



15-Aug-2019

Mike Gardner  
Terra Energy Partners, LLC  
1058 Country Rd 215  
Parachute, CO 81635

Re: **MV 13-33-695 Tank Release**

Work Order: **19080633**

Dear Mike,

ALS Environmental received 6 samples on 09-Aug-2019 09:00 AM for the analyses presented in the following report.

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

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

The total number of pages in this report is 30.

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

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

Sincerely,

A handwritten signature in black ink, appearing to read "Chad Whelton", is written over a faint, illegible background.

Electronically approved by: Chad Whelton

Chad Whelton  
Project Manager

### Report of Laboratory Analysis

Certificate No: MN 026-999-449

ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

Environmental 

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**Client:** Terra Energy Partners, LLC  
**Project:** MV 13-33-695 Tank Release  
**Work Order:** 19080633

**Work Order Sample Summary**

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<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
19080633-01	MV 13-33 Excavation: North Wall	Soil		8/7/2019 12:00	8/9/2019 09:00	<input type="checkbox"/>
19080633-02	MV 13-33 Excavation: South Wall	Soil		8/7/2019 15:30	8/9/2019 09:00	<input type="checkbox"/>
19080633-03	MV 13-33 Excavation: East Wall	Soil		8/7/2019 15:45	8/9/2019 09:00	<input type="checkbox"/>
19080633-04	MV 13-33 Excavation: West Wall	Soil		8/7/2019 12:30	8/9/2019 09:00	<input type="checkbox"/>
19080633-05	MV 13-33 Excavation: Bottom	Soil		8/7/2019 13:00	8/9/2019 09:00	<input type="checkbox"/>
19080633-06	MV 13-33 Background	Soil		8/7/2019 15:50	8/9/2019 09:00	<input type="checkbox"/>

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**Client:** Terra Energy Partners, LLC  
**Project:** MV 13-33-695 Tank Release  
**Work Order:** 19080633

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**Case Narrative**

Batch 140587, Method GRO\_8015\_S, Sample 19080633-01A: One or more GRO surrogate recoveries were above the upper control limits. The sample was non-detect, therefore, no qualification is required.

Batch 140696, Method CR6\_7196\_S, Sample 19080633-01A MS/MSD: The MS/MSD recovery was below the lower control limit for Hexavalent Chromium. The corresponding result in the parent sample may be biased low.

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

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

<u>Units Reported</u>	<u>Description</u>
% of sample	Percent of Sample
°C	Degrees Celcius
mg/Kg	Milligrams per Kilogram
mg/Kg-dry	Milligrams per Kilogram Dry Weight
mg/L	Milligrams per Liter
mmhos/cm @25°C	Millimhos-Centimeter at 25 Degrees Celcius
none	

s.u. Standard Units

Client: Terra Energy Partners, LLC  
 Project: MV 13-33-695 Tank Release  
 Sample ID: MV 13-33 Excavation: North Wall  
 Collection Date: 8/7/2019 12:00 PM

Work Order: 19080633  
 Lab ID: 19080633-01  
 Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>							
				Method: <b>SW8015C</b>		Prep: SW3546 / 8/9/19	Analyst: <b>RM</b>
DRO (C10-C28)	U		3.4	5.8	mg/Kg-dry	1	8/9/2019 21:12
Surr: 4-Terphenyl-d14	86.6			34-130	%REC	1	8/9/2019 21:12
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>							
				Method: <b>SW8015D</b>		Prep: SW5035 / 8/9/19	Analyst: <b>RM</b>
GRO (C6-C10)	U		3.1	7.3	mg/Kg	1	8/9/2019 18:10
Surr: Toluene-d8	126	S		71-123	%REC	1	8/9/2019 18:10
<b>MERCURY BY CVAA</b>							
				Method: <b>SW7471B</b>		Prep: SW7471 / 8/12/19	Analyst: <b>RSB</b>
Mercury	<b>0.021</b>		<b>0.0021</b>	<b>0.021</b>	mg/Kg-dry	1	8/12/2019 13:34
<b>METALS BY ICP-MS</b>							
				Method: <b>SW6020A</b>		Prep: SW3050B / 8/10/19	Analyst: <b>ABL</b>
Arsenic	<b>9.5</b>		<b>0.050</b>	<b>0.41</b>	mg/Kg-dry	1	8/11/2019 19:39
Barium	<b>290</b>		<b>3.8</b>	<b>4.1</b>	mg/Kg-dry	10	8/12/2019 18:50
Cadmium	<b>0.22</b>		<b>0.025</b>	<b>0.17</b>	mg/Kg-dry	1	8/11/2019 19:39
Chromium	<b>11</b>		<b>0.18</b>	<b>0.41</b>	mg/Kg-dry	1	8/11/2019 19:39
Copper	<b>11</b>		<b>0.41</b>	<b>0.41</b>	mg/Kg-dry	1	8/11/2019 19:39
Lead	<b>11</b>		<b>0.20</b>	<b>0.41</b>	mg/Kg-dry	1	8/11/2019 19:39
Nickel	<b>11</b>		<b>0.21</b>	<b>0.41</b>	mg/Kg-dry	1	8/11/2019 19:39
Selenium	U		0.38	0.41	mg/Kg-dry	1	8/11/2019 19:39
Silver	U		0.055	0.41	mg/Kg-dry	1	8/11/2019 19:39
Zinc	<b>46</b>		<b>8.1</b>	<b>8.3</b>	mg/Kg-dry	10	8/12/2019 18:50
<b>SOLUBLE CATIONS FOR SAR</b>							
				Method: <b>SW6020A</b>		Prep: USDA Method 20B / 8/13/19	Analyst: <b>ABL</b>
Calcium	<b>240</b>		<b>2.5</b>	<b>5.0</b>	mg/L	10	8/14/2019 12:36
Magnesium	<b>44</b>		<b>0.50</b>	<b>2.0</b>	mg/L	10	8/14/2019 12:36
Sodium	<b>15</b>		<b>0.45</b>	<b>2.0</b>	mg/L	10	8/14/2019 12:36
<b>SODIUM ADSORPTION RATIO</b>							
				Method: <b>USDA H60 METHOD 2</b>		Prep: USDA Method 20B / 8/13/19	Analyst: <b>ABL</b>
Sodium Adsorption Ratio	<b>0.24</b>		<b>0.010</b>	<b>0.010</b>	none	1	8/14/2019
<b>POLYNUCLEAR AROMATIC HYDROCARBONS (PAHS)</b>							
				Method: <b>SW846 8270D</b>		Prep: SW3546 / 8/9/19	Analyst: <b>EEW</b>
Acenaphthene	U		0.00095	0.0049	mg/Kg-dry	1	8/9/2019 15:18
Anthracene	U		0.0016	0.0049	mg/Kg-dry	1	8/9/2019 15:18
Benzo(a)anthracene	U		0.0020	0.0049	mg/Kg-dry	1	8/9/2019 15:18
Benzo(a)pyrene	U		0.0013	0.0049	mg/Kg-dry	1	8/9/2019 15:18
Benzo(b)fluoranthene	U		0.0012	0.0049	mg/Kg-dry	1	8/9/2019 15:18
Benzo(k)fluoranthene	U		0.0014	0.0049	mg/Kg-dry	1	8/9/2019 15:18
Chrysene	U		0.0010	0.0049	mg/Kg-dry	1	8/9/2019 15:18
Dibenzo(a,h)anthracene	U		0.0011	0.0049	mg/Kg-dry	1	8/9/2019 15:18
Fluoranthene	U		0.00090	0.0049	mg/Kg-dry	1	8/9/2019 15:18

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

# ALS Group, USA

Date: 15-Aug-19

**Client:** Terra Energy Partners, LLC  
**Project:** MV 13-33-695 Tank Release  
**Sample ID:** MV 13-33 Excavation: North Wall  
**Collection Date:** 8/7/2019 12:00 PM

**Work Order:** 19080633  
**Lab ID:** 19080633-01  
**Matrix:** SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Fluorene		U	0.0016	0.0049	mg/Kg-dry	1	8/9/2019 15:18
Indeno(1,2,3-cd)pyrene		U	0.0018	0.0049	mg/Kg-dry	1	8/9/2019 15:18
Naphthalene		U	0.0021	0.0049	mg/Kg-dry	1	8/9/2019 15:18
Pyrene		U	0.00081	0.0049	mg/Kg-dry	1	8/9/2019 15:18
Surr: 2-Fluorobiphenyl	74.3			20-140	%REC	1	8/9/2019 15:18
Surr: 4-Terphenyl-d14	67.4			22-172	%REC	1	8/9/2019 15:18
Surr: Nitrobenzene-d5	84.9			28-140	%REC	1	8/9/2019 15:18
<b>VOLATILE ORGANIC COMPOUNDS</b>			Method: <b>SW8260C</b>		Prep: SW5035 / 8/9/19		Analyst: <b>WH</b>
Benzene		U	0.0052	0.031	mg/Kg-dry	1	8/12/2019 14:29
Ethylbenzene		U	0.0065	0.031	mg/Kg-dry	1	8/12/2019 14:29
m,p-Xylene		U	0.041	0.061	mg/Kg-dry	1	8/12/2019 14:29
o-Xylene		U	0.012	0.031	mg/Kg-dry	1	8/12/2019 14:29
Toluene		U	0.0084	0.031	mg/Kg-dry	1	8/12/2019 14:29
Xylenes, Total		U	0.041	0.092	mg/Kg-dry	1	8/12/2019 14:29
Surr: 1,2-Dichloroethane-d4	107			70-130	%REC	1	8/12/2019 14:29
Surr: 4-Bromofluorobenzene	95.6			70-130	%REC	1	8/12/2019 14:29
Surr: Dibromofluoromethane	93.8			70-130	%REC	1	8/12/2019 14:29
Surr: Toluene-d8	100			70-130	%REC	1	8/12/2019 14:29
<b>ELECTRICAL CONDUCTIVITY (SAR)</b>			Method: <b>USDA H60 METHOD 2</b>		Prep: USDA Method 20B / 8/13/19		Analyst: <b>QTN</b>
Electrical Conductivity @ Saturation	1.6		0.011	0.10	mmhos/cm @25°	20	8/13/2019 11:23
<b>CHROMIUM, TRIVALENT</b>			Method: <b>CALCULATION</b>				Analyst: <b>JB</b>
Chromium, Trivalent	11		0.37	1.2	mg/Kg-dry	1	8/12/2019 16:15
<b>CHROMIUM, HEXAVALENT</b>			Method: <b>SW7196A</b>		Prep: SW3060A / 8/9/19		Analyst: <b>MB</b>
Chromium, Hexavalent		U	1.0	1.2	mg/Kg-dry	1	8/12/2019 14:30
<b>MOISTURE</b>			Method: <b>SW3550C</b>				Analyst: <b>MMO</b>
Moisture	18		0.10	0.10	% of sample	1	8/9/2019 16:39
<b>PH</b>			Method: <b>SW9045D</b>		Prep: EXTRACT / 8/9/19		Analyst: <b>DNW</b>
pH	8.60		0.10	0.100	s.u.	1	8/9/2019 15:00
Temperature	21.9		0.10	0.100	°C	1	8/9/2019 15:00

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

Client: Terra Energy Partners, LLC  
 Project: MV 13-33-695 Tank Release  
 Sample ID: MV 13-33 Excavation: South Wall  
 Collection Date: 8/7/2019 03:30 PM

Work Order: 19080633  
 Lab ID: 19080633-02  
 Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>							
				Method: <b>SW8015C</b>		Prep: SW3546 / 8/9/19	Analyst: <b>RM</b>
DRO (C10-C28)	U		3.5	6.0	mg/Kg-dry	1	8/9/2019 21:41
Surr: 4-Terphenyl-d14	94.1			34-130	%REC	1	8/9/2019 21:41
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>							
				Method: <b>SW8015D</b>		Prep: SW5035 / 8/9/19	Analyst: <b>RM</b>
GRO (C6-C10)	U		3.0	7.1	mg/Kg	1	8/9/2019 19:09
Surr: Toluene-d8	94.9			71-123	%REC	1	8/9/2019 19:09
<b>MERCURY BY CVAA</b>							
				Method: <b>SW7471B</b>		Prep: SW7471 / 8/12/19	Analyst: <b>RSB</b>
Mercury	<b>0.037</b>		<b>0.0022</b>	<b>0.022</b>	mg/Kg-dry	1	8/12/2019 13:40
<b>METALS BY ICP-MS</b>							
				Method: <b>SW6020A</b>		Prep: SW3050B / 8/10/19	Analyst: <b>ABL</b>
Arsenic	12		0.061	0.51	mg/Kg-dry	1	8/11/2019 19:44
Barium	300		4.7	5.1	mg/Kg-dry	10	8/12/2019 18:51
Cadmium	0.31		0.031	0.20	mg/Kg-dry	1	8/11/2019 19:44
Chromium	11		0.23	0.51	mg/Kg-dry	1	8/11/2019 19:44
Copper	13		0.51	0.51	mg/Kg-dry	1	8/11/2019 19:44
Lead	12		0.25	0.51	mg/Kg-dry	1	8/11/2019 19:44
Nickel	13		0.27	0.51	mg/Kg-dry	1	8/11/2019 19:44
Selenium	U		0.47	0.51	mg/Kg-dry	1	8/11/2019 19:44
Silver	U		0.068	0.51	mg/Kg-dry	1	8/11/2019 19:44
Zinc	53		10	10	mg/Kg-dry	10	8/12/2019 18:51
<b>SOLUBLE CATIONS FOR SAR</b>							
				Method: <b>SW6020A</b>		Prep: USDA Method 20B / 8/13/19	Analyst: <b>ABL</b>
Calcium	750		2.5	5.0	mg/L	10	8/14/2019 12:37
Magnesium	120		0.50	2.0	mg/L	10	8/14/2019 12:37
Sodium	66		0.45	2.0	mg/L	10	8/14/2019 12:37
<b>SODIUM ADSORPTION RATIO</b>							
				Method: <b>USDA H60 METHOD 2</b>		Prep: USDA Method 20B / 8/13/19	Analyst: <b>ABL</b>
Sodium Adsorption Ratio	0.59		0.010	0.010	none	1	8/14/2019
<b>POLYNUCLEAR AROMATIC HYDROCARBONS (PAHS)</b>							
				Method: <b>SW846 8270D</b>		Prep: SW3546 / 8/9/19	Analyst: <b>EEW</b>
Acenaphthene	U		0.00097	0.0050	mg/Kg-dry	1	8/9/2019 15:34
Anthracene	U		0.0017	0.0050	mg/Kg-dry	1	8/9/2019 15:34
Benzo(a)anthracene	U		0.0021	0.0050	mg/Kg-dry	1	8/9/2019 15:34
Benzo(a)pyrene	U		0.0014	0.0050	mg/Kg-dry	1	8/9/2019 15:34
Benzo(b)fluoranthene	U		0.0012	0.0050	mg/Kg-dry	1	8/9/2019 15:34
Benzo(k)fluoranthene	U		0.0015	0.0050	mg/Kg-dry	1	8/9/2019 15:34
Chrysene	U		0.0010	0.0050	mg/Kg-dry	1	8/9/2019 15:34
Dibenzo(a,h)anthracene	U		0.0012	0.0050	mg/Kg-dry	1	8/9/2019 15:34
Fluoranthene	U		0.00092	0.0050	mg/Kg-dry	1	8/9/2019 15:34

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

# ALS Group, USA

Date: 15-Aug-19

**Client:** Terra Energy Partners, LLC  
**Project:** MV 13-33-695 Tank Release  
**Sample ID:** MV 13-33 Excavation: South Wall  
**Collection Date:** 8/7/2019 03:30 PM

**Work Order:** 19080633  
**Lab ID:** 19080633-02  
**Matrix:** SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Fluorene		U	0.0017	0.0050	mg/Kg-dry	1	8/9/2019 15:34
Indeno(1,2,3-cd)pyrene		U	0.0018	0.0050	mg/Kg-dry	1	8/9/2019 15:34
Naphthalene		U	0.0022	0.0050	mg/Kg-dry	1	8/9/2019 15:34
Pyrene		U	0.00083	0.0050	mg/Kg-dry	1	8/9/2019 15:34
Surr: 2-Fluorobiphenyl	82.5			20-140	%REC	1	8/9/2019 15:34
Surr: 4-Terphenyl-d14	77.3			22-172	%REC	1	8/9/2019 15:34
Surr: Nitrobenzene-d5	92.6			28-140	%REC	1	8/9/2019 15:34
<b>VOLATILE ORGANIC COMPOUNDS</b>			Method: <b>SW8260C</b>		Prep: SW5035 / 8/9/19		Analyst: <b>WH</b>
Benzene		U	0.0049	0.029	mg/Kg-dry	1	8/12/2019 14:47
Ethylbenzene		U	0.0060	0.029	mg/Kg-dry	1	8/12/2019 14:47
m,p-Xylene		U	0.038	0.057	mg/Kg-dry	1	8/12/2019 14:47
o-Xylene		U	0.011	0.029	mg/Kg-dry	1	8/12/2019 14:47
Toluene		U	0.0078	0.029	mg/Kg-dry	1	8/12/2019 14:47
Xylenes, Total		U	0.038	0.086	mg/Kg-dry	1	8/12/2019 14:47
Surr: 1,2-Dichloroethane-d4	106			70-130	%REC	1	8/12/2019 14:47
Surr: 4-Bromofluorobenzene	94.4			70-130	%REC	1	8/12/2019 14:47
Surr: Dibromofluoromethane	91.1			70-130	%REC	1	8/12/2019 14:47
Surr: Toluene-d8	98.7			70-130	%REC	1	8/12/2019 14:47
<b>ELECTRICAL CONDUCTIVITY (SAR)</b>			Method: <b>USDA H60 METHOD 2</b>		Prep: USDA Method 20B / 8/13/19		Analyst: <b>QTN</b>
Electrical Conductivity @ Saturation	5.6		0.011	0.10	mmhos/cm @25°	20	8/13/2019 11:23
<b>CHROMIUM, TRIVALENT</b>			Method: <b>CALCULATION</b>				Analyst: <b>JB</b>
Chromium, Trivalent	11		0.38	1.2	mg/Kg-dry	1	8/12/2019 16:15
<b>CHROMIUM, HEXAVALENT</b>			Method: <b>SW7196A</b>		Prep: SW3060A / 8/9/19		Analyst: <b>MB</b>
Chromium, Hexavalent		U	1.0	1.2	mg/Kg-dry	1	8/12/2019 14:30
<b>MOISTURE</b>			Method: <b>SW3550C</b>				Analyst: <b>MMO</b>
Moisture	19		0.10	0.10	% of sample	1	8/9/2019 16:39
<b>PH</b>			Method: <b>SW9045D</b>		Prep: EXTRACT / 8/9/19		Analyst: <b>DNW</b>
pH	8.11		0.10	0.100	s.u.	1	8/9/2019 15:00
Temperature	22.2		0.10	0.100	°C	1	8/9/2019 15:00

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

Client: Terra Energy Partners, LLC  
 Project: MV 13-33-695 Tank Release  
 Sample ID: MV 13-33 Excavation: West Wall  
 Collection Date: 8/7/2019 12:30 PM

Work Order: 19080633  
 Lab ID: 19080633-04  
 Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>							
			Method: <b>SW8015C</b>		Prep: SW3546 / 8/9/19		Analyst: <b>RM</b>
DRO (C10-C28)	U		3.3	5.7	mg/Kg-dry	1	8/9/2019 22:10
Surr: 4-Terphenyl-d14	45.0			34-130	%REC	1	8/9/2019 22:10
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>							
			Method: <b>SW8015D</b>		Prep: SW5035 / 8/9/19		Analyst: <b>RM</b>
GRO (C6-C10)	U		2.8	6.8	mg/Kg	1	8/9/2019 19:38
Surr: Toluene-d8	87.7			71-123	%REC	1	8/9/2019 19:38
<b>MERCURY BY CVAA</b>							
			Method: <b>SW7471B</b>		Prep: SW7471 / 8/12/19		Analyst: <b>RSB</b>
Mercury	0.070		0.0020	0.020	mg/Kg-dry	1	8/12/2019 13:43
<b>METALS BY ICP-MS</b>							
			Method: <b>SW6020A</b>		Prep: SW3050B / 8/10/19		Analyst: <b>ABL</b>
Arsenic	11		0.051	0.43	mg/Kg-dry	1	8/11/2019 19:46
Barium	410		3.9	4.3	mg/Kg-dry	10	8/12/2019 18:53
Cadmium	0.36		0.026	0.17	mg/Kg-dry	1	8/11/2019 19:46
Chromium	12		0.19	0.43	mg/Kg-dry	1	8/11/2019 19:46
Copper	14		0.43	0.43	mg/Kg-dry	1	8/11/2019 19:46
Lead	14		0.21	0.43	mg/Kg-dry	1	8/11/2019 19:46
Nickel	15		0.22	0.43	mg/Kg-dry	1	8/11/2019 19:46
Selenium	U		0.39	0.43	mg/Kg-dry	1	8/11/2019 19:46
Silver	U		0.056	0.43	mg/Kg-dry	1	8/11/2019 19:46
Zinc	61		8.4	8.6	mg/Kg-dry	10	8/12/2019 18:53
<b>SOLUBLE CATIONS FOR SAR</b>							
			Method: <b>SW6020A</b>		Prep: USDA Method 20B / 8/13/19		Analyst: <b>ABL</b>
Calcium	120		2.5	5.0	mg/L	10	8/14/2019 12:39
Magnesium	52		0.50	2.0	mg/L	10	8/14/2019 12:39
Sodium	390		0.45	2.0	mg/L	10	8/14/2019 12:39
<b>SODIUM ADSORPTION RATIO</b>							
			Method: <b>USDA H60 METHOD 2</b>		Prep: USDA Method 20B / 8/13/19		Analyst: <b>ABL</b>
Sodium Adsorption Ratio	7.5		0.010	0.010	none	1	8/14/2019
<b>POLYNUCLEAR AROMATIC HYDROCARBONS (PAHS)</b>							
			Method: <b>SW846 8270D</b>		Prep: SW3546 / 8/9/19		Analyst: <b>EEW</b>
Acenaphthene	U		0.00092	0.0048	mg/Kg-dry	1	8/9/2019 15:49
Anthracene	U		0.0016	0.0048	mg/Kg-dry	1	8/9/2019 15:49
Benzo(a)anthracene	U		0.0020	0.0048	mg/Kg-dry	1	8/9/2019 15:49
Benzo(a)pyrene	U		0.0013	0.0048	mg/Kg-dry	1	8/9/2019 15:49
Benzo(b)fluoranthene	U		0.0011	0.0048	mg/Kg-dry	1	8/9/2019 15:49
Benzo(k)fluoranthene	U		0.0014	0.0048	mg/Kg-dry	1	8/9/2019 15:49
Chrysene	U		0.00098	0.0048	mg/Kg-dry	1	8/9/2019 15:49
Dibenzo(a,h)anthracene	U		0.0011	0.0048	mg/Kg-dry	1	8/9/2019 15:49
Fluoranthene	U		0.00088	0.0048	mg/Kg-dry	1	8/9/2019 15:49

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

# ALS Group, USA

Date: 15-Aug-19

**Client:** Terra Energy Partners, LLC  
**Project:** MV 13-33-695 Tank Release  
**Sample ID:** MV 13-33 Excavation: West Wall  
**Collection Date:** 8/7/2019 12:30 PM

**Work Order:** 19080633  
**Lab ID:** 19080633-04  
**Matrix:** SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Fluorene		U	0.0016	0.0048	mg/Kg-dry	1	8/9/2019 15:49
Indeno(1,2,3-cd)pyrene		U	0.0017	0.0048	mg/Kg-dry	1	8/9/2019 15:49
Naphthalene		U	0.0021	0.0048	mg/Kg-dry	1	8/9/2019 15:49
Pyrene		U	0.00079	0.0048	mg/Kg-dry	1	8/9/2019 15:49
Surr: 2-Fluorobiphenyl	42.5			20-140	%REC	1	8/9/2019 15:49
Surr: 4-Terphenyl-d14	35.5			22-172	%REC	1	8/9/2019 15:49
Surr: Nitrobenzene-d5	47.3			28-140	%REC	1	8/9/2019 15:49
<b>VOLATILE ORGANIC COMPOUNDS</b>			Method: <b>SW8260C</b>		Prep: SW5035 / 8/9/19		Analyst: <b>WH</b>
Benzene		U	0.0054	0.032	mg/Kg-dry	1	8/12/2019 15:04
Ethylbenzene		U	0.0066	0.032	mg/Kg-dry	1	8/12/2019 15:04
m,p-Xylene		U	0.042	0.063	mg/Kg-dry	1	8/12/2019 15:04
o-Xylene		U	0.012	0.032	mg/Kg-dry	1	8/12/2019 15:04
<b>Toluene</b>	<b>0.016</b>	J	<b>0.0086</b>	<b>0.032</b>	<b>mg/Kg-dry</b>	1	8/12/2019 15:04
Xylenes, Total		U	0.042	0.095	mg/Kg-dry	1	8/12/2019 15:04
Surr: 1,2-Dichloroethane-d4	106			70-130	%REC	1	8/12/2019 15:04
Surr: 4-Bromofluorobenzene	98.8			70-130	%REC	1	8/12/2019 15:04
Surr: Dibromofluoromethane	88.2			70-130	%REC	1	8/12/2019 15:04
Surr: Toluene-d8	100			70-130	%REC	1	8/12/2019 15:04
<b>ELECTRICAL CONDUCTIVITY (SAR)</b>			Method: <b>USDA H60 METHOD 2</b>		Prep: USDA Method 20B / 8/13/19		Analyst: <b>QTN</b>
Electrical Conductivity @ Saturation	<b>3.2</b>		<b>0.011</b>	<b>0.10</b>	mmhos/cm @25°	20	8/13/2019 11:23
<b>CHROMIUM, TRIVALENT</b>			Method: <b>CALCULATION</b>				Analyst: <b>JB</b>
Chromium, Trivalent	<b>12</b>		<b>0.35</b>	<b>1.1</b>	mg/Kg-dry	1	8/12/2019 16:15
<b>CHROMIUM, HEXAVALENT</b>			Method: <b>SW7196A</b>		Prep: SW3060A / 8/9/19		Analyst: <b>MB</b>
Chromium, Hexavalent		U	0.97	1.1	mg/Kg-dry	1	8/12/2019 14:30
<b>MOISTURE</b>			Method: <b>SW3550C</b>				Analyst: <b>MMO</b>
Moisture	<b>13</b>		<b>0.10</b>	<b>0.10</b>	% of sample	1	8/9/2019 16:39
<b>PH</b>			Method: <b>SW9045D</b>		Prep: EXTRACT / 8/9/19		Analyst: <b>DNW</b>
pH	<b>8.75</b>		<b>0.10</b>	<b>0.100</b>	s.u.	1	8/9/2019 15:00
Temperature	<b>21.9</b>		<b>0.10</b>	<b>0.100</b>	°C	1	8/9/2019 15:00

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

Client: Terra Energy Partners, LLC  
 Project: MV 13-33-695 Tank Release  
 Sample ID: MV 13-33 Excavation: Bottom  
 Collection Date: 8/7/2019 01:00 PM

Work Order: 19080633  
 Lab ID: 19080633-05  
 Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>							
			Method: <b>SW8015C</b>		Prep: SW3546 / 8/9/19		Analyst: <b>RM</b>
DRO (C10-C28)	U		3.3	5.8	mg/Kg-dry	1	8/9/2019 22:40
Surr: 4-Terphenyl-d14	87.1			34-130	%REC	1	8/9/2019 22:40
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>							
			Method: <b>SW8015D</b>		Prep: SW5035 / 8/9/19		Analyst: <b>RM</b>
GRO (C6-C10)	U		2.8	6.7	mg/Kg	1	8/9/2019 20:08
Surr: Toluene-d8	91.5			71-123	%REC	1	8/9/2019 20:08
<b>MERCURY BY CVAA</b>							
			Method: <b>SW7471B</b>		Prep: SW7471 / 8/12/19		Analyst: <b>RSB</b>
Mercury	<b>0.037</b>		<b>0.0022</b>	<b>0.022</b>	mg/Kg-dry	1	8/12/2019 13:45
<b>METALS BY ICP-MS</b>							
			Method: <b>SW6020A</b>		Prep: SW3050B / 8/10/19		Analyst: <b>ABL</b>
Arsenic	<b>9.2</b>		<b>0.049</b>	<b>0.41</b>	mg/Kg-dry	1	8/11/2019 19:48
Barium	<b>180</b>		<b>3.7</b>	<b>4.1</b>	mg/Kg-dry	10	8/12/2019 18:55
Cadmium	<b>0.35</b>		<b>0.024</b>	<b>0.16</b>	mg/Kg-dry	1	8/11/2019 19:48
Chromium	<b>9.3</b>		<b>0.18</b>	<b>0.41</b>	mg/Kg-dry	1	8/11/2019 19:48
Copper	<b>13</b>		<b>0.41</b>	<b>0.41</b>	mg/Kg-dry	1	8/11/2019 19:48
Lead	<b>12</b>		<b>0.20</b>	<b>0.41</b>	mg/Kg-dry	1	8/11/2019 19:48
Nickel	<b>14</b>		<b>0.21</b>	<b>0.41</b>	mg/Kg-dry	1	8/11/2019 19:48
Selenium	U		0.37	0.41	mg/Kg-dry	1	8/11/2019 19:48
Silver	U		0.054	0.41	mg/Kg-dry	1	8/11/2019 19:48
Zinc	<b>59</b>		<b>8.0</b>	<b>8.1</b>	mg/Kg-dry	10	8/12/2019 18:55
<b>SOLUBLE CATIONS FOR SAR</b>							
			Method: <b>SW6020A</b>		Prep: USDA Method 20B / 8/13/19		Analyst: <b>ABL</b>
Calcium	<b>130</b>		<b>2.5</b>	<b>5.0</b>	mg/L	10	8/14/2019 12:40
Magnesium	<b>54</b>		<b>0.50</b>	<b>2.0</b>	mg/L	10	8/14/2019 12:40
Sodium	<b>53</b>		<b>0.45</b>	<b>2.0</b>	mg/L	10	8/14/2019 12:40
<b>SODIUM ADSORPTION RATIO</b>							
			Method: <b>USDA H60 METHOD 2</b>		Prep: USDA Method 20B / 8/13/19		Analyst: <b>ABL</b>
Sodium Adsorption Ratio	<b>0.97</b>		<b>0.010</b>	<b>0.010</b>	none	1	8/14/2019
<b>POLYNUCLEAR AROMATIC HYDROCARBONS (PAHS)</b>							
			Method: <b>SW846 8270D</b>		Prep: SW3546 / 8/9/19		Analyst: <b>EEW</b>
Acenaphthene	U		0.00094	0.0048	mg/Kg-dry	1	8/9/2019 16:05
Anthracene	U		0.0016	0.0048	mg/Kg-dry	1	8/9/2019 16:05
Benzo(a)anthracene	U		0.0020	0.0048	mg/Kg-dry	1	8/9/2019 16:05
Benzo(a)pyrene	U		0.0013	0.0048	mg/Kg-dry	1	8/9/2019 16:05
Benzo(b)fluoranthene	U		0.0012	0.0048	mg/Kg-dry	1	8/9/2019 16:05
Benzo(k)fluoranthene	U		0.0014	0.0048	mg/Kg-dry	1	8/9/2019 16:05
Chrysene	U		0.0010	0.0048	mg/Kg-dry	1	8/9/2019 16:05
Dibenzo(a,h)anthracene	U		0.0011	0.0048	mg/Kg-dry	1	8/9/2019 16:05
Fluoranthene	U		0.00090	0.0048	mg/Kg-dry	1	8/9/2019 16:05

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

# ALS Group, USA

Date: 15-Aug-19

**Client:** Terra Energy Partners, LLC  
**Project:** MV 13-33-695 Tank Release  
**Sample ID:** MV 13-33 Excavation: Bottom  
**Collection Date:** 8/7/2019 01:00 PM

**Work Order:** 19080633  
**Lab ID:** 19080633-05  
**Matrix:** SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Fluorene		U	0.0016	0.0048	mg/Kg-dry	1	8/9/2019 16:05
Indeno(1,2,3-cd)pyrene		U	0.0017	0.0048	mg/Kg-dry	1	8/9/2019 16:05
Naphthalene		U	0.0021	0.0048	mg/Kg-dry	1	8/9/2019 16:05
Pyrene		U	0.00080	0.0048	mg/Kg-dry	1	8/9/2019 16:05
Surr: 2-Fluorobiphenyl	78.4			20-140	%REC	1	8/9/2019 16:05
Surr: 4-Terphenyl-d14	73.3			22-172	%REC	1	8/9/2019 16:05
Surr: Nitrobenzene-d5	89.4			28-140	%REC	1	8/9/2019 16:05
<b>VOLATILE ORGANIC COMPOUNDS</b>			Method: <b>SW8260C</b>		Prep: SW5035 / 8/9/19		Analyst: <b>WH</b>
Benzene		U	0.0052	0.030	mg/Kg-dry	1	8/12/2019 15:22
Ethylbenzene		U	0.0064	0.030	mg/Kg-dry	1	8/12/2019 15:22
m,p-Xylene		U	0.040	0.061	mg/Kg-dry	1	8/12/2019 15:22
o-Xylene		U	0.012	0.030	mg/Kg-dry	1	8/12/2019 15:22
<b>Toluene</b>	<b>0.034</b>		<b>0.0083</b>	<b>0.030</b>	<b>mg/Kg-dry</b>	1	8/12/2019 15:22
Xylenes, Total		U	0.040	0.091	mg/Kg-dry	1	8/12/2019 15:22
Surr: 1,2-Dichloroethane-d4	106			70-130	%REC	1	8/12/2019 15:22
Surr: 4-Bromofluorobenzene	97.2			70-130	%REC	1	8/12/2019 15:22
Surr: Dibromofluoromethane	87.6			70-130	%REC	1	8/12/2019 15:22
Surr: Toluene-d8	100			70-130	%REC	1	8/12/2019 15:22
<b>ELECTRICAL CONDUCTIVITY (SAR)</b>			Method: <b>USDA H60 METHOD 2</b>		Prep: USDA Method 20B / 8/13/19		Analyst: <b>QTN</b>
Electrical Conductivity @ Saturation	1.8		0.011	0.10	mmhos/cm @25°	20	8/13/2019 11:23
<b>CHROMIUM, TRIVALENT</b>			Method: <b>CALCULATION</b>				Analyst: <b>JB</b>
Chromium, Trivalent	9.3		0.36	1.2	mg/Kg-dry	1	8/12/2019 16:15
<b>CHROMIUM, HEXAVALENT</b>			Method: <b>SW7196A</b>		Prep: SW3060A / 8/9/19		Analyst: <b>MB</b>
Chromium, Hexavalent		U	0.98	1.2	mg/Kg-dry	1	8/12/2019 14:30
<b>MOISTURE</b>			Method: <b>SW3550C</b>				Analyst: <b>MMO</b>
Moisture	14		0.10	0.10	% of sample	1	8/9/2019 16:39
<b>PH</b>			Method: <b>SW9045D</b>		Prep: EXTRACT / 8/9/19		Analyst: <b>DNW</b>
pH	8.24		0.10	0.100	s.u.	1	8/9/2019 15:00
Temperature	21.7		0.10	0.100	°C	1	8/9/2019 15:00

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

**ALS Group, USA**

Date: 15-Aug-19

**Client:** Terra Energy Partners, LLC  
**Project:** MV 13-33-695 Tank Release  
**Sample ID:** MV 13-33 Background  
**Collection Date:** 8/7/2019 03:50 PM

**Work Order:** 19080633  
**Lab ID:** 19080633-06  
**Matrix:** SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>							
			Method: <b>SW8015C</b>		Prep: SW3546 / 8/9/19		Analyst: <b>RM</b>
DRO (C10-C28)	U		3.2	5.6	mg/Kg-dry	1	8/9/2019 23:09
Surr: 4-Terphenyl-d14	96.1			34-130	%REC	1	8/9/2019 23:09
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>							
			Method: <b>SW8015D</b>		Prep: SW5035 / 8/9/19		Analyst: <b>RM</b>
GRO (C6-C10)	U		2.8	6.7	mg/Kg	1	8/9/2019 20:38
Surr: Toluene-d8	86.6			71-123	%REC	1	8/9/2019 20:38
<b>MERCURY BY CVAA</b>							
			Method: <b>SW7471B</b>		Prep: SW7471 / 8/12/19		Analyst: <b>RSB</b>
Mercury	<b>0.013</b>	J	<b>0.0020</b>	<b>0.020</b>	mg/Kg-dry	1	8/12/2019 12:18
<b>METALS BY ICP-MS</b>							
			Method: <b>SW6020A</b>		Prep: SW3050B / 8/10/19		Analyst: <b>ABL</b>
Arsenic	<b>7.3</b>		<b>0.053</b>	<b>0.44</b>	mg/Kg-dry	1	8/11/2019 19:50
Barium	<b>330</b>		<b>4.1</b>	<b>4.4</b>	mg/Kg-dry	10	8/12/2019 18:56
Cadmium	<b>0.14</b>	J	<b>0.026</b>	<b>0.18</b>	mg/Kg-dry	1	8/11/2019 19:50
Chromium	<b>12</b>		<b>0.19</b>	<b>0.44</b>	mg/Kg-dry	1	8/11/2019 19:50
Copper	<b>9.9</b>		<b>0.44</b>	<b>0.44</b>	mg/Kg-dry	1	8/11/2019 19:50
Lead	<b>12</b>		<b>0.21</b>	<b>0.44</b>	mg/Kg-dry	1	8/11/2019 19:50
Nickel	<b>11</b>		<b>0.23</b>	<b>0.44</b>	mg/Kg-dry	1	8/11/2019 19:50
Selenium	<b>0.51</b>		<b>0.41</b>	<b>0.44</b>	mg/Kg-dry	1	8/11/2019 19:50
Silver	U		0.058	0.44	mg/Kg-dry	1	8/11/2019 19:50
Zinc	<b>45</b>		<b>8.6</b>	<b>8.8</b>	mg/Kg-dry	10	8/12/2019 18:56
<b>SOLUBLE CATIONS FOR SAR</b>							
			Method: <b>SW6020A</b>		Prep: USDA Method 20B / 8/13/19		Analyst: <b>ABL</b>
Calcium	<b>81</b>		<b>2.5</b>	<b>5.0</b>	mg/L	10	8/14/2019 12:42
Magnesium	<b>26</b>		<b>0.50</b>	<b>2.0</b>	mg/L	10	8/14/2019 12:42
Sodium	<b>12</b>		<b>0.45</b>	<b>2.0</b>	mg/L	10	8/14/2019 12:42
<b>SODIUM ADSORPTION RATIO</b>							
			Method: <b>USDA H60 METHOD 2</b>		Prep: USDA Method 20B / 8/13/19		Analyst: <b>ABL</b>
Sodium Adsorption Ratio	<b>0.30</b>		<b>0.010</b>	<b>0.010</b>	none	1	8/14/2019
<b>POLYNUCLEAR AROMATIC HYDROCARBONS (PAHS)</b>							
			Method: <b>SW846 8270D</b>		Prep: SW3546 / 8/9/19		Analyst: <b>EEW</b>
Acenaphthene	U		0.00091	0.0047	mg/Kg-dry	1	8/9/2019 16:20
Anthracene	U		0.0016	0.0047	mg/Kg-dry	1	8/9/2019 16:20
Benzo(a)anthracene	U		0.0019	0.0047	mg/Kg-dry	1	8/9/2019 16:20
Benzo(a)pyrene	U		0.0013	0.0047	mg/Kg-dry	1	8/9/2019 16:20
Benzo(b)fluoranthene	U		0.0011	0.0047	mg/Kg-dry	1	8/9/2019 16:20
Benzo(k)fluoranthene	U		0.0014	0.0047	mg/Kg-dry	1	8/9/2019 16:20
Chrysene	U		0.00097	0.0047	mg/Kg-dry	1	8/9/2019 16:20
Dibenzo(a,h)anthracene	U		0.0011	0.0047	mg/Kg-dry	1	8/9/2019 16:20
Fluoranthene	U		0.00086	0.0047	mg/Kg-dry	1	8/9/2019 16:20

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

# ALS Group, USA

Date: 15-Aug-19

**Client:** Terra Energy Partners, LLC  
**Project:** MV 13-33-695 Tank Release  
**Sample ID:** MV 13-33 Background  
**Collection Date:** 8/7/2019 03:50 PM

**Work Order:** 19080633  
**Lab ID:** 19080633-06  
**Matrix:** SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Fluorene	U		0.0015	0.0047	mg/Kg-dry	1	8/9/2019 16:20
Indeno(1,2,3-cd)pyrene	U		0.0017	0.0047	mg/Kg-dry	1	8/9/2019 16:20
Naphthalene	U		0.0020	0.0047	mg/Kg-dry	1	8/9/2019 16:20
Pyrene	U		0.00077	0.0047	mg/Kg-dry	1	8/9/2019 16:20
Surr: 2-Fluorobiphenyl	78.9			20-140	%REC	1	8/9/2019 16:20
Surr: 4-Terphenyl-d14	79.4			22-172	%REC	1	8/9/2019 16:20
Surr: Nitrobenzene-d5	83.4			28-140	%REC	1	8/9/2019 16:20
<b>VOLATILE ORGANIC COMPOUNDS</b>			Method: <b>SW8260C</b>		Prep: SW5035 / 8/9/19		Analyst: <b>WH</b>
Benzene	U		0.0055	0.032	mg/Kg-dry	1	8/12/2019 14:53
Ethylbenzene	U		0.0068	0.032	mg/Kg-dry	1	8/12/2019 14:53
m,p-Xylene	U		0.043	0.065	mg/Kg-dry	1	8/12/2019 14:53
o-Xylene	U		0.012	0.032	mg/Kg-dry	1	8/12/2019 14:53
Toluene	U		0.0088	0.032	mg/Kg-dry	1	8/12/2019 14:53
Xylenes, Total	U		0.043	0.097	mg/Kg-dry	1	8/12/2019 14:53
Surr: 1,2-Dichloroethane-d4	96.0			70-130	%REC	1	8/12/2019 14:53
Surr: 4-Bromofluorobenzene	97.2			70-130	%REC	1	8/12/2019 14:53
Surr: Dibromofluoromethane	87.0			70-130	%REC	1	8/12/2019 14:53
Surr: Toluene-d8	101			70-130	%REC	1	8/12/2019 14:53
<b>ELECTRICAL CONDUCTIVITY (SAR)</b>			Method: <b>USDA H60 METHOD 2</b>		Prep: USDA Method 20B / 8/13/19		Analyst: <b>QTN</b>
Electrical Conductivity @ Saturation	<b>0.85</b>		<b>0.011</b>	<b>0.10</b>	mmhos/cm @25°	20	8/13/2019 11:23
<b>CHROMIUM, TRIVALENT</b>			Method: <b>CALCULATION</b>				Analyst: <b>JB</b>
Chromium, Trivalent	<b>12</b>		<b>0.35</b>	<b>1.1</b>	mg/Kg-dry	1	8/12/2019 16:15
<b>CHROMIUM, HEXAVALENT</b>			Method: <b>SW7196A</b>		Prep: SW3060A / 8/9/19		Analyst: <b>MB</b>
Chromium, Hexavalent	U		0.96	1.1	mg/Kg-dry	1	8/12/2019 14:30
<b>MOISTURE</b>			Method: <b>SW3550C</b>				Analyst: <b>MMO</b>
Moisture	<b>11</b>		<b>0.10</b>	<b>0.10</b>	% of sample	1	8/9/2019 16:39
<b>PH</b>			Method: <b>SW9045D</b>		Prep: EXTRACT / 8/9/19		Analyst: <b>DNW</b>
pH	<b>8.95</b>		<b>0.10</b>	<b>0.100</b>	s.u.	1	8/9/2019 15:00
Temperature	<b>21.7</b>		<b>0.10</b>	<b>0.100</b>	°C	1	8/9/2019 15:00

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

**Client:** Terra Energy Partners, LLC  
**Work Order:** 19080633  
**Project:** MV 13-33-695 Tank Release

**QC BATCH REPORT**

Batch ID: **140555** Instrument ID **GC8** Method: **SW8015C**

<b>MBLK</b>		Sample ID: <b>DBLKS1-140555-140555</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>8/9/2019 03:51 PM</b>		
Client ID:		Run ID: <b>GC8_190809A</b>				SeqNo: <b>5839071</b>		Prep Date: <b>8/9/2019</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	U	5.0								
<i>Surr: 4-Terphenyl-d14</i>	3.483	0	3.33	0	105	34-130	0			

<b>LCS</b>		Sample ID: <b>DLCSS1-140555-140555</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>8/9/2019 04:20 PM</b>		
Client ID:		Run ID: <b>GC8_190809A</b>				SeqNo: <b>5839072</b>		Prep Date: <b>8/9/2019</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	381	5.0	333	0	114	65-122	0			
<i>Surr: 4-Terphenyl-d14</i>	3.333	0	3.33	0	100	34-130	0			

<b>MS</b>		Sample ID: <b>19080597-01A MS</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>8/9/2019 04:49 PM</b>		
Client ID:		Run ID: <b>GC8_190809A</b>				SeqNo: <b>5839073</b>		Prep Date: <b>8/9/2019</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	364.1	4.9	325.6	0	112	65-122	0			
<i>Surr: 4-Terphenyl-d14</i>	2.966	0	3.256	0	91.1	34-130	0			

<b>MSD</b>		Sample ID: <b>19080597-01A MSD</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>8/9/2019 05:19 PM</b>		
Client ID:		Run ID: <b>GC8_190809A</b>				SeqNo: <b>5839074</b>		Prep Date: <b>8/9/2019</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	291.4	4.8	321	0	90.8	65-122	364.1	22.2	30	
<i>Surr: 4-Terphenyl-d14</i>	2.474	0	3.21	0	77.1	34-130	2.966	18.1	30	

The following samples were analyzed in this batch:

19080633-01A	19080633-02A	19080633-04A
19080633-05A	19080633-06A	

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

Client: Terra Energy Partners, LLC  
 Work Order: 19080633  
 Project: MV 13-33-695 Tank Release

# QC BATCH REPORT

Batch ID: 140587 Instrument ID GC9 Method: SW8015D

MBLK		Sample ID: DBLKS1-140587-140587				Units: µg/Kg-dry		Analysis Date: 8/9/2019 06:39 PM		
Client ID:		Run ID: GC9_190809A		SeqNo: 5838951		Prep Date: 8/9/2019		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	U	5,000								
Surr: Toluene-d8	6367	0	5000	0	127	71-123	0			S

LCS		Sample ID: DLCSS1-140587-140587				Units: µg/Kg-dry		Analysis Date: 8/9/2019 04:41 PM		
Client ID:		Run ID: GC9_190809A		SeqNo: 5838947		Prep Date: 8/9/2019		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	547800	5,000	500000	0	110	71-123	0			
Surr: Toluene-d8	4820	0	5000	0	96.4	71-123	0			

MS		Sample ID: 19080633-01A MS				Units: µg/Kg-dry		Analysis Date: 8/9/2019 05:11 PM		
Client ID: MV 13-33 Excavation: North Wall		Run ID: GC9_190809A		SeqNo: 5838948		Prep Date: 8/9/2019		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	1650000	7,700	1536000	0	107	71-123	0			
Surr: Toluene-d8	8577	0	7682	0	112	71-123	0			

MSD		Sample ID: 19080633-01A MSD				Units: µg/Kg-dry		Analysis Date: 8/9/2019 05:40 PM		
Client ID: MV 13-33 Excavation: North Wall		Run ID: GC9_190809A		SeqNo: 5838949		Prep Date: 8/9/2019		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	1600000	7,700	1532000	0	104	71-123	1650000	3.08	30	
Surr: Toluene-d8	8954	0	7661	0	117	71-123	8577	4.3	30	

The following samples were analyzed in this batch:

19080633-01A	19080633-02A	19080633-04A
19080633-05A	19080633-06A	

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

Client: Terra Energy Partners, LLC  
 Work Order: 19080633  
 Project: MV 13-33-695 Tank Release

# QC BATCH REPORT

Batch ID: **140646** Instrument ID **HG4** Method: **SW7471B**

MBLK		Sample ID: <b>MBLK-140646-140646</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>8/12/2019 01:29 PM</b>		
Client ID:		Run ID: <b>HG4_190812A</b>		SeqNo: <b>5838675</b>		Prep Date: <b>8/12/2019</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	U	0.020								

LCS		Sample ID: <b>LCS-140646-140646</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>8/12/2019 01:32 PM</b>		
Client ID:		Run ID: <b>HG4_190812A</b>		SeqNo: <b>5838676</b>		Prep Date: <b>8/12/2019</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1942	0.020	0.1665	0	117	80-120	0			

MS		Sample ID: <b>19080633-01AMS</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>8/12/2019 01:36 PM</b>		
Client ID: <b>MV 13-33 Excavation: North Wall</b>		Run ID: <b>HG4_190812A</b>		SeqNo: <b>5838678</b>		Prep Date: <b>8/12/2019</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1735	0.018	0.1469	0.01735	106	75-125	0			

MSD		Sample ID: <b>19080633-01AMSD</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>8/12/2019 01:38 PM</b>		
Client ID: <b>MV 13-33 Excavation: North Wall</b>		Run ID: <b>HG4_190812A</b>		SeqNo: <b>5838679</b>		Prep Date: <b>8/12/2019</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1748	0.018	0.1458	0.01735	108	75-125	0.1735	0.782	35	

The following samples were analyzed in this batch:

19080633-01A	19080633-02A	19080633-04A
19080633-05A	19080633-06A	

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

Client: Terra Energy Partners, LLC  
 Work Order: 19080633  
 Project: MV 13-33-695 Tank Release

# QC BATCH REPORT

Batch ID: **140618** Instrument ID **ICPMS3** Method: **SW6020A**

MBLK		Sample ID: <b>MBLK-140618-140618</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>8/11/2019 07:25 PM</b>		
Client ID:		Run ID: <b>ICPMS3_190811B</b>			SeqNo: <b>5837307</b>		Prep Date: <b>8/10/2019</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	U	0.24								
Barium	U	0.24								
Cadmium	U	0.096								
Chromium	U	0.24								
Copper	U	0.24								
Lead	U	0.24								
Nickel	U	0.24								
Selenium	U	0.24								
Silver	U	0.24								
Zinc	U	0.48								

LCS		Sample ID: <b>LCS-140618-140618</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>8/11/2019 07:27 PM</b>		
Client ID:		Run ID: <b>ICPMS3_190811B</b>			SeqNo: <b>5837308</b>		Prep Date: <b>8/10/2019</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	5.266	0.25	4.902	0	107	80-120	0			
Barium	5.162	0.25	4.902	0	105	80-120	0			
Cadmium	4.986	0.098	4.902	0	102	80-120	0			
Chromium	5.399	0.25	4.902	0	110	80-120	0			
Copper	5.325	0.25	4.902	0	109	80-120	0			
Lead	5.164	0.25	4.902	0	105	80-120	0			
Nickel	5.374	0.25	4.902	0	110	80-120	0			
Selenium	4.902	0.25	4.902	0	100	80-120	0			
Silver	5.238	0.25	4.902	0	107	80-120	0			
Zinc	5.266	0.49	4.902	0	107	80-120	0			

MS		Sample ID: <b>19080640-05AMS</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>8/11/2019 08:39 PM</b>		
Client ID:		Run ID: <b>ICPMS3_190811B</b>			SeqNo: <b>5837374</b>		Prep Date: <b>8/10/2019</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	11.66	0.37	7.396	4.794	92.9	75-125	0			
Barium	131.9	0.37	7.396	105	364	75-125	0			SO
Cadmium	5.875	0.15	7.396	0.1023	78	75-125	0			
Chromium	18.72	0.37	7.396	7.723	149	75-125	0			S
Copper	15.08	0.37	7.396	9.734	72.3	75-125	0			S
Lead	21.54	0.37	7.396	14	102	75-125	0			
Nickel	19.37	0.37	7.396	12.22	96.7	75-125	0			
Selenium	6.81	0.37	7.396	0.6673	83	75-125	0			
Silver	5.784	0.37	7.396	0.05259	77.5	75-125	0			

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

Client: Terra Energy Partners, LLC  
 Work Order: 19080633  
 Project: MV 13-33-695 Tank Release

# QC BATCH REPORT

Batch ID: 140618 Instrument ID ICPMS3 Method: SW6020A

MS		Sample ID: 19080640-05AMS				Units: mg/Kg		Analysis Date: 8/12/2019 07:16 PM		
Client ID:		Run ID: ICPMS3_190812A		SeqNo: 5840425		Prep Date: 8/10/2019		DF: 10		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Zinc	78.2	7.4	7.396	63.65	197	75-125	0			SO

MSD		Sample ID: 19080640-05AMSD				Units: mg/Kg		Analysis Date: 8/11/2019 08:41 PM		
Client ID:		Run ID: ICPMS3_190811B		SeqNo: 5837375		Prep Date: 8/10/2019		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	11.63	0.37	7.353	4.794	92.9	75-125	11.66	0.294	20	
Barium	123	0.37	7.353	105	245	75-125	131.9	7.01	20	SO
Cadmium	5.907	0.15	7.353	0.1023	78.9	75-125	5.875	0.549	20	
Chromium	18.43	0.37	7.353	7.723	146	75-125	18.72	1.55	20	S
Copper	15.29	0.37	7.353	9.734	75.5	75-125	15.08	1.34	20	
Lead	21.62	0.37	7.353	14	104	75-125	21.54	0.377	20	
Nickel	19.21	0.37	7.353	12.22	95	75-125	19.37	0.861	20	
Selenium	6.903	0.37	7.353	0.6673	84.8	75-125	6.81	1.37	20	
Silver	5.795	0.37	7.353	0.05259	78.1	75-125	5.784	0.187	20	

MSD		Sample ID: 19080640-05AMSD				Units: mg/Kg		Analysis Date: 8/12/2019 07:17 PM		
Client ID:		Run ID: ICPMS3_190812A		SeqNo: 5840426		Prep Date: 8/10/2019		DF: 10		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Zinc	72.79	7.4	7.353	63.65	124	75-125	78.2	7.16	20	O

The following samples were analyzed in this batch:

19080633-01A	19080633-02A	19080633-04A
19080633-05A	19080633-06A	

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

**Client:** Terra Energy Partners, LLC  
**Work Order:** 19080633  
**Project:** MV 13-33-695 Tank Release

# QC BATCH REPORT

Batch ID: **140731**      Instrument ID **ICPMS3**      Method: **SW6020A**

DUP		Sample ID: <b>19080634-04ADUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>8/14/2019 06:36 PM</b>		
Client ID:		Run ID: <b>ICPMS3_190814A</b>			SeqNo: <b>5845972</b>		Prep Date: <b>8/13/2019</b>		DF: <b>10</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	98.32	5.0	0	0	0	0-0	79.79	20.8		
Magnesium	12.64	2.0	0	0	0	0-0	10.28	20.6		
Sodium	23.16	2.0	0	0	0	0-0	18	25.1		

The following samples were analyzed in this batch:

19080633-01A	19080633-02A	19080633-04A
19080633-05A	19080633-06A	

Batch ID: **140731**      Instrument ID **SAR**      Method: **USDA H60 Metho**

DUP		Sample ID: <b>19080634-04ADUP</b>				Units: <b>none</b>		Analysis Date: <b>8/14/2019</b>		
Client ID:		Run ID: <b>SAR_190814B</b>			SeqNo: <b>5848850</b>		Prep Date: <b>8/13/2019</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	0.5842	0.010	0	0	0		0.504	14.7	50	

The following samples were analyzed in this batch:

19080633-01A	19080633-02A	19080633-04A
19080633-05A	19080633-06A	

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

Client: Terra Energy Partners, LLC  
 Work Order: 19080633  
 Project: MV 13-33-695 Tank Release

# QC BATCH REPORT

Batch ID: 140554 Instrument ID SVMS6 Method: SW846 8270D

MBLK		Sample ID: SBLKS1-140554-140554				Units: µg/Kg		Analysis Date: 8/9/2019 11:55 AM		
Client ID:		Run ID: SVMS6_190809A		SeqNo: 5835992		Prep Date: 8/9/2019		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	U	4.2								
Anthracene	U	4.2								
Benzo(a)anthracene	U	4.2								
Benzo(a)pyrene	U	4.2								
Benzo(b)fluoranthene	U	4.2								
Benzo(k)fluoranthene	U	4.2								
Chrysene	U	4.2								
Dibenzo(a,h)anthracene	U	4.2								
Fluoranthene	U	4.2								
Fluorene	U	4.2								
Indeno(1,2,3-cd)pyrene	U	4.2								
Naphthalene	U	4.2								
Pyrene	U	4.2								
Surr: 2-Fluorobiphenyl	2968	0	3333	0	89	20-140	0			
Surr: 4-Terphenyl-d14	2843	0	3333	0	85.3	22-172	0			
Surr: Nitrobenzene-d5	3226	0	3333	0	96.8	28-140	0			

LCS		Sample ID: SLCSS1-140554-140554				Units: µg/Kg		Analysis Date: 8/9/2019 12:11 PM		
Client ID:		Run ID: SVMS6_190809A		SeqNo: 5835993		Prep Date: 8/9/2019		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	991.1	4.2	1333	0	74.4	40-140	0			
Anthracene	1097	4.2	1333	0	82.3	40-140	0			
Benzo(a)anthracene	968	4.2	1333	0	72.6	40-140	0			
Benzo(a)pyrene	1105	4.2	1333	0	82.9	40-140	0			
Benzo(b)fluoranthene	1010	4.2	1333	0	75.8	40-140	0			
Benzo(k)fluoranthene	1037	4.2	1333	0	77.8	40-140	0			
Chrysene	1027	4.2	1333	0	77.1	40-140	0			
Dibenzo(a,h)anthracene	1138	4.2	1333	0	85.4	40-140	0			
Fluoranthene	1267	4.2	1333	0	95.1	40-140	0			
Fluorene	1071	4.2	1333	0	80.3	40-140	0			
Indeno(1,2,3-cd)pyrene	1217	4.2	1333	0	91.3	40-140	0			
Naphthalene	1105	4.2	1333	0	82.9	40-140	0			
Pyrene	781.4	4.2	1333	0	58.6	40-140	0			
Surr: 2-Fluorobiphenyl	2743	0	3333	0	82.3	20-140	0			
Surr: 4-Terphenyl-d14	2291	0	3333	0	68.7	22-172	0			
Surr: Nitrobenzene-d5	2511	0	3333	0	75.3	28-140	0			

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

Client: Terra Energy Partners, LLC  
 Work Order: 19080633  
 Project: MV 13-33-695 Tank Release

# QC BATCH REPORT

Batch ID: 140554 Instrument ID SVMS6 Method: SW846 8270D

MS				Sample ID: 19080597-07A MS			Units: µg/Kg		Analysis Date: 8/9/2019 12:26 PM		
Client ID:		Run ID: SVMS6_190809A		SeqNo: 5835994		Prep Date: 8/9/2019		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	960.6	4.0	1294	0	74.3	40-140	0				
Anthracene	1040	4.0	1294	0	80.4	40-140	0				
Benzo(a)anthracene	937.2	4.0	1294	0	72.5	40-140	0				
Benzo(a)pyrene	1032	4.0	1294	0	79.8	40-140	0				
Benzo(b)fluoranthene	915.5	4.0	1294	0	70.8	40-140	0				
Benzo(k)fluoranthene	968.4	4.0	1294	0	74.9	40-140	0				
Chrysene	980.8	4.0	1294	0	75.8	40-140	0				
Dibenzo(a,h)anthracene	1051	4.0	1294	0	81.2	40-140	0				
Fluoranthene	1143	4.0	1294	0	88.4	40-140	0				
Fluorene	1037	4.0	1294	0	80.2	40-140	0				
Indeno(1,2,3-cd)pyrene	1130	4.0	1294	0	87.4	40-140	0				
Naphthalene	1105	4.0	1294	3.971	85.1	40-140	0				
Pyrene	839.3	4.0	1294	0	64.9	40-140	0				
Surr: 2-Fluorobiphenyl	2620	0	3234	0	81	20-140	0				
Surr: 4-Terphenyl-d14	2391	0	3234	0	73.9	22-172	0				
Surr: Nitrobenzene-d5	2850	0	3234	0	88.1	28-140	0				

MSD				Sample ID: 19080597-07A MSD			Units: µg/Kg		Analysis Date: 8/9/2019 12:42 PM		
Client ID:		Run ID: SVMS6_190809A		SeqNo: 5835995		Prep Date: 8/9/2019		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	988.3	4.0	1269	0	77.9	40-140	960.6	2.85	30		
Anthracene	1058	4.0	1269	0	83.4	40-140	1040	1.75	30		
Benzo(a)anthracene	955.8	4.0	1269	0	75.3	40-140	937.2	1.96	30		
Benzo(a)pyrene	1005	4.0	1269	0	79.2	40-140	1032	2.66	30		
Benzo(b)fluoranthene	870.4	4.0	1269	0	68.6	40-140	915.5	5.06	30		
Benzo(k)fluoranthene	931	4.0	1269	0	73.4	40-140	968.4	3.94	30		
Chrysene	982.6	4.0	1269	0	77.4	40-140	980.8	0.179	30		
Dibenzo(a,h)anthracene	989.4	4.0	1269	0	78	40-140	1051	6.02	30		
Fluoranthene	1187	4.0	1269	0	93.5	40-140	1143	3.73	30		
Fluorene	1038	4.0	1269	0	81.8	40-140	1037	0.084	30		
Indeno(1,2,3-cd)pyrene	1074	4.0	1269	0	84.6	40-140	1130	5.12	30		
Naphthalene	1150	4.0	1269	3.971	90.3	40-140	1105	4.01	30		
Pyrene	941.1	4.0	1269	0	74.2	40-140	839.3	11.4	30		
Surr: 2-Fluorobiphenyl	2704	0	3173	0	85.2	20-140	2620	3.13	0		
Surr: 4-Terphenyl-d14	2720	0	3173	0	85.7	22-172	2391	12.8	0		
Surr: Nitrobenzene-d5	3071	0	3173	0	96.8	28-140	2850	7.43	0		

The following samples were analyzed in this batch:

19080633-01A	19080633-02A	19080633-04A
19080633-05A	19080633-06A	

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

Client: Terra Energy Partners, LLC  
 Work Order: 19080633  
 Project: MV 13-33-695 Tank Release

# QC BATCH REPORT

Batch ID: **140586** Instrument ID **VMS10** Method: **SW8260C**

MBLK		Sample ID: <b>MBLK-140586-140586</b>				Units: <b>µg/Kg-dry</b>		Analysis Date: <b>8/9/2019 08:02 PM</b>		
Client ID:		Run ID: <b>VMS10_190809B</b>		SeqNo: <b>5838494</b>		Prep Date: <b>8/9/2019</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	U	30								
Ethylbenzene	U	30								
m,p-Xylene	U	60								
o-Xylene	U	30								
Toluene	U	30								
Xylenes, Total	U	90								
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>1084</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>108</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>988</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>98.8</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>886</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>88.6</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>1002</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>100</i>	<i>70-130</i>	<i>0</i>			

LCS		Sample ID: <b>LCS-140586-140586</b>				Units: <b>µg/Kg-dry</b>		Analysis Date: <b>8/9/2019 07:10 PM</b>		
Client ID:		Run ID: <b>VMS10_190809B</b>		SeqNo: <b>5838493</b>		Prep Date: <b>8/9/2019</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1032	30	1000	0	103	75-125	0			
Ethylbenzene	1010	30	1000	0	101	75-125	0			
m,p-Xylene	2008	60	2000	0	100	80-125	0			
o-Xylene	998.5	30	1000	0	99.8	75-125	0			
Toluene	972	30	1000	0	97.2	70-125	0			
Xylenes, Total	3006	90	3000	0	100	75-125	0			
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>1110</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>111</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>979.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>98</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>1045</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>104</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>991</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>99.1</i>	<i>70-130</i>	<i>0</i>			

MS		Sample ID: <b>19080633-01A MS</b>				Units: <b>µg/Kg-dry</b>		Analysis Date: <b>8/12/2019 08:31 PM</b>		
Client ID: <b>MV 13-33 Excavation: North Wall</b>		Run ID: <b>VMS9_190812A</b>		SeqNo: <b>5841178</b>		Prep Date: <b>8/9/2019</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1160	32	1080	0	107	75-125	0			
Ethylbenzene	1119	32	1080	0	104	75-125	0			
m,p-Xylene	2430	65	2160	0	112	80-125	0			
o-Xylene	1171	32	1080	0	108	75-125	0			
Toluene	1191	32	1080	0	110	70-125	0			
Xylenes, Total	3601	97	3240	0	111	75-125	0			
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>1063</i>	<i>0</i>	<i>1080</i>	<i>0</i>	<i>98.4</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>1112</i>	<i>0</i>	<i>1080</i>	<i>0</i>	<i>103</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>947.1</i>	<i>0</i>	<i>1080</i>	<i>0</i>	<i>87.7</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>1102</i>	<i>0</i>	<i>1080</i>	<i>0</i>	<i>102</i>	<i>70-130</i>	<i>0</i>			

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

**Client:** Terra Energy Partners, LLC  
**Work Order:** 19080633  
**Project:** MV 13-33-695 Tank Release

# QC BATCH REPORT

Batch ID: **140586**      Instrument ID **VMS10**      Method: **SW8260C**

MSD		Sample ID: 19080633-01A MSD				Units: $\mu\text{g}/\text{Kg-dry}$		Analysis Date: 8/12/2019 08:46 PM		
Client ID: MV 13-33 Excavation: North Wall		Run ID: VMS9_190812A		SeqNo: 5841179		Prep Date: 8/9/2019		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	916	32	1076	0	85.1	75-125	1160	23.5	30	
Ethylbenzene	868.1	32	1076	0	80.6	75-125	1119	25.2	30	
m,p-Xylene	1887	65	2153	0	87.6	80-125	2430	25.1	30	
o-Xylene	919.8	32	1076	0	85.4	75-125	1171	24	30	
Toluene	916	32	1076	0	85.1	70-125	1191	26.1	30	
Xylenes, Total	2807	97	3229	0	86.9	75-125	3601	24.8	30	
<i>Surr: 1,2-Dichloroethane-d4</i>	1052	0	1076	0	97.7	70-130	1063	1.09	30	
<i>Surr: 4-Bromofluorobenzene</i>	1115	0	1076	0	104	70-130	1112	0.306	30	
<i>Surr: Dibromofluoromethane</i>	939.7	0	1076	0	87.3	70-130	947.1	0.781	30	
<i>Surr: Toluene-d8</i>	1080	0	1076	0	100	70-130	1102	2	30	

The following samples were analyzed in this batch:

19080633-01A	19080633-02A	19080633-04A
19080633-05A	19080633-06A	

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

**Client:** Terra Energy Partners, LLC  
**Work Order:** 19080633  
**Project:** MV 13-33-695 Tank Release

# QC BATCH REPORT

Batch ID: **140593**      Instrument ID **WETCHEM**      Method: **SW9045D**

LCS		Sample ID: <b>LCS-140593-140593</b>				Units: <b>s.u.</b>		Analysis Date: <b>8/9/2019 03:00 PM</b>		
Client ID:		Run ID: <b>WETCHEM_190809\</b>		SeqNo: <b>5835398</b>		Prep Date: <b>8/9/2019</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	3.97	0.10	4	0	99.2	90-110	0			

DUP		Sample ID: <b>19080543-01A DUP</b>				Units: <b>s.u.</b>		Analysis Date: <b>8/9/2019 03:00 PM</b>		
Client ID:		Run ID: <b>WETCHEM_190809\</b>		SeqNo: <b>5835400</b>		Prep Date: <b>8/9/2019</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	8.24	0.10	0	0	0	0-0	8.02	2.71	20	
Temperature	22	0.10	0	0	0		22	0		

DUP		Sample ID: <b>19080634-01A DUP</b>				Units: <b>s.u.</b>		Analysis Date: <b>8/9/2019 03:00 PM</b>		
Client ID:		Run ID: <b>WETCHEM_190809\</b>		SeqNo: <b>5835412</b>		Prep Date: <b>8/9/2019</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	8.94	0.10	0	0	0	0-0	8.98	0.446	20	
Temperature	22	0.10	0	0	0		22	0		

The following samples were analyzed in this batch:

19080633-01A	19080633-02A	19080633-04A
19080633-05A	19080633-06A	

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

Client: Terra Energy Partners, LLC  
 Work Order: 19080633  
 Project: MV 13-33-695 Tank Release

# QC BATCH REPORT

Batch ID: **140696** Instrument ID **WETCHEM** Method: **SW7196A**

<b>MBLK</b>	Sample ID: <b>MBLK-140696-140696</b>		Units: <b>mg/Kg</b>		Analysis Date: <b>8/12/2019 02:30 PM</b>					
Client ID:	Run ID: <b>WETCHEM_190812M</b>		SeqNo: <b>5838972</b>		Prep Date: <b>8/9/2019</b> DF: <b>1</b>					
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent U 1.0

<b>LCS</b>	Sample ID: <b>LCS-140696-140696</b>		Units: <b>mg/Kg</b>		Analysis Date: <b>8/12/2019 02:30 PM</b>					
Client ID:	Run ID: <b>WETCHEM_190812M</b>		SeqNo: <b>5838973</b>		Prep Date: <b>8/9/2019</b> DF: <b>1</b>					
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 4.41 1.0 5 0 88.2 80-120 0

<b>MS</b>	Sample ID: <b>19080633-01A MS</b>		Units: <b>mg/Kg</b>		Analysis Date: <b>8/12/2019 02:30 PM</b>					
Client ID: <b>MV 13-33 Excavation: North Wall</b>	Run ID: <b>WETCHEM_190812M</b>		SeqNo: <b>5838976</b>		Prep Date: <b>8/9/2019</b> DF: <b>1</b>					
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 2.74 1.0 5 -0.09 56.6 75-125 0 S

<b>MS</b>	Sample ID: <b>19080633-01A MSI</b>		Units: <b>mg/Kg</b>		Analysis Date: <b>8/12/2019 02:30 PM</b>					
Client ID: <b>MV 13-33 Excavation: North Wall</b>	Run ID: <b>WETCHEM_190812M</b>		SeqNo: <b>5838978</b>		Prep Date: <b>8/9/2019</b> DF: <b>100</b>					
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 2075 100 2172 -0.09 95.5 75-125 0

<b>MSD</b>	Sample ID: <b>19080633-01A MSD</b>		Units: <b>mg/Kg</b>		Analysis Date: <b>8/12/2019 02:30 PM</b>					
Client ID: <b>MV 13-33 Excavation: North Wall</b>	Run ID: <b>WETCHEM_190812M</b>		SeqNo: <b>5838977</b>		Prep Date: <b>8/9/2019</b> DF: <b>1</b>					
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 3.099 0.99 4.95 -0.09 64.4 75-125 2.74 12.3 20 S

The following samples were analyzed in this batch:

19080633-01A	19080633-02A	19080633-04A
19080633-05A	19080633-06A	

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

Client: Terra Energy Partners, LLC  
 Work Order: 19080633  
 Project: MV 13-33-695 Tank Release

# QC BATCH REPORT

Batch ID: **R268034** Instrument ID **MOIST** Method: **SW3550C**

MBLK		Sample ID: <b>WBLKS-R268034</b>				Units: % of sample			Analysis Date: <b>8/9/2019 04:39 PM</b>		
Client ID:		Run ID: <b>MOIST_190809J</b>				SeqNo: <b>5838065</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Moisture	U	0.10									

LCS		Sample ID: <b>LCS-R268034</b>				Units: % of sample			Analysis Date: <b>8/9/2019 04:39 PM</b>		
Client ID:		Run ID: <b>MOIST_190809J</b>				SeqNo: <b>5838064</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Moisture	100	0.10	100	0	100	98-102	0				

DUP		Sample ID: <b>19080673-01A DUP</b>				Units: % of sample			Analysis Date: <b>8/9/2019 04:39 PM</b>		
Client ID:		Run ID: <b>MOIST_190809J</b>				SeqNo: <b>5838061</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Moisture	10.93	0.10	0	0	0	0-0	11.53	5.34	10		

DUP		Sample ID: <b>19080676-01A DUP</b>				Units: % of sample			Analysis Date: <b>8/9/2019 04:39 PM</b>		
Client ID:		Run ID: <b>MOIST_190809J</b>				SeqNo: <b>5838063</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Moisture	10.74	0.10	0	0	0	0-0	10.62	1.12	10		

The following samples were analyzed in this batch:

19080633-01A	19080633-02A	19080633-04A
19080633-05A	19080633-06A	

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



# ALS Laboratory Group

HOLLAND, Michigan 49424

## Chain-of-Custody

Form 202r8

WORKORDER #	19080633
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SAMPLER		Mike Gardner						DATE	8/7/2019				PAGE	1 of 1													
PROJECT NAME	MV 13-33-695 Tank Release						SITE ID	MV 13-33-695				TURNAROUND	RUSH		DISPOSAL	By Lab or Return to Client											
PROJECT No.	EDD FORMAT						COGCC Full 910-1 list																				
PURCHASE ORDER																											
COMPANY NAME	TEP Rocky Mountain LLC																BILL TO COMPANY	TEP Rocky Mountain LLC									
SEND REPORT TO	Mike Gardner																INVOICE ATTN TO	Mike Gardner, Tammy Gose									
ADDRESS						ADDRESS											1058 Co Rd 215										
CITY / STATE / ZIP						CITY / STATE / ZIP											Parachute, CO 81635										
PHONE						PHONE											970-263-2760										
FAX						FAX																					
E-MAIL						E-MAIL											mgardner@terraep.com; kgose@terraep.com										
mgardner@terraep.com; krowe@hrtcomp.com						mgardner@terraep.com; kgose@terraep.com																					
Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC																				
1	MV 13-33 Excavation: North Wall	Soil	8/7/2019	12:00 p.m.	16 oz glass		X																				
2	MV 13-33 Excavation: South Wall	Soil	8/7/2019	3:30 p.m.	16 oz glass		X																				
3	MV 13-33 Excavation: East Wall	Soil	8/7/2019	3:45 p.m.	16 oz glass		X																				
4	MV 13-33 Excavation: West Wall	Soil	8/7/2019	12:30 p.m.	16 oz glass		X																				
5	MV 13-33 Excavation: Bottom	Soil	8/7/2019	1:00 p.m.	16 oz glass		X																				
6	MV 13-33 Background	Soil	8/7/2019	3:50 p.m.	16 oz glass		X																				

\*Time Zone (Circle): EST CST MST PST Matrix: O = oil S = soil NS = non-soil solid W = water L = liquid E = extract F = filter

For metals or anions, please detail analytes below.

Comments:  SD2 4.4' 2 ②	QC PACKAGE (check below)	
	<input checked="" type="checkbox"/>	LEVEL II (Standard QC)
	<input type="checkbox"/>	LEVEL III (Std QC + forms)
	<input type="checkbox"/>	LEVEL IV (Std QC + forms + raw data)
	<input type="checkbox"/>	
Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaHSO4 7-Other 8-4 degrees C 9-5035		

SIGNATURE	PRINTED NAME	DATE	TIME
	Mike Gardner	8/7/2019	
	Dione F Shaw	8-7-19	1810
	Dione F Shaw	8-7-19	1830
	Dione F Shaw	8/9/19	0900
RELINQUISHED BY			
RECEIVED BY			
RELINQUISHED BY			
RECEIVED BY			
RELINQUISHED BY			
RECEIVED BY			

Sample Receipt Checklist

Client Name: **TERRAENERGY**

Date/Time Received: **09-Aug-19 09:00**

Work Order: **19080633**

Received by: **DS**

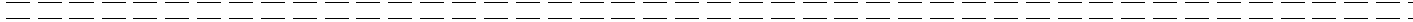
Checklist completed by Diane Shaw 09-Aug-19  
eSignature Date

Reviewed by: Chad Whilton 09-Aug-19  
eSignature Date

Matrices: Soil  
 Carrier name: FedEx

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample(s) received on ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>4.4/4.4 c</u>		<u>SR2</u>
Cooler(s)/Kit(s):	<u></u>		
Date/Time sample(s) sent to storage:	<u>8/9/2019 10:03:28 AM</u>		
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted by:	<u></u>		

Login Notes:



Client Contacted: \_\_\_\_\_ Date Contacted: \_\_\_\_\_ Person Contacted: \_\_\_\_\_

Contacted By: \_\_\_\_\_ Regarding: \_\_\_\_\_

Comments:

CorrectiveAction: