Surr)	100		77 - 120
Toluene-d8 (Surr)	98		80 - 125

Lab Sample ID: LCSD 280-672950/5

Matrix: Water

Analysis Batch: 672950

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	50.0	50.6		ug/L		101	80 - 124	0	20
1,1,1-Trichloroethane	50.0	47.1		ug/L		94	80 - 123	6	20
1,1,2,2-Tetrachloroethane	50.0	50.5		ug/L		101	74 - 123	1	20
1,1,2-Trichloroethane	50.0	48.5		ug/L		97	80 - 120	4	20
1,1-Dichloroethane	50.0	48.4		ug/L		97	78 - 121	2	20
1,1-Dichloroethene	50.0	46.2		ug/L		92	77 - 121	3	21
1,1-Dichloropropene	50.0	47.1		ug/L		94	77 - 123	4	20
1,2,3-Trichlorobenzene	50.0	43.5		ug/L		87	65 - 129	4	20
1,2,3-Trichloropropane	50.0	49.3		ug/L		99	80 - 120	2	20
1,2,4-Trichlorobenzene	50.0	43.7		ug/L		87	74 - 126	3	20
1,2,4-Trimethylbenzene	50.0	47.6		ug/L		95	79 - 124	0	20
1,2-Dibromo-3-Chloropropane	50.0	47.2		ug/L		94	73 - 128	3	21
1,2-Dibromoethane	50.0	46.6		ug/L		93	80 - 120	0	20
1,2-Dichlorobenzene	50.0	45.9		ug/L		92	80 - 120	0	20
1,2-Dichloroethane	50.0	48.0		ug/L		96	71 - 121	2	20
1,2-Dichloropropane	50.0	48.7		ug/L		97	78 - 120	3	20
1,3,5-Trimethylbenzene	50.0	48.2		ug/L		96	80 - 122	1	20
1,3-Dichlorobenzene	50.0	47.5		ug/L		95	80 - 120	0	20
1,3-Dichloropropane	50.0	48.6		ug/L		97	77 - 122	3	20
1,4-Dichlorobenzene	50.0	46.7		ug/L		93	80 - 120	0	20
2,2-Dichloropropane	50.0	45.6		ug/L		91	75 - 131	4	22
2-Butanone (MEK)	200	192		ug/L		96	58 - 135	3	20
2-Chlorotoluene	50.0	49.1		ug/L		98	80 - 120	2	20
2-Hexanone	200	195		ug/L		98	62 - 137	2	21
4-Chlorotoluene	50.0	48.8		ug/L		98	80 - 120	2	20
4-Isopropyltoluene	50.0	48.1		ug/L		96	80 - 122	1	20
4-Methyl-2-pentanone (MIBK)	200	210		ug/L		105	66 - 135	2	20
Acetone	200	185		ug/L		92	61 - 134	0	21
Benzene	50.0	49.1		ug/L		98	80 - 120	2	20
Bromobenzene	50.0	48.4		ug/L		97	80 - 120	0	20
Bromochloromethane	50.0	47.9		ug/L		96	80 - 123	2	20
Bromodichloromethane	50.0	50.4		ug/L		101	80 - 123	0	20
Bromoform	50.0	48.6		ug/L		97	79 - 138	2	20
Bromomethane	50.0	36.7		ug/L		73	29 - 148	37	40
Carbon disulfide	50.0	46.9		ug/L		94	70 - 121	4	20
Carbon tetrachloride	50.0	46.9		ug/L		94	79 - 127	4	20
Chlorobenzene	50.0	48.9		ug/L		98	80 - 120	0	20
Chloroethane	50.0	52.9		ug/L		106	56 - 141	1	30
Chloroform	50.0	48.1		ug/L		96	80 - 120	3	20
Chloromethane	50.0	52.2		ug/L		104	56 - 133	2	20

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

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

Lab Sample ID: LCSD 280-672950/5

Matrix: Water

Analysis Batch: 672950

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	50.0	48.2		ug/L		96	80 - 120	3	20
cis-1,3-Dichloropropene	50.0	49.0		ug/L		98	76 - 129	3	20
Dibromochloromethane	50.0	50.4		ug/L		101	80 - 125	0	20
Dibromomethane	50.0	44.9		ug/L		90	80 - 120	2	20
Dichlorodifluoromethane	50.0	51.1		ug/L		102	47 - 135	4	21
Ethylbenzene	50.0	47.8		ug/L		96	80 - 120	3	20
Hexachlorobutadiene	50.0	48.5		ug/L		97	73 - 128	4	20
Isopropylbenzene	50.0	48.4		ug/L		97	78 - 122	1	20
Methylene Chloride	50.0	47.6		ug/L		95	78 - 120	1	20
m-Xylene & p-Xylene	50.0	46.0		ug/L		92	80 - 120	3	20
Naphthalene	50.0	42.5		ug/L		85	60 - 124	0	21
n-Butylbenzene	50.0	47.0		ug/L		94	59 - 140	1	20
N-Propylbenzene	50.0	49.2		ug/L		98	80 - 123	5	20
o-Xylene	50.0	47.4		ug/L		95	80 - 120	3	20
sec-Butylbenzene	50.0	47.1		ug/L		94	80 - 123	3	20
Styrene	50.0	48.8		ug/L		98	80 - 120	1	20
tert-Butylbenzene	50.0	47.6		ug/L		95	80 - 120	1	20
Tetrachloroethene	50.0	47.0		ug/L		94	80 - 121	4	20
Toluene	50.0	48.7		ug/L		97	80 - 120	2	20
trans-1,2-Dichloroethene	50.0	46.6		ug/L		93	79 - 121	4	20
trans-1,3-Dichloropropene	50.0	49.5		ug/L		99	80 - 123	1	20
Trichloroethene	50.0	45.2		ug/L		90	80 - 120	4	20
Trichlorofluoromethane	50.0	49.9		ug/L		100	54 - 144	3	28
Vinyl chloride	50.0	54.3		ug/L		109	67 - 127	4	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		70 - 127
4-Bromofluorobenzene (Surr)	103		78 - 120
Dibromofluoromethane (Surr)	102		77 - 120
Toluene-d8 (Surr)	98		80 - 125

Lab Sample ID: 280-198180-A-2 MS

Matrix: Water

Analysis Batch: 672950

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	ND		50.0	53.7		ug/L		107	80 - 124
1,1,1-Trichloroethane	ND		50.0	51.9		ug/L		104	80 - 123
1,1,2,2-Tetrachloroethane	ND		50.0	54.6		ug/L		109	74 - 123
1,1,2-Trichloroethane	ND		50.0	51.2		ug/L		102	80 - 120
1,1-Dichloroethane	ND		50.0	51.0		ug/L		102	78 - 121
1,1-Dichloroethene	ND		50.0	50.0		ug/L		100	77 - 121
1,1-Dichloropropene	ND		50.0	51.4		ug/L		103	77 - 123
1,2,3-Trichlorobenzene	ND		50.0	43.8		ug/L		88	65 - 129
1,2,3-Trichloropropane	ND		50.0	48.5		ug/L		97	80 - 120
1,2,4-Trichlorobenzene	ND		50.0	42.5		ug/L		85	74 - 126
1,2,4-Trimethylbenzene	ND		50.0	50.1		ug/L		100	79 - 124
1,2-Dibromo-3-Chloropropane	ND		50.0	47.0		ug/L		94	73 - 128

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

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

Lab Sample ID: 280-198180-A-2 MS

Matrix: Water

Analysis Batch: 672950

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromoethane	ND		50.0	48.1		ug/L		96	80 - 120
1,2-Dichlorobenzene	ND		50.0	47.5		ug/L		95	80 - 120
1,2-Dichloroethane	ND		50.0	48.4		ug/L		97	71 - 121
1,2-Dichloropropane	ND		50.0	50.9		ug/L		102	78 - 120
1,3,5-Trimethylbenzene	ND		50.0	50.6		ug/L		101	80 - 122
1,3-Dichlorobenzene	ND		50.0	48.9		ug/L		98	80 - 120
1,3-Dichloropropane	ND		50.0	50.5		ug/L		101	77 - 122
1,4-Dichlorobenzene	ND		50.0	48.3		ug/L		97	80 - 120
2,2-Dichloropropane	ND		50.0	44.5		ug/L		89	75 - 131
2-Butanone (MEK)	ND		200	192		ug/L		96	58 - 135
2-Chlorotoluene	ND		50.0	49.8		ug/L		100	80 - 120
2-Hexanone	ND		200	203		ug/L		102	62 - 137
4-Chlorotoluene	ND		50.0	49.5		ug/L		99	80 - 120
4-Isopropyltoluene	ND		50.0	50.1		ug/L		100	80 - 122
4-Methyl-2-pentanone (MIBK)	ND		200	210		ug/L		105	66 - 135
Acetone	ND		200	180		ug/L		90	61 - 134
Benzene	ND		50.0	50.8		ug/L		102	80 - 120
Bromobenzene	ND		50.0	50.3		ug/L		101	80 - 120
Bromochloromethane	ND		50.0	48.1		ug/L		96	80 - 123
Bromodichloromethane	ND		50.0	51.2		ug/L		102	80 - 123
Bromoform	ND		50.0	48.2		ug/L		96	79 - 138
Bromomethane	ND		50.0	31.7		ug/L		63	29 - 148
Carbon disulfide	ND		50.0	49.3		ug/L		99	70 - 121
Carbon tetrachloride	ND		50.0	50.4		ug/L		101	79 - 127
Chlorobenzene	ND		50.0	50.8		ug/L		102	80 - 120
Chloroethane	ND		50.0	53.2		ug/L		106	56 - 141
Chloroform	ND		50.0	50.1		ug/L		100	80 - 120
Chloromethane	ND		50.0	53.1		ug/L		106	56 - 133
cis-1,2-Dichloroethene	ND		50.0	50.3		ug/L		101	80 - 120
cis-1,3-Dichloropropene	ND		50.0	50.6		ug/L		101	76 - 129
Dibromochloromethane	ND		50.0	51.4		ug/L		103	80 - 125
Dibromomethane	ND		50.0	45.7		ug/L		91	80 - 120
Dichlorodifluoromethane	ND		50.0	51.1		ug/L		102	47 - 135
Ethylbenzene	1.5		50.0	53.4		ug/L		104	80 - 120
Hexachlorobutadiene	ND		50.0	46.9		ug/L		94	73 - 128
Isopropylbenzene	1.2		50.0	52.1		ug/L		102	78 - 122
Methylene Chloride	ND		50.0	49.1		ug/L		98	78 - 120
m-Xylene & p-Xylene	ND		50.0	48.9		ug/L		98	80 - 120
Naphthalene	4.8		50.0	46.4		ug/L		83	60 - 124
n-Butylbenzene	ND		50.0	48.9		ug/L		98	59 - 140
N-Propylbenzene	0.51	J	50.0	52.3		ug/L		103	80 - 123
o-Xylene	ND		50.0	51.2		ug/L		102	80 - 120
sec-Butylbenzene	5.0		50.0	54.8		ug/L		100	80 - 123
Styrene	ND		50.0	52.1		ug/L		104	80 - 120
tert-Butylbenzene	0.84	J	50.0	50.9		ug/L		100	80 - 120
Tetrachloroethene	ND		50.0	51.2		ug/L		102	80 - 121
Toluene	ND		50.0	51.1		ug/L		102	80 - 120
trans-1,2-Dichloroethene	ND		50.0	51.1		ug/L		102	79 - 121
trans-1,3-Dichloropropene	ND		50.0	48.4		ug/L		97	80 - 123

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

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

Lab Sample ID: 280-198180-A-2 MS

Matrix: Water

Analysis Batch: 672950

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Trichloroethene	0.45	J	50.0	46.4		ug/L		92	80 - 120
Trichlorofluoromethane	ND		50.0	50.0		ug/L		100	54 - 144
Vinyl chloride	ND		50.0	53.3		ug/L		107	67 - 127
Surrogate	MS %Recovery	MS Qualifier	Limits						
1,2-Dichloroethane-d4 (Surr)	99		70 - 127						
4-Bromofluorobenzene (Surr)	101		78 - 120						
Dibromofluoromethane (Surr)	99		77 - 120						
Toluene-d8 (Surr)	99		80 - 125						

Lab Sample ID: 280-198180-A-2 MSD

Matrix: Water

Analysis Batch: 672950

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		50.0	52.5		ug/L		105	80 - 124	2	20
1,1,1-Trichloroethane	ND		50.0	53.2		ug/L		106	80 - 123	2	20
1,1,2,2-Tetrachloroethane	ND		50.0	56.3		ug/L		113	74 - 123	3	20
1,1,2-Trichloroethane	ND		50.0	51.6		ug/L		103	80 - 120	1	20
1,1-Dichloroethane	ND		50.0	52.4		ug/L		105	78 - 121	3	20
1,1-Dichloroethene	ND		50.0	50.9		ug/L		102	77 - 121	2	21
1,1-Dichloropropene	ND		50.0	52.1		ug/L		104	77 - 123	1	20
1,2,3-Trichlorobenzene	ND		50.0	44.9		ug/L		90	65 - 129	2	20
1,2,3-Trichloropropane	ND		50.0	49.4		ug/L		99	80 - 120	2	20
1,2,4-Trichlorobenzene	ND		50.0	44.4		ug/L		89	74 - 126	4	20
1,2,4-Trimethylbenzene	ND		50.0	49.9		ug/L		100	79 - 124	0	20
1,2-Dibromo-3-Chloropropane	ND		50.0	49.2		ug/L		98	73 - 128	5	21
1,2-Dibromoethane	ND		50.0	48.9		ug/L		98	80 - 120	2	20
1,2-Dichlorobenzene	ND		50.0	47.7		ug/L		95	80 - 120	0	20
1,2-Dichloroethane	ND		50.0	50.1		ug/L		100	71 - 121	3	20
1,2-Dichloropropane	ND		50.0	51.7		ug/L		103	78 - 120	2	20
1,3,5-Trimethylbenzene	ND		50.0	50.9		ug/L		102	80 - 122	0	20
1,3-Dichlorobenzene	ND		50.0	49.6		ug/L		99	80 - 120	2	20
1,3-Dichloropropane	ND		50.0	50.0		ug/L		100	77 - 122	1	20
1,4-Dichlorobenzene	ND		50.0	48.4		ug/L		97	80 - 120	0	20
2,2-Dichloropropane	ND		50.0	45.7		ug/L		91	75 - 131	3	22
2-Butanone (MEK)	ND		200	198		ug/L		99	58 - 135	3	20
2-Chlorotoluene	ND		50.0	50.0		ug/L		100	80 - 120	1	20
2-Hexanone	ND		200	202		ug/L		101	62 - 137	1	21
4-Chlorotoluene	ND		50.0	50.2		ug/L		100	80 - 120	1	20
4-Isopropyltoluene	ND		50.0	49.3		ug/L		99	80 - 122	2	20
4-Methyl-2-pentanone (MIBK)	ND		200	217		ug/L		109	66 - 135	3	20
Acetone	ND		200	190		ug/L		95	61 - 134	5	21
Benzene	ND		50.0	52.8		ug/L		106	80 - 120	4	20
Bromobenzene	ND		50.0	50.7		ug/L		101	80 - 120	1	20
Bromochloromethane	ND		50.0	50.2		ug/L		100	80 - 123	4	20
Bromodichloromethane	ND		50.0	53.6		ug/L		107	80 - 123	5	20
Bromoform	ND		50.0	49.4		ug/L		99	79 - 138	2	20

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

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

Lab Sample ID: 280-198180-A-2 MSD

Matrix: Water

Analysis Batch: 672950

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bromomethane	ND		50.0	39.3		ug/L		79	29 - 148	21	40
Carbon disulfide	ND		50.0	51.1		ug/L		102	70 - 121	4	20
Carbon tetrachloride	ND		50.0	52.2		ug/L		104	79 - 127	3	20
Chlorobenzene	ND		50.0	50.7		ug/L		101	80 - 120	0	20
Chloroethane	ND		50.0	55.7		ug/L		111	56 - 141	5	30
Chloroform	ND		50.0	51.5		ug/L		103	80 - 120	3	20
Chloromethane	ND		50.0	53.2		ug/L		106	56 - 133	0	20
cis-1,2-Dichloroethene	ND		50.0	50.8		ug/L		102	80 - 120	1	20
cis-1,3-Dichloropropene	ND		50.0	50.3		ug/L		101	76 - 129	1	20
Dibromochloromethane	ND		50.0	51.3		ug/L		103	80 - 125	0	20
Dibromomethane	ND		50.0	47.6		ug/L		95	80 - 120	4	20
Dichlorodifluoromethane	ND		50.0	53.0		ug/L		106	47 - 135	4	21
Ethylbenzene	1.5		50.0	51.5		ug/L		100	80 - 120	3	20
Hexachlorobutadiene	ND		50.0	47.8		ug/L		96	73 - 128	2	20
Isopropylbenzene	1.2		50.0	51.6		ug/L		101	78 - 122	1	20
Methylene Chloride	ND		50.0	50.0		ug/L		100	78 - 120	2	20
m-Xylene & p-Xylene	ND		50.0	48.5		ug/L		97	80 - 120	1	20
Naphthalene	4.8		50.0	48.0		ug/L		86	60 - 124	3	21
n-Butylbenzene	ND		50.0	49.2		ug/L		98	59 - 140	1	20
N-Propylbenzene	0.51	J	50.0	50.5		ug/L		100	80 - 123	3	20
o-Xylene	ND		50.0	50.7		ug/L		101	80 - 120	1	20
sec-Butylbenzene	5.0		50.0	53.5		ug/L		97	80 - 123	3	20
Styrene	ND		50.0	51.2		ug/L		102	80 - 120	2	20
tert-Butylbenzene	0.84	J	50.0	50.3		ug/L		99	80 - 120	1	20
Tetrachloroethene	ND		50.0	51.0		ug/L		102	80 - 121	0	20
Toluene	ND		50.0	51.7		ug/L		103	80 - 120	1	20
trans-1,2-Dichloroethene	ND		50.0	51.0		ug/L		102	79 - 121	0	20
trans-1,3-Dichloropropene	ND		50.0	50.6		ug/L		101	80 - 123	4	20
Trichloroethene	0.45	J	50.0	45.0		ug/L		89	80 - 120	3	20
Trichlorofluoromethane	ND		50.0	52.1		ug/L		104	54 - 144	4	28
Vinyl chloride	ND		50.0	56.2		ug/L		112	67 - 127	5	25

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102		70 - 127
4-Bromofluorobenzene (Surr)	100		78 - 120
Dibromofluoromethane (Surr)	101		77 - 120
Toluene-d8 (Surr)	98		80 - 125

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 280-671652/1-A

Matrix: Water

Analysis Batch: 671904

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 671652

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.40	ug/L		10/20/24 11:32	10/22/24 01:13	1
Arsenic	ND		5.0	0.50	ug/L		10/20/24 11:32	10/22/24 01:13	1
Lead	ND		1.0	0.23	ug/L		10/20/24 11:32	10/22/24 01:13	1
Nickel	ND		3.0	0.83	ug/L		10/20/24 11:32	10/22/24 01:13	1

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 280-671652/1-A

Matrix: Water

Analysis Batch: 671904

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 671652

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.570	J	3.0	0.38	ug/L		10/20/24 11:32	10/22/24 01:13	1
Selenium	ND		5.0	1.0	ug/L		10/20/24 11:32	10/22/24 01:13	1
Beryllium	ND		1.0	0.30	ug/L		10/20/24 11:32	10/22/24 01:13	1
Cadmium	ND		1.0	0.19	ug/L		10/20/24 11:32	10/22/24 01:13	1
Chromium	ND		3.0	0.50	ug/L		10/20/24 11:32	10/22/24 01:13	1
Cobalt	ND		1.0	0.33	ug/L		10/20/24 11:32	10/22/24 01:13	1
Copper	ND		2.0	0.71	ug/L		10/20/24 11:32	10/22/24 01:13	1
Silver	ND		1.0	0.045	ug/L		10/20/24 11:32	10/22/24 01:13	1
Thallium	ND		1.0	0.21	ug/L		10/20/24 11:32	10/22/24 01:13	1
Vanadium	ND		5.0	1.1	ug/L		10/20/24 11:32	10/22/24 01:13	1
Zinc	ND		10	2.0	ug/L		10/20/24 11:32	10/22/24 01:13	1

Lab Sample ID: LCS 280-671652/2-A

Matrix: Water

Analysis Batch: 671904

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 671652

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	40.0	40.6		ug/L		102	85 - 115
Arsenic	40.0	41.1		ug/L		103	89 - 111
Lead	40.0	40.7		ug/L		102	88 - 115
Nickel	40.0	41.0		ug/L		103	86 - 115
Barium	40.0	42.2		ug/L		106	89 - 115
Selenium	40.0	41.6		ug/L		104	85 - 114
Beryllium	40.0	38.9		ug/L		97	85 - 115
Cadmium	40.0	42.5		ug/L		106	89 - 111
Chromium	40.0	41.2		ug/L		103	86 - 115
Cobalt	40.0	41.2		ug/L		103	92 - 115
Copper	40.0	42.4		ug/L		106	90 - 115
Silver	40.0	42.1		ug/L		105	90 - 114
Thallium	40.0	40.2		ug/L		101	86 - 115
Vanadium	40.0	41.3		ug/L		103	90 - 115
Zinc	40.0	41.9		ug/L		105	88 - 115

Lab Sample ID: 140-39010-G-10-B MS

Matrix: Water

Analysis Batch: 671904

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 671652

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	39		40.0	76.5		ug/L		95	85 - 115
Arsenic	26		40.0	66.9		ug/L		103	79 - 120
Lead	30		40.0	72.1		ug/L		104	88 - 115
Nickel	55		40.0	95.9		ug/L		103	86 - 115
Barium	1900	B	40.0	2030	4	ug/L		276	89 - 115
Selenium	17		40.0	56.5		ug/L		98	85 - 114
Beryllium	1.1		40.0	39.6		ug/L		96	85 - 115
Cadmium	2.8		40.0	46.9		ug/L		110	89 - 111
Chromium	40		40.0	81.5		ug/L		104	86 - 115
Cobalt	14		40.0	55.5		ug/L		104	92 - 115
Copper	450		40.0	501	4	ug/L		123	90 - 115

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: 140-39010-G-10-B MS

Matrix: Water

Analysis Batch: 671904

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 671652

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	0.57	J	40.0	41.9		ug/L		103	70 - 130
Thallium	2.1		40.0	41.9		ug/L		100	86 - 115
Vanadium	50		40.0	92.4		ug/L		105	90 - 115

Lab Sample ID: 140-39010-G-10-B MS ^10

Matrix: Water

Analysis Batch: 672074

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 671652

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Zinc	9200		40.0	9080	4	ug/L		-307	88 - 115

Lab Sample ID: 140-39010-G-10-C MSD

Matrix: Water

Analysis Batch: 671904

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 671652

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Antimony	39		40.0	73.2		ug/L		87	85 - 115	4	20
Arsenic	26		40.0	63.9		ug/L		96	79 - 120	5	20
Lead	30		40.0	70.5		ug/L		100	88 - 115	2	20
Nickel	55		40.0	98.1		ug/L		109	86 - 115	2	20
Barium	1900	B	40.0	1950	4	ug/L		90	89 - 115	4	20
Selenium	17		40.0	56.8		ug/L		98	85 - 114	0	20
Beryllium	1.1		40.0	39.6		ug/L		96	85 - 115	0	20
Cadmium	2.8		40.0	44.0		ug/L		103	89 - 111	6	20
Chromium	40		40.0	81.1		ug/L		103	86 - 115	0	20
Cobalt	14		40.0	54.0		ug/L		100	92 - 115	3	20
Copper	450		40.0	484	4	ug/L		81	90 - 115	3	20
Silver	0.57	J	40.0	41.1		ug/L		101	70 - 130	2	20
Thallium	2.1		40.0	42.2		ug/L		100	86 - 115	1	20
Vanadium	50		40.0	91.7		ug/L		103	90 - 115	1	20

Lab Sample ID: 140-39010-G-10-C MSD ^10

Matrix: Water

Analysis Batch: 672074

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 671652

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Zinc	9200		40.0	8860	4	ug/L		-848	88 - 115	2	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 280-672999/47

Matrix: Water

Analysis Batch: 672999

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0	1.0	mg/L			10/31/24 02:57	1
Sulfate	ND		5.0	1.0	mg/L			10/31/24 02:57	1

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 280-672999/6

Matrix: Water

Analysis Batch: 672999

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0	1.0	mg/L			10/30/24 16:24	1
Sulfate	ND		5.0	1.0	mg/L			10/30/24 16:24	1

Lab Sample ID: LCS 280-672999/4

Matrix: Water

Analysis Batch: 672999

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	100	98.7		mg/L		99	90 - 110
Sulfate	100	99.8		mg/L		100	90 - 110

Lab Sample ID: LCS 280-672999/45

Matrix: Water

Analysis Batch: 672999

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	100	101		mg/L		101	90 - 110
Sulfate	100	102		mg/L		102	90 - 110

Lab Sample ID: LCSD 280-672999/46

Matrix: Water

Analysis Batch: 672999

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	100	100		mg/L		100	90 - 110	3	10
Sulfate	100	102		mg/L		102	90 - 110	2	10

Lab Sample ID: LCSD 280-672999/5

Matrix: Water

Analysis Batch: 672999

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	100	98.9		mg/L		99	90 - 110	0	10
Sulfate	100	99.6		mg/L		100	90 - 110	0	10

Lab Sample ID: MRL 280-672999/3

Matrix: Water

Analysis Batch: 672999

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	5.00	4.93		mg/L		99	50 - 150
Sulfate	5.00	5.03		mg/L		101	50 - 150

Lab Sample ID: 280-198319-2 MS

Matrix: Water

Analysis Batch: 672999

Client Sample ID: MW-3D

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	49		50.0	99.5		mg/L		101	80 - 120
Sulfate	3.3	J	50.0	54.4		mg/L		102	80 - 120

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 280-198319-2 MSD

Matrix: Water

Analysis Batch: 672999

Client Sample ID: MW-3D

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	49		50.0	99.9		mg/L		102	80 - 120	0	20
Sulfate	3.3	J	50.0	55.0		mg/L		103	80 - 120	1	20

Lab Sample ID: 280-198319-2 DU

Matrix: Water

Analysis Batch: 672999

Client Sample ID: MW-3D

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	49		49.0		mg/L		0.2	15
Sulfate	3.3	J	3.26	J	mg/L		1	15

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-672781/18

Matrix: Water

Analysis Batch: 672781

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.10	0.029	mg/L			10/28/24 15:42	1

Lab Sample ID: MB 280-672781/56

Matrix: Water

Analysis Batch: 672781

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.10	0.029	mg/L			10/28/24 17:05	1

Lab Sample ID: LCS 280-672781/19

Matrix: Water

Analysis Batch: 672781

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	2.51	2.52		mg/L		101	90 - 110

Lab Sample ID: LCS 280-672781/57

Matrix: Water

Analysis Batch: 672781

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	2.51	2.63		mg/L		105	90 - 110

Lab Sample ID: 280-198298-E-3 MS

Matrix: Water

Analysis Batch: 672781

Client Sample ID: Matrix Spike

Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	0.12		1.00	1.08		mg/L		96	90 - 110

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: 280-198298-E-3 MSD

Matrix: Water

Analysis Batch: 672781

Client Sample ID: Matrix Spike Duplicate

Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ammonia	0.12		1.00	1.14		mg/L		102	90 - 110	5	10

Lab Sample ID: 280-198351-B-1 MS

Matrix: Water

Analysis Batch: 672781

Client Sample ID: Matrix Spike

Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Ammonia	1.4		1.00	2.38		mg/L		94	90 - 110		

Lab Sample ID: 280-198351-B-1 MSD

Matrix: Water

Analysis Batch: 672781

Client Sample ID: Matrix Spike Duplicate

Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ammonia	1.4		1.00	2.35		mg/L		91	90 - 110	2	10

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-672766/137

Matrix: Water

Analysis Batch: 672766

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	ND		0.10	0.044	mg/L			10/28/24 15:01	1

Lab Sample ID: MB 280-672766/96

Matrix: Water

Analysis Batch: 672766

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	ND		0.10	0.044	mg/L			10/28/24 14:09	1

Lab Sample ID: LCS 280-672766/138

Matrix: Water

Analysis Batch: 672766

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrate Nitrite as N	1.00	1.06		mg/L		106	90 - 110		

Lab Sample ID: LCS 280-672766/97

Matrix: Water

Analysis Batch: 672766

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrate Nitrite as N	1.00	1.08		mg/L		108	90 - 110		

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Method: 353.2 - Nitrogen, Nitrate-Nitrite (Continued)

Lab Sample ID: LCSD 280-672766/139

Matrix: Water

Analysis Batch: 672766

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate Nitrite as N	1.00	1.05		mg/L		105	90 - 110	NaN	10

Lab Sample ID: LCSD 280-672766/98

Matrix: Water

Analysis Batch: 672766

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate Nitrite as N	1.00	1.07		mg/L		107	90 - 110	1	10

Lab Sample ID: 280-198319-8 MS

Matrix: Water

Analysis Batch: 672766

Client Sample ID: MW-26

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate Nitrite as N	ND	F1 *1	2.00	2.52	F1	mg/L		126	90 - 110		

Lab Sample ID: 280-198319-8 MSD

Matrix: Water

Analysis Batch: 672766

Client Sample ID: MW-26

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate Nitrite as N	ND	F1 *1	2.00	2.51	F1	mg/L		126	90 - 110	0	10

Method: 410.4 - COD

Lab Sample ID: MB 280-672276/4

Matrix: Water

Analysis Batch: 672276

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		20	8.7	mg/L			10/24/24 09:06	1

Lab Sample ID: LCS 280-672276/3

Matrix: Water

Analysis Batch: 672276

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chemical Oxygen Demand	100	109		mg/L		109	90 - 110		

Lab Sample ID: 280-198077-D-1 MS

Matrix: Water

Analysis Batch: 672276

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chemical Oxygen Demand	21		50.0	70.3		mg/L		99	90 - 110		

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Method: 410.4 - COD (Continued)

Lab Sample ID: 280-198077-D-1 MSD

Matrix: Water

Analysis Batch: 672276

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chemical Oxygen Demand	21		50.0	67.7		mg/L		94	90 - 110	4	11

Lab Sample ID: MB 280-672827/10

Matrix: Water

Analysis Batch: 672827

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		20	8.7	mg/L			10/29/24 08:59	1

Lab Sample ID: LCS 280-672827/9

Matrix: Water

Analysis Batch: 672827

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	100	106		mg/L		106	90 - 110

Lab Sample ID: 280-198198-B-2 MS

Matrix: Water

Analysis Batch: 672827

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	8.7	J	50.0	55.1		mg/L		110	90 - 110

Lab Sample ID: 280-198198-B-2 MSD

Matrix: Water

Analysis Batch: 672827

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chemical Oxygen Demand	8.7	J	50.0	55.1		mg/L		110	90 - 110	0	11

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-672502/34

Matrix: Water

Analysis Batch: 672502

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		10	3.1	mg/L			10/24/24 21:16	1

Lab Sample ID: 280-198289-C-1 DU

Matrix: Water

Analysis Batch: 672502

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	220		225		mg/L		0.2	20

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

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

Lab Sample ID: MB 280-672132/1
Matrix: Water
Analysis Batch: 672132

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	4.7	mg/L			10/23/24 09:51	1

Lab Sample ID: LCS 280-672132/2
Matrix: Water
Analysis Batch: 672132

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	504	499		mg/L		99	88 - 114

Lab Sample ID: 280-198319-5 DU
Matrix: Water
Analysis Batch: 672132

Client Sample ID: MW-15
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	320		317		mg/L		0.6	10

Lab Sample ID: MB 280-672283/1
Matrix: Water
Analysis Batch: 672283

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	4.7	mg/L			10/24/24 09:30	1

Lab Sample ID: LCS 280-672283/2
Matrix: Water
Analysis Batch: 672283

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	504	497		mg/L		99	88 - 114

Lab Sample ID: 280-198298-D-2 DU
Matrix: Water
Analysis Batch: 672283

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	230		224		mg/L		0.9	10

Lab Sample ID: 280-198357-C-18 DU
Matrix: Water
Analysis Batch: 672283

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	730		721		mg/L		0.6	10

QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 280-672212/1
Matrix: Water
Analysis Batch: 672212

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	1.1	mg/L			10/23/24 15:23	1

Lab Sample ID: LCS 280-672212/2
Matrix: Water
Analysis Batch: 672212

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	503	480		mg/L		95	79 - 114

Lab Sample ID: 280-198308-A-11 DU
Matrix: Water
Analysis Batch: 672212

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	2.8	J	2.80	J	mg/L		0	10

Lab Sample ID: MB 280-672329/1
Matrix: Water
Analysis Batch: 672329

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	1.1	mg/L			10/24/24 12:48	1

Lab Sample ID: LCS 280-672329/2
Matrix: Water
Analysis Batch: 672329

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	503	515		mg/L		102	79 - 114

Lab Sample ID: 280-198319-7 DU
Matrix: Water
Analysis Batch: 672329

Client Sample ID: MW-24
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	1.2	J	1.20	J	mg/L		0	10

Method: SM 5310B - Organic Carbon, Total (TOC)

Lab Sample ID: MB 280-672902/35
Matrix: Water
Analysis Batch: 672902

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TOC Result 1	ND		1.0	0.35	mg/L			10/28/24 22:19	1
TOC Result 2	ND		1.0	0.35	mg/L			10/28/24 22:19	1
TOC Result 3	ND		1.0	0.35	mg/L			10/28/24 22:19	1
TOC Result 4	ND		1.0	0.35	mg/L			10/28/24 22:19	1
Total Organic Carbon - Quad	ND		1.0	0.35	mg/L			10/28/24 22:19	1

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Method: SM 5310B - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: LCS 280-672902/34

Matrix: Water

Analysis Batch: 672902

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
TOC Result 1	25.0	26.3		mg/L		105	88 - 112
TOC Result 2	25.0	26.5		mg/L		106	88 - 112
TOC Result 3	25.0	26.2		mg/L		105	88 - 112
TOC Result 4	25.0	25.4		mg/L		102	88 - 112
Total Organic Carbon - Quad	25.0	26.1		mg/L		104	88 - 112

Lab Sample ID: 280-198325-E-1 MS

Matrix: Water

Analysis Batch: 672902

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
TOC Result 1	0.95	J	25.0	27.2		mg/L		105	88 - 112
TOC Result 2	0.95	J	25.0	26.4		mg/L		102	88 - 112
TOC Result 3	0.91	J	25.0	25.8		mg/L		99	88 - 112
TOC Result 4	0.95	J	25.0	25.6		mg/L		99	88 - 112
Total Organic Carbon - Quad	0.94	J	25.0	26.2		mg/L		101	88 - 112

Lab Sample ID: 280-198325-E-1 MSD

Matrix: Water

Analysis Batch: 672902

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
TOC Result 1	0.95	J	25.0	26.9		mg/L		104	88 - 112	1	15
TOC Result 2	0.95	J	25.0	26.4		mg/L		102	88 - 112	0	15
TOC Result 3	0.91	J	25.0	25.9		mg/L		100	88 - 112	1	15
TOC Result 4	0.95	J	25.0	25.8		mg/L		100	88 - 112	1	15
Total Organic Carbon - Quad	0.94	J	25.0	26.3		mg/L		101	88 - 112	0	15

QC Association Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

GC/MS VOA

Analysis Batch: 494969

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198319-3	PHILLIPS	Total/NA	Water	524.2	
MB 570-494969/7	Method Blank	Total/NA	Water	524.2	
LCS 570-494969/1003	Lab Control Sample	Total/NA	Water	524.2	
LCSD 570-494969/4	Lab Control Sample Dup	Total/NA	Water	524.2	
570-203315-E-1 MS	Matrix Spike	Total/NA	Water	524.2	
570-203315-E-1 MSD	Matrix Spike Duplicate	Total/NA	Water	524.2	

Analysis Batch: 672790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198319-1	MW-1D	Total/NA	Water	8260B	
280-198319-2	MW-3D	Total/NA	Water	8260B	
MB 280-672790/9	Method Blank	Total/NA	Water	8260B	
LCS 280-672790/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-672790/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 672950

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198319-4	P-8	Total/NA	Water	8260B	
280-198319-5	MW-15	Total/NA	Water	8260B	
280-198319-6	MW-23	Total/NA	Water	8260B	
280-198319-7	MW-24	Total/NA	Water	8260B	
280-198319-8	MW-26	Total/NA	Water	8260B	
280-198319-9	DUPLICATE	Total/NA	Water	8260B	
MB 280-672950/9	Method Blank	Total/NA	Water	8260B	
LCS 280-672950/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-672950/5	Lab Control Sample Dup	Total/NA	Water	8260B	
280-198180-A-2 MS	Matrix Spike	Total/NA	Water	8260B	
280-198180-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Metals

Prep Batch: 671652

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198319-1	MW-1D	Total/NA	Water	200.8	
280-198319-2	MW-3D	Total/NA	Water	200.8	
280-198319-3	PHILLIPS	Total/NA	Water	200.8	
280-198319-4	P-8	Total/NA	Water	200.8	
280-198319-5	MW-15	Total/NA	Water	200.8	
280-198319-6	MW-23	Total/NA	Water	200.8	
280-198319-7	MW-24	Total/NA	Water	200.8	
280-198319-8	MW-26	Total/NA	Water	200.8	
280-198319-9	DUPLICATE	Total/NA	Water	200.8	
MB 280-671652/1-A	Method Blank	Total/NA	Water	200.8	
LCS 280-671652/2-A	Lab Control Sample	Total/NA	Water	200.8	
140-39010-G-10-B MS	Matrix Spike	Total/NA	Water	200.8	
140-39010-G-10-B MS ^10	Matrix Spike	Total/NA	Water	200.8	
140-39010-G-10-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.8	
140-39010-G-10-C MSD ^10	Matrix Spike Duplicate	Total/NA	Water	200.8	

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QC Association Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Metals

Analysis Batch: 671904

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198319-1	MW-1D	Total/NA	Water	200.8	671652
280-198319-2	MW-3D	Total/NA	Water	200.8	671652
280-198319-3	PHILLIPS	Total/NA	Water	200.8	671652
280-198319-4	P-8	Total/NA	Water	200.8	671652
280-198319-5	MW-15	Total/NA	Water	200.8	671652
280-198319-6	MW-23	Total/NA	Water	200.8	671652
280-198319-7	MW-24	Total/NA	Water	200.8	671652
280-198319-8	MW-26	Total/NA	Water	200.8	671652
280-198319-9	DUPLICATE	Total/NA	Water	200.8	671652
MB 280-671652/1-A	Method Blank	Total/NA	Water	200.8	671652
LCS 280-671652/2-A	Lab Control Sample	Total/NA	Water	200.8	671652
140-39010-G-10-B MS	Matrix Spike	Total/NA	Water	200.8	671652
140-39010-G-10-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.8	671652

Analysis Batch: 672074

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-39010-G-10-B MS ^10	Matrix Spike	Total/NA	Water	200.8	671652
140-39010-G-10-C MSD ^10	Matrix Spike Duplicate	Total/NA	Water	200.8	671652

General Chemistry

Analysis Batch: 672132

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198319-1	MW-1D	Total/NA	Water	SM 2540C	
280-198319-2	MW-3D	Total/NA	Water	SM 2540C	
280-198319-3	PHILLIPS	Total/NA	Water	SM 2540C	
280-198319-4	P-8	Total/NA	Water	SM 2540C	
280-198319-5	MW-15	Total/NA	Water	SM 2540C	
MB 280-672132/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-672132/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-198319-5 DU	MW-15	Total/NA	Water	SM 2540C	

Analysis Batch: 672212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198319-1	MW-1D	Total/NA	Water	SM 2540D	
280-198319-2	MW-3D	Total/NA	Water	SM 2540D	
MB 280-672212/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 280-672212/2	Lab Control Sample	Total/NA	Water	SM 2540D	
280-198308-A-11 DU	Duplicate	Total/NA	Water	SM 2540D	

Analysis Batch: 672276

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198319-1	MW-1D	Total/NA	Water	410.4	
280-198319-2	MW-3D	Total/NA	Water	410.4	
280-198319-3	PHILLIPS	Total/NA	Water	410.4	
280-198319-4	P-8	Total/NA	Water	410.4	
280-198319-5	MW-15	Total/NA	Water	410.4	
280-198319-6	MW-23	Total/NA	Water	410.4	
MB 280-672276/4	Method Blank	Total/NA	Water	410.4	
LCS 280-672276/3	Lab Control Sample	Total/NA	Water	410.4	
280-198077-D-1 MS	Matrix Spike	Total/NA	Water	410.4	

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QC Association Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

General Chemistry (Continued)

Analysis Batch: 672276 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198077-D-1 MSD	Matrix Spike Duplicate	Total/NA	Water	410.4	

Analysis Batch: 672283

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198319-6	MW-23	Total/NA	Water	SM 2540C	
280-198319-7	MW-24	Total/NA	Water	SM 2540C	
280-198319-8	MW-26	Total/NA	Water	SM 2540C	
280-198319-9	DUPLICATE	Total/NA	Water	SM 2540C	
MB 280-672283/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-672283/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-198298-D-2 DU	Duplicate	Total/NA	Water	SM 2540C	
280-198357-C-18 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 672329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198319-3	PHILLIPS	Total/NA	Water	SM 2540D	
280-198319-4	P-8	Total/NA	Water	SM 2540D	
280-198319-5	MW-15	Total/NA	Water	SM 2540D	
280-198319-6	MW-23	Total/NA	Water	SM 2540D	
280-198319-7	MW-24	Total/NA	Water	SM 2540D	
280-198319-8	MW-26	Total/NA	Water	SM 2540D	
280-198319-9	DUPLICATE	Total/NA	Water	SM 2540D	
MB 280-672329/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 280-672329/2	Lab Control Sample	Total/NA	Water	SM 2540D	
280-198319-7 DU	MW-24	Total/NA	Water	SM 2540D	

Analysis Batch: 672502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198319-1	MW-1D	Total/NA	Water	SM 2320B	
280-198319-2	MW-3D	Total/NA	Water	SM 2320B	
280-198319-3	PHILLIPS	Total/NA	Water	SM 2320B	
280-198319-4	P-8	Total/NA	Water	SM 2320B	
280-198319-5	MW-15	Total/NA	Water	SM 2320B	
280-198319-6	MW-23	Total/NA	Water	SM 2320B	
280-198319-7	MW-24	Total/NA	Water	SM 2320B	
280-198319-8	MW-26	Total/NA	Water	SM 2320B	
280-198319-9	DUPLICATE	Total/NA	Water	SM 2320B	
MB 280-672502/34	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-672502/32	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 280-672502/33	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
280-198289-C-1 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 672766

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198319-1	MW-1D	Total/NA	Water	353.2	
280-198319-2	MW-3D	Total/NA	Water	353.2	
280-198319-3	PHILLIPS	Total/NA	Water	353.2	
280-198319-4	P-8	Total/NA	Water	353.2	
280-198319-5	MW-15	Total/NA	Water	353.2	
280-198319-6	MW-23	Total/NA	Water	353.2	
280-198319-7	MW-24	Total/NA	Water	353.2	

Eurofins Denver

QC Association Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

General Chemistry (Continued)

Analysis Batch: 672766 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198319-8	MW-26	Total/NA	Water	353.2	
280-198319-9	DUPLICATE	Total/NA	Water	353.2	
MB 280-672766/137	Method Blank	Total/NA	Water	353.2	
MB 280-672766/96	Method Blank	Total/NA	Water	353.2	
LCS 280-672766/138	Lab Control Sample	Total/NA	Water	353.2	
LCS 280-672766/97	Lab Control Sample	Total/NA	Water	353.2	
LCSD 280-672766/139	Lab Control Sample Dup	Total/NA	Water	353.2	
LCSD 280-672766/98	Lab Control Sample Dup	Total/NA	Water	353.2	
280-198319-8 MS	MW-26	Total/NA	Water	353.2	
280-198319-8 MSD	MW-26	Total/NA	Water	353.2	

Analysis Batch: 672781

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198319-1	MW-1D	Total/NA	Water	350.1	
280-198319-2	MW-3D	Total/NA	Water	350.1	
280-198319-3	PHILLIPS	Total/NA	Water	350.1	
280-198319-4	P-8	Total/NA	Water	350.1	
280-198319-5	MW-15	Total/NA	Water	350.1	
280-198319-6	MW-23	Total/NA	Water	350.1	
280-198319-7	MW-24	Total/NA	Water	350.1	
280-198319-8	MW-26	Total/NA	Water	350.1	
280-198319-9	DUPLICATE	Total/NA	Water	350.1	
MB 280-672781/18	Method Blank	Total/NA	Water	350.1	
MB 280-672781/56	Method Blank	Total/NA	Water	350.1	
LCS 280-672781/19	Lab Control Sample	Total/NA	Water	350.1	
LCS 280-672781/57	Lab Control Sample	Total/NA	Water	350.1	
280-198298-E-3 MS	Matrix Spike	Dissolved	Water	350.1	
280-198298-E-3 MSD	Matrix Spike Duplicate	Dissolved	Water	350.1	
280-198351-B-1 MS	Matrix Spike	Dissolved	Water	350.1	
280-198351-B-1 MSD	Matrix Spike Duplicate	Dissolved	Water	350.1	

Analysis Batch: 672827

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198319-7	MW-24	Total/NA	Water	410.4	
280-198319-8	MW-26	Total/NA	Water	410.4	
280-198319-9	DUPLICATE	Total/NA	Water	410.4	
MB 280-672827/10	Method Blank	Total/NA	Water	410.4	
LCS 280-672827/9	Lab Control Sample	Total/NA	Water	410.4	
280-198198-B-2 MS	Matrix Spike	Total/NA	Water	410.4	
280-198198-B-2 MSD	Matrix Spike Duplicate	Total/NA	Water	410.4	

Analysis Batch: 672902

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198319-1	MW-1D	Total/NA	Water	SM 5310B	
280-198319-2	MW-3D	Total/NA	Water	SM 5310B	
280-198319-3	PHILLIPS	Total/NA	Water	SM 5310B	
280-198319-4	P-8	Total/NA	Water	SM 5310B	
280-198319-5	MW-15	Total/NA	Water	SM 5310B	
280-198319-6	MW-23	Total/NA	Water	SM 5310B	
280-198319-7	MW-24	Total/NA	Water	SM 5310B	
280-198319-8	MW-26	Total/NA	Water	SM 5310B	

Eurofins Denver

QC Association Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

General Chemistry (Continued)

Analysis Batch: 672902 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198319-9	DUPLICATE	Total/NA	Water	SM 5310B	
MB 280-672902/35	Method Blank	Total/NA	Water	SM 5310B	
LCS 280-672902/34	Lab Control Sample	Total/NA	Water	SM 5310B	
280-198325-E-1 MS	Matrix Spike	Total/NA	Water	SM 5310B	
280-198325-E-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 5310B	

Analysis Batch: 672999

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198319-1	MW-1D	Total/NA	Water	300.0	
280-198319-2	MW-3D	Total/NA	Water	300.0	
280-198319-3	PHILLIPS	Total/NA	Water	300.0	
280-198319-4	P-8	Total/NA	Water	300.0	
280-198319-5	MW-15	Total/NA	Water	300.0	
280-198319-6	MW-23	Total/NA	Water	300.0	
280-198319-7	MW-24	Total/NA	Water	300.0	
280-198319-8	MW-26	Total/NA	Water	300.0	
280-198319-9	DUPLICATE	Total/NA	Water	300.0	
MB 280-672999/47	Method Blank	Total/NA	Water	300.0	
MB 280-672999/6	Method Blank	Total/NA	Water	300.0	
LCS 280-672999/4	Lab Control Sample	Total/NA	Water	300.0	
LCS 280-672999/45	Lab Control Sample	Total/NA	Water	300.0	
LCSD 280-672999/46	Lab Control Sample Dup	Total/NA	Water	300.0	
LCSD 280-672999/5	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 280-672999/3	Lab Control Sample	Total/NA	Water	300.0	
280-198319-2 MS	MW-3D	Total/NA	Water	300.0	
280-198319-2 MSD	MW-3D	Total/NA	Water	300.0	
280-198319-2 DU	MW-3D	Total/NA	Water	300.0	

Lab Chronicle

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Client Sample ID: MW-1D

Date Collected: 10/16/24 16:25

Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	672790	10/29/24 12:13	TAW	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	671652	10/20/24 11:32	SMK	EET DEN
Total/NA	Analysis	200.8		1			671904	10/22/24 01:21	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	672999	10/31/24 01:40	IRC	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	672781	10/28/24 16:45	BCR	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	672766	10/28/24 14:22	AKF	EET DEN
Total/NA	Analysis	410.4		1	2 mL	2 mL	672276	10/24/24 09:06	MF	EET DEN
Total/NA	Analysis	SM 2320B		1			672502	10/24/24 22:38	EL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	672132	10/23/24 09:51	BRD	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	672212	10/23/24 15:23	BRD	EET DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	672902	10/29/24 00:10	GMW	EET DEN

Client Sample ID: MW-3D

Date Collected: 10/16/24 15:20

Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	672790	10/29/24 12:35	TAW	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	671652	10/20/24 11:32	SMK	EET DEN
Total/NA	Analysis	200.8		1			671904	10/22/24 01:24	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	672999	10/31/24 03:08	IRC	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	672781	10/28/24 16:47	BCR	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	672766	10/28/24 14:21	AKF	EET DEN
Total/NA	Analysis	410.4		1	2 mL	2 mL	672276	10/24/24 09:06	MF	EET DEN
Total/NA	Analysis	SM 2320B		1			672502	10/24/24 22:44	EL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	672132	10/23/24 09:51	BRD	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	672212	10/23/24 15:23	BRD	EET DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	672902	10/29/24 00:26	GMW	EET DEN

Client Sample ID: PHILLIPS

Date Collected: 10/17/24 09:45

Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	494969	10/24/24 10:51	N5PD	EET CAL 4
Total/NA	Prep	200.8			50 mL	50 mL	671652	10/20/24 11:32	SMK	EET DEN
Total/NA	Analysis	200.8		1			671904	10/22/24 01:28	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	672999	10/31/24 04:14	IRC	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	672781	10/28/24 16:49	BCR	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	672766	10/28/24 14:47	AKF	EET DEN
Total/NA	Analysis	410.4		1	2 mL	2 mL	672276	10/24/24 09:06	MF	EET DEN
Total/NA	Analysis	SM 2320B		1			672502	10/24/24 22:49	EL	EET DEN

Eurofins Denver

Lab Chronicle

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Client Sample ID: PHILLIPS

Lab Sample ID: 280-198319-3

Date Collected: 10/17/24 09:45

Matrix: Water

Date Received: 10/18/24 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	672132	10/23/24 09:51	BRD	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	672329	10/24/24 12:48	BRD	EET DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	672902	10/29/24 00:42	GMW	EET DEN

Client Sample ID: P-8

Lab Sample ID: 280-198319-4

Date Collected: 10/17/24 11:02

Matrix: Water

Date Received: 10/18/24 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	672950	10/30/24 13:15	TAW	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	671652	10/20/24 11:32	SMK	EET DEN
Total/NA	Analysis	200.8		1			671904	10/22/24 01:31	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	672999	10/31/24 04:25	IRC	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	672781	10/28/24 17:17	BCR	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	672766	10/28/24 14:48	AKF	EET DEN
Total/NA	Analysis	410.4		1	2 mL	2 mL	672276	10/24/24 09:06	MF	EET DEN
Total/NA	Analysis	SM 2320B		1			672502	10/24/24 22:54	EL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	672132	10/23/24 09:51	BRD	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	672329	10/24/24 12:48	BRD	EET DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	672902	10/29/24 00:56	GMW	EET DEN

Client Sample ID: MW-15

Lab Sample ID: 280-198319-5

Date Collected: 10/17/24 12:14

Matrix: Water

Date Received: 10/18/24 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	672950	10/30/24 13:36	TAW	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	671652	10/20/24 11:32	SMK	EET DEN
Total/NA	Analysis	200.8		1			671904	10/22/24 01:35	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	672999	10/31/24 04:58	IRC	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	672781	10/28/24 17:19	BCR	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	672766	10/28/24 14:49	AKF	EET DEN
Total/NA	Analysis	410.4		1	2 mL	2 mL	672276	10/24/24 09:06	MF	EET DEN
Total/NA	Analysis	SM 2320B		1			672502	10/24/24 22:59	EL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	672132	10/23/24 09:51	BRD	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	672329	10/24/24 12:48	BRD	EET DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	672902	10/29/24 01:11	GMW	EET DEN

Lab Chronicle

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Client Sample ID: MW-23

Date Collected: 10/17/24 13:13

Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	672950	10/30/24 13:57	TAW	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	671652	10/20/24 11:32	SMK	EET DEN
Total/NA	Analysis	200.8		1			671904	10/22/24 01:38	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	672999	10/31/24 05:20	IRC	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	672781	10/28/24 17:22	BCR	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	672766	10/28/24 14:51	AKF	EET DEN
Total/NA	Analysis	410.4		1	2 mL	2 mL	672276	10/24/24 09:06	MF	EET DEN
Total/NA	Analysis	SM 2320B		1			672502	10/24/24 23:04	EL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	672283	10/24/24 09:30	BRD	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	672329	10/24/24 12:48	BRD	EET DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	672902	10/29/24 01:27	GMW	EET DEN

Client Sample ID: MW-24

Date Collected: 10/17/24 12:40

Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	672950	10/30/24 14:18	TAW	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	671652	10/20/24 11:32	SMK	EET DEN
Total/NA	Analysis	200.8		1			671904	10/22/24 01:42	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	672999	10/31/24 05:31	IRC	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	672781	10/28/24 17:24	BCR	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	672766	10/28/24 14:52	AKF	EET DEN
Total/NA	Analysis	410.4		1	2 mL	2 mL	672827	10/29/24 08:59	MF	EET DEN
Total/NA	Analysis	SM 2320B		1			672502	10/24/24 23:09	EL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	672283	10/24/24 09:30	BRD	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	672329	10/24/24 12:48	BRD	EET DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	672902	10/29/24 01:41	GMW	EET DEN

Client Sample ID: MW-26

Date Collected: 10/17/24 11:05

Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	672950	10/30/24 14:39	TAW	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	671652	10/20/24 11:32	SMK	EET DEN
Total/NA	Analysis	200.8		1			671904	10/22/24 01:46	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	672999	10/31/24 05:42	IRC	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	672781	10/28/24 17:26	BCR	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	672766	10/28/24 15:04	AKF	EET DEN
Total/NA	Analysis	410.4		1	2 mL	2 mL	672827	10/29/24 08:59	MF	EET DEN
Total/NA	Analysis	SM 2320B		1			672502	10/24/24 23:14	EL	EET DEN

Eurofins Denver

Lab Chronicle

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198319-1

Client Sample ID: MW-26

Date Collected: 10/17/24 11:05

Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	672283	10/24/24 09:30	BRD	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	672329	10/24/24 12:48	BRD	EET DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	672902	10/29/24 01:57	GMW	EET DEN

Client Sample ID: DUPLICATE

Date Collected: 10/17/24 00:00

Date Received: 10/18/24 09:05

Lab Sample ID: 280-198319-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	672950	10/30/24 15:00	TAW	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	671652	10/20/24 11:32	SMK	EET DEN
Total/NA	Analysis	200.8		1			671904	10/22/24 01:56	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	672999	10/31/24 05:53	IRC	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	672781	10/28/24 17:28	BCR	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	672766	10/28/24 15:08	AKF	EET DEN
Total/NA	Analysis	410.4		1	2 mL	2 mL	672827	10/29/24 08:59	MF	EET DEN
Total/NA	Analysis	SM 2320B		1			672502	10/24/24 23:20	EL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	672283	10/24/24 09:30	BRD	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	672329	10/24/24 12:48	BRD	EET DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	672902	10/29/24 02:13	GMW	EET DEN

Laboratory References:

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Eurofins Denver

4955 Yarrow Street

Arvada, CO 80002

Phone (303) 736-0100 Fax (303) 431-7171

Chain of Custody Record

Environment Testing
TestAmerica

Client Information		Sampler: <u>NR, NR</u>		Lab PM: Collins, Janice S		Carrier Tracking No(s):		COC No: 280-97584-22898.1			
Client Contact: <u>Geologic Associates</u>		Phone: <u>970-626-2282</u>		E-Mail: Janice.Collins@et.eurofinsus.com				Page: <u>1 of 1</u>			
Company: Valley Landfills, Inc. Republic Services				Analysis Requested						Job #:	
Address: 28972 Coffin Butte Road		Due Date Requested:		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) Bicarb Alk/Cl/ISO4/TDS 6010B- Dissolved Metals 200.8- Total Metals TSS 8260B- VOCs - All samples except Phillips 824.2 (Calciscence) - Sample Phillips only Ammonia, COD, TOC, NOX Total Number of containers				Preservation Codes:			
City: Corvallis		TAT Requested (days):						A - HCL M - Hexane			
State, Zip: OR, 97330		Compliance Project: ☐ Yes ☐ No						B - NaOH N - None			
Phone: 503-675-1335(Tel)		PO #:						C - Zn Acetate O - AsNaO2			
Email:		WO #:						D - Nitric Acid P - Na2O4S			
Project Name: Coffin Butte/Valley Landfills		Project #:						E - NaHSO4 Q - Na2SO3			
Site:		SSOW#:						F - MeOH R - Na2S2O3			
								G - Amchlor S - H2SO4			
								H - Ascorbic Acid T - TSP Dodecahydrate			
								I - Ice U - Acetone			
								J - DI Water V - MCAA			
								K - EDTA W - pH 4-5			
								L - EDA Z - other (specify)			
								Other:			
Sample Identification		Sample Date		Sample Time		Sample Type (C=comp, G=grab)		Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)		Special Instructions/Note:	
MW-1D		10/16/24		1625		G		W			
MW-3D		10/16/24		1520		G		W			
PHILLIPS		10/17/24		0945		G		W			
P-8		10/17/24		1102		G		W			
MW-15		10/17/24		1214		G		W			
MW-23		10/17/24		1313		G		W			
MW-24		10/17/24		1240		G		W			
MW-26		10/17/24		1105		G		W			
DUPLICATE		10/17/24		-		G		W			
QCAB		10/17/24		-		G		W			
QCTB		10/17/24		-		G		W			
Possible Hazard Identification										Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological										☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months	
Deliverable Requested: I, II, III, IV, Other (specify)										Special Instructions/QC Requirements:	
Empty Kit Relinquished by:				Date:		Time:		Method of Shipment:			
Relinquished by: <u>NR RLP</u>				Date/Time: <u>10-17-24/1730</u>		Company: <u>GLA</u>		Received by: <u>ANAR</u>		Date/Time: <u>10/18/24 0905</u>	
Relinquished by:				Date/Time:		Company:		Received by:		Date/Time:	
Relinquished by:				Date/Time:		Company:		Received by:		Date/Time:	
Custody Seals Intact: ☐ Yes ☐ No				Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: <u>0.6, 0.1, 0.3, CP: T.L, K: TM</u>					



280-198319 Chain of Custody

Ver: 01/16/2019



Do not lift using this tag

ORIGIN ID: CVOA

SHIP DATE: 17OCT24
ACTWGT: 64.10 LB
CAD: /SSF02541
DIMS: 25x14x14 IN

TO **SAMPLE RECEIVING**
EUROFINS ENVIRON TESTING
4955 YARROW STREET
DENVER
ARVADA CO 80002

(303) 736-0100

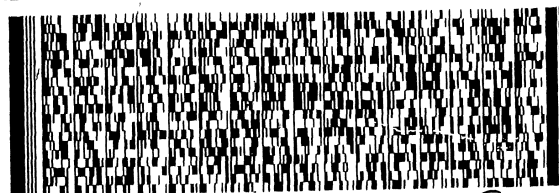
INU:

PO:

REF:

DEPT:

280-198319 Waybill



Fed
Ex

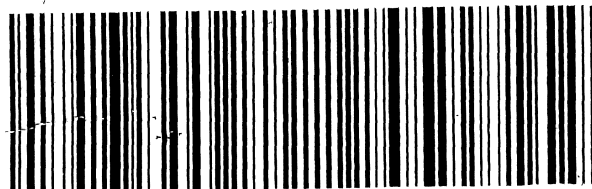
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TRK# 8182 2609 1449
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FRI - 18 OCT 10
PRIORITY OVERN

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11/1/2024

Do not lift using this tag.

ORIGIN ID: CVOA

SHIP DATE: 17OCT24
ACTWGT: 62.00 LB
CAD: /SSF02541
DIMS: 25x14x14 IN

Part # 156297-435 RROB EXP 08/28

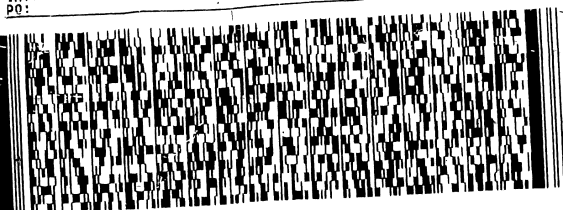
TO SAMPLE RECEIVING
EUROFINS ENVIRON TESTING
4955 YARROW STREET
DENVER
ARVADA CO 80002

(303) 736-0100
REF: INU: PG:

DEPT:

DEPT:

FedEx
Express



TRK# 8182 2609 1596
0667

XA LAAA

FRI - 18 OCT 10:30A
PRIORITY OVERNIGHT

AHS
80002

CO-US DEN

eurofins

Environment
TestAmerica

2625187

Do not lift using this tag.

ORIGIN ID: CVOA

SHIP DATE: 17OCT24
ACTWGT: 57.95 LB
CAD: /SSF02541
DIMS: 25x14x14 IN

Part # 156297-435 RROB

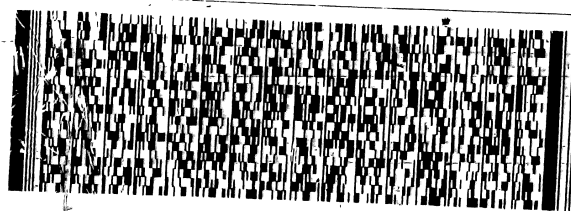
TO SAMPLE RECEIVING
EUROFINS ENVIRON TESTING

eurofins

Environment TestAmerica

2625184

FedEx
Express



TRK# 8182 2609 1438
0667

XA LAAA

FRI - 18 OCT 10:30A
PRIORITY OVERNIGHT

AHS
80002

CO-US DEN



4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0100 Fax: 303-431-7171

198319

Environment Testing

[illegible]

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

Possible Hazard Identification			Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		
Unconfirmed			☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months		
Deliverable Requested: I, II, III, IV, Other (specify)		Primary Deliverable Rank: 2		Special Instructions/QC Requirements:	
Empty Kit Relinquished by:		Date:		Time:	
Relinquished by: 		Date/Time: 10-21-24 15:00		Company: EHP	
Relinquished by: 		Date/Time:		Company:	
Relinquished by: 		Date/Time:		Company:	
Custody Seals Intact: ☒ Yes ☐ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 2.6/3.6 Sec 11/1/2024	

Cooler Temperature(s) °C and Other Remarks:

2-4/3 to July 11/1/2024

Login Sample Receipt Checklist

Client: Geo-Logic Associates

Job Number: 280-198319-1

Login Number: 198319

List Number: 1

Creator: Little, Matthew L

List Source: Eurofins Denver

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

Login Sample Receipt Checklist

Client: Geo-Logic Associates

Job Number: 280-198319-1

Login Number: 198319

List Number: 2

Creator: Arellano, Cyndy

List Source: Eurofins Calscience

List Creation: 10/23/24 02:47 PM

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

PREPARED FOR

Attn: Aaron Ogorzalek
Geo-Logic Associates
2777 East Guasti Road
Suite 1
Ontario, California 91761
Generated 11/8/2024 1:48:39 PM

JOB DESCRIPTION

Valley LF - Republic Serv Coffin Butte

JOB NUMBER

280-198364-1

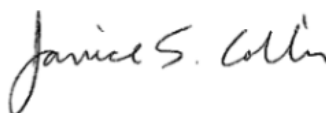
Eurofins Denver

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

Authorization



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11/8/2024 1:48:39 PM

Authorized for release by
Janice Collins, Project Manager
Janice.Collins@et.eurofinsus.com
(303)736-0100

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Definitions/Glossary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198364-1

Qualifiers

Metals

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

General Chemistry

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

Glossary

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

Case Narrative

Client: Geo-Logic Associates
Project: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198364-1

Job ID: 280-198364-1

Eurofins Denver

Job Narrative 280-198364-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 10/19/2024 9:45 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.6°C.

Receipt Exceptions

A trip blank was submitted for analysis with these samples; however, it was not listed on the Chain of Custody (COC).

The following sample was submitted for analysis; however, it was not listed on the Chain-of-Custody (COC): 280-198364-3

Metals

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

General Chemistry

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

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Detection Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198364-1

Client Sample ID: S-U4

Lab Sample ID: 280-198364-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	19000	B	200	24	ug/L	1		6010B	Dissolved
Iron	15	J B	100	9.1	ug/L	1		6010B	Dissolved
Magnesium	8700	B	200	4.2	ug/L	1		6010B	Dissolved
Manganese	3.0	J	10	0.45	ug/L	1		6010B	Dissolved
Sodium	8100		1000	97	ug/L	1		6010B	Dissolved
Chloride	3.0		3.0	1.0	mg/L	1		300.0	Total/NA
Bicarbonate Alkalinity as CaCO3	87		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	140		10	4.7	mg/L	1		SM 2540C	Total/NA

Client Sample ID: S-U5

Lab Sample ID: 280-198364-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	36000	B	200	24	ug/L	1		6010B	Dissolved
Iron	25	J B	100	9.1	ug/L	1		6010B	Dissolved
Magnesium	18000	B	200	4.2	ug/L	1		6010B	Dissolved
Manganese	1.2	J	10	0.45	ug/L	1		6010B	Dissolved
Sodium	11000		1000	97	ug/L	1		6010B	Dissolved
Chloride	6.9		3.0	1.0	mg/L	1		300.0	Total/NA
Bicarbonate Alkalinity as CaCO3	150		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	210		10	4.7	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Denver

Method Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198364-1

Method	Method Description	Protocol	Laboratory
6010B	Dissolved Metals	SW846	EET DEN
300.0	Anions, Ion Chromatography	EPA	EET DEN
SM 2320B	Alkalinity	SM	EET DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET DEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET DEN

Protocol References:

EPA = US Environmental Protection Agency

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

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

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Sample Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198364-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-198364-1	S-U4	Water	10/17/24 15:00	10/19/24 09:45
280-198364-2	S-U5	Water	10/17/24 15:40	10/19/24 09:45

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- 11
- 12
- 13

Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198364-1

Method: SW846 6010B - Dissolved Metals - Dissolved

Client Sample ID: S-U4
Date Collected: 10/17/24 15:00
Date Received: 10/19/24 09:45

Lab Sample ID: 280-198364-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	19000	B	200	24	ug/L		10/24/24 08:13	10/29/24 18:56	1
Iron	15	J B	100	9.1	ug/L		10/24/24 08:13	10/29/24 18:56	1
Magnesium	8700	B	200	4.2	ug/L		10/24/24 08:13	10/29/24 18:56	1
Manganese	3.0	J	10	0.45	ug/L		10/24/24 08:13	11/04/24 20:24	1
Sodium	8100		1000	97	ug/L		10/24/24 08:13	10/29/24 18:56	1

Client Sample ID: S-U5
Date Collected: 10/17/24 15:40
Date Received: 10/19/24 09:45

Lab Sample ID: 280-198364-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	36000	B	200	24	ug/L		10/24/24 08:13	10/29/24 19:00	1
Iron	25	J B	100	9.1	ug/L		10/24/24 08:13	10/29/24 19:00	1
Magnesium	18000	B	200	4.2	ug/L		10/24/24 08:13	10/29/24 19:00	1
Manganese	1.2	J	10	0.45	ug/L		10/24/24 08:13	11/04/24 20:29	1
Sodium	11000		1000	97	ug/L		10/24/24 08:13	10/29/24 19:00	1

General Chemistry

Client Sample ID: S-U4
Date Collected: 10/17/24 15:00
Date Received: 10/19/24 09:45

Lab Sample ID: 280-198364-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	3.0		3.0	1.0	mg/L			10/31/24 06:37	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	87		10	3.1	mg/L			10/25/24 01:36	1
Total Dissolved Solids (SM 2540C)	140		10	4.7	mg/L			10/23/24 09:54	1

Client Sample ID: S-U5
Date Collected: 10/17/24 15:40
Date Received: 10/19/24 09:45

Lab Sample ID: 280-198364-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	6.9		3.0	1.0	mg/L			10/31/24 07:20	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	150		10	3.1	mg/L			10/25/24 01:41	1
Total Dissolved Solids (SM 2540C)	210		10	4.7	mg/L			10/23/24 09:54	1

QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198364-1

Method: 6010B - Dissolved Metals

Lab Sample ID: MB 280-672220/1-A
Matrix: Water
Analysis Batch: 672959

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 672220

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	29.7	J	200	24	ug/L		10/24/24 08:13	10/29/24 18:45	1
Iron	23.1	J	100	9.1	ug/L		10/24/24 08:13	10/29/24 18:45	1
Magnesium	4.39	J	200	4.2	ug/L		10/24/24 08:13	10/29/24 18:45	1
Sodium	ND		1000	97	ug/L		10/24/24 08:13	10/29/24 18:45	1

Lab Sample ID: MB 280-672220/1-A
Matrix: Water
Analysis Batch: 673722

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 672220

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	ND		10	0.45	ug/L		10/24/24 08:13	11/04/24 20:12	1

Lab Sample ID: LCS 280-672220/2-A
Matrix: Water
Analysis Batch: 672959

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 672220

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	50000	51200		ug/L		102	90 - 111
Iron	10000	10400		ug/L		104	89 - 115
Magnesium	50000	51500		ug/L		103	90 - 113
Sodium	50000	50200		ug/L		100	90 - 115

Lab Sample ID: LCS 280-672220/2-A
Matrix: Water
Analysis Batch: 673722

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 672220

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Manganese	1000	983		ug/L		98	90 - 110

Lab Sample ID: LCSD 280-672220/29-A
Matrix: Water
Analysis Batch: 672959

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 672220

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	50000	51100		ug/L		102	90 - 111	0	20
Iron	10000	10400		ug/L		104	89 - 115	0	20
Magnesium	50000	51500		ug/L		103	90 - 113	0	20
Sodium	50000	50100		ug/L		100	90 - 115	0	20

Lab Sample ID: LCSD 280-672220/29-A
Matrix: Water
Analysis Batch: 673722

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 672220

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Manganese	1000	981		ug/L		98	90 - 110	0	20

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198364-1

Method: 6010B - Dissolved Metals (Continued)

Lab Sample ID: 280-198469-B-3-B MS
Matrix: Water
Analysis Batch: 672959

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 672220

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	230000	B	50000	275000	4	ug/L		82	48 - 153
Iron	38	J B	10000	9930		ug/L		99	52 - 155
Magnesium	20000	B	50000	68500		ug/L		96	62 - 146
Sodium	90000		50000	135000		ug/L		91	70 - 203

Lab Sample ID: 280-198469-B-3-B MS
Matrix: Water
Analysis Batch: 673722

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 672220

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Manganese	2500		1000	3430		ug/L		96	79 - 121

Lab Sample ID: 280-198469-B-3-C MSD
Matrix: Water
Analysis Batch: 672959

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 672220

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	230000	B	50000	278000	4	ug/L		87	48 - 153	1	20
Iron	38	J B	10000	10200		ug/L		101	52 - 155	2	20
Magnesium	20000	B	50000	70400		ug/L		100	62 - 146	3	20
Sodium	90000		50000	137000		ug/L		94	70 - 203	1	20

Lab Sample ID: 280-198469-B-3-C MSD
Matrix: Water
Analysis Batch: 673722

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 672220

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Manganese	2500		1000	3370		ug/L		90	79 - 121	2	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 280-672999/47
Matrix: Water
Analysis Batch: 672999

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0	1.0	mg/L			10/31/24 02:57	1

Lab Sample ID: LCS 280-672999/45
Matrix: Water
Analysis Batch: 672999

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	100	101		mg/L		101	90 - 110

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198364-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 280-672999/46

Matrix: Water

Analysis Batch: 672999

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	100	100		mg/L		100	90 - 110	3	10

Lab Sample ID: MRL 280-672999/3

Matrix: Water

Analysis Batch: 672999

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	5.00	4.93		mg/L		99	50 - 150		

Lab Sample ID: 280-198364-1 MS

Matrix: Water

Analysis Batch: 672999

Client Sample ID: S-U4

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	3.0		50.0	53.3		mg/L		101	80 - 120		

Lab Sample ID: 280-198364-1 MSD

Matrix: Water

Analysis Batch: 672999

Client Sample ID: S-U4

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	3.0		50.0	54.7		mg/L		103	80 - 120	3	20

Lab Sample ID: 280-198364-1 DU

Matrix: Water

Analysis Batch: 672999

Client Sample ID: S-U4

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	3.0		2.96	J	mg/L		3	15

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-672502/62

Matrix: Water

Analysis Batch: 672502

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		10	3.1	mg/L			10/24/24 23:52	1

Lab Sample ID: 280-198365-G-1 DU

Matrix: Water

Analysis Batch: 672502

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	460		442		mg/L		3	20

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198364-1

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

Lab Sample ID: MB 280-672134/1
Matrix: Water
Analysis Batch: 672134

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	4.7	mg/L			10/23/24 09:54	1

Lab Sample ID: LCS 280-672134/2
Matrix: Water
Analysis Batch: 672134

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	504	497		mg/L		99	88 - 114

Lab Sample ID: 280-198345-A-7 DU
Matrix: Water
Analysis Batch: 672134

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	5800		5660		mg/L		2	10

QC Association Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198364-1

Metals

Prep Batch: 672220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198364-1	S-U4	Dissolved	Water	3005A	
280-198364-2	S-U5	Dissolved	Water	3005A	
MB 280-672220/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-672220/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 280-672220/29-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	
280-198469-B-3-B MS	Matrix Spike	Dissolved	Water	3005A	
280-198469-B-3-C MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	

Analysis Batch: 672959

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198364-1	S-U4	Dissolved	Water	6010B	672220
280-198364-2	S-U5	Dissolved	Water	6010B	672220
MB 280-672220/1-A	Method Blank	Total Recoverable	Water	6010B	672220
LCS 280-672220/2-A	Lab Control Sample	Total Recoverable	Water	6010B	672220
LCSD 280-672220/29-A	Lab Control Sample Dup	Total Recoverable	Water	6010B	672220
280-198469-B-3-B MS	Matrix Spike	Dissolved	Water	6010B	672220
280-198469-B-3-C MSD	Matrix Spike Duplicate	Dissolved	Water	6010B	672220

Analysis Batch: 673722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198364-1	S-U4	Dissolved	Water	6010B	672220
280-198364-2	S-U5	Dissolved	Water	6010B	672220
MB 280-672220/1-A	Method Blank	Total Recoverable	Water	6010B	672220
LCS 280-672220/2-A	Lab Control Sample	Total Recoverable	Water	6010B	672220
LCSD 280-672220/29-A	Lab Control Sample Dup	Total Recoverable	Water	6010B	672220
280-198469-B-3-B MS	Matrix Spike	Dissolved	Water	6010B	672220
280-198469-B-3-C MSD	Matrix Spike Duplicate	Dissolved	Water	6010B	672220

General Chemistry

Analysis Batch: 672134

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198364-1	S-U4	Total/NA	Water	SM 2540C	
280-198364-2	S-U5	Total/NA	Water	SM 2540C	
MB 280-672134/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-672134/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-198345-A-7 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 672502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198364-1	S-U4	Total/NA	Water	SM 2320B	
280-198364-2	S-U5	Total/NA	Water	SM 2320B	
MB 280-672502/62	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-672502/60	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 280-672502/61	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
280-198365-G-1 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 672999

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198364-1	S-U4	Total/NA	Water	300.0	
280-198364-2	S-U5	Total/NA	Water	300.0	

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QC Association Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198364-1

General Chemistry (Continued)

Analysis Batch: 672999 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-672999/47	Method Blank	Total/NA	Water	300.0	
LCS 280-672999/45	Lab Control Sample	Total/NA	Water	300.0	
LCSD 280-672999/46	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 280-672999/3	Lab Control Sample	Total/NA	Water	300.0	
280-198364-1 MS	S-U4	Total/NA	Water	300.0	
280-198364-1 MSD	S-U4	Total/NA	Water	300.0	
280-198364-1 DU	S-U4	Total/NA	Water	300.0	

Lab Chronicle

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198364-1

Client Sample ID: S-U4

Date Collected: 10/17/24 15:00

Date Received: 10/19/24 09:45

Lab Sample ID: 280-198364-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			50 mL	50 mL	672220	10/24/24 08:13	AMH	EET DEN
Dissolved	Analysis	6010B		1			672959	10/29/24 18:56	NKC	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	672220	10/24/24 08:13	AMH	EET DEN
Dissolved	Analysis	6010B		1			673722	11/04/24 20:24	ADL	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	672999	10/31/24 06:37	IRC	EET DEN
Total/NA	Analysis	SM 2320B		1			672502	10/25/24 01:36	EL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	672134	10/23/24 09:54	BRD	EET DEN

Client Sample ID: S-U5

Date Collected: 10/17/24 15:40

Date Received: 10/19/24 09:45

Lab Sample ID: 280-198364-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			50 mL	50 mL	672220	10/24/24 08:13	AMH	EET DEN
Dissolved	Analysis	6010B		1			672959	10/29/24 19:00	NKC	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	672220	10/24/24 08:13	AMH	EET DEN
Dissolved	Analysis	6010B		1			673722	11/04/24 20:29	ADL	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	672999	10/31/24 07:20	IRC	EET DEN
Total/NA	Analysis	SM 2320B		1			672502	10/25/24 01:41	EL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	672134	10/23/24 09:54	BRD	EET DEN

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Chain of Custody Record

Client Information		Sampler: <i>NE, NE</i>		Lab PM: Collins, Janice S		Carrier Tracking No(s):		COC No: 280-97584-22898.1															
Client Contact: <i>Geo-Logic Associates</i>		Phone: <i>907-626 2782</i>		E-Mail: Janice.Collins@et.eurofinsus.com				Page: <i>10/1</i>															
Company: Valley Landfills, Inc. Republic Services				Analysis Requested						Job #:													
Address: 28972 Coffin Butte Road				Due Date Requested:		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) 2320B - Bicarb Alkalinity 2540C/300 - TDS/Chloride 6010B - Dissolved Metals (FF) Total Number of containers						Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify) Other:											
City: Corvallis				TAT Requested (days):																			
State, Zip: OR, 97330				Compliance Project: ☐ Yes ☐ No																			
Phone: 503-675-1335(Tel)				PO #: PO# 1584668																			
Email:				WO #:																			
Project Name: Coffin Butte/Valley Landfills				Project #: 28003197 "Underdrains"																			
Site:				SSOW#:																			
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		2320B - Bicarb Alkalinity		2540C/300 - TDS/Chloride		6010B - Dissolved Metals (FF)		Total Number of containers		Special Instructions/Note:	
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Login Sample Receipt Checklist

Client: Geo-Logic Associates

Job Number: 280-198364-1

Login Number: 198364

List Number: 1

Creator: Roehsner, Karen P

List Source: Eurofins Denver

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

ANALYTICAL REPORT

PREPARED FOR

Attn: Aaron Ogorzalek
Geo-Logic Associates
2777 East Guasti Road
Suite 1
Ontario, California 91761

Generated 11/5/2024 3:45:15 PM Revision 1

JOB DESCRIPTION

Valley LF - Republic Serv Coffin Butte

JOB NUMBER

280-198366-1

Eurofins Denver

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

Authorization



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Revision 1

Authorized for release by
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Definitions/Glossary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

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

General Chemistry

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Eurofins Denver

Case Narrative

Client: Geo-Logic Associates
Project: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

Job ID: 280-198366-1

Eurofins Denver

Job Narrative 280-198366-1

Revision 1 - November 5, 2024

The report being provided is a revision of the original report sent on 11/5/2024. The report (revision 1) is being revised due to a sample ID change per client request.

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 10/19/2024 9:45 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.5°C and 0.9°C.

Receipt Exceptions

Insufficient sample volume was provided for the following samples for the 524.2 analysis: 280-198366-1, 280-198366-2, 280-198366-3, 280-198366-4, 280-198366-5 and 280-198366-6.

Both of the 1 liter plastic unpreserved sample containers were received with about 900 mL of sample volume for the following sample: 280-198366-6. The field filtered 500 mL plastic nitric acid preserved sample container was received 1/2 filled with sample volume.

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): 280-198366-2. Two of the three 250 mL Amber container labels list S-U3, while the COC lists LDS-3. Logged per the COC.

GC/MS VOA

Method 8260B: The following volatiles samples were diluted due to foaming at the time of purging during the original sample analysis: 280-198366-1, 280-198366-2, 280-198366-5 and 280-198366-6. Elevated reporting limits (RLs) are provided.

Method 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 280-673139. The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch.

Method 8260B: The following sample(s) was collected in a properly preserved vial; however, the pH 7 was outside the required criteria when verified by the laboratory. The samples were analyzed outside the 7-day holding time specified for unpreserved samples but within the 14-day holding time specified for preserved samples: 280-198366-5 and 280-198366-6.

Method 8260B: The method blank for analytical batch 280-673139 contained Acetone above the method detection limit. This target analyte concentration was less than half the reporting limit (1/2RL) in the method blank; therefore, re-analysis of samples was not performed.

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

Metals

Method 200.8: Due to the reactive nature of the matrix, the initial volume used for the following sample deviated from the standard procedure: 280-198366-6. The reporting limits (RLs) have been adjusted proportionately. The analyst used a 10:50 dilution.

Method 200.8: The instrument blank for analytical batch 280-672256 contained Mg greater than one-half the reporting limit (RL), and were not re-analyzed because the samples were >10x the blank. The data have been qualified and reported.

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

Eurofins Denver

Case Narrative

Client: Geo-Logic Associates
Project: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

Job ID: 280-198366-1 (Continued)

Eurofins Denver

General Chemistry

Method 2320B: The method blank for analytical batch 280-672859 contained Bicarbonate Alkalinity as CaCO₃ above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-analysis of samples was not performed.

Method 300.0_28D: The following sample has chromatographic interferences that could adversely impact the identification and quantitation of target analytes: 280-198366-6. These interferences impact sulfate and cause the value to have a low bias.

Method 410.4: The following sample was analyzed at a dilution due to the chloride pre-screening results: 280-198366-5. Elevated reporting limits are provided.

Method 410.4: The following samples were analyzed at a dilution due to the chloride pre-screening results: 280-198366-1, 280-198366-2 and 280-198366-6. Elevated reporting limits are provided.

Method SM5310B: The matrix spike / matrix spike duplicate (MS/MSD) for analytical batch 280-672902 recovered Total Organic Carbon above the calibration limit. The parent sample was within calibration limits, and associated results have been reported.

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

Eurofins Denver

Detection Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

Client Sample ID: LDS-2B

Lab Sample ID: 280-198366-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	37	J B	75	33	ug/L	5		8260B	Total/NA
Carbon disulfide	1.3	J	10	1.3	ug/L	5		8260B	Total/NA
Antimony	3.0		2.0	0.40	ug/L	1		200.8	Total/NA
Arsenic	28		5.0	0.50	ug/L	1		200.8	Total/NA
Lead	4.0		1.0	0.23	ug/L	1		200.8	Total/NA
Nickel	240		3.0	0.83	ug/L	1		200.8	Total/NA
Barium	480	B	3.0	0.38	ug/L	1		200.8	Total/NA
Chromium	59		3.0	0.50	ug/L	1		200.8	Total/NA
Cobalt	64		1.0	0.33	ug/L	1		200.8	Total/NA
Copper	270		2.0	0.71	ug/L	1		200.8	Total/NA
Vanadium	100		5.0	1.1	ug/L	1		200.8	Total/NA
Zinc	120	B	10	2.0	ug/L	1		200.8	Total/NA
Chloride	2300		150	51	mg/L	50		300.0	Total/NA
Sulfate	12		5.0	1.0	mg/L	1		300.0	Total/NA
Ammonia	130		5.0	1.5	mg/L	50		350.1	Total/NA
Nitrate Nitrite as N	3.5		2.0	0.88	mg/L	20		353.2	Total/NA
Chemical Oxygen Demand	1000		200	87	mg/L	10		410.4	Total/NA
Bicarbonate Alkalinity as CaCO3	1200		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	5300		100	47	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	2.8	J	4.0	1.1	mg/L	1		SM 2540D	Total/NA
TOC Result 1	380		10	3.5	mg/L	10		SM 5310B	Total/NA
TOC Result 2	380		10	3.5	mg/L	10		SM 5310B	Total/NA
TOC Result 3	370		10	3.5	mg/L	10		SM 5310B	Total/NA
TOC Result 4	370		10	3.5	mg/L	10		SM 5310B	Total/NA
Total Organic Carbon - Quad	380		10	3.5	mg/L	10		SM 5310B	Total/NA

Client Sample ID: LDS-3

Lab Sample ID: 280-198366-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	2.4	J	4.0	1.2	ug/L	4		8260B	Total/NA
Antimony	0.83	J	2.0	0.40	ug/L	1		200.8	Total/NA
Arsenic	3.2	J	5.0	0.50	ug/L	1		200.8	Total/NA
Lead	0.29	J	1.0	0.23	ug/L	1		200.8	Total/NA
Nickel	130		3.0	0.83	ug/L	1		200.8	Total/NA
Barium	230	B	3.0	0.38	ug/L	1		200.8	Total/NA
Cadmium	0.19	J	1.0	0.19	ug/L	1		200.8	Total/NA
Chromium	5.5		3.0	0.50	ug/L	1		200.8	Total/NA
Cobalt	17		1.0	0.33	ug/L	1		200.8	Total/NA
Copper	42		2.0	0.71	ug/L	1		200.8	Total/NA
Silver	0.17	J	1.0	0.045	ug/L	1		200.8	Total/NA
Vanadium	5.4		5.0	1.1	ug/L	1		200.8	Total/NA
Zinc	5.7	J B	10	2.0	ug/L	1		200.8	Total/NA
Chloride	910		60	20	mg/L	20		300.0	Total/NA
Sulfate	320		100	21	mg/L	20		300.0	Total/NA
Ammonia	0.57		0.10	0.029	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	120		5.0	2.2	mg/L	50		353.2	Total/NA
Chemical Oxygen Demand	170		40	17	mg/L	2		410.4	Total/NA
Bicarbonate Alkalinity as CaCO3	400		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	2900		40	19	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	1.6	J	4.0	1.1	mg/L	1		SM 2540D	Total/NA
TOC Result 1	54		2.0	0.69	mg/L	2		SM 5310B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Denver

Detection Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

Client Sample ID: LDS-3 (Continued)

Lab Sample ID: 280-198366-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
TOC Result 2	54		2.0	0.69	mg/L	2		SM 5310B	Total/NA
TOC Result 3	52		2.0	0.69	mg/L	2		SM 5310B	Total/NA
TOC Result 4	51		2.0	0.69	mg/L	2		SM 5310B	Total/NA
Total Organic Carbon - Quad	53		2.0	0.69	mg/L	2		SM 5310B	Total/NA

Client Sample ID: LDS-4

Lab Sample ID: 280-198366-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	18		3.0	0.83	ug/L	1		200.8	Total/NA
Barium	110	B	3.0	0.38	ug/L	1		200.8	Total/NA
Chromium	1.0	J	3.0	0.50	ug/L	1		200.8	Total/NA
Cobalt	2.1		1.0	0.33	ug/L	1		200.8	Total/NA
Copper	5.3		2.0	0.71	ug/L	1		200.8	Total/NA
Vanadium	4.8	J	5.0	1.1	ug/L	1		200.8	Total/NA
Chloride	240		15	5.1	mg/L	5		300.0	Total/NA
Sulfate	46		5.0	1.0	mg/L	1		300.0	Total/NA
Ammonia	1.9		0.10	0.029	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	23		2.0	0.88	mg/L	20		353.2	Total/NA
Chemical Oxygen Demand	24		20	8.7	mg/L	1		410.4	Total/NA
Bicarbonate Alkalinity as CaCO3	340		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	890		20	9.4	mg/L	1		SM 2540C	Total/NA
TOC Result 1	4.8		1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 2	4.6		1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 3	4.5		1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 4	4.5		1.0	0.35	mg/L	1		SM 5310B	Total/NA
Total Organic Carbon - Quad	4.6		1.0	0.35	mg/L	1		SM 5310B	Total/NA

Client Sample ID: LDS-5

Lab Sample ID: 280-198366-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.45	J	2.0	0.40	ug/L	1		200.8	Total/NA
Arsenic	0.79	J	5.0	0.50	ug/L	1		200.8	Total/NA
Nickel	69		3.0	0.83	ug/L	1		200.8	Total/NA
Barium	210	B	3.0	0.38	ug/L	1		200.8	Total/NA
Chromium	4.7		3.0	0.50	ug/L	1		200.8	Total/NA
Cobalt	11		1.0	0.33	ug/L	1		200.8	Total/NA
Copper	46		2.0	0.71	ug/L	1		200.8	Total/NA
Vanadium	5.1		5.0	1.1	ug/L	1		200.8	Total/NA
Zinc	3.1	J B	10	2.0	ug/L	1		200.8	Total/NA
Chloride	850		30	10	mg/L	10		300.0	Total/NA
Sulfate	42		5.0	1.0	mg/L	1		300.0	Total/NA
Ammonia	0.61		0.10	0.029	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	77		5.0	2.2	mg/L	50		353.2	Total/NA
Chemical Oxygen Demand	99		20	8.7	mg/L	1		410.4	Total/NA
Bicarbonate Alkalinity as CaCO3	170		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	2000		40	19	mg/L	1		SM 2540C	Total/NA
TOC Result 1	28		1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 2	28		1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 3	27		1.0	0.35	mg/L	1		SM 5310B	Total/NA
TOC Result 4	27		1.0	0.35	mg/L	1		SM 5310B	Total/NA
Total Organic Carbon - Quad	28		1.0	0.35	mg/L	1		SM 5310B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Denver

Detection Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

Client Sample ID: LDS-ELP

Lab Sample ID: 280-198366-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.0	J	5.0	0.72	ug/L	5		8260B	Total/NA
Antimony	7.5		2.0	0.40	ug/L	1		200.8	Total/NA
Arsenic	9.2		5.0	0.50	ug/L	1		200.8	Total/NA
Lead	0.38	J	1.0	0.23	ug/L	1		200.8	Total/NA
Nickel	280		3.0	0.83	ug/L	1		200.8	Total/NA
Barium	150	B	3.0	0.38	ug/L	1		200.8	Total/NA
Selenium	1.3	J	5.0	1.0	ug/L	1		200.8	Total/NA
Cadmium	0.39	J	1.0	0.19	ug/L	1		200.8	Total/NA
Chromium	42		3.0	0.50	ug/L	1		200.8	Total/NA
Cobalt	110		1.0	0.33	ug/L	1		200.8	Total/NA
Copper	88		2.0	0.71	ug/L	1		200.8	Total/NA
Silver	0.051	J	1.0	0.045	ug/L	1		200.8	Total/NA
Vanadium	15		5.0	1.1	ug/L	1		200.8	Total/NA
Zinc	190	B	10	2.0	ug/L	1		200.8	Total/NA
Chloride	3000		60	20	mg/L	20		300.0	Total/NA
Sulfate	1200		100	21	mg/L	20		300.0	Total/NA
Ammonia	500		20	5.8	mg/L	200		350.1	Total/NA
Nitrate Nitrite as N	290		10	4.4	mg/L	100		353.2	Total/NA
Chemical Oxygen Demand	1100		200	87	mg/L	10		410.4	Total/NA
Bicarbonate Alkalinity as CaCO3	2000		10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	8200		1000	470	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	4.4		4.0	1.1	mg/L	1		SM 2540D	Total/NA
TOC Result 1	350		20	6.9	mg/L	20		SM 5310B	Total/NA
TOC Result 2	350		20	6.9	mg/L	20		SM 5310B	Total/NA
TOC Result 3	350		20	6.9	mg/L	20		SM 5310B	Total/NA
TOC Result 4	340		20	6.9	mg/L	20		SM 5310B	Total/NA
Total Organic Carbon - Quad	350		20	6.9	mg/L	20		SM 5310B	Total/NA

Client Sample ID: L-POND

Lab Sample ID: 280-198366-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	4000		200	92	ug/L	20		8260B	Total/NA
4-Isopropyltoluene	5.2	J	20	3.7	ug/L	20		8260B	Total/NA
4-Methyl-2-pentanone (MIBK)	80	J	100	20	ug/L	20		8260B	Total/NA
Acetone	4300	B	300	130	ug/L	20		8260B	Total/NA
Benzene	9.4	J	20	2.9	ug/L	20		8260B	Total/NA
Carbon disulfide	11	J	40	5.1	ug/L	20		8260B	Total/NA
Ethylbenzene	7.1	J	20	2.9	ug/L	20		8260B	Total/NA
m-Xylene & p-Xylene	10	J	40	7.1	ug/L	20		8260B	Total/NA
o-Xylene	6.5	J	20	2.3	ug/L	20		8260B	Total/NA
Toluene	32		20	6.4	ug/L	20		8260B	Total/NA
Antimony	17		10	2.0	ug/L	1		200.8	Total/NA
Arsenic	110		25	2.5	ug/L	1		200.8	Total/NA
Nickel	140		15	4.2	ug/L	1		200.8	Total/NA
Barium	600	B	15	1.9	ug/L	1		200.8	Total/NA
Chromium	160		15	2.5	ug/L	1		200.8	Total/NA
Cobalt	33		5.0	1.7	ug/L	1		200.8	Total/NA
Vanadium	160		25	5.6	ug/L	1		200.8	Total/NA
Zinc	87	B	50	10	ug/L	1		200.8	Total/NA
Chloride	3600		60	20	mg/L	20		300.0	Total/NA
Sulfate	4.1	J	5.0	1.0	mg/L	1		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Denver

Detection Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

Client Sample ID: L-POND (Continued)

Lab Sample ID: 280-198366-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ammonia	1300		50	15	mg/L	500		350.1	Total/NA
Chemical Oxygen Demand	3900		1000	430	mg/L	50		410.4	Total/NA
Bicarbonate Alkalinity as CaCO3	5200	B	10	3.1	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	9700		1000	470	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	70		8.0	2.2	mg/L	1		SM 2540D	Total/NA
TOC Result 1	1400		50	17	mg/L	50		SM 5310B	Total/NA
TOC Result 2	1300		50	17	mg/L	50		SM 5310B	Total/NA
TOC Result 3	1300		50	17	mg/L	50		SM 5310B	Total/NA
TOC Result 4	1300		50	17	mg/L	50		SM 5310B	Total/NA
Total Organic Carbon - Quad	1300		50	17	mg/L	50		SM 5310B	Total/NA

Client Sample ID: QCAB

Lab Sample ID: 280-198366-7

No Detections.

Client Sample ID: QCTB

Lab Sample ID: 280-198366-8

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Denver

Method Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	EET DEN
200.8	Metals (ICP/MS)	EPA	EET DEN
300.0	Anions, Ion Chromatography	EPA	EET DEN
350.1	Nitrogen, Ammonia	EPA	EET DEN
353.2	Nitrogen, Nitrate-Nitrite	EPA	EET DEN
410.4	COD	EPA	EET DEN
SM 2320B	Alkalinity	SM	EET DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET DEN
SM 2540D	Solids, Total Suspended (TSS)	SM	EET DEN
SM 5310B	Organic Carbon, Total (TOC)	SM	EET DEN
200.8	Preparation, Total Metals	EPA	EET DEN
5030B	Purge and Trap	SW846	EET DEN

Protocol References:

EPA = US Environmental Protection Agency

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

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

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Sample Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-198366-1	LDS-2B	Water	10/18/24 09:45	10/19/24 09:45
280-198366-2	LDS-3	Water	10/18/24 08:55	10/19/24 09:45
280-198366-3	LDS-4	Water	10/18/24 10:27	10/19/24 09:45
280-198366-4	LDS-5	Water	10/18/24 10:53	10/19/24 09:45
280-198366-5	LDS-ELP	Water	10/18/24 11:21	10/19/24 09:45
280-198366-6	L-POND	Water	10/18/24 12:30	10/19/24 09:45
280-198366-7	QCAB	Water	10/18/24 00:00	10/19/24 09:45
280-198366-8	QCTB	Water	10/18/24 08:55	10/19/24 09:45

Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: LDS-2B
Date Collected: 10/18/24 09:45
Date Received: 10/19/24 09:45

Lab Sample ID: 280-198366-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.78	ug/L			10/31/24 03:01	5
1,1,1-Trichloroethane	ND		5.0	2.0	ug/L			10/31/24 03:01	5
1,1,2,2-Tetrachloroethane	ND		5.0	1.1	ug/L			10/31/24 03:01	5
1,1,2-Trichloroethane	ND		5.0	1.4	ug/L			10/31/24 03:01	5
1,1-Dichloroethane	ND		5.0	1.1	ug/L			10/31/24 03:01	5
1,1-Dichloroethene	ND		5.0	1.2	ug/L			10/31/24 03:01	5
1,1-Dichloropropene	ND		5.0	0.95	ug/L			10/31/24 03:01	5
1,2,3-Trichlorobenzene	ND		20	6.0	ug/L			10/31/24 03:01	5
1,2,3-Trichloropropane	ND		13	1.4	ug/L			10/31/24 03:01	5
1,2,4-Trichlorobenzene	ND		5.0	2.9	ug/L			10/31/24 03:01	5
1,2,4-Trimethylbenzene	ND		5.0	0.75	ug/L			10/31/24 03:01	5
1,2-Dibromo-3-Chloropropane	ND		25	2.1	ug/L			10/31/24 03:01	5
1,2-Dibromoethane	ND		5.0	0.92	ug/L			10/31/24 03:01	5
1,2-Dichlorobenzene	ND		5.0	0.72	ug/L			10/31/24 03:01	5
1,2-Dichloroethane	ND		5.0	1.4	ug/L			10/31/24 03:01	5
1,2-Dichloropropane	ND		5.0	1.2	ug/L			10/31/24 03:01	5
1,3,5-Trimethylbenzene	ND		5.0	0.61	ug/L			10/31/24 03:01	5
1,3-Dichlorobenzene	ND		5.0	1.7	ug/L			10/31/24 03:01	5
1,3-Dichloropropane	ND		5.0	0.87	ug/L			10/31/24 03:01	5
1,4-Dichlorobenzene	ND		5.0	1.9	ug/L			10/31/24 03:01	5
2,2-Dichloropropane	ND		5.0	0.84	ug/L			10/31/24 03:01	5
2-Butanone (MEK)	ND		50	23	ug/L			10/31/24 03:01	5
2-Chlorotoluene	ND		5.0	1.7	ug/L			10/31/24 03:01	5
2-Hexanone	ND		25	4.1	ug/L			10/31/24 03:01	5
4-Chlorotoluene	ND		5.0	1.1	ug/L			10/31/24 03:01	5
4-Isopropyltoluene	ND		5.0	0.93	ug/L			10/31/24 03:01	5
4-Methyl-2-pentanone (MIBK)	ND		25	4.9	ug/L			10/31/24 03:01	5
Acetone	37	J B	75	33	ug/L			10/31/24 03:01	5
Benzene	ND		5.0	0.72	ug/L			10/31/24 03:01	5
Bromobenzene	ND		5.0	0.95	ug/L			10/31/24 03:01	5
Bromochloromethane	ND		5.0	2.0	ug/L			10/31/24 03:01	5
Bromodichloromethane	ND		5.0	0.94	ug/L			10/31/24 03:01	5
Bromoform	ND		10	1.2	ug/L			10/31/24 03:01	5
Bromomethane	ND		25	12	ug/L			10/31/24 03:01	5
Carbon disulfide	1.3	J	10	1.3	ug/L			10/31/24 03:01	5
Carbon tetrachloride	ND		5.0	1.1	ug/L			10/31/24 03:01	5
Chlorobenzene	ND		5.0	0.46	ug/L			10/31/24 03:01	5
Chloroethane	ND		10	3.2	ug/L			10/31/24 03:01	5
Chloroform	ND		5.0	1.8	ug/L			10/31/24 03:01	5
Chloromethane	ND		10	1.1	ug/L			10/31/24 03:01	5
cis-1,2-Dichloroethene	ND		5.0	1.6	ug/L			10/31/24 03:01	5
cis-1,3-Dichloropropene	ND		5.0	0.78	ug/L			10/31/24 03:01	5
Dibromochloromethane	ND		5.0	1.4	ug/L			10/31/24 03:01	5
Dibromomethane	ND		5.0	1.7	ug/L			10/31/24 03:01	5
Dichlorodifluoromethane	ND		10	1.5	ug/L			10/31/24 03:01	5
Ethylbenzene	ND		5.0	0.72	ug/L			10/31/24 03:01	5
Hexachlorobutadiene	ND		10	2.6	ug/L			10/31/24 03:01	5
Isopropylbenzene	ND		5.0	0.79	ug/L			10/31/24 03:01	5
Methylene Chloride	ND		10	4.7	ug/L			10/31/24 03:01	5

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: LDS-2B

Date Collected: 10/18/24 09:45

Date Received: 10/19/24 09:45

Lab Sample ID: 280-198366-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		10	1.8	ug/L			10/31/24 03:01	5
Naphthalene	ND		15	5.0	ug/L			10/31/24 03:01	5
n-Butylbenzene	ND		5.0	1.2	ug/L			10/31/24 03:01	5
N-Propylbenzene	ND		5.0	0.92	ug/L			10/31/24 03:01	5
o-Xylene	ND		5.0	0.57	ug/L			10/31/24 03:01	5
sec-Butylbenzene	ND		5.0	1.0	ug/L			10/31/24 03:01	5
Styrene	ND		5.0	0.63	ug/L			10/31/24 03:01	5
tert-Butylbenzene	ND		5.0	0.89	ug/L			10/31/24 03:01	5
Tetrachloroethene	ND		5.0	2.0	ug/L			10/31/24 03:01	5
Toluene	ND		5.0	1.6	ug/L			10/31/24 03:01	5
trans-1,2-Dichloroethene	ND		5.0	1.8	ug/L			10/31/24 03:01	5
trans-1,3-Dichloropropene	ND		5.0	0.72	ug/L			10/31/24 03:01	5
Trichloroethene	ND		5.0	1.5	ug/L			10/31/24 03:01	5
Trichlorofluoromethane	ND		10	0.99	ug/L			10/31/24 03:01	5
Vinyl chloride	ND		5.0	1.1	ug/L			10/31/24 03:01	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		70 - 127		10/31/24 03:01	5
4-Bromofluorobenzene (Surr)	94		78 - 120		10/31/24 03:01	5
Dibromofluoromethane (Surr)	101		77 - 120		10/31/24 03:01	5
Toluene-d8 (Surr)	99		80 - 125		10/31/24 03:01	5

Client Sample ID: LDS-3

Date Collected: 10/18/24 08:55

Date Received: 10/19/24 09:45

Lab Sample ID: 280-198366-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		4.0	0.62	ug/L			10/31/24 02:41	4
1,1,1-Trichloroethane	ND		4.0	1.6	ug/L			10/31/24 02:41	4
1,1,2,2-Tetrachloroethane	ND		4.0	0.84	ug/L			10/31/24 02:41	4
1,1,2-Trichloroethane	ND		4.0	1.1	ug/L			10/31/24 02:41	4
1,1-Dichloroethane	ND		4.0	0.88	ug/L			10/31/24 02:41	4
1,1-Dichloroethene	ND		4.0	0.92	ug/L			10/31/24 02:41	4
1,1-Dichloropropene	ND		4.0	0.76	ug/L			10/31/24 02:41	4
1,2,3-Trichlorobenzene	ND		16	4.8	ug/L			10/31/24 02:41	4
1,2,3-Trichloropropane	ND		10	1.1	ug/L			10/31/24 02:41	4
1,2,4-Trichlorobenzene	ND		4.0	2.3	ug/L			10/31/24 02:41	4
1,2,4-Trimethylbenzene	ND		4.0	0.60	ug/L			10/31/24 02:41	4
1,2-Dibromo-3-Chloropropane	ND		20	1.7	ug/L			10/31/24 02:41	4
1,2-Dibromoethane	ND		4.0	0.73	ug/L			10/31/24 02:41	4
1,2-Dichlorobenzene	ND		4.0	0.58	ug/L			10/31/24 02:41	4
1,2-Dichloroethane	ND		4.0	1.1	ug/L			10/31/24 02:41	4
1,2-Dichloropropane	ND		4.0	0.97	ug/L			10/31/24 02:41	4
1,3,5-Trimethylbenzene	ND		4.0	0.48	ug/L			10/31/24 02:41	4
1,3-Dichlorobenzene	ND		4.0	1.3	ug/L			10/31/24 02:41	4
1,3-Dichloropropane	ND		4.0	0.70	ug/L			10/31/24 02:41	4
1,4-Dichlorobenzene	ND		4.0	1.6	ug/L			10/31/24 02:41	4
2,2-Dichloropropane	ND		4.0	0.67	ug/L			10/31/24 02:41	4
2-Butanone (MEK)	ND		40	18	ug/L			10/31/24 02:41	4
2-Chlorotoluene	ND		4.0	1.4	ug/L			10/31/24 02:41	4
2-Hexanone	ND		20	3.2	ug/L			10/31/24 02:41	4

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: LDS-3
Date Collected: 10/18/24 08:55
Date Received: 10/19/24 09:45

Lab Sample ID: 280-198366-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		4.0	0.84	ug/L			10/31/24 02:41	4
4-Isopropyltoluene	ND		4.0	0.74	ug/L			10/31/24 02:41	4
4-Methyl-2-pentanone (MIBK)	ND		20	3.9	ug/L			10/31/24 02:41	4
Acetone	ND		60	26	ug/L			10/31/24 02:41	4
Benzene	ND		4.0	0.58	ug/L			10/31/24 02:41	4
Bromobenzene	ND		4.0	0.76	ug/L			10/31/24 02:41	4
Bromochloromethane	ND		4.0	1.6	ug/L			10/31/24 02:41	4
Bromodichloromethane	ND		4.0	0.75	ug/L			10/31/24 02:41	4
Bromoform	ND		8.0	0.98	ug/L			10/31/24 02:41	4
Bromomethane	ND		20	9.4	ug/L			10/31/24 02:41	4
Carbon disulfide	ND		8.0	1.0	ug/L			10/31/24 02:41	4
Carbon tetrachloride	ND		4.0	0.90	ug/L			10/31/24 02:41	4
Chlorobenzene	ND		4.0	0.37	ug/L			10/31/24 02:41	4
Chloroethane	ND		8.0	2.6	ug/L			10/31/24 02:41	4
Chloroform	ND		4.0	1.4	ug/L			10/31/24 02:41	4
Chloromethane	ND		8.0	0.91	ug/L			10/31/24 02:41	4
cis-1,2-Dichloroethene	ND		4.0	1.3	ug/L			10/31/24 02:41	4
cis-1,3-Dichloropropene	ND		4.0	0.62	ug/L			10/31/24 02:41	4
Dibromochloromethane	ND		4.0	1.1	ug/L			10/31/24 02:41	4
Dibromomethane	ND		4.0	1.4	ug/L			10/31/24 02:41	4
Dichlorodifluoromethane	ND		8.0	1.2	ug/L			10/31/24 02:41	4
Ethylbenzene	ND		4.0	0.58	ug/L			10/31/24 02:41	4
Hexachlorobutadiene	ND		8.0	2.1	ug/L			10/31/24 02:41	4
Isopropylbenzene	ND		4.0	0.63	ug/L			10/31/24 02:41	4
Methylene Chloride	ND		8.0	3.8	ug/L			10/31/24 02:41	4
m-Xylene & p-Xylene	ND		8.0	1.4	ug/L			10/31/24 02:41	4
Naphthalene	ND		12	4.0	ug/L			10/31/24 02:41	4
n-Butylbenzene	ND		4.0	0.93	ug/L			10/31/24 02:41	4
N-Propylbenzene	ND		4.0	0.74	ug/L			10/31/24 02:41	4
o-Xylene	ND		4.0	0.46	ug/L			10/31/24 02:41	4
sec-Butylbenzene	ND		4.0	0.82	ug/L			10/31/24 02:41	4
Styrene	ND		4.0	0.50	ug/L			10/31/24 02:41	4
tert-Butylbenzene	ND		4.0	0.71	ug/L			10/31/24 02:41	4
Tetrachloroethene	ND		4.0	1.6	ug/L			10/31/24 02:41	4
Toluene	ND		4.0	1.3	ug/L			10/31/24 02:41	4
trans-1,2-Dichloroethene	ND		4.0	1.5	ug/L			10/31/24 02:41	4
trans-1,3-Dichloropropene	ND		4.0	0.57	ug/L			10/31/24 02:41	4
Trichloroethene	2.4	J	4.0	1.2	ug/L			10/31/24 02:41	4
Trichlorofluoromethane	ND		8.0	0.79	ug/L			10/31/24 02:41	4
Vinyl chloride	ND		4.0	0.90	ug/L			10/31/24 02:41	4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		70 - 127		10/31/24 02:41	4
4-Bromofluorobenzene (Surr)	95		78 - 120		10/31/24 02:41	4
Dibromofluoromethane (Surr)	102		77 - 120		10/31/24 02:41	4
Toluene-d8 (Surr)	100		80 - 125		10/31/24 02:41	4

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: LDS-4
Date Collected: 10/18/24 10:27
Date Received: 10/19/24 09:45

Lab Sample ID: 280-198366-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			10/31/24 01:38	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			10/31/24 01:38	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/31/24 01:38	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			10/31/24 01:38	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			10/31/24 01:38	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			10/31/24 01:38	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			10/31/24 01:38	1
1,2,3-Trichlorobenzene	ND		4.0	1.2	ug/L			10/31/24 01:38	1
1,2,3-Trichloropropane	ND		2.5	0.28	ug/L			10/31/24 01:38	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			10/31/24 01:38	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			10/31/24 01:38	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.42	ug/L			10/31/24 01:38	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			10/31/24 01:38	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			10/31/24 01:38	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			10/31/24 01:38	1
1,2-Dichloropropane	ND		1.0	0.24	ug/L			10/31/24 01:38	1
1,3,5-Trimethylbenzene	ND		1.0	0.12	ug/L			10/31/24 01:38	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			10/31/24 01:38	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			10/31/24 01:38	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			10/31/24 01:38	1
2,2-Dichloropropane	ND		1.0	0.17	ug/L			10/31/24 01:38	1
2-Butanone (MEK)	ND		10	4.6	ug/L			10/31/24 01:38	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			10/31/24 01:38	1
2-Hexanone	ND		5.0	0.81	ug/L			10/31/24 01:38	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			10/31/24 01:38	1
4-Isopropyltoluene	ND		1.0	0.19	ug/L			10/31/24 01:38	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			10/31/24 01:38	1
Acetone	ND		15	6.6	ug/L			10/31/24 01:38	1
Benzene	ND		1.0	0.14	ug/L			10/31/24 01:38	1
Bromobenzene	ND		1.0	0.19	ug/L			10/31/24 01:38	1
Bromochloromethane	ND		1.0	0.40	ug/L			10/31/24 01:38	1
Bromodichloromethane	ND		1.0	0.19	ug/L			10/31/24 01:38	1
Bromoform	ND		2.0	0.25	ug/L			10/31/24 01:38	1
Bromomethane	ND		5.0	2.4	ug/L			10/31/24 01:38	1
Carbon disulfide	ND		2.0	0.26	ug/L			10/31/24 01:38	1
Carbon tetrachloride	ND		1.0	0.23	ug/L			10/31/24 01:38	1
Chlorobenzene	ND		1.0	0.092	ug/L			10/31/24 01:38	1
Chloroethane	ND		2.0	0.64	ug/L			10/31/24 01:38	1
Chloroform	ND		1.0	0.36	ug/L			10/31/24 01:38	1
Chloromethane	ND		2.0	0.23	ug/L			10/31/24 01:38	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			10/31/24 01:38	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			10/31/24 01:38	1
Dibromochloromethane	ND		1.0	0.28	ug/L			10/31/24 01:38	1
Dibromomethane	ND		1.0	0.34	ug/L			10/31/24 01:38	1
Dichlorodifluoromethane	ND		2.0	0.30	ug/L			10/31/24 01:38	1
Ethylbenzene	ND		1.0	0.14	ug/L			10/31/24 01:38	1
Hexachlorobutadiene	ND		2.0	0.53	ug/L			10/31/24 01:38	1
Isopropylbenzene	ND		1.0	0.16	ug/L			10/31/24 01:38	1
Methylene Chloride	ND		2.0	0.94	ug/L			10/31/24 01:38	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: LDS-4
Date Collected: 10/18/24 10:27
Date Received: 10/19/24 09:45

Lab Sample ID: 280-198366-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			10/31/24 01:38	1
Naphthalene	ND		3.0	0.99	ug/L			10/31/24 01:38	1
n-Butylbenzene	ND		1.0	0.23	ug/L			10/31/24 01:38	1
N-Propylbenzene	ND		1.0	0.18	ug/L			10/31/24 01:38	1
o-Xylene	ND		1.0	0.11	ug/L			10/31/24 01:38	1
sec-Butylbenzene	ND		1.0	0.20	ug/L			10/31/24 01:38	1
Styrene	ND		1.0	0.13	ug/L			10/31/24 01:38	1
tert-Butylbenzene	ND		1.0	0.18	ug/L			10/31/24 01:38	1
Tetrachloroethene	ND		1.0	0.40	ug/L			10/31/24 01:38	1
Toluene	ND		1.0	0.32	ug/L			10/31/24 01:38	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			10/31/24 01:38	1
trans-1,3-Dichloropropene	ND		1.0	0.14	ug/L			10/31/24 01:38	1
Trichloroethene	ND		1.0	0.30	ug/L			10/31/24 01:38	1
Trichlorofluoromethane	ND		2.0	0.20	ug/L			10/31/24 01:38	1
Vinyl chloride	ND		1.0	0.23	ug/L			10/31/24 01:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		70 - 127					10/31/24 01:38	1
4-Bromofluorobenzene (Surr)	93		78 - 120					10/31/24 01:38	1
Dibromofluoromethane (Surr)	103		77 - 120					10/31/24 01:38	1
Toluene-d8 (Surr)	101		80 - 125					10/31/24 01:38	1

Client Sample ID: LDS-5
Date Collected: 10/18/24 10:53
Date Received: 10/19/24 09:45

Lab Sample ID: 280-198366-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			10/31/24 01:59	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			10/31/24 01:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/31/24 01:59	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			10/31/24 01:59	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			10/31/24 01:59	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			10/31/24 01:59	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			10/31/24 01:59	1
1,2,3-Trichlorobenzene	ND		4.0	1.2	ug/L			10/31/24 01:59	1
1,2,3-Trichloropropane	ND		2.5	0.28	ug/L			10/31/24 01:59	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			10/31/24 01:59	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			10/31/24 01:59	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.42	ug/L			10/31/24 01:59	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			10/31/24 01:59	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			10/31/24 01:59	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			10/31/24 01:59	1
1,2-Dichloropropane	ND		1.0	0.24	ug/L			10/31/24 01:59	1
1,3,5-Trimethylbenzene	ND		1.0	0.12	ug/L			10/31/24 01:59	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			10/31/24 01:59	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			10/31/24 01:59	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			10/31/24 01:59	1
2,2-Dichloropropane	ND		1.0	0.17	ug/L			10/31/24 01:59	1
2-Butanone (MEK)	ND		10	4.6	ug/L			10/31/24 01:59	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			10/31/24 01:59	1
2-Hexanone	ND		5.0	0.81	ug/L			10/31/24 01:59	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: LDS-5
Date Collected: 10/18/24 10:53
Date Received: 10/19/24 09:45

Lab Sample ID: 280-198366-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			10/31/24 01:59	1
4-Isopropyltoluene	ND		1.0	0.19	ug/L			10/31/24 01:59	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			10/31/24 01:59	1
Acetone	ND		15	6.6	ug/L			10/31/24 01:59	1
Benzene	ND		1.0	0.14	ug/L			10/31/24 01:59	1
Bromobenzene	ND		1.0	0.19	ug/L			10/31/24 01:59	1
Bromochloromethane	ND		1.0	0.40	ug/L			10/31/24 01:59	1
Bromodichloromethane	ND		1.0	0.19	ug/L			10/31/24 01:59	1
Bromoform	ND		2.0	0.25	ug/L			10/31/24 01:59	1
Bromomethane	ND		5.0	2.4	ug/L			10/31/24 01:59	1
Carbon disulfide	ND		2.0	0.26	ug/L			10/31/24 01:59	1
Carbon tetrachloride	ND		1.0	0.23	ug/L			10/31/24 01:59	1
Chlorobenzene	ND		1.0	0.092	ug/L			10/31/24 01:59	1
Chloroethane	ND		2.0	0.64	ug/L			10/31/24 01:59	1
Chloroform	ND		1.0	0.36	ug/L			10/31/24 01:59	1
Chloromethane	ND		2.0	0.23	ug/L			10/31/24 01:59	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			10/31/24 01:59	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			10/31/24 01:59	1
Dibromochloromethane	ND		1.0	0.28	ug/L			10/31/24 01:59	1
Dibromomethane	ND		1.0	0.34	ug/L			10/31/24 01:59	1
Dichlorodifluoromethane	ND		2.0	0.30	ug/L			10/31/24 01:59	1
Ethylbenzene	ND		1.0	0.14	ug/L			10/31/24 01:59	1
Hexachlorobutadiene	ND		2.0	0.53	ug/L			10/31/24 01:59	1
Isopropylbenzene	ND		1.0	0.16	ug/L			10/31/24 01:59	1
Methylene Chloride	ND		2.0	0.94	ug/L			10/31/24 01:59	1
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			10/31/24 01:59	1
Naphthalene	ND		3.0	0.99	ug/L			10/31/24 01:59	1
n-Butylbenzene	ND		1.0	0.23	ug/L			10/31/24 01:59	1
N-Propylbenzene	ND		1.0	0.18	ug/L			10/31/24 01:59	1
o-Xylene	ND		1.0	0.11	ug/L			10/31/24 01:59	1
sec-Butylbenzene	ND		1.0	0.20	ug/L			10/31/24 01:59	1
Styrene	ND		1.0	0.13	ug/L			10/31/24 01:59	1
tert-Butylbenzene	ND		1.0	0.18	ug/L			10/31/24 01:59	1
Tetrachloroethene	ND		1.0	0.40	ug/L			10/31/24 01:59	1
Toluene	ND		1.0	0.32	ug/L			10/31/24 01:59	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			10/31/24 01:59	1
trans-1,3-Dichloropropene	ND		1.0	0.14	ug/L			10/31/24 01:59	1
Trichloroethene	ND		1.0	0.30	ug/L			10/31/24 01:59	1
Trichlorofluoromethane	ND		2.0	0.20	ug/L			10/31/24 01:59	1
Vinyl chloride	ND		1.0	0.23	ug/L			10/31/24 01:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		70 - 127		10/31/24 01:59	1
4-Bromofluorobenzene (Surr)	95		78 - 120		10/31/24 01:59	1
Dibromofluoromethane (Surr)	102		77 - 120		10/31/24 01:59	1
Toluene-d8 (Surr)	101		80 - 125		10/31/24 01:59	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: LDS-ELP
Date Collected: 10/18/24 11:21
Date Received: 10/19/24 09:45

Lab Sample ID: 280-198366-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.78	ug/L			10/31/24 03:22	5
1,1,1-Trichloroethane	ND		5.0	2.0	ug/L			10/31/24 03:22	5
1,1,2,2-Tetrachloroethane	ND		5.0	1.1	ug/L			10/31/24 03:22	5
1,1,2-Trichloroethane	ND		5.0	1.4	ug/L			10/31/24 03:22	5
1,1-Dichloroethane	ND		5.0	1.1	ug/L			10/31/24 03:22	5
1,1-Dichloroethene	ND		5.0	1.2	ug/L			10/31/24 03:22	5
1,1-Dichloropropene	ND		5.0	0.95	ug/L			10/31/24 03:22	5
1,2,3-Trichlorobenzene	ND		20	6.0	ug/L			10/31/24 03:22	5
1,2,3-Trichloropropane	ND		13	1.4	ug/L			10/31/24 03:22	5
1,2,4-Trichlorobenzene	ND		5.0	2.9	ug/L			10/31/24 03:22	5
1,2,4-Trimethylbenzene	ND		5.0	0.75	ug/L			10/31/24 03:22	5
1,2-Dibromo-3-Chloropropane	ND		25	2.1	ug/L			10/31/24 03:22	5
1,2-Dibromoethane	ND		5.0	0.92	ug/L			10/31/24 03:22	5
1,2-Dichlorobenzene	ND		5.0	0.72	ug/L			10/31/24 03:22	5
1,2-Dichloroethane	ND		5.0	1.4	ug/L			10/31/24 03:22	5
1,2-Dichloropropane	ND		5.0	1.2	ug/L			10/31/24 03:22	5
1,3,5-Trimethylbenzene	ND		5.0	0.61	ug/L			10/31/24 03:22	5
1,3-Dichlorobenzene	ND		5.0	1.7	ug/L			10/31/24 03:22	5
1,3-Dichloropropane	ND		5.0	0.87	ug/L			10/31/24 03:22	5
1,4-Dichlorobenzene	ND		5.0	1.9	ug/L			10/31/24 03:22	5
2,2-Dichloropropane	ND		5.0	0.84	ug/L			10/31/24 03:22	5
2-Butanone (MEK)	ND		50	23	ug/L			10/31/24 03:22	5
2-Chlorotoluene	ND		5.0	1.7	ug/L			10/31/24 03:22	5
2-Hexanone	ND		25	4.1	ug/L			10/31/24 03:22	5
4-Chlorotoluene	ND		5.0	1.1	ug/L			10/31/24 03:22	5
4-Isopropyltoluene	ND		5.0	0.93	ug/L			10/31/24 03:22	5
4-Methyl-2-pentanone (MIBK)	ND		25	4.9	ug/L			10/31/24 03:22	5
Acetone	ND		75	33	ug/L			10/31/24 03:22	5
Benzene	1.0	J	5.0	0.72	ug/L			10/31/24 03:22	5
Bromobenzene	ND		5.0	0.95	ug/L			10/31/24 03:22	5
Bromochloromethane	ND		5.0	2.0	ug/L			10/31/24 03:22	5
Bromodichloromethane	ND		5.0	0.94	ug/L			10/31/24 03:22	5
Bromoform	ND		10	1.2	ug/L			10/31/24 03:22	5
Bromomethane	ND		25	12	ug/L			10/31/24 03:22	5
Carbon disulfide	ND		10	1.3	ug/L			10/31/24 03:22	5
Carbon tetrachloride	ND		5.0	1.1	ug/L			10/31/24 03:22	5
Chlorobenzene	ND		5.0	0.46	ug/L			10/31/24 03:22	5
Chloroethane	ND		10	3.2	ug/L			10/31/24 03:22	5
Chloroform	ND		5.0	1.8	ug/L			10/31/24 03:22	5
Chloromethane	ND		10	1.1	ug/L			10/31/24 03:22	5
cis-1,2-Dichloroethene	ND		5.0	1.6	ug/L			10/31/24 03:22	5
cis-1,3-Dichloropropene	ND		5.0	0.78	ug/L			10/31/24 03:22	5
Dibromochloromethane	ND		5.0	1.4	ug/L			10/31/24 03:22	5
Dibromomethane	ND		5.0	1.7	ug/L			10/31/24 03:22	5
Dichlorodifluoromethane	ND		10	1.5	ug/L			10/31/24 03:22	5
Ethylbenzene	ND		5.0	0.72	ug/L			10/31/24 03:22	5
Hexachlorobutadiene	ND		10	2.6	ug/L			10/31/24 03:22	5
Isopropylbenzene	ND		5.0	0.79	ug/L			10/31/24 03:22	5
Methylene Chloride	ND		10	4.7	ug/L			10/31/24 03:22	5

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: LDS-ELP
Date Collected: 10/18/24 11:21
Date Received: 10/19/24 09:45

Lab Sample ID: 280-198366-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		10	1.8	ug/L			10/31/24 03:22	5
Naphthalene	ND		15	5.0	ug/L			10/31/24 03:22	5
n-Butylbenzene	ND		5.0	1.2	ug/L			10/31/24 03:22	5
N-Propylbenzene	ND		5.0	0.92	ug/L			10/31/24 03:22	5
o-Xylene	ND		5.0	0.57	ug/L			10/31/24 03:22	5
sec-Butylbenzene	ND		5.0	1.0	ug/L			10/31/24 03:22	5
Styrene	ND		5.0	0.63	ug/L			10/31/24 03:22	5
tert-Butylbenzene	ND		5.0	0.89	ug/L			10/31/24 03:22	5
Tetrachloroethene	ND		5.0	2.0	ug/L			10/31/24 03:22	5
Toluene	ND		5.0	1.6	ug/L			10/31/24 03:22	5
trans-1,2-Dichloroethene	ND		5.0	1.8	ug/L			10/31/24 03:22	5
trans-1,3-Dichloropropene	ND		5.0	0.72	ug/L			10/31/24 03:22	5
Trichloroethene	ND		5.0	1.5	ug/L			10/31/24 03:22	5
Trichlorofluoromethane	ND		10	0.99	ug/L			10/31/24 03:22	5
Vinyl chloride	ND		5.0	1.1	ug/L			10/31/24 03:22	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		70 - 127					10/31/24 03:22	5
4-Bromofluorobenzene (Surr)	94		78 - 120					10/31/24 03:22	5
Dibromofluoromethane (Surr)	99		77 - 120					10/31/24 03:22	5
Toluene-d8 (Surr)	100		80 - 125					10/31/24 03:22	5

Client Sample ID: L-POND
Date Collected: 10/18/24 12:30
Date Received: 10/19/24 09:45

Lab Sample ID: 280-198366-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		20	3.1	ug/L			10/31/24 03:43	20
1,1,1-Trichloroethane	ND		20	7.8	ug/L			10/31/24 03:43	20
1,1,2,2-Tetrachloroethane	ND		20	4.2	ug/L			10/31/24 03:43	20
1,1,2-Trichloroethane	ND		20	5.4	ug/L			10/31/24 03:43	20
1,1-Dichloroethane	ND		20	4.4	ug/L			10/31/24 03:43	20
1,1-Dichloroethene	ND		20	4.6	ug/L			10/31/24 03:43	20
1,1-Dichloropropene	ND		20	3.8	ug/L			10/31/24 03:43	20
1,2,3-Trichlorobenzene	ND		80	24	ug/L			10/31/24 03:43	20
1,2,3-Trichloropropane	ND		50	5.5	ug/L			10/31/24 03:43	20
1,2,4-Trichlorobenzene	ND		20	12	ug/L			10/31/24 03:43	20
1,2,4-Trimethylbenzene	ND		20	3.0	ug/L			10/31/24 03:43	20
1,2-Dibromo-3-Chloropropane	ND		100	8.5	ug/L			10/31/24 03:43	20
1,2-Dibromoethane	ND		20	3.7	ug/L			10/31/24 03:43	20
1,2-Dichlorobenzene	ND		20	2.9	ug/L			10/31/24 03:43	20
1,2-Dichloroethane	ND		20	5.6	ug/L			10/31/24 03:43	20
1,2-Dichloropropane	ND		20	4.9	ug/L			10/31/24 03:43	20
1,3,5-Trimethylbenzene	ND		20	2.4	ug/L			10/31/24 03:43	20
1,3-Dichlorobenzene	ND		20	6.7	ug/L			10/31/24 03:43	20
1,3-Dichloropropane	ND		20	3.5	ug/L			10/31/24 03:43	20
1,4-Dichlorobenzene	ND		20	7.8	ug/L			10/31/24 03:43	20
2,2-Dichloropropane	ND		20	3.4	ug/L			10/31/24 03:43	20
2-Butanone (MEK)	4000		200	92	ug/L			10/31/24 03:43	20
2-Chlorotoluene	ND		20	6.8	ug/L			10/31/24 03:43	20
2-Hexanone	ND		100	16	ug/L			10/31/24 03:43	20

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: L-POND
Date Collected: 10/18/24 12:30
Date Received: 10/19/24 09:45

Lab Sample ID: 280-198366-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		20	4.2	ug/L			10/31/24 03:43	20
4-Isopropyltoluene	5.2	J	20	3.7	ug/L			10/31/24 03:43	20
4-Methyl-2-pentanone (MIBK)	80	J	100	20	ug/L			10/31/24 03:43	20
Acetone	4300	B	300	130	ug/L			10/31/24 03:43	20
Benzene	9.4	J	20	2.9	ug/L			10/31/24 03:43	20
Bromobenzene	ND		20	3.8	ug/L			10/31/24 03:43	20
Bromochloromethane	ND		20	8.1	ug/L			10/31/24 03:43	20
Bromodichloromethane	ND		20	3.7	ug/L			10/31/24 03:43	20
Bromoform	ND		40	4.9	ug/L			10/31/24 03:43	20
Bromomethane	ND		100	47	ug/L			10/31/24 03:43	20
Carbon disulfide	11	J	40	5.1	ug/L			10/31/24 03:43	20
Carbon tetrachloride	ND		20	4.5	ug/L			10/31/24 03:43	20
Chlorobenzene	ND		20	1.8	ug/L			10/31/24 03:43	20
Chloroethane	ND		40	13	ug/L			10/31/24 03:43	20
Chloroform	ND		20	7.2	ug/L			10/31/24 03:43	20
Chloromethane	ND		40	4.5	ug/L			10/31/24 03:43	20
cis-1,2-Dichloroethene	ND		20	6.4	ug/L			10/31/24 03:43	20
cis-1,3-Dichloropropene	ND		20	3.1	ug/L			10/31/24 03:43	20
Dibromochloromethane	ND		20	5.5	ug/L			10/31/24 03:43	20
Dibromomethane	ND		20	6.9	ug/L			10/31/24 03:43	20
Dichlorodifluoromethane	ND		40	6.0	ug/L			10/31/24 03:43	20
Ethylbenzene	7.1	J	20	2.9	ug/L			10/31/24 03:43	20
Hexachlorobutadiene	ND		40	11	ug/L			10/31/24 03:43	20
Isopropylbenzene	ND		20	3.1	ug/L			10/31/24 03:43	20
Methylene Chloride	ND		40	19	ug/L			10/31/24 03:43	20
m-Xylene & p-Xylene	10	J	40	7.1	ug/L			10/31/24 03:43	20
Naphthalene	ND		60	20	ug/L			10/31/24 03:43	20
n-Butylbenzene	ND		20	4.7	ug/L			10/31/24 03:43	20
N-Propylbenzene	ND		20	3.7	ug/L			10/31/24 03:43	20
o-Xylene	6.5	J	20	2.3	ug/L			10/31/24 03:43	20
sec-Butylbenzene	ND		20	4.1	ug/L			10/31/24 03:43	20
Styrene	ND		20	2.5	ug/L			10/31/24 03:43	20
tert-Butylbenzene	ND		20	3.5	ug/L			10/31/24 03:43	20
Tetrachloroethene	ND		20	8.1	ug/L			10/31/24 03:43	20
Toluene	32		20	6.4	ug/L			10/31/24 03:43	20
trans-1,2-Dichloroethene	ND		20	7.4	ug/L			10/31/24 03:43	20
trans-1,3-Dichloropropene	ND		20	2.9	ug/L			10/31/24 03:43	20
Trichloroethene	ND		20	6.0	ug/L			10/31/24 03:43	20
Trichlorofluoromethane	ND		40	4.0	ug/L			10/31/24 03:43	20
Vinyl chloride	ND		20	4.5	ug/L			10/31/24 03:43	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		70 - 127		10/31/24 03:43	20
4-Bromofluorobenzene (Surr)	94		78 - 120		10/31/24 03:43	20
Dibromofluoromethane (Surr)	101		77 - 120		10/31/24 03:43	20
Toluene-d8 (Surr)	102		80 - 125		10/31/24 03:43	20

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: QCAB
Date Collected: 10/18/24 00:00
Date Received: 10/19/24 09:45

Lab Sample ID: 280-198366-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			10/31/24 00:37	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			10/31/24 00:37	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/31/24 00:37	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			10/31/24 00:37	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			10/31/24 00:37	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			10/31/24 00:37	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			10/31/24 00:37	1
1,2,3-Trichlorobenzene	ND		4.0	1.2	ug/L			10/31/24 00:37	1
1,2,3-Trichloropropane	ND		2.5	0.28	ug/L			10/31/24 00:37	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			10/31/24 00:37	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			10/31/24 00:37	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.42	ug/L			10/31/24 00:37	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			10/31/24 00:37	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			10/31/24 00:37	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			10/31/24 00:37	1
1,2-Dichloropropane	ND		1.0	0.24	ug/L			10/31/24 00:37	1
1,3,5-Trimethylbenzene	ND		1.0	0.12	ug/L			10/31/24 00:37	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			10/31/24 00:37	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			10/31/24 00:37	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			10/31/24 00:37	1
2,2-Dichloropropane	ND		1.0	0.17	ug/L			10/31/24 00:37	1
2-Butanone (MEK)	ND		10	4.6	ug/L			10/31/24 00:37	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			10/31/24 00:37	1
2-Hexanone	ND		5.0	0.81	ug/L			10/31/24 00:37	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			10/31/24 00:37	1
4-Isopropyltoluene	ND		1.0	0.19	ug/L			10/31/24 00:37	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			10/31/24 00:37	1
Acetone	ND		15	6.6	ug/L			10/31/24 00:37	1
Benzene	ND		1.0	0.14	ug/L			10/31/24 00:37	1
Bromobenzene	ND		1.0	0.19	ug/L			10/31/24 00:37	1
Bromochloromethane	ND		1.0	0.40	ug/L			10/31/24 00:37	1
Bromodichloromethane	ND		1.0	0.19	ug/L			10/31/24 00:37	1
Bromoform	ND		2.0	0.25	ug/L			10/31/24 00:37	1
Bromomethane	ND		5.0	2.4	ug/L			10/31/24 00:37	1
Carbon disulfide	ND		2.0	0.26	ug/L			10/31/24 00:37	1
Carbon tetrachloride	ND		1.0	0.23	ug/L			10/31/24 00:37	1
Chlorobenzene	ND		1.0	0.092	ug/L			10/31/24 00:37	1
Chloroethane	ND		2.0	0.64	ug/L			10/31/24 00:37	1
Chloroform	ND		1.0	0.36	ug/L			10/31/24 00:37	1
Chloromethane	ND		2.0	0.23	ug/L			10/31/24 00:37	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			10/31/24 00:37	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			10/31/24 00:37	1
Dibromochloromethane	ND		1.0	0.28	ug/L			10/31/24 00:37	1
Dibromomethane	ND		1.0	0.34	ug/L			10/31/24 00:37	1
Dichlorodifluoromethane	ND		2.0	0.30	ug/L			10/31/24 00:37	1
Ethylbenzene	ND		1.0	0.14	ug/L			10/31/24 00:37	1
Hexachlorobutadiene	ND		2.0	0.53	ug/L			10/31/24 00:37	1
Isopropylbenzene	ND		1.0	0.16	ug/L			10/31/24 00:37	1
Methylene Chloride	ND		2.0	0.94	ug/L			10/31/24 00:37	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: QCAB
Date Collected: 10/18/24 00:00
Date Received: 10/19/24 09:45

Lab Sample ID: 280-198366-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			10/31/24 00:37	1
Naphthalene	ND		3.0	0.99	ug/L			10/31/24 00:37	1
n-Butylbenzene	ND		1.0	0.23	ug/L			10/31/24 00:37	1
N-Propylbenzene	ND		1.0	0.18	ug/L			10/31/24 00:37	1
o-Xylene	ND		1.0	0.11	ug/L			10/31/24 00:37	1
sec-Butylbenzene	ND		1.0	0.20	ug/L			10/31/24 00:37	1
Styrene	ND		1.0	0.13	ug/L			10/31/24 00:37	1
tert-Butylbenzene	ND		1.0	0.18	ug/L			10/31/24 00:37	1
Tetrachloroethene	ND		1.0	0.40	ug/L			10/31/24 00:37	1
Toluene	ND		1.0	0.32	ug/L			10/31/24 00:37	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			10/31/24 00:37	1
trans-1,3-Dichloropropene	ND		1.0	0.14	ug/L			10/31/24 00:37	1
Trichloroethene	ND		1.0	0.30	ug/L			10/31/24 00:37	1
Trichlorofluoromethane	ND		2.0	0.20	ug/L			10/31/24 00:37	1
Vinyl chloride	ND		1.0	0.23	ug/L			10/31/24 00:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		70 - 127					10/31/24 00:37	1
4-Bromofluorobenzene (Surr)	93		78 - 120					10/31/24 00:37	1
Dibromofluoromethane (Surr)	101		77 - 120					10/31/24 00:37	1
Toluene-d8 (Surr)	101		80 - 125					10/31/24 00:37	1

Client Sample ID: QCTB
Date Collected: 10/18/24 08:55
Date Received: 10/19/24 09:45

Lab Sample ID: 280-198366-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			10/31/24 00:17	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			10/31/24 00:17	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/31/24 00:17	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			10/31/24 00:17	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			10/31/24 00:17	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			10/31/24 00:17	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			10/31/24 00:17	1
1,2,3-Trichlorobenzene	ND		4.0	1.2	ug/L			10/31/24 00:17	1
1,2,3-Trichloropropane	ND		2.5	0.28	ug/L			10/31/24 00:17	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			10/31/24 00:17	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			10/31/24 00:17	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.42	ug/L			10/31/24 00:17	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			10/31/24 00:17	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			10/31/24 00:17	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			10/31/24 00:17	1
1,2-Dichloropropane	ND		1.0	0.24	ug/L			10/31/24 00:17	1
1,3,5-Trimethylbenzene	ND		1.0	0.12	ug/L			10/31/24 00:17	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			10/31/24 00:17	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			10/31/24 00:17	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			10/31/24 00:17	1
2,2-Dichloropropane	ND		1.0	0.17	ug/L			10/31/24 00:17	1
2-Butanone (MEK)	ND		10	4.6	ug/L			10/31/24 00:17	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			10/31/24 00:17	1
2-Hexanone	ND		5.0	0.81	ug/L			10/31/24 00:17	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: QCTB
Date Collected: 10/18/24 08:55
Date Received: 10/19/24 09:45

Lab Sample ID: 280-198366-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			10/31/24 00:17	1
4-Isopropyltoluene	ND		1.0	0.19	ug/L			10/31/24 00:17	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			10/31/24 00:17	1
Acetone	ND		15	6.6	ug/L			10/31/24 00:17	1
Benzene	ND		1.0	0.14	ug/L			10/31/24 00:17	1
Bromobenzene	ND		1.0	0.19	ug/L			10/31/24 00:17	1
Bromochloromethane	ND		1.0	0.40	ug/L			10/31/24 00:17	1
Bromodichloromethane	ND		1.0	0.19	ug/L			10/31/24 00:17	1
Bromoform	ND		2.0	0.25	ug/L			10/31/24 00:17	1
Bromomethane	ND		5.0	2.4	ug/L			10/31/24 00:17	1
Carbon disulfide	ND		2.0	0.26	ug/L			10/31/24 00:17	1
Carbon tetrachloride	ND		1.0	0.23	ug/L			10/31/24 00:17	1
Chlorobenzene	ND		1.0	0.092	ug/L			10/31/24 00:17	1
Chloroethane	ND		2.0	0.64	ug/L			10/31/24 00:17	1
Chloroform	ND		1.0	0.36	ug/L			10/31/24 00:17	1
Chloromethane	ND		2.0	0.23	ug/L			10/31/24 00:17	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			10/31/24 00:17	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			10/31/24 00:17	1
Dibromochloromethane	ND		1.0	0.28	ug/L			10/31/24 00:17	1
Dibromomethane	ND		1.0	0.34	ug/L			10/31/24 00:17	1
Dichlorodifluoromethane	ND		2.0	0.30	ug/L			10/31/24 00:17	1
Ethylbenzene	ND		1.0	0.14	ug/L			10/31/24 00:17	1
Hexachlorobutadiene	ND		2.0	0.53	ug/L			10/31/24 00:17	1
Isopropylbenzene	ND		1.0	0.16	ug/L			10/31/24 00:17	1
Methylene Chloride	ND		2.0	0.94	ug/L			10/31/24 00:17	1
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			10/31/24 00:17	1
Naphthalene	ND		3.0	0.99	ug/L			10/31/24 00:17	1
n-Butylbenzene	ND		1.0	0.23	ug/L			10/31/24 00:17	1
N-Propylbenzene	ND		1.0	0.18	ug/L			10/31/24 00:17	1
o-Xylene	ND		1.0	0.11	ug/L			10/31/24 00:17	1
sec-Butylbenzene	ND		1.0	0.20	ug/L			10/31/24 00:17	1
Styrene	ND		1.0	0.13	ug/L			10/31/24 00:17	1
tert-Butylbenzene	ND		1.0	0.18	ug/L			10/31/24 00:17	1
Tetrachloroethene	ND		1.0	0.40	ug/L			10/31/24 00:17	1
Toluene	ND		1.0	0.32	ug/L			10/31/24 00:17	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			10/31/24 00:17	1
trans-1,3-Dichloropropene	ND		1.0	0.14	ug/L			10/31/24 00:17	1
Trichloroethene	ND		1.0	0.30	ug/L			10/31/24 00:17	1
Trichlorofluoromethane	ND		2.0	0.20	ug/L			10/31/24 00:17	1
Vinyl chloride	ND		1.0	0.23	ug/L			10/31/24 00:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		70 - 127		10/31/24 00:17	1
4-Bromofluorobenzene (Surr)	93		78 - 120		10/31/24 00:17	1
Dibromofluoromethane (Surr)	103		77 - 120		10/31/24 00:17	1
Toluene-d8 (Surr)	101		80 - 125		10/31/24 00:17	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

Method: EPA 200.8 - Metals (ICP/MS)

Client Sample ID: LDS-2B
Date Collected: 10/18/24 09:45
Date Received: 10/19/24 09:45

Lab Sample ID: 280-198366-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	3.0		2.0	0.40	ug/L		10/23/24 08:17	10/23/24 21:57	1
Arsenic	28		5.0	0.50	ug/L		10/23/24 08:17	10/23/24 21:57	1
Lead	4.0		1.0	0.23	ug/L		10/23/24 08:17	10/23/24 21:57	1
Nickel	240		3.0	0.83	ug/L		10/23/24 08:17	10/23/24 21:57	1
Barium	480	B	3.0	0.38	ug/L		10/23/24 08:17	10/23/24 21:57	1
Selenium	ND		5.0	1.0	ug/L		10/23/24 08:17	10/23/24 21:57	1
Beryllium	ND		1.0	0.30	ug/L		10/23/24 08:17	10/23/24 21:57	1
Cadmium	ND		1.0	0.19	ug/L		10/23/24 08:17	10/23/24 21:57	1
Chromium	59		3.0	0.50	ug/L		10/23/24 08:17	10/23/24 21:57	1
Cobalt	64		1.0	0.33	ug/L		10/23/24 08:17	10/23/24 21:57	1
Copper	270		2.0	0.71	ug/L		10/23/24 08:17	10/23/24 21:57	1
Silver	ND		1.0	0.045	ug/L		10/23/24 08:17	10/23/24 21:57	1
Thallium	ND		1.0	0.21	ug/L		10/23/24 08:17	10/23/24 21:57	1
Vanadium	100		5.0	1.1	ug/L		10/23/24 08:17	10/23/24 21:57	1
Zinc	120	B	10	2.0	ug/L		10/23/24 08:17	10/23/24 21:57	1

Client Sample ID: LDS-3
Date Collected: 10/18/24 08:55
Date Received: 10/19/24 09:45

Lab Sample ID: 280-198366-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.83	J	2.0	0.40	ug/L		10/23/24 08:17	10/23/24 21:59	1
Arsenic	3.2	J	5.0	0.50	ug/L		10/23/24 08:17	10/23/24 21:59	1
Lead	0.29	J	1.0	0.23	ug/L		10/23/24 08:17	10/23/24 21:59	1
Nickel	130		3.0	0.83	ug/L		10/23/24 08:17	10/23/24 21:59	1
Barium	230	B	3.0	0.38	ug/L		10/23/24 08:17	10/23/24 21:59	1
Selenium	ND		5.0	1.0	ug/L		10/23/24 08:17	10/23/24 21:59	1
Beryllium	ND		1.0	0.30	ug/L		10/23/24 08:17	10/23/24 21:59	1
Cadmium	0.19	J	1.0	0.19	ug/L		10/23/24 08:17	10/23/24 21:59	1
Chromium	5.5		3.0	0.50	ug/L		10/23/24 08:17	10/23/24 21:59	1
Cobalt	17		1.0	0.33	ug/L		10/23/24 08:17	10/23/24 21:59	1
Copper	42		2.0	0.71	ug/L		10/23/24 08:17	10/23/24 21:59	1
Silver	0.17	J	1.0	0.045	ug/L		10/23/24 08:17	10/23/24 21:59	1
Thallium	ND		1.0	0.21	ug/L		10/23/24 08:17	10/23/24 21:59	1
Vanadium	5.4		5.0	1.1	ug/L		10/23/24 08:17	10/23/24 21:59	1
Zinc	5.7	J B	10	2.0	ug/L		10/23/24 08:17	10/23/24 21:59	1

Client Sample ID: LDS-4
Date Collected: 10/18/24 10:27
Date Received: 10/19/24 09:45

Lab Sample ID: 280-198366-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.40	ug/L		10/23/24 08:17	10/23/24 22:06	1
Arsenic	ND		5.0	0.50	ug/L		10/23/24 08:17	10/23/24 22:06	1
Lead	ND		1.0	0.23	ug/L		10/23/24 08:17	10/23/24 22:06	1
Nickel	18		3.0	0.83	ug/L		10/23/24 08:17	10/23/24 22:06	1
Barium	110	B	3.0	0.38	ug/L		10/23/24 08:17	10/23/24 22:06	1
Selenium	ND		5.0	1.0	ug/L		10/23/24 08:17	10/23/24 22:06	1
Beryllium	ND		1.0	0.30	ug/L		10/23/24 08:17	10/23/24 22:06	1
Cadmium	ND		1.0	0.19	ug/L		10/23/24 08:17	10/23/24 22:06	1
Chromium	1.0	J	3.0	0.50	ug/L		10/23/24 08:17	10/23/24 22:06	1
Cobalt	2.1		1.0	0.33	ug/L		10/23/24 08:17	10/23/24 22:06	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

Method: EPA 200.8 - Metals (ICP/MS) (Continued)

Client Sample ID: LDS-4
Date Collected: 10/18/24 10:27
Date Received: 10/19/24 09:45

Lab Sample ID: 280-198366-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	5.3		2.0	0.71	ug/L		10/23/24 08:17	10/23/24 22:06	1
Silver	ND		1.0	0.045	ug/L		10/23/24 08:17	10/23/24 22:06	1
Thallium	ND		1.0	0.21	ug/L		10/23/24 08:17	10/23/24 22:06	1
Vanadium	4.8	J	5.0	1.1	ug/L		10/23/24 08:17	10/23/24 22:06	1
Zinc	ND		10	2.0	ug/L		10/23/24 08:17	10/23/24 22:06	1

Client Sample ID: LDS-5
Date Collected: 10/18/24 10:53
Date Received: 10/19/24 09:45

Lab Sample ID: 280-198366-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.45	J	2.0	0.40	ug/L		10/23/24 08:17	10/23/24 22:09	1
Arsenic	0.79	J	5.0	0.50	ug/L		10/23/24 08:17	10/23/24 22:09	1
Lead	ND		1.0	0.23	ug/L		10/23/24 08:17	10/23/24 22:09	1
Nickel	69		3.0	0.83	ug/L		10/23/24 08:17	10/23/24 22:09	1
Barium	210	B	3.0	0.38	ug/L		10/23/24 08:17	10/23/24 22:09	1
Selenium	ND		5.0	1.0	ug/L		10/23/24 08:17	10/23/24 22:09	1
Beryllium	ND		1.0	0.30	ug/L		10/23/24 08:17	10/23/24 22:09	1
Cadmium	ND		1.0	0.19	ug/L		10/23/24 08:17	10/23/24 22:09	1
Chromium	4.7		3.0	0.50	ug/L		10/23/24 08:17	10/23/24 22:09	1
Cobalt	11		1.0	0.33	ug/L		10/23/24 08:17	10/23/24 22:09	1
Copper	46		2.0	0.71	ug/L		10/23/24 08:17	10/23/24 22:09	1
Silver	ND		1.0	0.045	ug/L		10/23/24 08:17	10/23/24 22:09	1
Thallium	ND		1.0	0.21	ug/L		10/23/24 08:17	10/23/24 22:09	1
Vanadium	5.1		5.0	1.1	ug/L		10/23/24 08:17	10/23/24 22:09	1
Zinc	3.1	J B	10	2.0	ug/L		10/23/24 08:17	10/23/24 22:09	1

Client Sample ID: LDS-ELP
Date Collected: 10/18/24 11:21
Date Received: 10/19/24 09:45

Lab Sample ID: 280-198366-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	7.5		2.0	0.40	ug/L		10/23/24 08:17	10/23/24 22:11	1
Arsenic	9.2		5.0	0.50	ug/L		10/23/24 08:17	10/23/24 22:11	1
Lead	0.38	J	1.0	0.23	ug/L		10/23/24 08:17	10/23/24 22:11	1
Nickel	280		3.0	0.83	ug/L		10/23/24 08:17	10/23/24 22:11	1
Barium	150	B	3.0	0.38	ug/L		10/23/24 08:17	10/23/24 22:11	1
Selenium	1.3	J	5.0	1.0	ug/L		10/23/24 08:17	10/23/24 22:11	1
Beryllium	ND		1.0	0.30	ug/L		10/23/24 08:17	10/23/24 22:11	1
Cadmium	0.39	J	1.0	0.19	ug/L		10/23/24 08:17	10/23/24 22:11	1
Chromium	42		3.0	0.50	ug/L		10/23/24 08:17	10/23/24 22:11	1
Cobalt	110		1.0	0.33	ug/L		10/23/24 08:17	10/23/24 22:11	1
Copper	88		2.0	0.71	ug/L		10/23/24 08:17	10/23/24 22:11	1
Silver	0.051	J	1.0	0.045	ug/L		10/23/24 08:17	10/23/24 22:11	1
Thallium	ND		1.0	0.21	ug/L		10/23/24 08:17	10/23/24 22:11	1
Vanadium	15		5.0	1.1	ug/L		10/23/24 08:17	10/23/24 22:11	1
Zinc	190	B	10	2.0	ug/L		10/23/24 08:17	10/23/24 22:11	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

Method: EPA 200.8 - Metals (ICP/MS)

Client Sample ID: L-POND
Date Collected: 10/18/24 12:30
Date Received: 10/19/24 09:45

Lab Sample ID: 280-198366-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	17		10	2.0	ug/L		10/23/24 08:17	10/23/24 22:13	1
Arsenic	110		25	2.5	ug/L		10/23/24 08:17	10/23/24 22:13	1
Lead	ND		5.0	1.2	ug/L		10/23/24 08:17	10/23/24 22:13	1
Nickel	140		15	4.2	ug/L		10/23/24 08:17	10/23/24 22:13	1
Barium	600	B	15	1.9	ug/L		10/23/24 08:17	10/23/24 22:13	1
Selenium	ND		25	5.0	ug/L		10/23/24 08:17	10/23/24 22:13	1
Beryllium	ND		5.0	1.5	ug/L		10/23/24 08:17	10/23/24 22:13	1
Cadmium	ND		5.0	0.95	ug/L		10/23/24 08:17	10/23/24 22:13	1
Chromium	160		15	2.5	ug/L		10/23/24 08:17	10/23/24 22:13	1
Cobalt	33		5.0	1.7	ug/L		10/23/24 08:17	10/23/24 22:13	1
Copper	ND		10	3.6	ug/L		10/23/24 08:17	10/23/24 22:13	1
Silver	ND		5.0	0.23	ug/L		10/23/24 08:17	10/23/24 22:13	1
Thallium	ND		5.0	1.1	ug/L		10/23/24 08:17	10/23/24 22:13	1
Vanadium	160		25	5.6	ug/L		10/23/24 08:17	10/23/24 22:13	1
Zinc	87	B	50	10	ug/L		10/23/24 08:17	10/23/24 22:13	1

General Chemistry

Client Sample ID: LDS-2B
Date Collected: 10/18/24 09:45
Date Received: 10/19/24 09:45

Lab Sample ID: 280-198366-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	2300		150	51	mg/L			10/31/24 10:05	50
Sulfate (EPA 300.0)	12		5.0	1.0	mg/L			10/31/24 09:54	1
Ammonia (EPA 350.1)	130		5.0	1.5	mg/L			11/02/24 12:23	50
Nitrate Nitrite as N (EPA 353.2)	3.5		2.0	0.88	mg/L			10/30/24 10:53	20
Chemical Oxygen Demand (EPA 410.4)	1000		200	87	mg/L			10/31/24 09:09	10
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	1200		10	3.1	mg/L			10/26/24 06:56	1
Total Dissolved Solids (SM 2540C)	5300		100	47	mg/L			10/25/24 08:55	1
Total Suspended Solids (SM 2540D)	2.8	J	4.0	1.1	mg/L			10/25/24 11:03	1
TOC Result 1 (SM 5310B)	380		10	3.5	mg/L			10/29/24 10:28	10
TOC Result 2 (SM 5310B)	380		10	3.5	mg/L			10/29/24 10:28	10
TOC Result 3 (SM 5310B)	370		10	3.5	mg/L			10/29/24 10:28	10
TOC Result 4 (SM 5310B)	370		10	3.5	mg/L			10/29/24 10:28	10
Total Organic Carbon - Quad (SM 5310B)	380		10	3.5	mg/L			10/29/24 10:28	10

Client Sample ID: LDS-3
Date Collected: 10/18/24 08:55
Date Received: 10/19/24 09:45

Lab Sample ID: 280-198366-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	910		60	20	mg/L			10/31/24 12:28	20
Sulfate (EPA 300.0)	320		100	21	mg/L			10/31/24 12:28	20
Ammonia (EPA 350.1)	0.57		0.10	0.029	mg/L			10/28/24 17:33	1
Nitrate Nitrite as N (EPA 353.2)	120		5.0	2.2	mg/L			10/29/24 14:36	50
Chemical Oxygen Demand (EPA 410.4)	170		40	17	mg/L			10/31/24 09:09	2
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	400		10	3.1	mg/L			10/26/24 07:03	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

General Chemistry (Continued)

Client Sample ID: LDS-3
Date Collected: 10/18/24 08:55
Date Received: 10/19/24 09:45

Lab Sample ID: 280-198366-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	2900		40	19	mg/L			10/25/24 08:55	1
Total Suspended Solids (SM 2540D)	1.6	J	4.0	1.1	mg/L			10/25/24 11:03	1
TOC Result 1 (SM 5310B)	54		2.0	0.69	mg/L			10/29/24 10:43	2
TOC Result 2 (SM 5310B)	54		2.0	0.69	mg/L			10/29/24 10:43	2
TOC Result 3 (SM 5310B)	52		2.0	0.69	mg/L			10/29/24 10:43	2
TOC Result 4 (SM 5310B)	51		2.0	0.69	mg/L			10/29/24 10:43	2
Total Organic Carbon - Quad (SM 5310B)	53		2.0	0.69	mg/L			10/29/24 10:43	2

Client Sample ID: LDS-4
Date Collected: 10/18/24 10:27
Date Received: 10/19/24 09:45

Lab Sample ID: 280-198366-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	240		15	5.1	mg/L			10/31/24 13:23	5
Sulfate (EPA 300.0)	46		5.0	1.0	mg/L			10/31/24 13:12	1
Ammonia (EPA 350.1)	1.9		0.10	0.029	mg/L			10/28/24 17:55	1
Nitrate Nitrite as N (EPA 353.2)	23		2.0	0.88	mg/L			10/29/24 14:38	20
Chemical Oxygen Demand (EPA 410.4)	24		20	8.7	mg/L			10/29/24 08:59	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	340		10	3.1	mg/L			10/26/24 07:09	1
Total Dissolved Solids (SM 2540C)	890		20	9.4	mg/L			10/25/24 08:55	1
Total Suspended Solids (SM 2540D)	ND		4.0	1.1	mg/L			10/25/24 11:03	1
TOC Result 1 (SM 5310B)	4.8		1.0	0.35	mg/L			10/29/24 11:02	1
TOC Result 2 (SM 5310B)	4.6		1.0	0.35	mg/L			10/29/24 11:02	1
TOC Result 3 (SM 5310B)	4.5		1.0	0.35	mg/L			10/29/24 11:02	1
TOC Result 4 (SM 5310B)	4.5		1.0	0.35	mg/L			10/29/24 11:02	1
Total Organic Carbon - Quad (SM 5310B)	4.6		1.0	0.35	mg/L			10/29/24 11:02	1

Client Sample ID: LDS-5
Date Collected: 10/18/24 10:53
Date Received: 10/19/24 09:45

Lab Sample ID: 280-198366-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	850		30	10	mg/L			10/31/24 13:45	10
Sulfate (EPA 300.0)	42		5.0	1.0	mg/L			10/31/24 13:34	1
Ammonia (EPA 350.1)	0.61		0.10	0.029	mg/L			10/28/24 17:57	1
Nitrate Nitrite as N (EPA 353.2)	77		5.0	2.2	mg/L			10/29/24 14:39	50
Chemical Oxygen Demand (EPA 410.4)	99		20	8.7	mg/L			10/29/24 08:59	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	170		10	3.1	mg/L			10/26/24 07:15	1
Total Dissolved Solids (SM 2540C)	2000		40	19	mg/L			10/25/24 08:55	1
Total Suspended Solids (SM 2540D)	ND		4.0	1.1	mg/L			10/25/24 11:03	1
TOC Result 1 (SM 5310B)	28		1.0	0.35	mg/L			10/29/24 11:16	1
TOC Result 2 (SM 5310B)	28		1.0	0.35	mg/L			10/29/24 11:16	1
TOC Result 3 (SM 5310B)	27		1.0	0.35	mg/L			10/29/24 11:16	1
TOC Result 4 (SM 5310B)	27		1.0	0.35	mg/L			10/29/24 11:16	1
Total Organic Carbon - Quad (SM 5310B)	28		1.0	0.35	mg/L			10/29/24 11:16	1

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Client Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

General Chemistry

Client Sample ID: LDS-ELP
Date Collected: 10/18/24 11:21
Date Received: 10/19/24 09:45

Lab Sample ID: 280-198366-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	3000		60	20	mg/L			10/31/24 13:01	20
Sulfate (EPA 300.0)	1200		100	21	mg/L			10/31/24 13:01	20
Ammonia (EPA 350.1)	500		20	5.8	mg/L			11/02/24 12:26	200
Nitrate Nitrite as N (EPA 353.2)	290		10	4.4	mg/L			10/29/24 14:40	100
Chemical Oxygen Demand (EPA 410.4)	1100		200	87	mg/L			10/29/24 08:59	10
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	2000		10	3.1	mg/L			10/26/24 07:33	1
Total Dissolved Solids (SM 2540C)	8200		1000	470	mg/L			10/25/24 08:55	1
Total Suspended Solids (SM 2540D)	4.4		4.0	1.1	mg/L			10/25/24 11:03	1
TOC Result 1 (SM 5310B)	350		20	6.9	mg/L			10/29/24 12:36	20
TOC Result 2 (SM 5310B)	350		20	6.9	mg/L			10/29/24 12:36	20
TOC Result 3 (SM 5310B)	350		20	6.9	mg/L			10/29/24 12:36	20
TOC Result 4 (SM 5310B)	340		20	6.9	mg/L			10/29/24 12:36	20
Total Organic Carbon - Quad (SM 5310B)	350		20	6.9	mg/L			10/29/24 12:36	20

Client Sample ID: L-POND
Date Collected: 10/18/24 12:30
Date Received: 10/19/24 09:45

Lab Sample ID: 280-198366-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	3600		60	20	mg/L			10/31/24 12:50	20
Sulfate (EPA 300.0)	4.1	J	5.0	1.0	mg/L			10/31/24 12:39	1
Ammonia (EPA 350.1)	1300		50	15	mg/L			11/02/24 12:28	500
Nitrate Nitrite as N (EPA 353.2)	ND		0.10	0.044	mg/L			10/29/24 14:41	1
Chemical Oxygen Demand (EPA 410.4)	3900		1000	430	mg/L			10/31/24 09:09	50
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	5200	B	10	3.1	mg/L			10/28/24 23:49	1
Total Dissolved Solids (SM 2540C)	9700		1000	470	mg/L			10/25/24 08:55	1
Total Suspended Solids (SM 2540D)	70		8.0	2.2	mg/L			10/25/24 11:03	1
TOC Result 1 (SM 5310B)	1400		50	17	mg/L			10/31/24 23:36	50
TOC Result 2 (SM 5310B)	1300		50	17	mg/L			10/31/24 23:36	50
TOC Result 3 (SM 5310B)	1300		50	17	mg/L			10/31/24 23:36	50
TOC Result 4 (SM 5310B)	1300		50	17	mg/L			10/31/24 23:36	50
Total Organic Carbon - Quad (SM 5310B)	1300		50	17	mg/L			10/31/24 23:36	50

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Surrogate Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	DCA	BFB	DBFM	TOL
		(70-127)	(78-120)	(77-120)	(80-125)
280-198366-1	LDS-2B	105	94	101	99
280-198366-2	LDS-3	107	95	102	100
280-198366-3	LDS-4	107	93	103	101
280-198366-4	LDS-5	107	95	102	101
280-198366-5	LDS-ELP	102	94	99	100
280-198366-6	L-POND	105	94	101	102
280-198366-7	QCAB	104	93	101	101
280-198366-8	QCTB	105	93	103	101
LCS 280-673139/4	Lab Control Sample	103	97	100	102
LCSD 280-673139/5	Lab Control Sample Dup	103	96	100	102
MB 280-673139/9	Method Blank	103	96	101	102

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

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

Lab Sample ID: MB 280-673139/9

Matrix: Water

Analysis Batch: 673139

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			10/30/24 21:12	1
1,1,1-Trichloroethane	ND		1.0	0.39	ug/L			10/30/24 21:12	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/30/24 21:12	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			10/30/24 21:12	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			10/30/24 21:12	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			10/30/24 21:12	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			10/30/24 21:12	1
1,2,3-Trichlorobenzene	ND		4.0	1.2	ug/L			10/30/24 21:12	1
1,2,3-Trichloropropane	ND		2.5	0.28	ug/L			10/30/24 21:12	1
1,2,4-Trichlorobenzene	ND		1.0	0.58	ug/L			10/30/24 21:12	1
1,2,4-Trimethylbenzene	ND		1.0	0.15	ug/L			10/30/24 21:12	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.42	ug/L			10/30/24 21:12	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			10/30/24 21:12	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			10/30/24 21:12	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			10/30/24 21:12	1
1,2-Dichloropropane	ND		1.0	0.24	ug/L			10/30/24 21:12	1
1,3,5-Trimethylbenzene	ND		1.0	0.12	ug/L			10/30/24 21:12	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			10/30/24 21:12	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			10/30/24 21:12	1
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L			10/30/24 21:12	1
2,2-Dichloropropane	ND		1.0	0.17	ug/L			10/30/24 21:12	1
2-Butanone (MEK)	ND		10	4.6	ug/L			10/30/24 21:12	1
2-Chlorotoluene	ND		1.0	0.34	ug/L			10/30/24 21:12	1
2-Hexanone	ND		5.0	0.81	ug/L			10/30/24 21:12	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			10/30/24 21:12	1
4-Isopropyltoluene	ND		1.0	0.19	ug/L			10/30/24 21:12	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			10/30/24 21:12	1
Acetone	7.03	J	15	6.6	ug/L			10/30/24 21:12	1
Benzene	ND		1.0	0.14	ug/L			10/30/24 21:12	1
Bromobenzene	ND		1.0	0.19	ug/L			10/30/24 21:12	1
Bromochloromethane	ND		1.0	0.40	ug/L			10/30/24 21:12	1
Bromodichloromethane	ND		1.0	0.19	ug/L			10/30/24 21:12	1
Bromoform	ND		2.0	0.25	ug/L			10/30/24 21:12	1
Bromomethane	ND		5.0	2.4	ug/L			10/30/24 21:12	1
Carbon disulfide	ND		2.0	0.26	ug/L			10/30/24 21:12	1
Carbon tetrachloride	ND		1.0	0.23	ug/L			10/30/24 21:12	1
Chlorobenzene	ND		1.0	0.092	ug/L			10/30/24 21:12	1
Chloroethane	ND		2.0	0.64	ug/L			10/30/24 21:12	1
Chloroform	ND		1.0	0.36	ug/L			10/30/24 21:12	1
Chloromethane	ND		2.0	0.23	ug/L			10/30/24 21:12	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			10/30/24 21:12	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			10/30/24 21:12	1
Dibromochloromethane	ND		1.0	0.28	ug/L			10/30/24 21:12	1
Dibromomethane	ND		1.0	0.34	ug/L			10/30/24 21:12	1
Dichlorodifluoromethane	ND		2.0	0.30	ug/L			10/30/24 21:12	1
Ethylbenzene	ND		1.0	0.14	ug/L			10/30/24 21:12	1
Hexachlorobutadiene	ND		2.0	0.53	ug/L			10/30/24 21:12	1
Isopropylbenzene	ND		1.0	0.16	ug/L			10/30/24 21:12	1

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

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

Lab Sample ID: MB 280-673139/9

Matrix: Water

Analysis Batch: 673139

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		2.0	0.94	ug/L			10/30/24 21:12	1
m-Xylene & p-Xylene	ND		2.0	0.36	ug/L			10/30/24 21:12	1
Naphthalene	ND		3.0	0.99	ug/L			10/30/24 21:12	1
n-Butylbenzene	ND		1.0	0.23	ug/L			10/30/24 21:12	1
N-Propylbenzene	ND		1.0	0.18	ug/L			10/30/24 21:12	1
o-Xylene	ND		1.0	0.11	ug/L			10/30/24 21:12	1
sec-Butylbenzene	ND		1.0	0.20	ug/L			10/30/24 21:12	1
Styrene	ND		1.0	0.13	ug/L			10/30/24 21:12	1
tert-Butylbenzene	ND		1.0	0.18	ug/L			10/30/24 21:12	1
Tetrachloroethene	ND		1.0	0.40	ug/L			10/30/24 21:12	1
Toluene	ND		1.0	0.32	ug/L			10/30/24 21:12	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			10/30/24 21:12	1
trans-1,3-Dichloropropene	ND		1.0	0.14	ug/L			10/30/24 21:12	1
Trichloroethene	ND		1.0	0.30	ug/L			10/30/24 21:12	1
Trichlorofluoromethane	ND		2.0	0.20	ug/L			10/30/24 21:12	1
Vinyl chloride	ND		1.0	0.23	ug/L			10/30/24 21:12	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		70 - 127		10/30/24 21:12	1
4-Bromofluorobenzene (Surr)	96		78 - 120		10/30/24 21:12	1
Dibromofluoromethane (Surr)	101		77 - 120		10/30/24 21:12	1
Toluene-d8 (Surr)	102		80 - 125		10/30/24 21:12	1

Lab Sample ID: LCS 280-673139/4

Matrix: Water

Analysis Batch: 673139

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	50.0	49.4		ug/L		99	80 - 124
1,1,1-Trichloroethane	50.0	48.2		ug/L		96	80 - 123
1,1,2,2-Tetrachloroethane	50.0	55.7		ug/L		111	74 - 123
1,1,2-Trichloroethane	50.0	50.5		ug/L		101	80 - 120
1,1-Dichloroethane	50.0	51.0		ug/L		102	78 - 121
1,1-Dichloroethene	50.0	45.8		ug/L		92	77 - 121
1,1-Dichloropropene	50.0	50.9		ug/L		102	77 - 123
1,2,3-Trichlorobenzene	50.0	48.4		ug/L		97	65 - 129
1,2,3-Trichloropropane	50.0	54.2		ug/L		108	80 - 120
1,2,4-Trichlorobenzene	50.0	47.6		ug/L		95	74 - 126
1,2,4-Trimethylbenzene	50.0	54.2		ug/L		108	79 - 124
1,2-Dibromo-3-Chloropropane	50.0	45.0		ug/L		90	73 - 128
1,2-Dibromoethane	50.0	51.3		ug/L		103	80 - 120
1,2-Dichlorobenzene	50.0	52.4		ug/L		105	80 - 120
1,2-Dichloroethane	50.0	53.8		ug/L		108	71 - 121
1,2-Dichloropropane	50.0	51.7		ug/L		103	78 - 120
1,3,5-Trimethylbenzene	50.0	54.0		ug/L		108	80 - 122
1,3-Dichlorobenzene	50.0	52.4		ug/L		105	80 - 120
1,3-Dichloropropane	50.0	52.8		ug/L		106	77 - 122
1,4-Dichlorobenzene	50.0	51.7		ug/L		103	80 - 120

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

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

Lab Sample ID: LCS 280-673139/4

Matrix: Water

Analysis Batch: 673139

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,2-Dichloropropane	50.0	46.8		ug/L		94	75 - 131
2-Butanone (MEK)	200	213		ug/L		106	58 - 135
2-Chlorotoluene	50.0	52.0		ug/L		104	80 - 120
2-Hexanone	200	218		ug/L		109	62 - 137
4-Chlorotoluene	50.0	52.1		ug/L		104	80 - 120
4-Isopropyltoluene	50.0	53.5		ug/L		107	80 - 122
4-Methyl-2-pentanone (MIBK)	200	217		ug/L		109	66 - 135
Acetone	200	208		ug/L		104	61 - 134
Benzene	50.0	50.2		ug/L		100	80 - 120
Bromobenzene	50.0	51.0		ug/L		102	80 - 120
Bromochloromethane	50.0	49.5		ug/L		99	80 - 123
Bromodichloromethane	50.0	51.3		ug/L		103	80 - 123
Bromoform	50.0	47.5		ug/L		95	79 - 138
Bromomethane	50.0	64.9		ug/L		130	29 - 148
Carbon disulfide	50.0	45.3		ug/L		91	70 - 121
Carbon tetrachloride	50.0	48.3		ug/L		97	79 - 127
Chlorobenzene	50.0	51.3		ug/L		103	80 - 120
Chloroethane	50.0	46.7		ug/L		93	56 - 141
Chloroform	50.0	52.1		ug/L		104	80 - 120
Chloromethane	50.0	55.8		ug/L		112	56 - 133
cis-1,2-Dichloroethene	50.0	47.8		ug/L		96	80 - 120
cis-1,3-Dichloropropene	50.0	48.8		ug/L		98	76 - 129
Dibromochloromethane	50.0	49.7		ug/L		99	80 - 125
Dibromomethane	50.0	51.2		ug/L		102	80 - 120
Dichlorodifluoromethane	50.0	46.6		ug/L		93	47 - 135
Ethylbenzene	50.0	51.1		ug/L		102	80 - 120
Hexachlorobutadiene	50.0	47.4		ug/L		95	73 - 128
Isopropylbenzene	50.0	52.3		ug/L		105	78 - 122
Methylene Chloride	50.0	50.2		ug/L		100	78 - 120
m-Xylene & p-Xylene	50.0	50.9		ug/L		102	80 - 120
Naphthalene	50.0	49.2		ug/L		98	60 - 124
n-Butylbenzene	50.0	56.5		ug/L		113	59 - 140
N-Propylbenzene	50.0	52.3		ug/L		105	80 - 123
o-Xylene	50.0	51.2		ug/L		102	80 - 120
sec-Butylbenzene	50.0	51.9		ug/L		104	80 - 123
Styrene	50.0	51.7		ug/L		103	80 - 120
tert-Butylbenzene	50.0	52.9		ug/L		106	80 - 120
Tetrachloroethene	50.0	47.4		ug/L		95	80 - 121
Toluene	50.0	51.5		ug/L		103	80 - 120
trans-1,2-Dichloroethene	50.0	46.4		ug/L		93	79 - 121
trans-1,3-Dichloropropene	50.0	49.7		ug/L		99	80 - 123
Trichloroethene	50.0	47.3		ug/L		95	80 - 120
Trichlorofluoromethane	50.0	49.1		ug/L		98	54 - 144
Vinyl chloride	50.0	59.6		ug/L		119	67 - 127

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	103		70 - 127
4-Bromofluorobenzene (Surr)	97		78 - 120

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

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

Lab Sample ID: LCS 280-673139/4

Matrix: Water

Analysis Batch: 673139

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
Dibromofluoromethane (Surr)	100		77 - 120
Toluene-d8 (Surr)	102		80 - 125

Lab Sample ID: LCSD 280-673139/5

Matrix: Water

Analysis Batch: 673139

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	50.0	53.4		ug/L		107	80 - 124	8	20
1,1,1-Trichloroethane	50.0	51.7		ug/L		103	80 - 123	7	20
1,1,2,2-Tetrachloroethane	50.0	56.2		ug/L		112	74 - 123	1	20
1,1,2-Trichloroethane	50.0	52.6		ug/L		105	80 - 120	4	20
1,1-Dichloroethane	50.0	54.7		ug/L		109	78 - 121	7	20
1,1-Dichloroethene	50.0	48.7		ug/L		97	77 - 121	6	21
1,1-Dichloropropene	50.0	53.4		ug/L		107	77 - 123	5	20
1,2,3-Trichlorobenzene	50.0	49.5		ug/L		99	65 - 129	2	20
1,2,3-Trichloropropane	50.0	53.5		ug/L		107	80 - 120	1	20
1,2,4-Trichlorobenzene	50.0	49.5		ug/L		99	74 - 126	4	20
1,2,4-Trimethylbenzene	50.0	57.2		ug/L		114	79 - 124	5	20
1,2-Dibromo-3-Chloropropane	50.0	45.1		ug/L		90	73 - 128	0	21
1,2-Dibromoethane	50.0	54.2		ug/L		108	80 - 120	5	20
1,2-Dichlorobenzene	50.0	55.9		ug/L		112	80 - 120	6	20
1,2-Dichloroethane	50.0	56.5		ug/L		113	71 - 121	5	20
1,2-Dichloropropane	50.0	55.1		ug/L		110	78 - 120	6	20
1,3,5-Trimethylbenzene	50.0	57.0		ug/L		114	80 - 122	5	20
1,3-Dichlorobenzene	50.0	55.4		ug/L		111	80 - 120	6	20
1,3-Dichloropropane	50.0	55.9		ug/L		112	77 - 122	6	20
1,4-Dichlorobenzene	50.0	55.0		ug/L		110	80 - 120	6	20
2,2-Dichloropropane	50.0	48.4		ug/L		97	75 - 131	3	22
2-Butanone (MEK)	200	213		ug/L		107	58 - 135	0	20
2-Chlorotoluene	50.0	53.8		ug/L		108	80 - 120	3	20
2-Hexanone	200	222		ug/L		111	62 - 137	2	21
4-Chlorotoluene	50.0	55.3		ug/L		111	80 - 120	6	20
4-Isopropyltoluene	50.0	56.5		ug/L		113	80 - 122	5	20
4-Methyl-2-pentanone (MIBK)	200	218		ug/L		109	66 - 135	0	20
Acetone	200	212		ug/L		106	61 - 134	2	21
Benzene	50.0	52.8		ug/L		106	80 - 120	5	20
Bromobenzene	50.0	55.1		ug/L		110	80 - 120	8	20
Bromochloromethane	50.0	51.7		ug/L		103	80 - 123	4	20
Bromodichloromethane	50.0	54.1		ug/L		108	80 - 123	5	20
Bromoform	50.0	51.1		ug/L		102	79 - 138	7	20
Bromomethane	50.0	67.2		ug/L		134	29 - 148	4	40
Carbon disulfide	50.0	48.8		ug/L		98	70 - 121	8	20
Carbon tetrachloride	50.0	51.0		ug/L		102	79 - 127	5	20
Chlorobenzene	50.0	55.6		ug/L		111	80 - 120	8	20
Chloroethane	50.0	48.7		ug/L		97	56 - 141	4	30
Chloroform	50.0	54.9		ug/L		110	80 - 120	5	20
Chloromethane	50.0	59.0		ug/L		118	56 - 133	6	20

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

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

Lab Sample ID: LCSD 280-673139/5

Matrix: Water

Analysis Batch: 673139

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	50.0	50.8		ug/L		102	80 - 120	6	20
cis-1,3-Dichloropropene	50.0	52.7		ug/L		105	76 - 129	8	20
Dibromochloromethane	50.0	52.6		ug/L		105	80 - 125	6	20
Dibromomethane	50.0	53.9		ug/L		108	80 - 120	5	20
Dichlorodifluoromethane	50.0	48.7		ug/L		97	47 - 135	4	21
Ethylbenzene	50.0	55.5		ug/L		111	80 - 120	8	20
Hexachlorobutadiene	50.0	49.0		ug/L		98	73 - 128	3	20
Isopropylbenzene	50.0	54.5		ug/L		109	78 - 122	4	20
Methylene Chloride	50.0	53.9		ug/L		108	78 - 120	7	20
m-Xylene & p-Xylene	50.0	54.8		ug/L		110	80 - 120	7	20
Naphthalene	50.0	48.6		ug/L		97	60 - 124	1	21
n-Butylbenzene	50.0	59.5		ug/L		119	59 - 140	5	20
N-Propylbenzene	50.0	54.6		ug/L		109	80 - 123	4	20
o-Xylene	50.0	55.5		ug/L		111	80 - 120	8	20
sec-Butylbenzene	50.0	54.6		ug/L		109	80 - 123	5	20
Styrene	50.0	55.9		ug/L		112	80 - 120	8	20
tert-Butylbenzene	50.0	55.6		ug/L		111	80 - 120	5	20
Tetrachloroethene	50.0	50.6		ug/L		101	80 - 121	7	20
Toluene	50.0	54.6		ug/L		109	80 - 120	6	20
trans-1,2-Dichloroethene	50.0	49.9		ug/L		100	79 - 121	7	20
trans-1,3-Dichloropropene	50.0	52.3		ug/L		105	80 - 123	5	20
Trichloroethene	50.0	52.1		ug/L		104	80 - 120	10	20
Trichlorofluoromethane	50.0	49.8		ug/L		100	54 - 144	1	28
Vinyl chloride	50.0	62.5		ug/L		125	67 - 127	5	25

Surrogate	%Recovery	LCSD Qualifier	LCSD Limits
1,2-Dichloroethane-d4 (Surr)	103		70 - 127
4-Bromofluorobenzene (Surr)	96		78 - 120
Dibromofluoromethane (Surr)	100		77 - 120
Toluene-d8 (Surr)	102		80 - 125

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 280-672039/1-A

Matrix: Water

Analysis Batch: 672256

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 672039

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.40	ug/L		10/23/24 08:17	10/23/24 21:19	1
Arsenic	ND		5.0	0.50	ug/L		10/23/24 08:17	10/23/24 21:19	1
Lead	ND		1.0	0.23	ug/L		10/23/24 08:17	10/23/24 21:19	1
Nickel	ND		3.0	0.83	ug/L		10/23/24 08:17	10/23/24 21:19	1
Barium	0.452	J	3.0	0.38	ug/L		10/23/24 08:17	10/23/24 21:19	1
Selenium	ND		5.0	1.0	ug/L		10/23/24 08:17	10/23/24 21:19	1
Beryllium	ND		1.0	0.30	ug/L		10/23/24 08:17	10/23/24 21:19	1
Cadmium	ND		1.0	0.19	ug/L		10/23/24 08:17	10/23/24 21:19	1
Chromium	ND		3.0	0.50	ug/L		10/23/24 08:17	10/23/24 21:19	1
Cobalt	ND		1.0	0.33	ug/L		10/23/24 08:17	10/23/24 21:19	1
Copper	ND		2.0	0.71	ug/L		10/23/24 08:17	10/23/24 21:19	1

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 280-672039/1-A
Matrix: Water
Analysis Batch: 672256

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 672039

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		1.0	0.045	ug/L		10/23/24 08:17	10/23/24 21:19	1
Thallium	ND		1.0	0.21	ug/L		10/23/24 08:17	10/23/24 21:19	1
Vanadium	ND		5.0	1.1	ug/L		10/23/24 08:17	10/23/24 21:19	1
Zinc	ND		10	2.0	ug/L		10/23/24 08:17	10/23/24 21:19	1

Lab Sample ID: LCS 280-672039/2-A
Matrix: Water
Analysis Batch: 672256

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 672039

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	40.0	40.1		ug/L		100	85 - 115
Arsenic	40.0	39.6		ug/L		99	89 - 111
Lead	40.0	39.5		ug/L		99	88 - 115
Nickel	40.0	39.4		ug/L		98	86 - 115
Barium	40.0	42.4		ug/L		106	89 - 115
Selenium	40.0	39.5		ug/L		99	85 - 114
Beryllium	40.0	37.1		ug/L		93	85 - 115
Cadmium	40.0	39.0		ug/L		97	89 - 111
Chromium	40.0	38.4		ug/L		96	86 - 115
Cobalt	40.0	39.4		ug/L		98	92 - 115
Copper	40.0	38.9		ug/L		97	90 - 115
Silver	40.0	40.5		ug/L		101	90 - 114
Thallium	40.0	39.3		ug/L		98	86 - 115
Vanadium	40.0	40.0		ug/L		100	90 - 115
Zinc	40.0	39.0		ug/L		97	88 - 115

Lab Sample ID: 140-39086-G-1-B MS
Matrix: Water
Analysis Batch: 672256

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 672039

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	ND		40.0	41.1		ug/L		103	85 - 115
Arsenic	5.5		40.0	41.2		ug/L		89	79 - 120
Lead	0.50	J	40.0	38.9		ug/L		96	88 - 115
Nickel	18		40.0	56.4		ug/L		96	86 - 115
Barium	46	B	40.0	89.8		ug/L		109	89 - 115
Selenium	14		40.0	54.4		ug/L		101	85 - 114
Beryllium	ND		40.0	38.0		ug/L		95	85 - 115
Cadmium	0.22	J	40.0	37.7		ug/L		94	89 - 111
Chromium	7.0		40.0	44.5		ug/L		94	86 - 115
Cobalt	ND		40.0	38.5		ug/L		96	92 - 115
Copper	190		40.0	226	4	ug/L		92	90 - 115
Silver	0.35	J	40.0	39.7		ug/L		98	70 - 130
Thallium	ND		40.0	38.0		ug/L		95	86 - 115
Vanadium	1.4	J	40.0	38.6		ug/L		93	90 - 115
Zinc	33	B	40.0	69.0		ug/L		90	88 - 115

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: 140-39086-G-1-C MSD

Matrix: Water

Analysis Batch: 672256

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 672039

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	ND		40.0	41.4		ug/L		104	85 - 115	1	20
Arsenic	5.5		40.0	41.7		ug/L		90	79 - 120	1	20
Lead	0.50	J	40.0	39.8		ug/L		98	88 - 115	2	20
Nickel	18		40.0	56.7		ug/L		97	86 - 115	0	20
Barium	46	B	40.0	87.9		ug/L		105	89 - 115	2	20
Selenium	14		40.0	49.8		ug/L		89	85 - 114	9	20
Beryllium	ND		40.0	37.1		ug/L		93	85 - 115	2	20
Cadmium	0.22	J	40.0	38.5		ug/L		96	89 - 111	2	20
Chromium	7.0		40.0	44.7		ug/L		94	86 - 115	0	20
Cobalt	ND		40.0	38.8		ug/L		97	92 - 115	1	20
Copper	190		40.0	229	4	ug/L		100	90 - 115	1	20
Silver	0.35	J	40.0	40.8		ug/L		101	70 - 130	3	20
Thallium	ND		40.0	39.1		ug/L		98	86 - 115	3	20
Vanadium	1.4	J	40.0	39.6		ug/L		95	90 - 115	3	20
Zinc	33	B	40.0	71.4		ug/L		96	88 - 115	3	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 280-672999/47

Matrix: Water

Analysis Batch: 672999

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0	1.0	mg/L			10/31/24 02:57	1
Sulfate	ND		5.0	1.0	mg/L			10/31/24 02:57	1

Lab Sample ID: MB 280-672999/6

Matrix: Water

Analysis Batch: 672999

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0	1.0	mg/L			10/30/24 16:24	1
Sulfate	ND		5.0	1.0	mg/L			10/30/24 16:24	1

Lab Sample ID: MB 280-672999/91

Matrix: Water

Analysis Batch: 672999

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0	1.0	mg/L			10/31/24 11:00	1
Sulfate	ND		5.0	1.0	mg/L			10/31/24 11:00	1

Lab Sample ID: LCS 280-672999/4

Matrix: Water

Analysis Batch: 672999

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	100	98.7		mg/L		99	90 - 110
Sulfate	100	99.8		mg/L		100	90 - 110

Eurofins Denver

QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 280-672999/45

Matrix: Water

Analysis Batch: 672999

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	100	101		mg/L		101	90 - 110
Sulfate	100	102		mg/L		102	90 - 110

Lab Sample ID: LCS 280-672999/89

Matrix: Water

Analysis Batch: 672999

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	100	103		mg/L		103	90 - 110
Sulfate	100	104		mg/L		104	90 - 110

Lab Sample ID: LCSD 280-672999/46

Matrix: Water

Analysis Batch: 672999

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	100	100		mg/L		100	90 - 110	3	10
Sulfate	100	102		mg/L		102	90 - 110	2	10

Lab Sample ID: LCSD 280-672999/5

Matrix: Water

Analysis Batch: 672999

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	100	98.9		mg/L		99	90 - 110	0	10
Sulfate	100	99.6		mg/L		100	90 - 110	0	10

Lab Sample ID: LCSD 280-672999/90

Matrix: Water

Analysis Batch: 672999

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	100	104		mg/L		104	90 - 110	1	10
Sulfate	100	105		mg/L		105	90 - 110	1	10

Lab Sample ID: MRL 280-672999/3

Matrix: Water

Analysis Batch: 672999

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	5.00	4.93		mg/L		99	50 - 150
Sulfate	5.00	5.03		mg/L		101	50 - 150

Lab Sample ID: 280-198191-D-5 MS

Matrix: Water

Analysis Batch: 672999

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	2700		1000	3640		mg/L		98	80 - 120
Sulfate	1200		1000	2200		mg/L		102	80 - 120

Eurofins Denver

QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 280-198191-D-5 MSD

Matrix: Water

Analysis Batch: 672999

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	2700		1000	3640		mg/L		98	80 - 120	0	20
Sulfate	1200		1000	2200		mg/L		102	80 - 120	0	20

Lab Sample ID: 280-198364-B-1 MS

Matrix: Water

Analysis Batch: 672999

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	3.0		50.0	53.3		mg/L		101	80 - 120		
Sulfate	2.5	J	50.0	52.9		mg/L		101	80 - 120		

Lab Sample ID: 280-198364-B-1 MSD

Matrix: Water

Analysis Batch: 672999

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	3.0		50.0	54.7		mg/L		103	80 - 120	3	20
Sulfate	2.5	J	50.0	54.6		mg/L		104	80 - 120	3	20

Lab Sample ID: 280-198636-A-3 MS

Matrix: Water

Analysis Batch: 672999

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	500		250	755		mg/L		100	80 - 120		
Sulfate			250	937		mg/L					

Lab Sample ID: 280-198636-A-3 MSD

Matrix: Water

Analysis Batch: 672999

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	500		250	761		mg/L		102	80 - 120	1	20
Sulfate			250	940		mg/L					

Lab Sample ID: 280-198191-D-5 DU

Matrix: Water

Analysis Batch: 672999

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	2700		2660		mg/L		0	15
Sulfate	1200		1190		mg/L		0.2	15

Lab Sample ID: 280-198364-B-1 DU

Matrix: Water

Analysis Batch: 672999

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	3.0		2.96	J	mg/L		3	15
Sulfate	2.5	J	2.45	J	mg/L		0.9	15

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 280-198636-A-3 DU

Matrix: Water

Analysis Batch: 672999

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	500		503		mg/L		0.2	15
Sulfate			685		mg/L			15

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-672781/56

Matrix: Water

Analysis Batch: 672781

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.10	0.029	mg/L			10/28/24 17:05	1

Lab Sample ID: LCS 280-672781/57

Matrix: Water

Analysis Batch: 672781

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	2.51	2.63		mg/L		105	90 - 110

Lab Sample ID: 280-198601-E-1 MS

Matrix: Water

Analysis Batch: 672781

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	19	F2 F1	1.00	19.1	4	mg/L		0	90 - 110

Lab Sample ID: 280-198601-E-1 MSD

Matrix: Water

Analysis Batch: 672781

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ammonia	19	F2 F1	1.00	17.0	4 F2	mg/L		-205	90 - 110	11	10

Lab Sample ID: MB 280-673494/18

Matrix: Water

Analysis Batch: 673494

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.10	0.029	mg/L			11/02/24 12:05	1

Lab Sample ID: LCS 280-673494/19

Matrix: Water

Analysis Batch: 673494

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	2.51	2.45		mg/L		98	90 - 110

Eurofins Denver

QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: 590-27772-B-1 MS

Matrix: Water

Analysis Batch: 673494

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Ammonia	ND		1.00	0.991		mg/L		99	90 - 110		

Lab Sample ID: 590-27772-B-1 MSD

Matrix: Water

Analysis Batch: 673494

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ammonia	ND		1.00	1.01		mg/L		100	90 - 110	1	10

Lab Sample ID: 280-198351-B-1 MS

Matrix: Water

Analysis Batch: 672781

Client Sample ID: Matrix Spike

Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Ammonia	1.4		1.00	2.38		mg/L		94	90 - 110		

Lab Sample ID: 280-198351-B-1 MSD

Matrix: Water

Analysis Batch: 672781

Client Sample ID: Matrix Spike Duplicate

Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ammonia	1.4		1.00	2.35		mg/L		91	90 - 110	2	10

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-672943/20

Matrix: Water

Analysis Batch: 672943

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	ND		0.10	0.044	mg/L			10/29/24 14:08	1

Lab Sample ID: LCS 280-672943/18

Matrix: Water

Analysis Batch: 672943

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrate Nitrite as N	1.00	1.04		mg/L		104	90 - 110		

Lab Sample ID: LCSD 280-672943/19

Matrix: Water

Analysis Batch: 672943

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate Nitrite as N	1.00	1.04		mg/L		104	90 - 110	1	10

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

Method: 353.2 - Nitrogen, Nitrate-Nitrite (Continued)

Lab Sample ID: 280-198487-A-6 MS

Matrix: Water

Analysis Batch: 672943

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrate Nitrite as N	9.3	F1	4.00	13.8	F1	mg/L		111	90 - 110		

Lab Sample ID: 280-198487-A-6 MSD

Matrix: Water

Analysis Batch: 672943

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate Nitrite as N	9.3	F1	4.00	13.6		mg/L		106	90 - 110	1	10

Lab Sample ID: MB 280-673048/20

Matrix: Water

Analysis Batch: 673048

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	ND		0.10	0.044	mg/L			10/30/24 10:47	1

Lab Sample ID: LCS 280-673048/18

Matrix: Water

Analysis Batch: 673048

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrate Nitrite as N	1.00	1.04		mg/L		104	90 - 110		

Lab Sample ID: LCSD 280-673048/19

Matrix: Water

Analysis Batch: 673048

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate Nitrite as N	1.00	1.05		mg/L		105	90 - 110	1	10

Lab Sample ID: 280-198416-B-5 MS

Matrix: Water

Analysis Batch: 673048

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrate Nitrite as N	ND	F1	2.00	2.48	F1	mg/L		124	90 - 110		

Lab Sample ID: 280-198416-B-5 MSD

Matrix: Water

Analysis Batch: 673048

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate Nitrite as N	ND	F1	2.00	2.47	F1	mg/L		123	90 - 110	0	10

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

Method: 410.4 - COD

Lab Sample ID: MB 280-672827/10

Matrix: Water

Analysis Batch: 672827

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		20	8.7	mg/L			10/29/24 08:59	1

Lab Sample ID: LCS 280-672827/9

Matrix: Water

Analysis Batch: 672827

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	100	106		mg/L		106	90 - 110

Lab Sample ID: 280-198198-B-2 MS

Matrix: Water

Analysis Batch: 672827

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	8.7	J	50.0	55.1		mg/L		110	90 - 110

Lab Sample ID: 280-198198-B-2 MSD

Matrix: Water

Analysis Batch: 672827

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chemical Oxygen Demand	8.7	J	50.0	55.1		mg/L		110	90 - 110	0	11

Lab Sample ID: MB 280-673165/4

Matrix: Water

Analysis Batch: 673165

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		20	8.7	mg/L			10/31/24 09:09	1

Lab Sample ID: LCS 280-673165/3

Matrix: Water

Analysis Batch: 673165

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	100	98.7		mg/L		99	90 - 110

Lab Sample ID: 280-198480-B-1 MS

Matrix: Water

Analysis Batch: 673165

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	19	J	50.0	66.9		mg/L		96	90 - 110

Lab Sample ID: 280-198480-B-1 MSD

Matrix: Water

Analysis Batch: 673165

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chemical Oxygen Demand	19	J	50.0	66.2		mg/L		95	90 - 110	1	11

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-672604/90
Matrix: Water
Analysis Batch: 672604

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO ₃	ND		10	3.1	mg/L			10/26/24 04:53	1

Lab Sample ID: 280-198544-G-1 DU
Matrix: Water
Analysis Batch: 672604

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	Prepared	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO ₃	490		476		mg/L			2	20

Lab Sample ID: MB 280-672859/6
Matrix: Water
Analysis Batch: 672859

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO ₃	5.90	J	10	3.1	mg/L			10/28/24 21:42	1

Lab Sample ID: 280-198367-E-2 DU
Matrix: Water
Analysis Batch: 672859

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	Prepared	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO ₃	8000	B	7890		mg/L			2	20

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

Lab Sample ID: MB 280-672438/1
Matrix: Water
Analysis Batch: 672438

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	4.7	mg/L			10/25/24 08:55	1

Lab Sample ID: LCS 280-672438/2
Matrix: Water
Analysis Batch: 672438

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	504	504		mg/L		100	88 - 114

Lab Sample ID: 280-198136-D-11 DU
Matrix: Water
Analysis Batch: 672438

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	Prepared	RPD	RPD Limit
Total Dissolved Solids	1800		1760		mg/L			2	10

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 280-672485/1
Matrix: Water
Analysis Batch: 672485

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	1.1	mg/L			10/25/24 11:03	1

Lab Sample ID: LCS 280-672485/2
Matrix: Water
Analysis Batch: 672485

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	504	451		mg/L		89	79 - 114

Lab Sample ID: 160-55953-J-6 DU
Matrix: Water
Analysis Batch: 672485

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	2900		2690		mg/L		8	10

Method: SM 5310B - Organic Carbon, Total (TOC)

Lab Sample ID: MB 280-672902/68
Matrix: Water
Analysis Batch: 672902

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TOC Result 1	ND		1.0	0.35	mg/L			10/29/24 07:03	1
TOC Result 2	ND		1.0	0.35	mg/L			10/29/24 07:03	1
TOC Result 3	ND		1.0	0.35	mg/L			10/29/24 07:03	1
TOC Result 4	ND		1.0	0.35	mg/L			10/29/24 07:03	1
Total Organic Carbon - Quad	ND		1.0	0.35	mg/L			10/29/24 07:03	1

Lab Sample ID: LCS 280-672902/67
Matrix: Water
Analysis Batch: 672902

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
TOC Result 1	25.0	26.8		mg/L		107	88 - 112
TOC Result 2	25.0	26.9		mg/L		108	88 - 112
TOC Result 3	25.0	26.2		mg/L		105	88 - 112
TOC Result 4	25.0	25.7		mg/L		103	88 - 112
Total Organic Carbon - Quad	25.0	26.4		mg/L		106	88 - 112

Lab Sample ID: 280-198366-4 MS
Matrix: Water
Analysis Batch: 672902

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
TOC Result 1	28		25.0	53.7		mg/L		103	88 - 112
TOC Result 2	28		25.0	53.8		mg/L		103	88 - 112
TOC Result 3	27		25.0	53.0		mg/L		102	88 - 112
TOC Result 4	27		25.0	51.8		mg/L		100	88 - 112
Total Organic Carbon - Quad	28		25.0	53.1		mg/L		102	88 - 112

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QC Sample Results

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

Method: SM 5310B - Organic Carbon, Total (TOC)

Lab Sample ID: 280-198366-4 MSD

Matrix: Water

Analysis Batch: 672902

Client Sample ID: LDS-5

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
TOC Result 1	28		25.0	53.9		mg/L		103	88 - 112	0	15
TOC Result 2	28		25.0	54.1		mg/L		104	88 - 112	1	15
TOC Result 3	27		25.0	53.0		mg/L		102	88 - 112	0	15
TOC Result 4	27		25.0	51.9		mg/L		100	88 - 112	0	15
Total Organic Carbon - Quad	28		25.0	53.2		mg/L		102	88 - 112	0	15

Lab Sample ID: MB 280-673431/35

Matrix: Water

Analysis Batch: 673431

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TOC Result 1	ND		1.0	0.35	mg/L			10/31/24 21:28	1
TOC Result 2	ND		1.0	0.35	mg/L			10/31/24 21:28	1
TOC Result 3	ND		1.0	0.35	mg/L			10/31/24 21:28	1
TOC Result 4	ND		1.0	0.35	mg/L			10/31/24 21:28	1
Total Organic Carbon - Quad	ND		1.0	0.35	mg/L			10/31/24 21:28	1

Lab Sample ID: LCS 280-673431/34

Matrix: Water

Analysis Batch: 673431

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
TOC Result 1	25.0	26.2		mg/L		105	88 - 112
TOC Result 2	25.0	25.7		mg/L		103	88 - 112
TOC Result 3	25.0	25.1		mg/L		101	88 - 112
TOC Result 4	25.0	24.8		mg/L		99	88 - 112
Total Organic Carbon - Quad	25.0	25.5		mg/L		102	88 - 112

Lab Sample ID: 280-198412-B-2 MS

Matrix: Water

Analysis Batch: 673431

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
TOC Result 1	1.3		25.0	27.7		mg/L		105	88 - 112
TOC Result 2	1.4		25.0	27.5		mg/L		105	88 - 112
TOC Result 3	1.3		25.0	27.1		mg/L		103	88 - 112
TOC Result 4	1.3		25.0	26.3		mg/L		100	88 - 112
Total Organic Carbon - Quad	1.3		25.0	27.1		mg/L		103	88 - 112

Lab Sample ID: 280-198412-B-2 MSD

Matrix: Water

Analysis Batch: 673431

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
TOC Result 1	1.3		25.0	27.7		mg/L		105	88 - 112	0	15
TOC Result 2	1.4		25.0	27.8		mg/L		106	88 - 112	1	15
TOC Result 3	1.3		25.0	27.1		mg/L		103	88 - 112	0	15
TOC Result 4	1.3		25.0	26.3		mg/L		100	88 - 112	0	15
Total Organic Carbon - Quad	1.3		25.0	27.2		mg/L		104	88 - 112	0	15

Eurofins Denver

QC Association Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

GC/MS VOA

Analysis Batch: 673139

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198366-1	LDS-2B	Total/NA	Water	8260B	
280-198366-2	LDS-3	Total/NA	Water	8260B	
280-198366-3	LDS-4	Total/NA	Water	8260B	
280-198366-4	LDS-5	Total/NA	Water	8260B	
280-198366-5	LDS-ELP	Total/NA	Water	8260B	
280-198366-6	L-POND	Total/NA	Water	8260B	
280-198366-7	QCAB	Total/NA	Water	8260B	
280-198366-8	QCTB	Total/NA	Water	8260B	
MB 280-673139/9	Method Blank	Total/NA	Water	8260B	
LCS 280-673139/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-673139/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Metals

Prep Batch: 672039

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198366-1	LDS-2B	Total/NA	Water	200.8	
280-198366-2	LDS-3	Total/NA	Water	200.8	
280-198366-3	LDS-4	Total/NA	Water	200.8	
280-198366-4	LDS-5	Total/NA	Water	200.8	
280-198366-5	LDS-ELP	Total/NA	Water	200.8	
280-198366-6	L-POND	Total/NA	Water	200.8	
MB 280-672039/1-A	Method Blank	Total/NA	Water	200.8	
LCS 280-672039/2-A	Lab Control Sample	Total/NA	Water	200.8	
140-39086-G-1-B MS	Matrix Spike	Total/NA	Water	200.8	
140-39086-G-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.8	

Analysis Batch: 672256

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198366-1	LDS-2B	Total/NA	Water	200.8	672039
280-198366-2	LDS-3	Total/NA	Water	200.8	672039
280-198366-3	LDS-4	Total/NA	Water	200.8	672039
280-198366-4	LDS-5	Total/NA	Water	200.8	672039
280-198366-5	LDS-ELP	Total/NA	Water	200.8	672039
280-198366-6	L-POND	Total/NA	Water	200.8	672039
MB 280-672039/1-A	Method Blank	Total/NA	Water	200.8	672039
LCS 280-672039/2-A	Lab Control Sample	Total/NA	Water	200.8	672039
140-39086-G-1-B MS	Matrix Spike	Total/NA	Water	200.8	672039
140-39086-G-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.8	672039

General Chemistry

Analysis Batch: 672438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198366-1	LDS-2B	Total/NA	Water	SM 2540C	
280-198366-2	LDS-3	Total/NA	Water	SM 2540C	
280-198366-3	LDS-4	Total/NA	Water	SM 2540C	
280-198366-4	LDS-5	Total/NA	Water	SM 2540C	
280-198366-5	LDS-ELP	Total/NA	Water	SM 2540C	
280-198366-6	L-POND	Total/NA	Water	SM 2540C	
MB 280-672438/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-672438/2	Lab Control Sample	Total/NA	Water	SM 2540C	

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QC Association Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

General Chemistry (Continued)

Analysis Batch: 672438 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198136-D-11 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 672485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198366-1	LDS-2B	Total/NA	Water	SM 2540D	
280-198366-2	LDS-3	Total/NA	Water	SM 2540D	
280-198366-3	LDS-4	Total/NA	Water	SM 2540D	
280-198366-4	LDS-5	Total/NA	Water	SM 2540D	
280-198366-5	LDS-ELP	Total/NA	Water	SM 2540D	
280-198366-6	L-POND	Total/NA	Water	SM 2540D	
MB 280-672485/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 280-672485/2	Lab Control Sample	Total/NA	Water	SM 2540D	
160-55953-J-6 DU	Duplicate	Total/NA	Water	SM 2540D	

Analysis Batch: 672604

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198366-1	LDS-2B	Total/NA	Water	SM 2320B	
280-198366-2	LDS-3	Total/NA	Water	SM 2320B	
280-198366-3	LDS-4	Total/NA	Water	SM 2320B	
280-198366-4	LDS-5	Total/NA	Water	SM 2320B	
280-198366-5	LDS-ELP	Total/NA	Water	SM 2320B	
MB 280-672604/90	Method Blank	Total/NA	Water	SM 2320B	
280-198544-G-1 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 672781

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198366-2	LDS-3	Total/NA	Water	350.1	
280-198366-3	LDS-4	Total/NA	Water	350.1	
280-198366-4	LDS-5	Total/NA	Water	350.1	
MB 280-672781/56	Method Blank	Total/NA	Water	350.1	
LCS 280-672781/57	Lab Control Sample	Total/NA	Water	350.1	
280-198351-B-1 MS	Matrix Spike	Dissolved	Water	350.1	
280-198351-B-1 MSD	Matrix Spike Duplicate	Dissolved	Water	350.1	
280-198601-E-1 MS	Matrix Spike	Total/NA	Water	350.1	
280-198601-E-1 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	

Analysis Batch: 672827

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198366-3	LDS-4	Total/NA	Water	410.4	
280-198366-4	LDS-5	Total/NA	Water	410.4	
280-198366-5	LDS-ELP	Total/NA	Water	410.4	
MB 280-672827/10	Method Blank	Total/NA	Water	410.4	
LCS 280-672827/9	Lab Control Sample	Total/NA	Water	410.4	
280-198198-B-2 MS	Matrix Spike	Total/NA	Water	410.4	
280-198198-B-2 MSD	Matrix Spike Duplicate	Total/NA	Water	410.4	

Analysis Batch: 672859

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198366-6	L-POND	Total/NA	Water	SM 2320B	
MB 280-672859/6	Method Blank	Total/NA	Water	SM 2320B	
280-198367-E-2 DU	Duplicate	Total/NA	Water	SM 2320B	

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QC Association Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

General Chemistry

Analysis Batch: 672902

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198366-1	LDS-2B	Total/NA	Water	SM 5310B	
280-198366-2	LDS-3	Total/NA	Water	SM 5310B	
280-198366-3	LDS-4	Total/NA	Water	SM 5310B	
280-198366-4	LDS-5	Total/NA	Water	SM 5310B	
280-198366-5	LDS-ELP	Total/NA	Water	SM 5310B	
MB 280-672902/68	Method Blank	Total/NA	Water	SM 5310B	
LCS 280-672902/67	Lab Control Sample	Total/NA	Water	SM 5310B	
280-198366-4 MS	LDS-5	Total/NA	Water	SM 5310B	
280-198366-4 MSD	LDS-5	Total/NA	Water	SM 5310B	

Analysis Batch: 672943

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198366-2	LDS-3	Total/NA	Water	353.2	
280-198366-3	LDS-4	Total/NA	Water	353.2	
280-198366-4	LDS-5	Total/NA	Water	353.2	
280-198366-5	LDS-ELP	Total/NA	Water	353.2	
280-198366-6	L-POND	Total/NA	Water	353.2	
MB 280-672943/20	Method Blank	Total/NA	Water	353.2	
LCS 280-672943/18	Lab Control Sample	Total/NA	Water	353.2	
LCSD 280-672943/19	Lab Control Sample Dup	Total/NA	Water	353.2	
280-198487-A-6 MS	Matrix Spike	Total/NA	Water	353.2	
280-198487-A-6 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	

Analysis Batch: 672999

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198366-1	LDS-2B	Total/NA	Water	300.0	
280-198366-1	LDS-2B	Total/NA	Water	300.0	
280-198366-2	LDS-3	Total/NA	Water	300.0	
280-198366-3	LDS-4	Total/NA	Water	300.0	
280-198366-3	LDS-4	Total/NA	Water	300.0	
280-198366-4	LDS-5	Total/NA	Water	300.0	
280-198366-4	LDS-5	Total/NA	Water	300.0	
280-198366-5	LDS-ELP	Total/NA	Water	300.0	
280-198366-6	L-POND	Total/NA	Water	300.0	
280-198366-6	L-POND	Total/NA	Water	300.0	
MB 280-672999/47	Method Blank	Total/NA	Water	300.0	
MB 280-672999/6	Method Blank	Total/NA	Water	300.0	
MB 280-672999/91	Method Blank	Total/NA	Water	300.0	
LCS 280-672999/4	Lab Control Sample	Total/NA	Water	300.0	
LCS 280-672999/45	Lab Control Sample	Total/NA	Water	300.0	
LCS 280-672999/89	Lab Control Sample	Total/NA	Water	300.0	
LCSD 280-672999/46	Lab Control Sample Dup	Total/NA	Water	300.0	
LCSD 280-672999/5	Lab Control Sample Dup	Total/NA	Water	300.0	
LCSD 280-672999/90	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 280-672999/3	Lab Control Sample	Total/NA	Water	300.0	
280-198191-D-5 MS	Matrix Spike	Total/NA	Water	300.0	
280-198191-D-5 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
280-198364-B-1 MS	Matrix Spike	Total/NA	Water	300.0	
280-198364-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
280-198636-A-3 MS	Matrix Spike	Total/NA	Water	300.0	
280-198636-A-3 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

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QC Association Summary

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

General Chemistry (Continued)

Analysis Batch: 672999 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198191-D-5 DU	Duplicate	Total/NA	Water	300.0	
280-198364-B-1 DU	Duplicate	Total/NA	Water	300.0	
280-198636-A-3 DU	Duplicate	Total/NA	Water	300.0	

Analysis Batch: 673048

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198366-1	LDS-2B	Total/NA	Water	353.2	
MB 280-673048/20	Method Blank	Total/NA	Water	353.2	
LCS 280-673048/18	Lab Control Sample	Total/NA	Water	353.2	
LCSD 280-673048/19	Lab Control Sample Dup	Total/NA	Water	353.2	
280-198416-B-5 MS	Matrix Spike	Total/NA	Water	353.2	
280-198416-B-5 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	

Analysis Batch: 673165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198366-1	LDS-2B	Total/NA	Water	410.4	
280-198366-2	LDS-3	Total/NA	Water	410.4	
280-198366-6	L-POND	Total/NA	Water	410.4	
MB 280-673165/4	Method Blank	Total/NA	Water	410.4	
LCS 280-673165/3	Lab Control Sample	Total/NA	Water	410.4	
280-198480-B-1 MS	Matrix Spike	Total/NA	Water	410.4	
280-198480-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	410.4	

Analysis Batch: 673431

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198366-6	L-POND	Total/NA	Water	SM 5310B	
MB 280-673431/35	Method Blank	Total/NA	Water	SM 5310B	
LCS 280-673431/34	Lab Control Sample	Total/NA	Water	SM 5310B	
280-198412-B-2 MS	Matrix Spike	Total/NA	Water	SM 5310B	
280-198412-B-2 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 5310B	

Analysis Batch: 673494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-198366-1	LDS-2B	Total/NA	Water	350.1	
280-198366-5	LDS-ELP	Total/NA	Water	350.1	
280-198366-6	L-POND	Total/NA	Water	350.1	
MB 280-673494/18	Method Blank	Total/NA	Water	350.1	
LCS 280-673494/19	Lab Control Sample	Total/NA	Water	350.1	
590-27772-B-1 MS	Matrix Spike	Total/NA	Water	350.1	
590-27772-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	

Lab Chronicle

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

Client Sample ID: LDS-2B

Date Collected: 10/18/24 09:45

Date Received: 10/19/24 09:45

Lab Sample ID: 280-198366-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	5 mL	5 mL	673139	10/31/24 03:01	BMJ	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	672039	10/23/24 08:17	AMH	EET DEN
Total/NA	Analysis	200.8		1			672256	10/23/24 21:57	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	672999	10/31/24 09:54	IRC	EET DEN
Total/NA	Analysis	300.0		50	10 mL	10 mL	672999	10/31/24 10:05	IRC	EET DEN
Total/NA	Analysis	350.1		50	10 mL	10 mL	673494	11/02/24 12:23	LBR	EET DEN
Total/NA	Analysis	353.2		20	100 mL	100 mL	673048	10/30/24 10:53	AKF	EET DEN
Total/NA	Analysis	410.4		10	2 mL	2 mL	673165	10/31/24 09:09	MF	EET DEN
Total/NA	Analysis	SM 2320B		1			672604	10/26/24 06:56	EL	EET DEN
Total/NA	Analysis	SM 2540C		1	10 mL	100 mL	672438	10/25/24 08:55	BRD	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	672485	10/25/24 11:03	BRD	EET DEN
Total/NA	Analysis	SM 5310B		10	20 mL	20 mL	672902	10/29/24 10:28	GMW	EET DEN

Client Sample ID: LDS-3

Date Collected: 10/18/24 08:55

Date Received: 10/19/24 09:45

Lab Sample ID: 280-198366-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		4	5 mL	5 mL	673139	10/31/24 02:41	BMJ	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	672039	10/23/24 08:17	AMH	EET DEN
Total/NA	Analysis	200.8		1			672256	10/23/24 21:59	LMT	EET DEN
Total/NA	Analysis	300.0		20	10 mL	10 mL	672999	10/31/24 12:28	IRC	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	672781	10/28/24 17:33	BCR	EET DEN
Total/NA	Analysis	353.2		50	100 mL	100 mL	672943	10/29/24 14:36	AKF	EET DEN
Total/NA	Analysis	410.4		2	2 mL	2 mL	673165	10/31/24 09:09	MF	EET DEN
Total/NA	Analysis	SM 2320B		1			672604	10/26/24 07:03	EL	EET DEN
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	672438	10/25/24 08:55	BRD	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	672485	10/25/24 11:03	BRD	EET DEN
Total/NA	Analysis	SM 5310B		2	20 mL	20 mL	672902	10/29/24 10:43	GMW	EET DEN

Client Sample ID: LDS-4

Date Collected: 10/18/24 10:27

Date Received: 10/19/24 09:45

Lab Sample ID: 280-198366-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	673139	10/31/24 01:38	BMJ	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	672039	10/23/24 08:17	AMH	EET DEN
Total/NA	Analysis	200.8		1			672256	10/23/24 22:06	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	672999	10/31/24 13:12	IRC	EET DEN
Total/NA	Analysis	300.0		5	10 mL	10 mL	672999	10/31/24 13:23	IRC	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	672781	10/28/24 17:55	BCR	EET DEN
Total/NA	Analysis	353.2		20	100 mL	100 mL	672943	10/29/24 14:38	AKF	EET DEN

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Lab Chronicle

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

Client Sample ID: LDS-4

Lab Sample ID: 280-198366-3

Date Collected: 10/18/24 10:27

Matrix: Water

Date Received: 10/19/24 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	410.4		1	2 mL	2 mL	672827	10/29/24 08:59	MF	EET DEN
Total/NA	Analysis	SM 2320B		1			672604	10/26/24 07:09	EL	EET DEN
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	672438	10/25/24 08:55	BRD	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	672485	10/25/24 11:03	BRD	EET DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	672902	10/29/24 11:02	GMW	EET DEN

Client Sample ID: LDS-5

Lab Sample ID: 280-198366-4

Date Collected: 10/18/24 10:53

Matrix: Water

Date Received: 10/19/24 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	673139	10/31/24 01:59	BMJ	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	672039	10/23/24 08:17	AMH	EET DEN
Total/NA	Analysis	200.8		1			672256	10/23/24 22:09	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	672999	10/31/24 13:34	IRC	EET DEN
Total/NA	Analysis	300.0		10	10 mL	10 mL	672999	10/31/24 13:45	IRC	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	672781	10/28/24 17:57	BCR	EET DEN
Total/NA	Analysis	353.2		50	100 mL	100 mL	672943	10/29/24 14:39	AKF	EET DEN
Total/NA	Analysis	410.4		1	2 mL	2 mL	672827	10/29/24 08:59	MF	EET DEN
Total/NA	Analysis	SM 2320B		1			672604	10/26/24 07:15	EL	EET DEN
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	672438	10/25/24 08:55	BRD	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	672485	10/25/24 11:03	BRD	EET DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	672902	10/29/24 11:16	GMW	EET DEN

Client Sample ID: LDS-ELP

Lab Sample ID: 280-198366-5

Date Collected: 10/18/24 11:21

Matrix: Water

Date Received: 10/19/24 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	5 mL	5 mL	673139	10/31/24 03:22	BMJ	EET DEN
Total/NA	Prep	200.8			50 mL	50 mL	672039	10/23/24 08:17	AMH	EET DEN
Total/NA	Analysis	200.8		1			672256	10/23/24 22:11	LMT	EET DEN
Total/NA	Analysis	300.0		20	10 mL	10 mL	672999	10/31/24 13:01	IRC	EET DEN
Total/NA	Analysis	350.1		200	10 mL	10 mL	673494	11/02/24 12:26	LBR	EET DEN
Total/NA	Analysis	353.2		100	100 mL	100 mL	672943	10/29/24 14:40	AKF	EET DEN
Total/NA	Analysis	410.4		10	2 mL	2 mL	672827	10/29/24 08:59	MF	EET DEN
Total/NA	Analysis	SM 2320B		1			672604	10/26/24 07:33	EL	EET DEN
Total/NA	Analysis	SM 2540C		1	1 mL	100 mL	672438	10/25/24 08:55	BRD	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	672485	10/25/24 11:03	BRD	EET DEN
Total/NA	Analysis	SM 5310B		20	20 mL	20 mL	672902	10/29/24 12:36	GMW	EET DEN

Eurofins Denver

Lab Chronicle

Client: Geo-Logic Associates
Project/Site: Valley LF - Republic Serv Coffin Butte

Job ID: 280-198366-1

Client Sample ID: L-POND

Date Collected: 10/18/24 12:30

Date Received: 10/19/24 09:45

Lab Sample ID: 280-198366-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	5 mL	5 mL	673139	10/31/24 03:43	BMJ	EET DEN
Total/NA	Prep	200.8			10 mL	50 mL	672039	10/23/24 08:17	AMH	EET DEN
Total/NA	Analysis	200.8		1			672256	10/23/24 22:13	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	672999	10/31/24 12:39	IRC	EET DEN
Total/NA	Analysis	300.0		20	10 mL	10 mL	672999	10/31/24 12:50	IRC	EET DEN
Total/NA	Analysis	350.1		500	10 mL	10 mL	673494	11/02/24 12:28	LBR	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	672943	10/29/24 14:41	AKF	EET DEN
Total/NA	Analysis	410.4		50	2 mL	2 mL	673165	10/31/24 09:09	MF	EET DEN
Total/NA	Analysis	SM 2320B		1			672859	10/28/24 23:49	EL	EET DEN
Total/NA	Analysis	SM 2540C		1	1 mL	100 mL	672438	10/25/24 08:55	BRD	EET DEN
Total/NA	Analysis	SM 2540D		1	125 mL	250 mL	672485	10/25/24 11:03	BRD	EET DEN
Total/NA	Analysis	SM 5310B		50	20 mL	20 mL	673431	10/31/24 23:36	ABW	EET DEN

Client Sample ID: QCAB

Date Collected: 10/18/24 00:00

Date Received: 10/19/24 09:45

Lab Sample ID: 280-198366-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	673139	10/31/24 00:37	BMJ	EET DEN

Client Sample ID: QCTB

Date Collected: 10/18/24 08:55

Date Received: 10/19/24 09:45

Lab Sample ID: 280-198366-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	673139	10/31/24 00:17	BMJ	EET DEN

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Eurofins Denver

 eurofins | Environment Testing
TestAmerica

280-198366 Chain of Custody

Login Sample Receipt Checklist

Client: Geo-Logic Associates

Job Number: 280-198366-1

Login Number: 198366

List Source: Eurofins Denver

List Number: 1

Creator: Roehsner, Karen P

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