



06-Dec-2018

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

Re: **RGU 33-24-198 Spoil Pile**

Work Order: **18111884**

Dear Mike,

ALS Environmental received 1 sample on 30-Nov-2018 09:30 AM for the analyses presented in the following report.

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

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

The total number of pages in this report is 24.

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".

Electronically approved by: Chad Whelton

Chad Whelton
Project Manager

Report of Laboratory Analysis

Certificate No: MN 998501

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

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RIGHT SOLUTIONS RIGHT PARTNER

Client: Terra Energy Partners, LLC
Project: RGU 33-24-198 Spoil Pile
Work Order: 18111884

Work Order Sample Summary

<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>
18111884-01	RGU 33-24-198 Spoil Pile	Soil		11/27/2018 15:00	11/30/2018 09:30	<input type="checkbox"/>

Client: Terra Energy Partners, LLC**Project:** RGU 33-24-198 Spoil Pile**Work Order:** 18111884**Case Narrative**

Batch 128745, Method CR6_7196_S, Sample 18111884-01A MSD: The MSD recovery was outside of the control limit for Hexavalent Chromium. However, the MS recovery and the RPD between the MS and MSD was in control. No qualification is required.

Batch 128858, Method SAR_USDA20B, Sample 18111884-01ADup: The RPD between the sample and its duplicate was out of control for SAR. The corresponding sample result should be considered estimated.

<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
µg/Kg-dry	Micrograms per Kilogram Dry Weight
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

ALS Group, USA

Date: 06-Dec-18

Client: Terra Energy Partners, LLC
Project: RGU 33-24-198 Spoil Pile
Sample ID: RGU 33-24-198 Spoil Pile
Collection Date: 11/27/2018 03:00 PM

Work Order: 18111884
Lab ID: 18111884-01
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID							
			Method: SW8015M		Prep: SW3546 / 11/30/18		Analyst: RP
DRO (C10-C28)	180		3.1	5.5	mg/Kg-dry	1	12/3/2018 11:13
Surr: 4-Terphenyl-d14	107			33-111	%REC	1	12/3/2018 11:13
GASOLINE RANGE ORGANICS BY GC-FID							
			Method: SW8015D		Prep: SW5035 / 11/30/18		Analyst: RP
GRO (C6-C10)	47		2.6	6.2	mg/Kg	1	12/3/2018 13:06
Surr: Toluene-d8	93.4			71-123	%REC	1	12/3/2018 13:06
MERCURY BY CVAA							
			Method: SW7471B		Prep: SW7471 / 12/3/18		Analyst: RSB
Mercury	0.026		0.0019	0.019	mg/Kg-dry	1	12/3/2018 14:37
METALS ANALYSIS BY ICP							
			Method: SW846 6010C		Prep: SW3050B / 11/30/18		Analyst: ABL
Arsenic	4.2		0.11	0.44	mg/Kg-dry	1	12/1/2018 00:55
Barium	1,100		0.18	0.44	mg/Kg-dry	1	12/1/2018 00:55
Cadmium	0.14	J	0.042	0.88	mg/Kg-dry	1	12/1/2018 00:55
Chromium	38		0.025	0.44	mg/Kg-dry	1	12/1/2018 00:55
Copper	17		0.19	0.88	mg/Kg-dry	1	12/1/2018 00:55
Lead	7.8		0.093	0.44	mg/Kg-dry	1	12/1/2018 00:55
Nickel	17		0.18	0.44	mg/Kg-dry	1	12/1/2018 00:55
Selenium	0.64	J	0.25	0.88	mg/Kg-dry	1	12/1/2018 00:55
Silver	U		0.054	0.44	mg/Kg-dry	1	12/1/2018 00:55
Zinc	53		0.070	0.88	mg/Kg-dry	1	12/1/2018 00:55
SOLUBLE CATIONS FOR SAR							
			Method: SW6020A		Prep: USDA Method 20B / 12/4/18		Analyst: STP
Calcium	48		0.86	5.0	mg/L	10	12/4/2018 15:25
Magnesium	21		0.068	2.0	mg/L	10	12/4/2018 15:25
Sodium	36		0.34	2.0	mg/L	10	12/5/2018 13:18
SODIUM ADSORPTION RATIO							
			Method: USDA H60 METHOD 2		Prep: USDA Method 20B / 12/4/18		Analyst: STP
Sodium Adsorption Ratio	1.1		0.010	0.010	none	1	12/4/2018
SEMI-VOLATILE ORGANIC COMPOUNDS							
			Method: SW846 8270D		Prep: SW3546 / 11/30/18		Analyst: KAW
Acenaphthene	U		5.3	7.3	µg/Kg-dry	1	12/1/2018 01:11
Anthracene	U		5.1	7.3	µg/Kg-dry	1	12/1/2018 01:11
Benzo(a)anthracene	U		6.3	7.3	µg/Kg-dry	1	12/1/2018 01:11
Benzo(a)pyrene	U		4.5	7.3	µg/Kg-dry	1	12/1/2018 01:11
Benzo(b)fluoranthene	U		5.4	7.3	µg/Kg-dry	1	12/1/2018 01:11
Benzo(k)fluoranthene	U		5.5	7.3	µg/Kg-dry	1	12/1/2018 01:11
Chrysene	U		5.9	7.3	µg/Kg-dry	1	12/1/2018 01:11
Dibenzo(a,h)anthracene	U		3.9	7.3	µg/Kg-dry	1	12/1/2018 01:11
Fluoranthene	U		3.5	7.3	µg/Kg-dry	1	12/1/2018 01:11

