

**PERMIAN BASIN
ENVIRONMENTAL LAB, LP
1400 Rankin Hwy
Midland, TX 79701**



Analytical Report

Prepared for:

Christine Alderman
Cimarex
600 N. Marinfeld, Ste. 600
Midland, TX 79701

Project: Assault SWD

Project Number: [none]

Location:

Lab Order Number: 7H11010



NELAP/TCEQ # T104704516-16-7

Report Date: 08/15/17

Cimarex
600 N. Marinfeld, Ste. 600
Midland TX, 79701

Project: Assault SWD
Project Number: [none]
Project Manager: Christine Alderman

Fax: (432) 571-7832

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
S-1	7H11010-01	Water	08/11/17 08:25	08-11-2017 17:05
S-2	7H11010-02	Water	08/11/17 09:38	08-11-2017 17:05
S-3	7H11010-03	Water	08/11/17 09:59	08-11-2017 17:05
S-3A	7H11010-04	Water	08/11/17 10:18	08-11-2017 17:05
S-3B	7H11010-05	Water	08/11/17 10:30	08-11-2017 17:05
S-4	7H11010-06	Water	08/11/17 09:30	08-11-2017 17:05
S-4A	7H11010-07	Water	08/11/17 09:37	08-11-2017 17:05
S-4B	7H11010-08	Water	08/11/17 09:47	08-11-2017 17:05
S-4C	7H11010-09	Water	08/11/17 10:00	08-11-2017 17:05
S-5	7H11010-10	Water	08/11/17 09:45	08-11-2017 17:05
S-5A	7H11010-11	Water	08/11/17 10:22	08-11-2017 17:05
S-5B	7H11010-12	Water	08/11/17 10:43	08-11-2017 17:05
S-6	7H11010-13	Water	08/11/17 09:43	08-11-2017 17:05
S-6A	7H11010-14	Water	08/11/17 10:04	08-11-2017 17:05
S-6C	7H11010-15	Water	08/11/17 10:25	08-11-2017 17:05
DUP-1	7H11010-16	Water	08/11/17 12:00	08-11-2017 17:05
DUP-2	7H11010-17	Water	08/11/17 12:00	08-11-2017 17:05

Cimarex
600 N. Marinfeld, Ste. 600
Midland TX, 79701

Project: Assault SWD
Project Number: [none]
Project Manager: Christine Alderman

Fax: (432) 571-7832

S-1
7H11010-01 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

Permian Basin Environmental Lab, L.P.

Organics by GC

C6-C12	ND	2.50	mg/L	1	P7H1201	08/12/17	08/12/17	TX 1005	
>C12-C28	ND	2.50	mg/L	1	P7H1201	08/12/17	08/12/17	TX 1005	
>C28-C35	ND	2.50	mg/L	1	P7H1201	08/12/17	08/12/17	TX 1005	
Surrogate: 1-Chlorooctane		113 %	70-130		P7H1201	08/12/17	08/12/17	TX 1005	
Surrogate: o-Terphenyl		120 %	70-130		P7H1201	08/12/17	08/12/17	TX 1005	
Total Hydrocarbon nC6-nC35	ND	2.50	mg/L	1	[CALC]	08/12/17	08/12/17	[CALC]	

General Chemistry Parameters by EPA / Standard Methods

Total Alkalinity	100	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Carbonate Alkalinity	ND	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Bicarbonate Alkalinity	100	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Hydroxide Alkalinity	ND	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Bromide	ND	0.0500	mg/L	1	P7H1208	08/12/17	08/13/17	EPA 300.0	
Chloride	33.2	12.5	mg/L	25	P7H1208	08/12/17	08/13/17	EPA 300.0	
Specific Conductance (EC)	2650	5.00	umhos/cm	1	P7H1217	08/12/17	08/12/17	EPA 120.1	
Dissolved Oxygen	6.00		mg/L	1	P7H1212	08/12/17	08/12/17	CHEMets	QAL1
pH	7.80		pH Units	1	P7H1211	08/12/17	08/12/17	EPA 150.1	
Temperature	20.50		pH Units	1	P7H1211	08/12/17	08/12/17	EPA 150.1	
Total Dissolved Solids	2660	20.0	mg/L	1	P7H1301	08/13/17	08/13/17	EPA 160.1	
Sulfate	1400	25.0	mg/L	25	P7H1208	08/12/17	08/13/17	EPA 300.0	

Total Metals by EPA / Standard Methods

Calcium	615	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Magnesium	34.5	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Potassium	5.70	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Sodium	57.6	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Hardness	1680	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2

Cimarex
600 N. Marinfeld, Ste. 600
Midland TX, 79701

Project: Assault SWD
Project Number: [none]
Project Manager: Christine Alderman

Fax: (432) 571-7832

S-2
7H11010-02 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

Permian Basin Environmental Lab, L.P.

Organics by GC

C6-C12	ND	2.50	mg/L	1	P7H1201	08/12/17	08/12/17	TX 1005	
>C12-C28	ND	2.50	mg/L	1	P7H1201	08/12/17	08/12/17	TX 1005	
>C28-C35	ND	2.50	mg/L	1	P7H1201	08/12/17	08/12/17	TX 1005	
Surrogate: 1-Chlorooctane		114 %	70-130		P7H1201	08/12/17	08/12/17	TX 1005	
Surrogate: o-Terphenyl		118 %	70-130		P7H1201	08/12/17	08/12/17	TX 1005	
Total Hydrocarbon nC6-nC35	ND	2.50	mg/L	1	[CALC]	08/12/17	08/12/17	[CALC]	

General Chemistry Parameters by EPA / Standard Methods

Total Alkalinity	100	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Carbonate Alkalinity	ND	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Bicarbonate Alkalinity	100	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Hydroxide Alkalinity	ND	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Bromide	ND	0.0500	mg/L	1	P7H1208	08/12/17	08/13/17	EPA 300.0	
Chloride	26.8	12.5	mg/L	25	P7H1208	08/12/17	08/13/17	EPA 300.0	
Specific Conductance (EC)	2790	5.00	umhos/cm	1	P7H1217	08/12/17	08/12/17	EPA 120.1	
Dissolved Oxygen	6.00		mg/L	1	P7H1212	08/12/17	08/12/17	CHEMets	QAL1
pH	7.78		pH Units	1	P7H1211	08/12/17	08/12/17	EPA 150.1	
Temperature	20.70		pH Units	1	P7H1211	08/12/17	08/12/17	EPA 150.1	
Total Dissolved Solids	2700	20.0	mg/L	1	P7H1301	08/13/17	08/13/17	EPA 160.1	
Sulfate	1480	25.0	mg/L	25	P7H1208	08/12/17	08/13/17	EPA 300.0	

Total Metals by EPA / Standard Methods

Calcium	595	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Magnesium	28.5	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Potassium	6.15	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Sodium	48.9	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Hardness	1600	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2

Cimarex
600 N. Marinfeld, Ste. 600
Midland TX, 79701

Project: Assault SWD
Project Number: [none]
Project Manager: Christine Alderman

Fax: (432) 571-7832

S-3
7H11010-03 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

Permian Basin Environmental Lab, L.P.

Organics by GC

C6-C12	ND	2.50	mg/L	1	P7H1201	08/12/17	08/12/17	TX 1005	
>C12-C28	ND	2.50	mg/L	1	P7H1201	08/12/17	08/12/17	TX 1005	
>C28-C35	ND	2.50	mg/L	1	P7H1201	08/12/17	08/12/17	TX 1005	
Surrogate: 1-Chlorooctane		113 %	70-130		P7H1201	08/12/17	08/12/17	TX 1005	
Surrogate: o-Terphenyl		118 %	70-130		P7H1201	08/12/17	08/12/17	TX 1005	
Total Hydrocarbon nC6-nC35	ND	2.50	mg/L	1	[CALC]	08/12/17	08/12/17	[CALC]	

General Chemistry Parameters by EPA / Standard Methods

Total Alkalinity	90.0	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Carbonate Alkalinity	ND	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Bicarbonate Alkalinity	90.0	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Hydroxide Alkalinity	ND	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Bromide	ND	0.0500	mg/L	1	P7H1208	08/12/17	08/13/17	EPA 300.0	
Chloride	47.4	0.500	mg/L	1	P7H1208	08/12/17	08/13/17	EPA 300.0	
Specific Conductance (EC)	2750	5.00	umhos/cm	1	P7H1217	08/12/17	08/12/17	EPA 120.1	
Dissolved Oxygen	6.00		mg/L	1	P7H1212	08/12/17	08/12/17	CHEMets	QAL1
pH	7.74		pH Units	1	P7H1211	08/12/17	08/12/17	EPA 150.1	
Temperature	20.50		pH Units	1	P7H1211	08/12/17	08/12/17	EPA 150.1	
Total Dissolved Solids	2580	20.0	mg/L	1	P7H1301	08/13/17	08/13/17	EPA 160.1	
Sulfate	1480	25.0	mg/L	25	P7H1208	08/12/17	08/13/17	EPA 300.0	

Total Metals by EPA / Standard Methods

Calcium	537	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Magnesium	24.3	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Potassium	5.29	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Sodium	43.4	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Hardness	1440	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2

Cimarex
600 N. Marinfeld, Ste. 600
Midland TX, 79701

Project: Assault SWD
Project Number: [none]
Project Manager: Christine Alderman

Fax: (432) 571-7832

S-3A

7H11010-04 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

Permian Basin Environmental Lab, L.P.

Organics by GC

C6-C12	ND	2.50	mg/L	1	P7H1201	08/12/17	08/12/17	TX 1005	
>C12-C28	ND	2.50	mg/L	1	P7H1201	08/12/17	08/12/17	TX 1005	
>C28-C35	ND	2.50	mg/L	1	P7H1201	08/12/17	08/12/17	TX 1005	
Surrogate: 1-Chlorooctane		107 %	70-130		P7H1201	08/12/17	08/12/17	TX 1005	
Surrogate: o-Terphenyl		114 %	70-130		P7H1201	08/12/17	08/12/17	TX 1005	
Total Hydrocarbon nC6-nC35	ND	2.50	mg/L	1	[CALC]	08/12/17	08/12/17	[CALC]	

General Chemistry Parameters by EPA / Standard Methods

Total Alkalinity	80.0	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Carbonate Alkalinity	ND	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Bicarbonate Alkalinity	80.0	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Hydroxide Alkalinity	ND	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Bromide	ND	0.0500	mg/L	1	P7H1208	08/12/17	08/13/17	EPA 300.0	
Chloride	31.8	0.500	mg/L	1	P7H1208	08/12/17	08/13/17	EPA 300.0	
Specific Conductance (EC)	2580	5.00	umhos/cm	1	P7H1217	08/12/17	08/12/17	EPA 120.1	
Dissolved Oxygen	6.00		mg/L	1	P7H1212	08/12/17	08/12/17	CHEMets	QAL1
pH	7.63		pH Units	1	P7H1211	08/12/17	08/12/17	EPA 150.1	
Temperature	20.60		pH Units	1	P7H1211	08/12/17	08/12/17	EPA 150.1	
Total Dissolved Solids	2440	20.0	mg/L	1	P7H1301	08/13/17	08/13/17	EPA 160.1	
Sulfate	1410	25.0	mg/L	25	P7H1208	08/12/17	08/13/17	EPA 300.0	

Total Metals by EPA / Standard Methods

Calcium	532	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Magnesium	17.8	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Potassium	5.63	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Sodium	30.4	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Hardness	1400	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2

Cimarex
600 N. Marinfeld, Ste. 600
Midland TX, 79701

Project: Assault SWD
Project Number: [none]
Project Manager: Christine Alderman

Fax: (432) 571-7832

S-3B

7H11010-05 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

Permian Basin Environmental Lab, L.P.

Organics by GC

C6-C12	ND	2.50	mg/L	1	P7H1201	08/12/17	08/12/17	TX 1005	
>C12-C28	ND	2.50	mg/L	1	P7H1201	08/12/17	08/12/17	TX 1005	
>C28-C35	ND	2.50	mg/L	1	P7H1201	08/12/17	08/12/17	TX 1005	
Surrogate: 1-Chlorooctane		58.7 %	70-130		P7H1201	08/12/17	08/12/17	TX 1005	S-GC1
Surrogate: o-Terphenyl		61.4 %	70-130		P7H1201	08/12/17	08/12/17	TX 1005	S-GC1
Total Hydrocarbon nC6-nC35	ND	2.50	mg/L	1	[CALC]	08/12/17	08/12/17	[CALC]	

General Chemistry Parameters by EPA / Standard Methods

Total Alkalinity	72.0	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Carbonate Alkalinity	ND	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Bicarbonate Alkalinity	72.0	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Hydroxide Alkalinity	ND	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Bromide	ND	0.0500	mg/L	1	P7H1208	08/12/17	08/13/17	EPA 300.0	
Chloride	31.6	0.500	mg/L	1	P7H1208	08/12/17	08/13/17	EPA 300.0	
Specific Conductance (EC)	2640	5.00	umhos/cm	1	P7H1217	08/12/17	08/12/17	EPA 120.1	
Dissolved Oxygen	6.00		mg/L	1	P7H1212	08/12/17	08/12/17	CHEMets	QAL1
pH	7.75		pH Units	1	P7H1211	08/12/17	08/12/17	EPA 150.1	
Temperature	20.50		pH Units	1	P7H1211	08/12/17	08/12/17	EPA 150.1	
Total Dissolved Solids	2740	20.0	mg/L	1	P7H1301	08/13/17	08/13/17	EPA 160.1	
Sulfate	1440	25.0	mg/L	25	P7H1208	08/12/17	08/13/17	EPA 300.0	

Total Metals by EPA / Standard Methods

Calcium	600	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Magnesium	19.4	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Potassium	5.99	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Sodium	33.0	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Hardness	1580	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2

Cimarex
600 N. Marinfeld, Ste. 600
Midland TX, 79701

Project: Assault SWD
Project Number: [none]
Project Manager: Christine Alderman

Fax: (432) 571-7832

S-4
7H11010-06 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

Permian Basin Environmental Lab, L.P.

Organics by GC

C6-C12	ND	2.50	mg/L	1	P7H1201	08/12/17	08/13/17	TX 1005	
>C12-C28	ND	2.50	mg/L	1	P7H1201	08/12/17	08/13/17	TX 1005	
>C28-C35	ND	2.50	mg/L	1	P7H1201	08/12/17	08/13/17	TX 1005	
Surrogate: 1-Chlorooctane		115 %	70-130		P7H1201	08/12/17	08/13/17	TX 1005	
Surrogate: o-Terphenyl		121 %	70-130		P7H1201	08/12/17	08/13/17	TX 1005	
Total Hydrocarbon nC6-nC35	ND	2.50	mg/L	1	[CALC]	08/12/17	08/13/17	[CALC]	

General Chemistry Parameters by EPA / Standard Methods

Total Alkalinity	60.0	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Carbonate Alkalinity	ND	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Bicarbonate Alkalinity	60.0	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Hydroxide Alkalinity	ND	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Bromide	ND	0.0500	mg/L	1	P7H1208	08/12/17	08/13/17	EPA 300.0	
Chloride	22.3	0.500	mg/L	1	P7H1208	08/12/17	08/13/17	EPA 300.0	
Specific Conductance (EC)	2540	5.00	umhos/cm	1	P7H1217	08/12/17	08/12/17	EPA 120.1	
Dissolved Oxygen	6.00		mg/L	1	P7H1212	08/12/17	08/12/17	CHEMets	QAL1
pH	7.65		pH Units	1	P7H1211	08/12/17	08/12/17	EPA 150.1	
Temperature	20.70		pH Units	1	P7H1211	08/12/17	08/12/17	EPA 150.1	
Total Dissolved Solids	2530	20.0	mg/L	1	P7H1301	08/13/17	08/13/17	EPA 160.1	
Sulfate	1420	25.0	mg/L	25	P7H1208	08/12/17	08/13/17	EPA 300.0	

Total Metals by EPA / Standard Methods

Calcium	645	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Magnesium	16.9	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Potassium	6.39	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Sodium	26.8	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Hardness	1680	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2

Cimarex
600 N. Marinfeld, Ste. 600
Midland TX, 79701

Project: Assault SWD
Project Number: [none]
Project Manager: Christine Alderman

Fax: (432) 571-7832

S-4A
7H11010-07 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

Permian Basin Environmental Lab, L.P.

Organics by GC

C6-C12	ND	2.50	mg/L	1	P7H1201	08/12/17	08/15/17	TX 1005	
>C12-C28	ND	2.50	mg/L	1	P7H1201	08/12/17	08/15/17	TX 1005	
>C28-C35	ND	2.50	mg/L	1	P7H1201	08/12/17	08/15/17	TX 1005	
Surrogate: 1-Chlorooctane		107 %	70-130		P7H1201	08/12/17	08/15/17	TX 1005	
Surrogate: o-Terphenyl		144 %	70-130		P7H1201	08/12/17	08/15/17	TX 1005	S-GC
Total Hydrocarbon nC6-nC35	ND	2.50	mg/L	1	[CALC]	08/12/17	08/15/17	[CALC]	

General Chemistry Parameters by EPA / Standard Methods

Total Alkalinity	65.0	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Carbonate Alkalinity	ND	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Bicarbonate Alkalinity	65.0	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Hydroxide Alkalinity	ND	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Bromide	ND	0.0500	mg/L	1	P7H1208	08/12/17	08/13/17	EPA 300.0	
Chloride	21.7	0.500	mg/L	1	P7H1208	08/12/17	08/13/17	EPA 300.0	
Specific Conductance (EC)	2530	5.00	umhos/cm	1	P7H1217	08/12/17	08/12/17	EPA 120.1	
Dissolved Oxygen	6.00		mg/L	1	P7H1212	08/12/17	08/12/17	CHEMets	QAL1
pH	7.71		pH Units	1	P7H1211	08/12/17	08/12/17	EPA 150.1	
Temperature	20.60		pH Units	1	P7H1211	08/12/17	08/12/17	EPA 150.1	
Total Dissolved Solids	2480	20.0	mg/L	1	P7H1301	08/13/17	08/13/17	EPA 160.1	
Sulfate	1400	25.0	mg/L	25	P7H1208	08/12/17	08/13/17	EPA 300.0	

Total Metals by EPA / Standard Methods

Calcium	537	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Magnesium	14.1	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Potassium	5.44	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Sodium	22.0	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Hardness	1400	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2

Cimarex
600 N. Marinfeld, Ste. 600
Midland TX, 79701

Project: Assault SWD
Project Number: [none]
Project Manager: Christine Alderman

Fax: (432) 571-7832

S-4B

7H11010-08 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

Permian Basin Environmental Lab, L.P.

Organics by GC

C6-C12	ND	2.50	mg/L	1	P7H1201	08/12/17	08/15/17	TX 1005	
>C12-C28	ND	2.50	mg/L	1	P7H1201	08/12/17	08/15/17	TX 1005	
>C28-C35	ND	2.50	mg/L	1	P7H1201	08/12/17	08/15/17	TX 1005	
Surrogate: 1-Chlorooctane		130 %	70-130		P7H1201	08/12/17	08/15/17	TX 1005	
Surrogate: o-Terphenyl		150 %	70-130		P7H1201	08/12/17	08/15/17	TX 1005	S-GC
Total Hydrocarbon nC6-nC35	ND	2.50	mg/L	1	[CALC]	08/12/17	08/15/17	[CALC]	

General Chemistry Parameters by EPA / Standard Methods

Total Alkalinity	65.0	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Carbonate Alkalinity	ND	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Bicarbonate Alkalinity	65.0	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Hydroxide Alkalinity	ND	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Bromide	ND	0.0500	mg/L	1	P7H1208	08/12/17	08/13/17	EPA 300.0	
Chloride	22.1	0.500	mg/L	1	P7H1208	08/12/17	08/13/17	EPA 300.0	
Specific Conductance (EC)	2570	5.00	umhos/cm	1	P7H1217	08/12/17	08/12/17	EPA 120.1	
Dissolved Oxygen	6.00		mg/L	1	P7H1212	08/12/17	08/12/17	CHEMets	QAL1
pH	7.79		pH Units	1	P7H1211	08/12/17	08/12/17	EPA 150.1	
Temperature	20.60		pH Units	1	P7H1211	08/12/17	08/12/17	EPA 150.1	
Total Dissolved Solids	2490	20.0	mg/L	1	P7H1301	08/13/17	08/13/17	EPA 160.1	
Sulfate	1400	25.0	mg/L	25	P7H1208	08/12/17	08/13/17	EPA 300.0	

Total Metals by EPA / Standard Methods

Calcium	522	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Magnesium	13.4	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Potassium	5.21	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Sodium	21.2	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Hardness	1360	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2

Cimarex
600 N. Marinfeld, Ste. 600
Midland TX, 79701

Project: Assault SWD
Project Number: [none]
Project Manager: Christine Alderman

Fax: (432) 571-7832

S-4C
7H11010-09 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

Permian Basin Environmental Lab, L.P.

Organics by GC

C6-C12	ND	2.50	mg/L	1	P7H1201	08/12/17	08/15/17	TX 1005	
>C12-C28	ND	2.50	mg/L	1	P7H1201	08/12/17	08/15/17	TX 1005	
>C28-C35	ND	2.50	mg/L	1	P7H1201	08/12/17	08/15/17	TX 1005	
Surrogate: 1-Chlorooctane		129 %	70-130		P7H1201	08/12/17	08/15/17	TX 1005	
Surrogate: o-Terphenyl		139 %	70-130		P7H1201	08/12/17	08/15/17	TX 1005	S-GC
Total Hydrocarbon nC6-nC35	ND	2.50	mg/L	1	[CALC]	08/12/17	08/15/17	[CALC]	

General Chemistry Parameters by EPA / Standard Methods

Total Alkalinity	62.0	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Carbonate Alkalinity	ND	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Bicarbonate Alkalinity	62.0	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Hydroxide Alkalinity	ND	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Bromide	ND	0.0500	mg/L	1	P7H1208	08/12/17	08/13/17	EPA 300.0	
Chloride	21.9	0.500	mg/L	1	P7H1208	08/12/17	08/13/17	EPA 300.0	
Specific Conductance (EC)	2510	5.00	umhos/cm	1	P7H1217	08/12/17	08/12/17	EPA 120.1	
Dissolved Oxygen	6.00		mg/L	1	P7H1212	08/12/17	08/12/17	CHEMets	QAL1
pH	7.90		pH Units	1	P7H1211	08/12/17	08/12/17	EPA 150.1	
Temperature	20.60		pH Units	1	P7H1211	08/12/17	08/12/17	EPA 150.1	
Total Dissolved Solids	2620	20.0	mg/L	1	P7H1301	08/13/17	08/13/17	EPA 160.1	
Sulfate	1380	25.0	mg/L	25	P7H1208	08/12/17	08/13/17	EPA 300.0	

Total Metals by EPA / Standard Methods

Calcium	527	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Magnesium	13.8	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Potassium	5.35	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Sodium	21.8	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Hardness	1370	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2

Cimarex
600 N. Marinfeld, Ste. 600
Midland TX, 79701

Project: Assault SWD
Project Number: [none]
Project Manager: Christine Alderman

Fax: (432) 571-7832

S-5
7H11010-10 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

Permian Basin Environmental Lab, L.P.

Organics by GC

C6-C12	ND	2.50	mg/L	1	P7H1201	08/12/17	08/15/17	TX 1005	
>C12-C28	ND	2.50	mg/L	1	P7H1201	08/12/17	08/15/17	TX 1005	
>C28-C35	ND	2.50	mg/L	1	P7H1201	08/12/17	08/15/17	TX 1005	
Surrogate: 1-Chlorooctane		133 %	70-130		P7H1201	08/12/17	08/15/17	TX 1005	S-GC1
Surrogate: o-Terphenyl		146 %	70-130		P7H1201	08/12/17	08/15/17	TX 1005	S-GC1
Total Hydrocarbon nC6-nC35	ND	2.50	mg/L	1	[CALC]	08/12/17	08/15/17	[CALC]	

General Chemistry Parameters by EPA / Standard Methods

Total Alkalinity	70.0	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Carbonate Alkalinity	ND	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Bicarbonate Alkalinity	70.0	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Hydroxide Alkalinity	ND	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Bromide	ND	0.0500	mg/L	1	P7H1208	08/12/17	08/13/17	EPA 300.0	
Chloride	25.3	0.500	mg/L	1	P7H1208	08/12/17	08/13/17	EPA 300.0	
Specific Conductance (EC)	2330	5.00	umhos/cm	1	P7H1217	08/12/17	08/12/17	EPA 120.1	
Dissolved Oxygen	6.00		mg/L	1	P7H1212	08/12/17	08/12/17	CHEMets	QAL1
pH	7.69		pH Units	1	P7H1211	08/12/17	08/12/17	EPA 150.1	
Temperature	20.70		pH Units	1	P7H1211	08/12/17	08/12/17	EPA 150.1	
Total Dissolved Solids	2740	20.0	mg/L	1	P7H1301	08/13/17	08/13/17	EPA 160.1	
Sulfate	1410	25.0	mg/L	25	P7H1208	08/12/17	08/13/17	EPA 300.0	

Total Metals by EPA / Standard Methods

Calcium	501	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Magnesium	13.7	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Potassium	5.22	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Sodium	22.6	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Hardness	1310	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2

Cimarex
600 N. Marinfeld, Ste. 600
Midland TX, 79701

Project: Assault SWD
Project Number: [none]
Project Manager: Christine Alderman

Fax: (432) 571-7832

S-5A
7H11010-11 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

Permian Basin Environmental Lab, L.P.

Organics by GC

C6-C12	ND	2.50	mg/L	1	P7H1201	08/12/17	08/15/17	TX 1005	
>C12-C28	ND	2.50	mg/L	1	P7H1201	08/12/17	08/15/17	TX 1005	
>C28-C35	ND	2.50	mg/L	1	P7H1201	08/12/17	08/15/17	TX 1005	
Surrogate: 1-Chlorooctane		135 %	70-130		P7H1201	08/12/17	08/15/17	TX 1005	S-GC1
Surrogate: o-Terphenyl		148 %	70-130		P7H1201	08/12/17	08/15/17	TX 1005	S-GC1
Total Hydrocarbon nC6-nC35	ND	2.50	mg/L	1	[CALC]	08/12/17	08/15/17	[CALC]	

General Chemistry Parameters by EPA / Standard Methods

Total Alkalinity	57.0	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Carbonate Alkalinity	ND	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Bicarbonate Alkalinity	57.0	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Hydroxide Alkalinity	ND	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Bromide	ND	0.0500	mg/L	1	P7H1208	08/12/17	08/13/17	EPA 300.0	
Chloride	24.5	0.500	mg/L	1	P7H1208	08/12/17	08/13/17	EPA 300.0	
Specific Conductance (EC)	2550	5.00	umhos/cm	1	P7H1217	08/12/17	08/12/17	EPA 120.1	
Dissolved Oxygen	6.00		mg/L	1	P7H1212	08/12/17	08/12/17	CHEMets	QAL1
pH	8.02		pH Units	1	P7H1211	08/12/17	08/12/17	EPA 150.1	
Temperature	20.70		pH Units	1	P7H1211	08/12/17	08/12/17	EPA 150.1	
Total Dissolved Solids	2560	20.0	mg/L	1	P7H1301	08/13/17	08/13/17	EPA 160.1	
Sulfate	1380	25.0	mg/L	25	P7H1208	08/12/17	08/13/17	EPA 300.0	

Total Metals by EPA / Standard Methods

Calcium	536	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Magnesium	13.3	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Potassium	5.78	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Sodium	22.1	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Hardness	1390	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2

Cimarex
600 N. Marinfeld, Ste. 600
Midland TX, 79701

Project: Assault SWD
Project Number: [none]
Project Manager: Christine Alderman

Fax: (432) 571-7832

S-5B
7H11010-12 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

Permian Basin Environmental Lab, L.P.

Organics by GC

C6-C12	ND	2.50	mg/L	1	P7H1201	08/12/17	08/15/17	TX 1005	
>C12-C28	ND	2.50	mg/L	1	P7H1201	08/12/17	08/15/17	TX 1005	
>C28-C35	ND	2.50	mg/L	1	P7H1201	08/12/17	08/15/17	TX 1005	
Surrogate: 1-Chlorooctane		65.3 %	70-130		P7H1201	08/12/17	08/15/17	TX 1005	S-GC
Surrogate: o-Terphenyl		120 %	70-130		P7H1201	08/12/17	08/15/17	TX 1005	
Total Hydrocarbon nC6-nC35	ND	2.50	mg/L	1	[CALC]	08/12/17	08/15/17	[CALC]	

General Chemistry Parameters by EPA / Standard Methods

Total Alkalinity	60.0	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Carbonate Alkalinity	ND	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Bicarbonate Alkalinity	60.0	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Hydroxide Alkalinity	ND	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Bromide	ND	0.0500	mg/L	1	P7H1208	08/12/17	08/13/17	EPA 300.0	
Chloride	28.3	0.500	mg/L	1	P7H1208	08/12/17	08/13/17	EPA 300.0	
Specific Conductance (EC)	2540	5.00	umhos/cm	1	P7H1217	08/12/17	08/12/17	EPA 120.1	
Dissolved Oxygen	6.00		mg/L	1	P7H1212	08/12/17	08/12/17	CHEMets	QAL1
pH	7.92		pH Units	1	P7H1211	08/12/17	08/12/17	EPA 150.1	
Temperature	20.80		pH Units	1	P7H1211	08/12/17	08/12/17	EPA 150.1	
Total Dissolved Solids	2640	20.0	mg/L	1	P7H1301	08/13/17	08/13/17	EPA 160.1	
Sulfate	1420	25.0	mg/L	25	P7H1208	08/12/17	08/13/17	EPA 300.0	

Total Metals by EPA / Standard Methods

Calcium	605	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Magnesium	14.9	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Potassium	6.39	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Sodium	25.9	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Hardness	1570	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2

Cimarex
600 N. Marinfeld, Ste. 600
Midland TX, 79701

Project: Assault SWD
Project Number: [none]
Project Manager: Christine Alderman

Fax: (432) 571-7832

S-6
7H11010-13 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

Permian Basin Environmental Lab, L.P.

Organics by GC

C6-C12	ND	2.50	mg/L	1	P7H1201	08/12/17	08/15/17	TX 1005	
>C12-C28	ND	2.50	mg/L	1	P7H1201	08/12/17	08/15/17	TX 1005	
>C28-C35	ND	2.50	mg/L	1	P7H1201	08/12/17	08/15/17	TX 1005	
Surrogate: 1-Chlorooctane		129 %	70-130		P7H1201	08/12/17	08/15/17	TX 1005	
Surrogate: o-Terphenyl		147 %	70-130		P7H1201	08/12/17	08/15/17	TX 1005	S-GC
Total Hydrocarbon nC6-nC35	ND	2.50	mg/L	1	[CALC]	08/12/17	08/15/17	[CALC]	

General Chemistry Parameters by EPA / Standard Methods

Total Alkalinity	57.0	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Carbonate Alkalinity	ND	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Bicarbonate Alkalinity	57.0	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Hydroxide Alkalinity	ND	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Bromide	ND	0.0500	mg/L	1	P7H1208	08/12/17	08/13/17	EPA 300.0	
Chloride	27.0	0.500	mg/L	1	P7H1208	08/12/17	08/13/17	EPA 300.0	
Specific Conductance (EC)	2460	5.00	umhos/cm	1	P7H1217	08/12/17	08/12/17	EPA 120.1	
Dissolved Oxygen	6.00		mg/L	1	P7H1212	08/12/17	08/12/17	CHEMets	QAL1
pH	7.77		pH Units	1	P7H1211	08/12/17	08/12/17	EPA 150.1	
Temperature	20.70		pH Units	1	P7H1211	08/12/17	08/12/17	EPA 150.1	
Total Dissolved Solids	2670	20.0	mg/L	1	P7H1301	08/13/17	08/13/17	EPA 160.1	
Sulfate	1420	25.0	mg/L	25	P7H1208	08/12/17	08/13/17	EPA 300.0	

Total Metals by EPA / Standard Methods

Calcium	673	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Magnesium	16.5	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Potassium	7.01	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Sodium	27.5	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Hardness	1750	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2

Cimarex
600 N. Marinfeld, Ste. 600
Midland TX, 79701

Project: Assault SWD
Project Number: [none]
Project Manager: Christine Alderman

Fax: (432) 571-7832

S-6A
7H11010-14 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

Permian Basin Environmental Lab, L.P.

Organics by GC

C6-C12	ND	2.50	mg/L	1	P7H1201	08/12/17	08/15/17	TX 1005	
>C12-C28	ND	2.50	mg/L	1	P7H1201	08/12/17	08/15/17	TX 1005	
>C28-C35	ND	2.50	mg/L	1	P7H1201	08/12/17	08/15/17	TX 1005	
Surrogate: 1-Chlorooctane		120 %	70-130		P7H1201	08/12/17	08/15/17	TX 1005	
Surrogate: o-Terphenyl		140 %	70-130		P7H1201	08/12/17	08/15/17	TX 1005	S-GC
Total Hydrocarbon nC6-nC35	ND	2.50	mg/L	1	[CALC]	08/12/17	08/15/17	[CALC]	

General Chemistry Parameters by EPA / Standard Methods

Total Alkalinity	85.0	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Carbonate Alkalinity	ND	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Bicarbonate Alkalinity	85.0	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Hydroxide Alkalinity	ND	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Bromide	0.308	0.0500	mg/L	1	P7H1208	08/12/17	08/13/17	EPA 300.0	
Chloride	48.0	12.5	mg/L	25	P7H1208	08/12/17	08/13/17	EPA 300.0	
Specific Conductance (EC)	2810	5.00	umhos/cm	1	P7H1217	08/12/17	08/12/17	EPA 120.1	
Dissolved Oxygen	6.00		mg/L	1	P7H1212	08/12/17	08/12/17	CHEMets	QAL1
pH	7.84		pH Units	1	P7H1211	08/12/17	08/12/17	EPA 150.1	
Temperature	20.70		pH Units	1	P7H1211	08/12/17	08/12/17	EPA 150.1	
Total Dissolved Solids	2850	20.0	mg/L	1	P7H1301	08/13/17	08/13/17	EPA 160.1	
Sulfate	1470	25.0	mg/L	25	P7H1208	08/12/17	08/13/17	EPA 300.0	

Total Metals by EPA / Standard Methods

Calcium	579	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Magnesium	38.2	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Potassium	6.36	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Sodium	68.6	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Hardness	1600	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2

Cimarex
600 N. Marinfeld, Ste. 600
Midland TX, 79701

Project: Assault SWD
Project Number: [none]
Project Manager: Christine Alderman

Fax: (432) 571-7832

S-6C
7H11010-15 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

Permian Basin Environmental Lab, L.P.

Organics by GC

C6-C12	ND	2.50	mg/L	1	P7H1201	08/12/17	08/15/17	TX 1005	
>C12-C28	ND	2.50	mg/L	1	P7H1201	08/12/17	08/15/17	TX 1005	
>C28-C35	ND	2.50	mg/L	1	P7H1201	08/12/17	08/15/17	TX 1005	
Surrogate: 1-Chlorooctane		122 %	70-130		P7H1201	08/12/17	08/15/17	TX 1005	
Surrogate: o-Terphenyl		145 %	70-130		P7H1201	08/12/17	08/15/17	TX 1005	S-GC
Total Hydrocarbon nC6-nC35	ND	2.50	mg/L	1	[CALC]	08/12/17	08/15/17	[CALC]	

General Chemistry Parameters by EPA / Standard Methods

Total Alkalinity	95.0	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Carbonate Alkalinity	ND	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Bicarbonate Alkalinity	95.0	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Hydroxide Alkalinity	ND	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Bromide	0.328	0.0500	mg/L	1	P7H1208	08/12/17	08/13/17	EPA 300.0	
Chloride	58.6	12.5	mg/L	25	P7H1208	08/12/17	08/13/17	EPA 300.0	
Specific Conductance (EC)	2900	5.00	umhos/cm	1	P7H1217	08/12/17	08/12/17	EPA 120.1	
Dissolved Oxygen	6.00		mg/L	1	P7H1212	08/12/17	08/12/17	CHEMets	QAL1
pH	7.95		pH Units	1	P7H1211	08/12/17	08/12/17	EPA 150.1	
Temperature	21.10		pH Units	1	P7H1211	08/12/17	08/12/17	EPA 150.1	
Total Dissolved Solids	2740	20.0	mg/L	1	P7H1301	08/13/17	08/13/17	EPA 160.1	
Sulfate	1470	25.0	mg/L	25	P7H1208	08/12/17	08/13/17	EPA 300.0	

Total Metals by EPA / Standard Methods

Calcium	602	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Magnesium	43.1	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Potassium	7.01	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Sodium	82.2	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Hardness	1680	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2

Cimarex
600 N. Marinfeld, Ste. 600
Midland TX, 79701

Project: Assault SWD
Project Number: [none]
Project Manager: Christine Alderman

Fax: (432) 571-7832

DUP-1
7H11010-16 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

Permian Basin Environmental Lab, L.P.

Organics by GC

C6-C12	ND	2.50	mg/L	1	P7H1201	08/12/17	08/15/17	TX 1005	
>C12-C28	ND	2.50	mg/L	1	P7H1201	08/12/17	08/15/17	TX 1005	
>C28-C35	ND	2.50	mg/L	1	P7H1201	08/12/17	08/15/17	TX 1005	
Surrogate: 1-Chlorooctane		119 %	70-130		P7H1201	08/12/17	08/15/17	TX 1005	
Surrogate: o-Terphenyl		137 %	70-130		P7H1201	08/12/17	08/15/17	TX 1005	S-GC
Total Hydrocarbon nC6-nC35	ND	2.50	mg/L	1	[CALC]	08/12/17	08/15/17	[CALC]	

General Chemistry Parameters by EPA / Standard Methods

Total Alkalinity	70.0	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Carbonate Alkalinity	ND	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Bicarbonate Alkalinity	70.0	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Hydroxide Alkalinity	ND	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Bromide	ND	0.0500	mg/L	1	P7H1208	08/12/17	08/13/17	EPA 300.0	
Chloride	22.6	0.500	mg/L	1	P7H1208	08/12/17	08/13/17	EPA 300.0	
Specific Conductance (EC)	2600	5.00	umhos/cm	1	P7H1217	08/12/17	08/12/17	EPA 120.1	
Dissolved Oxygen	6.00		mg/L	1	P7H1212	08/12/17	08/12/17	CHEMets	QAL1
pH	7.86		pH Units	1	P7H1211	08/12/17	08/12/17	EPA 150.1	
Temperature	21.10		pH Units	1	P7H1211	08/12/17	08/12/17	EPA 150.1	
Total Dissolved Solids	2540	20.0	mg/L	1	P7H1301	08/13/17	08/13/17	EPA 160.1	
Sulfate	1420	25.0	mg/L	25	P7H1208	08/12/17	08/13/17	EPA 300.0	

Total Metals by EPA / Standard Methods

Calcium	566	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Magnesium	14.5	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Potassium	5.62	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Sodium	22.8	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Hardness	1470	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2

Cimarex
600 N. Marinfeld, Ste. 600
Midland TX, 79701

Project: Assault SWD
Project Number: [none]
Project Manager: Christine Alderman

Fax: (432) 571-7832

DUP-2
7H11010-17 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

Permian Basin Environmental Lab, L.P.

Organics by GC

C6-C12	ND	2.50	mg/L	1	P7H1201	08/12/17	08/15/17	TX 1005	
>C12-C28	ND	2.50	mg/L	1	P7H1201	08/12/17	08/15/17	TX 1005	
>C28-C35	ND	2.50	mg/L	1	P7H1201	08/12/17	08/15/17	TX 1005	
Surrogate: 1-Chlorooctane		126 %	70-130		P7H1201	08/12/17	08/15/17	TX 1005	
Surrogate: o-Terphenyl		146 %	70-130		P7H1201	08/12/17	08/15/17	TX 1005	S-GC
Total Hydrocarbon nC6-nC35	ND	2.50	mg/L	1	[CALC]	08/12/17	08/15/17	[CALC]	

General Chemistry Parameters by EPA / Standard Methods

Total Alkalinity	52.0	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Carbonate Alkalinity	ND	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Bicarbonate Alkalinity	52.0	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Hydroxide Alkalinity	ND	10.0	mg/L	1	P7H1210	08/12/17	08/12/17	EPA 310.1M	
Bromide	ND	0.0500	mg/L	1	P7H1208	08/12/17	08/13/17	EPA 300.0	
Chloride	27.0	0.500	mg/L	1	P7H1208	08/12/17	08/13/17	EPA 300.0	
Specific Conductance (EC)	2530	5.00	umhos/cm	1	P7H1217	08/12/17	08/12/17	EPA 120.1	
Dissolved Oxygen	6.00		mg/L	1	P7H1212	08/12/17	08/12/17	CHEMets	QAL1
pH	7.79		pH Units	1	P7H1211	08/12/17	08/12/17	EPA 150.1	
Temperature	21.10		pH Units	1	P7H1211	08/12/17	08/12/17	EPA 150.1	
Total Dissolved Solids	2650	20.0	mg/L	1	P7H1301	08/13/17	08/13/17	EPA 160.1	
Sulfate	1430	25.0	mg/L	25	P7H1208	08/12/17	08/13/17	EPA 300.0	

Total Metals by EPA / Standard Methods

Calcium	464	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Magnesium	11.8	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Potassium	4.84	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2, J
Sodium	19.7	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2
Hardness	1210	5.00	mg/L	1	P7H1207	08/12/17	08/12/17	EPA 6010B	QAL2

Cimarex
600 N. Marinfeld, Ste. 600
Midland TX, 79701

Project: Assault SWD
Project Number: [none]
Project Manager: Christine Alderman

Fax: (432) 571-7832

Organics by GC - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch P7H1201 - TX 1005

Blank (P7H1201-BLK1)

Prepared & Analyzed: 08/12/17

C6-C12	ND	2.50	mg/L							
>C12-C28	ND	2.50	"							
>C28-C35	ND	2.50	"							
Surrogate: 1-Chlorooctane	10.3		"	9.38		110	70-130			
Surrogate: o-Terphenyl	5.44		"	4.69		116	70-130			

LCS (P7H1201-BS1)

Prepared & Analyzed: 08/12/17

C6-C12	74.4	2.50	mg/L	93.8		79.4	75-125			
>C12-C28	71.1	2.50	"	93.8		75.8	75-125			
Surrogate: 1-Chlorooctane	10.2		"	9.38		109	70-130			
Surrogate: o-Terphenyl	4.82		"	4.69		103	70-130			

LCS Dup (P7H1201-BSD1)

Prepared & Analyzed: 08/12/17

C6-C12	74.2	2.50	mg/L	93.8		79.1	75-125	0.320	20	
>C12-C28	71.5	2.50	"	93.8		76.2	75-125	0.580	20	
Surrogate: 1-Chlorooctane	10.3		"	9.38		110	70-130			
Surrogate: o-Terphenyl	4.85		"	4.69		104	70-130			

Cimarex
600 N. Marinfeld, Ste. 600
Midland TX, 79701

Project: Assault SWD
Project Number: [none]
Project Manager: Christine Alderman

Fax: (432) 571-7832

General Chemistry Parameters by EPA / Standard Methods - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch P7H1208 - * DEFAULT PREP *****

Blank (P7H1208-BLK1)

Prepared: 08/12/17 Analyzed: 08/13/17

Bromide	ND	0.0500	mg/L
Chloride	ND	0.500	"
Sulfate	ND	1.00	"

LCS (P7H1208-BS1)

Prepared: 08/12/17 Analyzed: 08/13/17

Bromide	4.62	0.0500	mg/L	5.00	92.5	80-120
Chloride	43.8	0.500	"	40.0	109	85-115
Sulfate	42.4	1.00	"	40.0	106	85-115

LCS Dup (P7H1208-BSD1)

Prepared: 08/12/17 Analyzed: 08/13/17

Sulfate	41.3	1.00	mg/L	40.0	103	85-115	2.55	20
Bromide	4.53	0.0500	"	5.00	90.6	80-120	2.10	20
Chloride	42.8	0.500	"	40.0	107	85-115	2.28	20

Duplicate (P7H1208-DUP1)

Source: 7H11010-01

Prepared: 08/12/17 Analyzed: 08/13/17

Bromide	ND	0.0500	mg/L	ND				20
Sulfate	1430	25.0	"	1400			1.95	20
Chloride	29.7	12.5	"	33.2			11.2	20

Duplicate (P7H1208-DUP2)

Source: 7H11010-11

Prepared: 08/12/17 Analyzed: 08/13/17

Chloride	24.7	0.500	mg/L	24.5			0.808	20
Sulfate	1400	25.0	"	1380			1.43	20
Bromide	ND	0.0500	"	ND				20

Matrix Spike (P7H1208-MS1)

Source: 7H11010-01

Prepared: 08/12/17 Analyzed: 08/13/17

Sulfate	1650	25.0	mg/L	200	1400	124	80-120		QM-07
Chloride	252	12.5	"	200	33.2	109	80-120		
Bromide	24.9	1.25	"	25.0	ND	99.6	75-125		

Cimarex
600 N. Marinfeld, Ste. 600
Midland TX, 79701

Project: Assault SWD
Project Number: [none]
Project Manager: Christine Alderman

Fax: (432) 571-7832

General Chemistry Parameters by EPA / Standard Methods - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch P7H1210 - * DEFAULT PREP *****

Blank (P7H1210-BLK1)

Prepared & Analyzed: 08/12/17

Total Alkalinity	ND	10.0	mg/L
Carbonate Alkalinity	ND	10.0	"
Bicarbonate Alkalinity	ND	10.0	"
Hydroxide Alkalinity	ND	10.0	"

Blank (P7H1210-BLK2)

Prepared & Analyzed: 08/12/17

Total Alkalinity	ND	10.0	mg/L
Carbonate Alkalinity	ND	10.0	"
Bicarbonate Alkalinity	ND	10.0	"
Hydroxide Alkalinity	ND	10.0	"

Duplicate (P7H1210-DUP1)

Source: 7H11010-01

Prepared & Analyzed: 08/12/17

Total Alkalinity	100	10.0	mg/L	100	0.00	20
Carbonate Alkalinity	ND	10.0	"	ND		20
Bicarbonate Alkalinity	100	10.0	"	100	0.00	20
Hydroxide Alkalinity	ND	10.0	"	ND		20

Duplicate (P7H1210-DUP2)

Source: 7H12001-04

Prepared & Analyzed: 08/12/17

Total Alkalinity	70.0	10.0	mg/L	70.0	0.00	20
Carbonate Alkalinity	ND	10.0	"	ND		20
Bicarbonate Alkalinity	70.0	10.0	"	70.0	0.00	20
Hydroxide Alkalinity	ND	10.0	"	ND		20

Batch P7H1211 - * DEFAULT PREP *****

Duplicate (P7H1211-DUP1)

Source: 7H11010-01

Prepared & Analyzed: 08/12/17

pH	7.77	pH Units	7.80	0.385	20
Temperature	20.50	"	20.50	0.00	200

Cimarex
600 N. Marinfeld, Ste. 600
Midland TX, 79701

Project: Assault SWD
Project Number: [none]
Project Manager: Christine Alderman

Fax: (432) 571-7832

General Chemistry Parameters by EPA / Standard Methods - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch P7H1211 - * DEFAULT PREP *****

Duplicate (P7H1211-DUP2)	Source: 7H12001-04		Prepared & Analyzed: 08/12/17							
pH	7.61		pH Units		7.61			0.00	20	
Temperature	20.80		"		21.10			1.43	200	

Batch P7H1212 - * DEFAULT PREP *****

Duplicate (P7H1212-DUP1)	Source: 7H11010-01		Prepared & Analyzed: 08/12/17							
Dissolved Oxygen	6.00		mg/L		6.00			0.00	200	QAL1

Batch P7H1217 - * DEFAULT PREP *****

Duplicate (P7H1217-DUP1)	Source: 7H10011-01		Prepared & Analyzed: 08/11/17							
Specific Conductance (EC)	2880	5.00	umhos/cm		2820			2.11	20	

Duplicate (P7H1217-DUP2)	Source: 7H11010-01		Prepared & Analyzed: 08/12/17							
Specific Conductance (EC)	2720	5.00	umhos/cm		2650			2.61	20	

Duplicate (P7H1217-DUP3)	Source: 7H12001-11		Prepared & Analyzed: 08/12/17							
Specific Conductance (EC)	2700	5.00	umhos/cm		2750			1.83	20	

Batch P7H1301 - * DEFAULT PREP *****

Blank (P7H1301-BLK1)			Prepared & Analyzed: 08/13/17							
Total Dissolved Solids	40.0	20.0	mg/L							

Blank (P7H1301-BLK2)			Prepared & Analyzed: 08/13/17							
Total Dissolved Solids	30.0	20.0	mg/L							

Cimarex
600 N. Marinfeld, Ste. 600
Midland TX, 79701

Project: Assault SWD
Project Number: [none]
Project Manager: Christine Alderman

Fax: (432) 571-7832

General Chemistry Parameters by EPA / Standard Methods - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch P7H1301 - * DEFAULT PREP *****

Duplicate (P7H1301-DUP1)

Source: 7H11010-10

Prepared & Analyzed: 08/13/17

Total Dissolved Solids	2690	20.0	mg/L		2740			1.84	20	
------------------------	------	------	------	--	------	--	--	------	----	--

Duplicate (P7H1301-DUP2)

Source: 7H12001-01

Prepared & Analyzed: 08/13/17

Total Dissolved Solids	5720	20.0	mg/L		6290			9.49	20	
------------------------	------	------	------	--	------	--	--	------	----	--

Cimarex
600 N. Marinfeld, Ste. 600
Midland TX, 79701

Project: Assault SWD
Project Number: [none]
Project Manager: Christine Alderman

Fax: (432) 571-7832

Total Metals by EPA / Standard Methods - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch P7H1207 - * DEFAULT PREP *****

Blank (P7H1207-BLK1)

Prepared & Analyzed: 08/12/17

Calcium	ND	5.00	mg/L							QAL2
Magnesium	ND	5.00	"							QAL2
Potassium	0.0205	5.00	"							J, QAL2
Sodium	0.0258	5.00	"							QAL2, J
Hardness	ND	5.00	"							QAL2

LCS (P7H1207-BS1)

Prepared & Analyzed: 08/12/17

Calcium	54.3	5.00	mg/L	50.0		109	80-120			QAL2
Magnesium	54.1	5.00	"	50.0		108	80-120			QAL2
Potassium	57.9	5.00	"	50.0		116	80-120			QAL2
Sodium	58.9	5.00	"	50.0		118	80-120			QAL2

LCS Dup (P7H1207-BSD1)

Prepared & Analyzed: 08/12/17

Calcium	56.1	5.00	mg/L	50.0		112	80-120	3.27	20	QAL2
Magnesium	56.0	5.00	"	50.0		112	80-120	3.36	20	QAL2
Potassium	59.8	5.00	"	50.0		120	80-120	3.30	20	QAL2
Sodium	60.2	5.00	"	50.0		120	80-120	2.11	20	QAL2

Duplicate (P7H1207-DUP1)

Source: 7H11010-01

Prepared & Analyzed: 08/12/17

Calcium	585	5.00	mg/L		615			5.02	20	QAL2
Magnesium	33.0	5.00	"		34.5			4.36	20	QAL2
Potassium	5.43	5.00	"		5.70			4.75	20	QAL2
Sodium	55.3	5.00	"		57.6			4.12	20	QAL2
Hardness	1600	5.00	"		1680			4.96	20	QAL2

Matrix Spike (P7H1207-MS1)

Source: 7H11010-01

Prepared & Analyzed: 08/12/17

Calcium	573	5.00	mg/L	50.0	615	NR	75-125			QAL2, QM-07
Magnesium	77.5	5.00	"	50.0	34.5	86.2	75-125			QAL2
Potassium	59.4	5.00	"	50.0	5.70	107	75-125			QAL2
Sodium	102	5.00	"	50.0	57.6	88.9	75-125			QAL2

Cimarex
600 N. Marinfeld, Ste. 600
Midland TX, 79701

Project: Assault SWD
Project Number: [none]
Project Manager: Christine Alderman

Fax: (432) 571-7832

Notes and Definitions

S-GC1 Surrogate recovery outside of control limits. A second analysis confirmed the original results..

S-GC Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

QAL2 Certification in process for this analyte.

QAL1 The Laboratory is not NELAC Certified for this analyte or analysis.

J Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

LCS Laboratory Control Spike

MS Matrix Spike

Dup Duplicate

Report Approved By:



Date:

8/15/2017

Brent Barron, Laboratory Director/Technical Director

Cimarex
600 N. Marinfeld, Ste. 600
Midland TX, 79701

Project: Assault SWD
Project Number: [none]
Project Manager: Christine Alderman

Fax: (432) 571-7832

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-686-7235.



7411009

CHAIN OF CUSTODY RECORD

000136

Facility Name Cimarex Energy		Analytical Laboratory Name PBE Labs		Today's Date 8/11/17	
Address 600 N. Monroeville Blvd, Ste. 600		Address City		Zip 79701	
City Midland TX		State TX		Zip 79701	
Sample Group Identifier		Contact Name and Report to: Christine Wilderman		Page 1	
Site/Project Name or Identifier Assaults-522		Phone 432-853-7059		Fax	
Special Instructions 24 hr. TAT		Carrier Waybill Number		Analysis/Analyses	

Station Name or Sample ID	Sample Date	Time 24 hrs	Matrix	Sample Top Btm	Size	Containers Type No.	Y	Filtered N	Preservative	Comments	Oil/Grease E1664A	TPH	St. H ₂ O Analysis	Anion/Cation						
S-1	8/11/17	08:25	W			3														
S-2		09:38																		
S-3		09:59																		
S-3A		10:18																		
S-3B		10:30																		
S-4		09:30																		
S-4A		09:37																		
S-4B		09:47																		
S-4C		10:00																		
S-5		09:45																		
S-5A		10:22																		
S-5B		10:43																		
S-6		09:43																		

Notes:

Potential Hazardous Characteristics

☐ Non-Haz ☐ RCRA D001, 2&3, or 4 ☐ RCRA Listed ☐ Radioactive ☐ Unknown

Sample Disposal

☐ Disposal by Lab ☐ Return to Client ☐ Hold pending further instructions

1. Relinquished by Christine M. Wilderman	Date 8/11/17	Time 13:18	2. Received by Christine M. Wilderman	Date 8-11-17	Time 1705
3. Relinquished by Christine M. Wilderman	Date 8-11-17	Time 1705	4. Received by Christine M. Wilderman	Date 8-11-17	Time 1705
5. Relinquished by	Date	Time	6. Received by	Date	Time
Comments			Samples released by or H.P. name	Date	Time
Comments			Send invoice to ESH Department		

Original - Send to lab with sample

Yellow - Return to ESH

Pink - Remain in book

CHAIN OF CUSTODY RECORD

[illegible]