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

ALS Group, USA

Date: 06-Dec-18

Client: Terra Energy Partners, LLC
Project: RGU 33-24-198 Spoil Pile
Sample ID: RGU 33-24-198 Spoil Pile
Collection Date: 11/27/2018 03:00 PM

Work Order: 18111884
Lab ID: 18111884-01
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Fluorene	160		5.3	7.3	µg/Kg-dry	1	12/1/2018 01:11
Indeno(1,2,3-cd)pyrene	U		5.1	7.3	µg/Kg-dry	1	12/1/2018 01:11
Naphthalene	82		4.7	7.3	µg/Kg-dry	1	12/1/2018 01:11
Pyrene	U		1.3	7.3	µg/Kg-dry	1	12/1/2018 01:11
Surr: 2-Fluorobiphenyl	48.9			44-107	%REC	1	12/1/2018 01:11
Surr: 4-Terphenyl-d14	58.0			52-123	%REC	1	12/1/2018 01:11
Surr: Nitrobenzene-d5	42.3			41-94	%REC	1	12/1/2018 01:11
VOLATILE ORGANIC COMPOUNDS			Method: SW8260C		Prep: SW5035 / 11/30/18		Analyst: WH
Benzene	U		0.0064	0.037	mg/Kg	1	11/30/2018 15:36
Ethylbenzene	U		0.0079	0.037	mg/Kg	1	11/30/2018 15:36
m,p-Xylene	0.021	J	0.018	0.075	mg/Kg	1	11/30/2018 15:36
o-Xylene	U		0.014	0.037	mg/Kg	1	11/30/2018 15:36
Toluene	U		0.010	0.037	mg/Kg	1	11/30/2018 15:36
Xylenes, Total	U		0.032	0.11	mg/Kg	1	11/30/2018 15:36
Surr: 1,2-Dichloroethane-d4	97.8			70-130	%REC	1	11/30/2018 15:36
Surr: 4-Bromofluorobenzene	106			70-130	%REC	1	11/30/2018 15:36
Surr: Dibromofluoromethane	95.0			70-130	%REC	1	11/30/2018 15:36
Surr: Toluene-d8	98.0			70-130	%REC	1	11/30/2018 15:36
ELECTRICAL CONDUCTIVITY (SAR)			Method: USDA H60 METHOD 2		Prep: USDA Method 20B / 12/4/18		Analyst: JB
Electrical Conductivity @ Saturation	5.7		0.011	0.10	mmhos/cm @25°	20	12/4/2018 21:00
CHROMIUM, TRIVALENT			Method: CALCULATION				Analyst: MB
Chromium, Trivalent	38		0.35	1.1	mg/Kg-dry	1	12/3/2018 16:00
CHROMIUM, HEXAVALENT			Method: SW7196A		Prep: SW3060A / 12/1/18		Analyst: JEB
Chromium, Hexavalent	U		0.35	1.1	mg/Kg-dry	1	12/2/2018 14:10
MOISTURE			Method: SW3550C				Analyst: KTP
Moisture	11		0.10	0.10	% of sample	1	11/30/2018 15:48
PH			Method: SW9045D		Prep: EXTRACT / 12/3/18		Analyst: RZM
pH	8.46		0.10	0.100	s.u.	1	12/3/2018 13:10
Temperature	21.5		0.10	0.100	s.u.	1	12/3/2018 13:10

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

Client: Terra Energy Partners, LLC
Work Order: 18111884
Project: RGU 33-24-198 Spoil Pile

QC BATCH REPORT

Batch ID: **128706** Instrument ID **GC8** Method: **SW8015M**

MBLK		Sample ID: DBLKS1-128706-128706				Units: mg/Kg		Analysis Date: 12/3/2018 11:42 AM		
Client ID:		Run ID: GC8_181203A				SeqNo: 5413911		Prep Date: 11/30/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28) U 5.0
 Surr: 4-Terphenyl-d14 2.538 0 3.33 0 76.2 33-111 0

LCS		Sample ID: DLCSS1-128706-128706				Units: mg/Kg		Analysis Date: 12/3/2018 12:11 PM		
Client ID:		Run ID: GC8_181203A				SeqNo: 5413912		Prep Date: 11/30/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28) 225.4 5.0 333 0 67.7 58-111 0
 Surr: 4-Terphenyl-d14 2.42 0 3.33 0 72.7 33-111 0

MS		Sample ID: 18111883-01A MS				Units: mg/Kg		Analysis Date: 12/3/2018 12:40 PM		
Client ID:		Run ID: GC8_181203A				SeqNo: 5413988		Prep Date: 11/30/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28) 213.3 4.9 326.2 0 65.4 58-111 0
 Surr: 4-Terphenyl-d14 2.336 0 3.262 0 71.6 33-111 0

MSD		Sample ID: 18111883-01A MSD				Units: mg/Kg		Analysis Date: 12/3/2018 01:10 PM		
Client ID:		Run ID: GC8_181203A				SeqNo: 5413989		Prep Date: 11/30/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28) 218.6 4.9 329.2 0 66.4 58-111 213.3 2.44 30
 Surr: 4-Terphenyl-d14 2.095 0 3.292 0 63.6 33-111 2.336 10.9 30

The following samples were analyzed in this batch:

18111884-01A

Client: Terra Energy Partners, LLC
Work Order: 1811884
Project: RGU 33-24-198 Spoil Pile

QC BATCH REPORT

Batch ID: **128708** Instrument ID **GC9** Method: **SW8015D**

MBLK		Sample ID: MBLK-128708-128708				Units: µg/Kg-dry		Analysis Date: 12/3/2018 04:30 PM		
Client ID:		Run ID: GC9_181203A				SeqNo: 5414722		Prep Date: 11/30/2018		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								
<i>Surr: Toluene-d8</i>	4544	0	5000	0	90.9	71-123	0			

MBLK		Sample ID: MBLK-128708-128708				Units: µg/Kg-dry		Analysis Date: 12/5/2018 01:59 AM		
Client ID:		Run ID: GC9_181204B				SeqNo: 5418866		Prep Date: 11/30/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	U	2,500								

LCS		Sample ID: LCS-128708-128708				Units: µg/Kg-dry		Analysis Date: 12/3/2018 03:33 PM		
Client ID:		Run ID: GC9_181203A				SeqNo: 5414685		Prep Date: 11/30/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	450700	5,000	500000	0	90.1	71-123	0			
<i>Surr: Toluene-d8</i>	4922	0	5000	0	98.4	71-123	0			

LCS		Sample ID: LCS-128708-128708				Units: µg/Kg-dry		Analysis Date: 12/5/2018 01:01 AM		
Client ID:		Run ID: GC9_181204B				SeqNo: 5418865		Prep Date: 11/30/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	10460	2,500	10000	0	105	80-120	0			

LCSD		Sample ID: LCSD-128708-128708				Units: µg/Kg-dry		Analysis Date: 12/5/2018 10:40 AM		
Client ID:		Run ID: GC9_181204B				SeqNo: 5418892		Prep Date: 11/30/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	10440	2,500	10000	0	104	80-120	10460	0.206	20	

MS		Sample ID: 1811883-01A MS				Units: µg/Kg-dry		Analysis Date: 12/3/2018 02:04 PM		
Client ID:		Run ID: GC9_181203A				SeqNo: 5414676		Prep Date: 11/30/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	795300	7,500	750000	664.5	106	71-123	0			
<i>Surr: Toluene-d8</i>	7690	0	7500	0	103	71-123	0			

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

Client: Terra Energy Partners, LLC
Work Order: 18111884
Project: RGU 33-24-198 Spoil Pile

QC BATCH REPORT

Batch ID: **128708** Instrument ID **GC9** Method: **SW8015D**

MSD		Sample ID: 18111883-01A MSD				Units: µg/Kg-dry		Analysis Date: 12/3/2018 02:33 PM		
Client ID:		Run ID: GC9_181203A				SeqNo: 5414679		Prep Date: 11/30/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	770700	7,500	750000	664.5	103	71-123	795300	3.14	30	
<i>Surr: Toluene-d8</i>	<i>8005</i>	<i>0</i>	<i>7500</i>	<i>0</i>	<i>107</i>	<i>71-123</i>	<i>7690</i>	<i>4</i>	<i>30</i>	

The following samples were analyzed in this batch:

18111884-01A

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

Client: Terra Energy Partners, LLC
Work Order: 18111884
Project: RGU 33-24-198 Spoil Pile

QC BATCH REPORT

Batch ID: **128765** Instrument ID **HG4** Method: **SW7471B**

MBLK		Sample ID: MBLK-128765-128765				Units: mg/Kg		Analysis Date: 12/3/2018 01:22 PM		
Client ID:		Run ID: HG4_181203A				SeqNo: 5414257		Prep Date: 12/3/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.003417	0.020								J

LCS		Sample ID: LCS-128765-128765				Units: mg/Kg		Analysis Date: 12/3/2018 01:25 PM		
Client ID:		Run ID: HG4_181203A				SeqNo: 5414258		Prep Date: 12/3/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1672	0.020	0.1665	0	100	80-120	0			

MS		Sample ID: 18111737-01C MS				Units: mg/Kg		Analysis Date: 12/3/2018 01:57 PM		
Client ID:		Run ID: HG4_181203A				SeqNo: 5414276		Prep Date: 12/3/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1269	0.017	0.1454	0.01147	79.4	75-125	0			

MSD		Sample ID: 18111737-01C MSD				Units: mg/Kg		Analysis Date: 12/3/2018 01:59 PM		
Client ID:		Run ID: HG4_181203A				SeqNo: 5414277		Prep Date: 12/3/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.124	0.017	0.1452	0.01147	77.5	75-125	0.1269	2.35	35	

The following samples were analyzed in this batch:

18111884-01A

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

Client: Terra Energy Partners, LLC
Work Order: 18111884
Project: RGU 33-24-198 Spoil Pile

QC BATCH REPORT

Batch ID: **128705** Instrument ID **ICP2** Method: **SW846 6010C**

MBLK				Sample ID: MBLK-128705-128705				Units: mg/Kg		Analysis Date: 11/30/2018 10:34 PM	
Client ID:			Run ID: ICP2_181130A			SeqNo: 5412631		Prep Date: 11/30/2018		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Arsenic	U	0.25									
Barium	U	0.25									
Cadmium	U	0.49									
Chromium	0.02721	0.25								J	
Copper	U	0.49									
Lead	U	0.25									
Nickel	U	0.25									
Selenium	U	0.49									
Silver	0.05931	0.25								J	
Zinc	0.06961	0.49								J	

LCS				Sample ID: LCS-128705-128705				Units: mg/Kg			Analysis Date: 11/30/2018 10:41 PM			
Client ID:				Run ID: ICP2_181130A				SeqNo: 5412632			Prep Date: 11/30/2018		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual				
Arsenic	4.693	0.24	4.721	0	99.4	80-120	0							
Barium	5.163	0.24	4.721	0	109	80-120	0							
Cadmium	4.85	0.47	4.721	0	103	80-120	0							
Chromium	5.388	0.24	4.721	0	114	80-120	0							
Copper	4.935	0.47	4.721	0	105	80-120	0							
Lead	4.926	0.24	4.721	0	104	80-120	0							
Nickel	5.028	0.24	4.721	0	106	80-120	0							
Selenium	4.641	0.47	4.721	0	98.3	80-120	0							
Silver	4.824	0.24	4.721	0	102	80-120	0							
Zinc	4.973	0.47	4.721	0	105	80-120	0							

MS				Sample ID: 18111790-01AMS			Units: mg/Kg		Analysis Date: 11/30/2018 11:11 PM		
Client ID:			Run ID: ICP2_181130A			SeqNo: 5412637		Prep Date: 11/30/2018		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Arsenic	28.93	0.40	8.078	22.79	75.9	75-125	0				
Barium	50.62	0.40	8.078	40.19	129	75-125	0			SO	
Cadmium	8.061	0.81	8.078	0.4835	93.8	75-125	0				
Chromium	20.41	0.40	8.078	8.991	141	75-125	0			S	
Copper	16.91	0.81	8.078	8.25	107	75-125	0				
Lead	68.66	0.40	8.078	69.46	-9.86	75-125	0			SO	
Nickel	15.44	0.40	8.078	6.541	110	75-125	0				
Selenium	7.722	0.81	8.078	0.2084	93	75-125	0				
Silver	7.787	0.40	8.078	-0.03741	96.9	75-125	0				
Zinc	55.69	0.81	8.078	34.7	260	75-125	0			SO	

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

Client: Terra Energy Partners, LLC
Work Order: 18111884
Project: RGU 33-24-198 Spoil Pile

QC BATCH REPORT

Batch ID: **128705** Instrument ID **ICP2** Method: **SW846 6010C**

MSD				Sample ID: 18111790-01AMSD			Units: mg/Kg		Analysis Date: 11/30/2018 11:18 PM		
Client ID:			Run ID: ICP2_181130A			SeqNo: 5412638		Prep Date: 11/30/2018		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Arsenic	26.19	0.33	6.667	22.79	51	75-125	28.93	9.91	20	S	
Barium	48.3	0.33	6.667	40.19	122	75-125	50.62	4.71	20	O	
Cadmium	6.333	0.67	6.667	0.4835	87.7	75-125	8.061	24	20	R	
Chromium	18.45	0.33	6.667	8.991	142	75-125	20.41	10.1	20	S	
Copper	16.25	0.67	6.667	8.25	120	75-125	16.91	3.95	20		
Lead	67.48	0.33	6.667	69.46	-29.6	75-125	68.66	1.73	20	SO	
Nickel	13.34	0.33	6.667	6.541	102	75-125	15.44	14.6	20		
Selenium	6.153	0.67	6.667	0.2084	89.2	75-125	7.722	22.6	20	R	
Silver	6.755	0.33	6.667	-0.03741	102	75-125	7.787	14.2	20		
Zinc	48.99	0.67	6.667	34.7	214	75-125	55.69	12.8	20	SO	

The following samples were analyzed in this batch:

18111884-01A

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

Client: Terra Energy Partners, LLC
Work Order: 18111884
Project: RGU 33-24-198 Spoil Pile

QC BATCH REPORT

Batch ID: **128858** Instrument ID **ICPMS3** Method: **SW6020A**

DUP		Sample ID: 18111884-01ADup				Units: mg/L		Analysis Date: 12/4/2018 03:26 PM		
Client ID: RGU 33-24-198 Spoil Pile		Run ID: ICPMS3_181204A				SeqNo: 5417997		Prep Date: 12/4/2018		DF: 10
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	201.3	5.0	0	0	0	0-0	48.44	122		
Magnesium	106.5	2.0	0	0	0	0-0	20.97	134		

DUP		Sample ID: 18111884-01ADup				Units: mg/L		Analysis Date: 12/5/2018 01:19 PM		
Client ID: RGU 33-24-198 Spoil Pile		Run ID: ICPMS3_181205A				SeqNo: 5419279		Prep Date: 12/4/2018		DF: 10
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium	760.6	2.0	0	0	0	0-0	36.38	182		

The following samples were analyzed in this batch:

18111884-01A

Batch ID: **128858** Instrument ID **SAR** Method: **USDA H60 Metho**

DUP		Sample ID: 18111884-01ADup				Units: none		Analysis Date: 12/4/2018		
Client ID: RGU 33-24-198 Spoil Pile		Run ID: SAR_181204A				SeqNo: 5417250		Prep Date: 12/4/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	10.79	0.010	0	0	0		1.099	163	50	R

The following samples were analyzed in this batch:

18111884-01A

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

Client: Terra Energy Partners, LLC
Work Order: 18111884
Project: RGU 33-24-198 Spoil Pile

QC BATCH REPORT

Batch ID: **128703** Instrument ID **SVMS9** Method: **SW846 8270D**

MBLK		Sample ID: SBLKS1-128703-128703				Units: µg/Kg		Analysis Date: 12/3/2018 01:44 PM		
Client ID:		Run ID: SVMS9_181203A				SeqNo: 5414023		Prep Date: 11/30/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	U	6.7								
Anthracene	U	6.7								
Benzo(a)anthracene	U	6.7								
Benzo(a)pyrene	U	6.7								
Benzo(b)fluoranthene	U	6.7								
Benzo(k)fluoranthene	U	6.7								
Chrysene	U	6.7								
Dibenzo(a,h)anthracene	U	6.7								
Fluoranthene	U	6.7								
Fluorene	U	6.7								
Indeno(1,2,3-cd)pyrene	U	6.7								
Naphthalene	U	6.7								
Pyrene	U	6.7								
<i>Surr: 2-Fluorobiphenyl</i>	2305	0	3333	0	69.1	44-107	0			
<i>Surr: 4-Terphenyl-d14</i>	2666	0	3333	0	80	52-123	0			
<i>Surr: Nitrobenzene-d5</i>	1986	0	3333	0	59.6	41-94	0			

LCS		Sample ID: SLCSS1-128703-128703				Units: µg/Kg		Analysis Date: 12/3/2018 01:21 PM		
Client ID:		Run ID: SVMS9_181203A				SeqNo: 5414022		Prep Date: 11/30/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1097	6.7	1333	0	82.3	55-101	0			
Anthracene	1096	6.7	1333	0	82.2	67-105	0			
Benzo(a)anthracene	1180	6.7	1333	0	88.5	68-105	0			
Benzo(a)pyrene	1165	6.7	1333	0	87.4	68-110	0			
Benzo(b)fluoranthene	1159	6.7	1333	0	86.9	65-110	0			
Benzo(k)fluoranthene	1132	6.7	1333	0	84.9	66-113	0			
Chrysene	1129	6.7	1333	0	84.7	68-108	0			
Dibenzo(a,h)anthracene	1135	6.7	1333	0	85.1	62-119	0			
Fluoranthene	1079	6.7	1333	0	81	67-106	0			
Fluorene	1183	6.7	1333	0	88.8	59-107	0			
Indeno(1,2,3-cd)pyrene	1201	6.7	1333	0	90.1	56-120	0			
Naphthalene	994.7	6.7	1333	0	74.6	46-98	0			
Pyrene	1301	6.7	1333	0	97.6	60-119	0			
<i>Surr: 2-Fluorobiphenyl</i>	2734	0	3333	0	82	44-107	0			
<i>Surr: 4-Terphenyl-d14</i>	3183	0	3333	0	95.5	52-123	0			
<i>Surr: Nitrobenzene-d5</i>	2447	0	3333	0	73.4	41-94	0			

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

Client: Terra Energy Partners, LLC
Work Order: 18111884
Project: RGU 33-24-198 Spoil Pile

QC BATCH REPORT

Batch ID: **128703** Instrument ID: **SVMS9** Method: **SW846 8270D**

MS				Sample ID: 18111833-06A MS			Units: µg/Kg		Analysis Date: 12/1/2018 01:58 AM	
Client ID:				Run ID: SVMS5_181130A			SeqNo: 5413012		Prep Date: 11/30/2018	
									DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1139	6.7	1331	0	85.6	55-101	0			
Anthracene	1085	6.7	1331	0	81.5	67-105	0			
Benzo(a)anthracene	1162	6.7	1331	0	87.3	68-105	0			
Benzo(a)pyrene	1143	6.7	1331	0	85.9	68-110	0			
Benzo(b)fluoranthene	1095	6.7	1331	0	82.3	65-110	0			
Benzo(k)fluoranthene	1132	6.7	1331	0	85.1	66-113	0			
Chrysene	1103	6.7	1331	0	82.9	68-108	0			
Dibenzo(a,h)anthracene	1093	6.7	1331	0	82.2	62-119	0			
Fluoranthene	1145	6.7	1331	0	86	67-106	0			
Fluorene	1239	6.7	1331	0	93.1	59-107	0			
Indeno(1,2,3-cd)pyrene	1172	6.7	1331	0	88.1	56-120	0			
Naphthalene	955.7	6.7	1331	0	71.8	46-98	0			
Pyrene	1191	6.7	1331	0	89.5	60-119	0			
Surr: 2-Fluorobiphenyl	2498	0	3327	0	75.1	44-107	0			
Surr: 4-Terphenyl-d14	2946	0	3327	0	88.5	52-123	0			
Surr: Nitrobenzene-d5	2134	0	3327	0	64.1	41-94	0			

MSD				Sample ID: 18111833-06A MSD			Units: µg/Kg		Analysis Date: 12/1/2018 02:21 AM	
Client ID:				Run ID: SVMS5_181130A			SeqNo: 5413015		Prep Date: 11/30/2018	
									DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	870	6.3	1255	0	69.3	55-101	1139	26.8	30	
Anthracene	945.3	6.3	1255	0	75.3	67-105	1085	13.7	30	
Benzo(a)anthracene	944.1	6.3	1255	0	75.2	68-105	1162	20.7	30	
Benzo(a)pyrene	914.6	6.3	1255	0	72.9	68-110	1143	22.2	30	
Benzo(b)fluoranthene	924.6	6.3	1255	0	73.7	65-110	1095	16.9	30	
Benzo(k)fluoranthene	940.9	6.3	1255	0	75	66-113	1132	18.4	30	
Chrysene	883.8	6.3	1255	0	70.4	68-108	1103	22.1	30	
Dibenzo(a,h)anthracene	879.4	6.3	1255	0	70.1	62-119	1093	21.7	30	
Fluoranthene	1061	6.3	1255	0	84.5	67-106	1145	7.6	30	
Fluorene	927.1	6.3	1255	0	73.9	59-107	1239	28.8	30	
Indeno(1,2,3-cd)pyrene	913.9	6.3	1255	0	72.8	56-120	1172	24.7	30	
Naphthalene	672.9	6.3	1255	0	53.6	46-98	955.7	34.7	30	R
Pyrene	830.5	6.3	1255	0	66.2	60-119	1191	35.7	30	R
Surr: 2-Fluorobiphenyl	2019	0	3138	0	64.3	44-107	2498	21.2	40	
Surr: 4-Terphenyl-d14	2014	0	3138	0	64.2	52-123	2946	37.6	40	
Surr: Nitrobenzene-d5	1697	0	3138	0	54.1	41-94	2134	22.8	40	

The following samples were analyzed in this batch:

18111884-01A

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

Client: Terra Energy Partners, LLC
Work Order: 1811884
Project: RGU 33-24-198 Spoil Pile

QC BATCH REPORT

Batch ID: **128707** Instrument ID **VMS7** Method: **SW8260C**

Sample ID: MBLK-128707-128707				Units: µg/Kg-dry			Analysis Date: 11/30/2018 11:56 A			
Client ID:		Run ID: VMS7_181130A			SeqNo: 5411378		Prep Date: 11/30/2018		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	U	30	0	0	0	0-0	0			
Ethylbenzene	U	30	0	0	0	0-0	0			
m,p-Xylene	U	60	0	0	0	0-0	0			
o-Xylene	U	30	0	0	0	0-0	0			
Toluene	U	30	0	0	0	0-0	0			
Xylenes, Total	U	90	0	0	0	0-0	0			
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>1020</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>102</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>996</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>99.6</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>961</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>96.1</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>989.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>99</i>	<i>70-130</i>	<i>0</i>			

LCS				Sample ID: LCS-128707-128707				Units: µg/Kg-dry			Analysis Date: 11/30/2018 11:09 A			
Client ID:				Run ID: VMS7_181130A				SeqNo: 5411377			Prep Date: 11/30/2018		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual				
Benzene	1144	30	1000	0	114	75-125	0							
Ethylbenzene	1198	30	1000	0	120	75-125	0							
m,p-Xylene	2158	60	2000	0	108	80-125	0							
o-Xylene	1148	30	1000	0	115	75-125	0							
Toluene	1134	30	1000	0	113	70-125	0							
Xylenes, Total	3306	90	3000	0	110	75-125	0							
Surr: 1,2-Dichloroethane-d4	1018	0	1000	0	102	70-130	0							
Surr: 4-Bromofluorobenzene	1031	0	1000	0	103	70-130	0							
Surr: Dibromofluoromethane	1044	0	1000	0	104	70-130	0							
Surr: Toluene-d8	1010	0	1000	0	101	70-130	0							

MS				Sample ID: 1811883-01A MS			Units: µg/Kg-dry		Analysis Date: 11/30/2018 05:57 PM		
Client ID:			Run ID: VMS7_181130A			SeqNo: 5413638		Prep Date: 11/30/2018		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	1490	45	1500	0	99.3	75-125		0			
Ethylbenzene	1520	45	1500	0	101	75-125		0			
m,p-Xylene	2817	90	3000	14.25	93.4	80-125		0			
o-Xylene	1500	45	1500	12.75	99.2	75-125		0			
Toluene	1471	45	1500	0	98	70-125		0			
Xylenes, Total	4317	140	4500	0	95.9	75-125		0			
Surr: 1,2-Dichloroethane-d4	1491	0	1500	0	99.4	70-130		0			
Surr: 4-Bromofluorobenzene	1547	0	1500	0	103	70-130		0			
Surr: Dibromofluoromethane	1492	0	1500	0	99.4	70-130		0			
Surr: Toluene-d8	1487	0	1500	0	99.2	70-130		0			

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

Client: Terra Energy Partners, LLC
Work Order: 18111884
Project: RGU 33-24-198 Spoil Pile

QC BATCH REPORT

Batch ID: **128707** Instrument ID **VMS7** Method: **SW8260C**

MSD				Sample ID: 18111883-01A MSD			Units: µg/Kg-dry		Analysis Date: 11/30/2018 06:12 PM	
Client ID:			Run ID: VMS7_181130A			SeqNo: 5413640		Prep Date: 11/30/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1512	45	1500	0	101	75-125	1490	1.5	30	
Ethylbenzene	1507	45	1500	0	100	75-125	1520	0.843	30	
m,p-Xylene	2840	90	3000	14.25	94.2	80-125	2817	0.796	30	
o-Xylene	1494	45	1500	12.75	98.8	75-125	1500	0.401	30	
Toluene	1480	45	1500	0	98.6	70-125	1471	0.61	30	
Xylenes, Total	4334	140	4500	0	96.3	75-125	4317	0.381	30	
Surr: 1,2-Dichloroethane-d4	1503	0	1500	0	100	70-130	1491	0.802	30	
Surr: 4-Bromofluorobenzene	1578	0	1500	0	105	70-130	1547	1.97	30	
Surr: Dibromofluoromethane	1480	0	1500	0	98.7	70-130	1492	0.757	30	
Surr: Toluene-d8	1481	0	1500	0	98.8	70-130	1487	0.404	30	

The following samples were analyzed in this batch:

18111884-01A

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

Client: Terra Energy Partners, LLC
 Work Order: 18111884
 Project: RGU 33-24-198 Spoil Pile

QC BATCH REPORT

Batch ID: **128745** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK		Sample ID: MBLK-128745-128745				Units: mg/Kg		Analysis Date: 12/2/2018 02:10 PM		
Client ID:		Run ID: WETCHEM_181202A				SeqNo: 5412466		Prep Date: 12/1/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent U 1.0

LCS		Sample ID: LCS-128745-128745				Units: mg/Kg		Analysis Date: 12/2/2018 02:10 PM		
Client ID:		Run ID: WETCHEM_181202A				SeqNo: 5412467		Prep Date: 12/1/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 4.323 1.0 5 0 86.5 80-120 0

MS		Sample ID: 18111884-01A MS				Units: mg/Kg		Analysis Date: 12/2/2018 02:10 PM		
Client ID: RGU 33-24-198 Spoil Pile		Run ID: WETCHEM_181202A				SeqNo: 5412470		Prep Date: 12/1/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 2.772 0.99 4.95 -0.9899 76 75-125 0

MS		Sample ID: 18111884-01A MSI				Units: mg/Kg		Analysis Date: 12/2/2018 02:10 PM		
Client ID: RGU 33-24-198 Spoil Pile		Run ID: WETCHEM_181202A				SeqNo: 5412472		Prep Date: 12/1/2018		DF: 100
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 15250 980 18300 -0.9899 83.4 75-125 0

MSD		Sample ID: 18111884-01A MSD				Units: mg/Kg		Analysis Date: 12/2/2018 02:10 PM		
Client ID: RGU 33-24-198 Spoil Pile		Run ID: WETCHEM_181202A				SeqNo: 5412471		Prep Date: 12/1/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 2.485 1.0 5.155 -0.9899 67.4 75-125 2.772 10.9 20 S

The following samples were analyzed in this batch:

18111884-01A

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

Client: Terra Energy Partners, LLC
Work Order: 18111884
Project: RGU 33-24-198 Spoil Pile

QC BATCH REPORT

Batch ID: **128776** Instrument ID **WETCHEM** Method: **SW9045D**

LCS				Sample ID: LCS-128776-128776				Units: s.u.			Analysis Date: 12/3/2018 01:10 PM			
Client ID:				Run ID: WETCHEM_181203F				SeqNo: 5414301			Prep Date: 12/3/2018		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual				
pH	3.96	0.10	4	0	99	90-110	0							

DUP				Sample ID: 18111884-01A DUP				Units: s.u.			Analysis Date: 12/3/2018 01:10 PM			
Client ID: RGU 33-24-198 Spoil Pile				Run ID: WETCHEM_181203F				SeqNo: 5414309			Prep Date: 12/3/2018		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual				
pH	8.46	0.10	0	0	0	0-0	8.46	0	20					
Temperature	21.5	0.10	0	0	0		21.5	0						

The following samples were analyzed in this batch:

18111884-01A

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

Client: Terra Energy Partners, LLC
Work Order: 18111884
Project: RGU 33-24-198 Spoil Pile

QC BATCH REPORT

Batch ID: **128858** Instrument ID **WETCHEM** Method: **USDA H60 Metho**

DUP		Sample ID: 18111884-01A DUP				Units: mmhos/cm @25°		Analysis Date: 12/4/2018 09:00 PM		
Client ID: RGU 33-24-198 Spoil Pile			Run ID: WETCHEM_181204S			SeqNo: 5417742		Prep Date: 12/4/2018		DF: 20
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ Saturation	5.76	0.10	0	0	0		5.74	0.348	50	

The following samples were analyzed in this batch:

18111884-01A

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

Client: Terra Energy Partners, LLC
Work Order: 18111884
Project: RGU 33-24-198 Spoil Pile

QC BATCH REPORT

Batch ID: **R250427** Instrument ID **MOIST** Method: **SW3550C**

MBLK		Sample ID: WBLKS-R250427				Units: % of sample		Analysis Date: 11/30/2018 03:48 PM		
Client ID:		Run ID: MOIST_181130D				SeqNo: 5413630		Prep Date:		DF: 1
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: LCS-R250427				Units: % of sample		Analysis Date: 11/30/2018 03:48 PM		
Client ID:		Run ID: MOIST_181130D				SeqNo: 5413627		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 99.93 0.10 100 0 99.9 99.5-100.5 0

DUP		Sample ID: 18111861-11C DUP				Units: % of sample		Analysis Date: 11/30/2018 03:48 PM		
Client ID:		Run ID: MOIST_181130D				SeqNo: 5413575		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 5.12 0.10 0 0 0 0-0 4.99 2.57 10

DUP		Sample ID: 18111861-12C DUP				Units: % of sample		Analysis Date: 11/30/2018 03:48 PM		
Client ID:		Run ID: MOIST_181130D				SeqNo: 5413578		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 17.3 0.10 0 0 0 0-0 17.67 2.12 10

The following samples were analyzed in this batch:

18111884-01A

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



ALS Laboratory Group

HOLLAND, Michigan 49424

Chain-of-Custody

Form 202r8

WORKORDER #

18111884

PROJECT NAME		RGU 33-24-198 Spoil Pile		SAMPLER		Mike Gardner		DATE		11/27/2018		PAGE		1 of 1	
PROJECT No.				SITE ID		RGU 33-24-198 Spoil Pile		TURNAROUND		RUSH - ASAP		DISPOSAL		By Lab or Return to Client	
EDD FORMAT				PURCHASE ORDER				COGCC 910-1 - full list							
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		Parachure CO 81635									
PHONE				PHONE		970-263-2760									
FAX				FAX											
E-MAIL		mgardner@terraep.com		E-MAIL		mgardner@terraep.com; tgose@terraep.com									
Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC								
1	RGU 33-24-198 Spoil Pile	soil	11/27/2018	3:00 p.m.	2 btls			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: SR2 2.2°C ①	QC PACKAGE (check below)	
	X	LEVEL II (Standard QC)
		LEVEL III (Std QC + forms)
		LEVEL IV (Std QC + forms + raw data)
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
RELINQUISHED BY: <i>[Signature]</i>	Mike Gardner	11/27/2018	
RECEIVED BY: <i>[Signature]</i>		11-28-18	1445
RELINQUISHED BY: <i>[Signature]</i>		11-30-18	1845
RECEIVED BY: <i>[Signature]</i>	Diane F. Shea	11/30/18	0930
RELINQUISHED BY:			
RECEIVED BY:			

Sample Receipt Checklist

Client Name: **TERRAENERGY**

Date/Time Received: **30-Nov-18 09:30**

Work Order: **18111884**

Received by: **DS**

Checklist completed by <u>Diane Shaw</u>	30-Nov-18	Reviewed by: <u>Chad Whelton</u>	30-Nov-18
eSignature	Date	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 checked="" type="checkbox"/>	No <input 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>2.2/2.2 c</u> <u>SR2</u>		
Cooler(s)/Kit(s):	<u></u>		
Date/Time sample(s) sent to storage:	<u>11/30/2018 10:15:46 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: