



05-Nov-2018

Kris Rowe
HRL Compliance Solutions, Inc
2385 F 1/2 Road
Grand Junction, CO 81505

Re: **Terra Energy - RGU 33-24 Spill**

Work Order: **18101838**

Dear Kris,

ALS Environmental received 7 samples on 27-Oct-2018 10:00 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 33.

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

Environmental 

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RIGHT SOLUTIONS RIGHT PARTNER

Client: HRL Compliance Solutions, Inc
Project: Terra Energy - RGU 33-24 Spill
Work Order: 18101838

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>
18101838-01	North	Soil		10/26/2018 10:12	10/27/2018 10:00	<input type="checkbox"/>
18101838-02	Middle	Soil		10/26/2018 10:38	10/27/2018 10:00	<input type="checkbox"/>
18101838-03	South	Soil		10/26/2018 10:44	10/27/2018 10:00	<input type="checkbox"/>
18101838-04	Spoils	Soil		10/26/2018 10:51	10/27/2018 10:00	<input type="checkbox"/>
18101838-05	BKGD 1	Soil		10/26/2018 11:04	10/27/2018 10:00	<input type="checkbox"/>
18101838-06	BKGD 2	Soil		10/26/2018 11:10	10/27/2018 10:00	<input type="checkbox"/>
18101838-07	BKGD 3	Soil		10/26/2018 11:17	10/27/2018 10:00	<input type="checkbox"/>

Client: HRL Compliance Solutions, Inc
Project: Terra Energy - RGU 33-24 Spill
Work Order: 18101838

Case Narrative

Batch 126974, Method VOC_8260_S, Sample 18101838-01A MS/MSD: The MS/MSD recovery was above the upper control limit for m/p-Xylenes. The corresponding result in the parent sample may be biased high.

Batch 126974, Method VOC_8260_S, Sample 18101838-01A MSD: The MSD recoveries were above the upper control limits for o-Xylene and Total Xylenes. However, the MS recoveries and the RPDs between the MS and MSD were within control limits. No qualification is required.

Batch 127109, Method CR6_7196_S, Sample 18101838-01A 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.

<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: 05-Nov-18

Client: HRL Compliance Solutions, Inc
Project: Terra Energy - RGU 33-24 Spill
Sample ID: North
Collection Date: 10/26/2018 10:12 AM

Work Order: 18101838
Lab ID: 18101838-01
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID							
			Method: SW8015M		Prep: SW3546 / 10/30/18		Analyst: RP
DRO (C10-C28)	U		3.2	5.7	mg/Kg-dry	1	10/30/2018 20:32
Surr: 4-Terphenyl-d14	79.5			33-111	%REC	1	10/30/2018 20:32
GASOLINE RANGE ORGANICS BY GC-FID							
			Method: SW8015D		Prep: SW5035 / 10/29/18		Analyst: RP
GRO (C6-C10)	U		2.8	6.8	mg/Kg	1	10/30/2018 03:53
Surr: Toluene-d8	94.8			71-123	%REC	1	10/30/2018 03:53
MERCURY BY CVAA							
			Method: SW7471B		Prep: SW7471 / 10/29/18		Analyst: RSH
Mercury	0.019	J	0.0020	0.020	mg/Kg-dry	1	10/30/2018 13:55
METALS ANALYSIS BY ICP							
			Method: SW846 6010C		Prep: SW3050B / 10/29/18		Analyst: ABL
Arsenic	4.5		0.10	0.40	mg/Kg-dry	1	10/31/2018 02:35
Barium	250		0.16	0.40	mg/Kg-dry	1	10/31/2018 02:35
Cadmium	0.096	J	0.038	0.80	mg/Kg-dry	1	10/31/2018 02:35
Chromium	16		0.022	0.40	mg/Kg-dry	1	10/31/2018 02:35
Copper	12		0.17	0.80	mg/Kg-dry	1	10/31/2018 02:35
Lead	6.9		0.084	0.40	mg/Kg-dry	1	10/31/2018 14:16
Nickel	11		0.16	0.40	mg/Kg-dry	1	10/31/2018 02:35
Selenium	U		0.22	0.80	mg/Kg-dry	1	10/31/2018 02:35
Silver	U		0.049	0.40	mg/Kg-dry	1	10/31/2018 02:35
Zinc	38		0.064	0.80	mg/Kg-dry	1	10/31/2018 02:35
SOLUBLE CATIONS FOR SAR							
			Method: SW6020A		Prep: USDA Method 20B / 10/31/18		Analyst: STP
Calcium	130		0.86	5.0	mg/L	10	10/31/2018 23:55
Magnesium	78		0.068	2.0	mg/L	10	10/31/2018 23:55
Sodium	610		0.34	2.0	mg/L	10	10/31/2018 23:55
SODIUM ADSORPTION RATIO							
			Method: USDA H60 METHOD 2		Prep: USDA Method 20B / 10/31/18		Analyst: STP
Sodium Adsorption Ratio	10		0.010	0.010	none	1	10/31/2018
SEMI-VOLATILE ORGANIC COMPOUNDS							
			Method: SW846 8270D		Prep: SW3546 / 10/30/18		Analyst: KAW
Acenaphthene	U		5.5	7.6	µg/Kg-dry	1	10/30/2018 16:06
Anthracene	U		5.4	7.6	µg/Kg-dry	1	10/30/2018 16:06
Benzo(a)anthracene	U		6.6	7.6	µg/Kg-dry	1	10/30/2018 16:06
Benzo(a)pyrene	U		4.7	7.6	µg/Kg-dry	1	10/30/2018 16:06
Benzo(b)fluoranthene	U		5.7	7.6	µg/Kg-dry	1	10/30/2018 16:06
Benzo(k)fluoranthene	U		5.7	7.6	µg/Kg-dry	1	10/30/2018 16:06
Chrysene	U		6.1	7.6	µg/Kg-dry	1	10/30/2018 16:06
Dibenzo(a,h)anthracene	U		4.1	7.6	µg/Kg-dry	1	10/30/2018 16:06
Fluoranthene	U		3.6	7.6	µg/Kg-dry	1	10/30/2018 16:06

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

ALS Group, USA

Date: 05-Nov-18

Client: HRL Compliance Solutions, Inc
Project: Terra Energy - RGU 33-24 Spill
Sample ID: North
Collection Date: 10/26/2018 10:12 AM

Work Order: 18101838
Lab ID: 18101838-01
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Fluorene	U		5.5	7.6	µg/Kg-dry	1	10/30/2018 16:06
Indeno(1,2,3-cd)pyrene	U		5.3	7.6	µg/Kg-dry	1	10/30/2018 16:06
Naphthalene	U		4.8	7.6	µg/Kg-dry	1	10/30/2018 16:06
Pyrene	U		1.4	7.6	µg/Kg-dry	1	10/30/2018 16:06
Surr: 2-Fluorobiphenyl	69.4			44-107	%REC	1	10/30/2018 16:06
Surr: 4-Terphenyl-d14	78.8			52-123	%REC	1	10/30/2018 16:06
Surr: Nitrobenzene-d5	61.7			41-94	%REC	1	10/30/2018 16:06
VOLATILE ORGANIC COMPOUNDS			Method: SW8260C		Prep: SW5035 / 10/29/18		Analyst: WH
Benzene	U		0.0051	0.030	mg/Kg	1	10/29/2018 18:52
Ethylbenzene	U		0.0063	0.030	mg/Kg	1	10/29/2018 18:52
m,p-Xylene	U		0.014	0.060	mg/Kg	1	10/29/2018 18:52
o-Xylene	U		0.012	0.030	mg/Kg	1	10/29/2018 18:52
Toluene	U		0.0082	0.030	mg/Kg	1	10/29/2018 18:52
Xylenes, Total	U		0.026	0.090	mg/Kg	1	10/29/2018 18:52
Surr: 1,2-Dichloroethane-d4	96.6			70-130	%REC	1	10/29/2018 18:52
Surr: 4-Bromofluorobenzene	102			70-130	%REC	1	10/29/2018 18:52
Surr: Dibromofluoromethane	92.0			70-130	%REC	1	10/29/2018 18:52
Surr: Toluene-d8	93.1			70-130	%REC	1	10/29/2018 18:52
ELECTRICAL CONDUCTIVITY (SAR)			Method: USDA H60 METHOD 2		Prep: USDA Method 20B / 10/31/18		Analyst: JB
Electrical Conductivity @ Saturation	4.7		0.011	0.10	mmhos/cm @25°	20	11/1/2018 20:00
CHROMIUM, TRIVALENT			Method: CALCULATION				Analyst: JB
Chromium, Trivalent	16		0.36	1.2	mg/Kg-dry	1	10/31/2018 13:30
CHROMIUM, HEXAVALENT			Method: SW7196A		Prep: SW3060A / 10/30/18		Analyst: JEB
Chromium, Hexavalent	U		0.36	1.2	mg/Kg-dry	1	10/31/2018 10:10
MOISTURE			Method: SW3550C				Analyst: RBS
Moisture	15		0.025	0.050	% of sample	1	11/2/2018 16:50
PH			Method: SW9045D		Prep: EXTRACT / 10/31/18		Analyst: RZM
pH	8.10		0.10	0.100	s.u.	1	10/31/2018 13:55

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

ALS Group, USA

Date: 05-Nov-18

Client: HRL Compliance Solutions, Inc
Project: Terra Energy - RGU 33-24 Spill
Sample ID: Middle
Collection Date: 10/26/2018 10:38 AM

Work Order: 18101838
Lab ID: 18101838-02
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID							
			Method: SW8015M		Prep: SW3546 / 10/30/18		Analyst: RP
DRO (C10-C28)	U		3.4	5.9	mg/Kg-dry	1	10/30/2018 21:01
Surr: 4-Terphenyl-d14	86.6			33-111	%REC	1	10/30/2018 21:01
GASOLINE RANGE ORGANICS BY GC-FID							
			Method: SW8015D		Prep: SW5035 / 10/29/18		Analyst: RP
GRO (C6-C10)	U		3.0	7.2	mg/Kg	1	10/30/2018 04:19
Surr: Toluene-d8	100			71-123	%REC	1	10/30/2018 04:19
MERCURY BY CVAA							
			Method: SW7471B		Prep: SW7471 / 10/29/18		Analyst: RSH
Mercury	0.016	J	0.0023	0.023	mg/Kg-dry	1	10/30/2018 13:58
METALS ANALYSIS BY ICP							
			Method: SW846 6010C		Prep: SW3050B / 10/29/18		Analyst: ABL
Arsenic	5.1		0.10	0.39	mg/Kg-dry	1	10/31/2018 03:06
Barium	230		0.16	0.39	mg/Kg-dry	1	10/31/2018 03:06
Cadmium	0.11	J	0.038	0.79	mg/Kg-dry	1	10/31/2018 03:06
Chromium	18		0.022	0.39	mg/Kg-dry	1	10/31/2018 03:06
Copper	14		0.17	0.79	mg/Kg-dry	1	10/31/2018 03:06
Lead	7.5		0.083	0.39	mg/Kg-dry	1	10/31/2018 14:22
Nickel	12		0.16	0.39	mg/Kg-dry	1	10/31/2018 03:06
Selenium	U		0.22	0.79	mg/Kg-dry	1	10/31/2018 03:06
Silver	U		0.049	0.39	mg/Kg-dry	1	10/31/2018 03:06
Zinc	40		0.063	0.79	mg/Kg-dry	1	10/31/2018 03:06
SOLUBLE CATIONS FOR SAR							
			Method: SW6020A		Prep: USDA Method 20B / 10/31/18		Analyst: STP
Calcium	370		0.86	5.0	mg/L	10	10/31/2018 23:57
Magnesium	180		0.068	2.0	mg/L	10	10/31/2018 23:57
Sodium	890		0.34	2.0	mg/L	10	10/31/2018 23:57
SODIUM ADSORPTION RATIO							
			Method: USDA H60 METHOD 2		Prep: USDA Method 20B / 10/31/18		Analyst: STP
Sodium Adsorption Ratio	9.5		0.010	0.010	none	1	10/31/2018
SEMI-VOLATILE ORGANIC COMPOUNDS							
			Method: SW846 8270D		Prep: SW3546 / 10/30/18		Analyst: KAW
Acenaphthene	U		5.7	7.9	µg/Kg-dry	1	10/30/2018 16:30
Anthracene	U		5.6	7.9	µg/Kg-dry	1	10/30/2018 16:30
Benzo(a)anthracene	U		6.8	7.9	µg/Kg-dry	1	10/30/2018 16:30
Benzo(a)pyrene	U		4.9	7.9	µg/Kg-dry	1	10/30/2018 16:30
Benzo(b)fluoranthene	U		5.9	7.9	µg/Kg-dry	1	10/30/2018 16:30
Benzo(k)fluoranthene	U		6.0	7.9	µg/Kg-dry	1	10/30/2018 16:30
Chrysene	U		6.4	7.9	µg/Kg-dry	1	10/30/2018 16:30
Dibenzo(a,h)anthracene	U		4.3	7.9	µg/Kg-dry	1	10/30/2018 16:30
Fluoranthene	9.5		3.8	7.9	µg/Kg-dry	1	10/30/2018 16:30

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

ALS Group, USA

Date: 05-Nov-18

Client: HRL Compliance Solutions, Inc
Project: Terra Energy - RGU 33-24 Spill
Sample ID: Middle
Collection Date: 10/26/2018 10:38 AM

Work Order: 18101838
Lab ID: 18101838-02
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Fluorene	U		5.7	7.9	µg/Kg-dry	1	10/30/2018 16:30
Indeno(1,2,3-cd)pyrene	U		5.5	7.9	µg/Kg-dry	1	10/30/2018 16:30
Naphthalene	U		5.1	7.9	µg/Kg-dry	1	10/30/2018 16:30
Pyrene	7.9		1.4	7.9	µg/Kg-dry	1	10/30/2018 16:30
Surr: 2-Fluorobiphenyl	80.2			44-107	%REC	1	10/30/2018 16:30
Surr: 4-Terphenyl-d14	87.9			52-123	%REC	1	10/30/2018 16:30
Surr: Nitrobenzene-d5	71.1			41-94	%REC	1	10/30/2018 16:30
VOLATILE ORGANIC COMPOUNDS			Method: SW8260C		Prep: SW5035 / 10/29/18		Analyst: AK
Benzene	U		0.0051	0.030	mg/Kg	1	10/30/2018 14:26
Ethylbenzene	U		0.0063	0.030	mg/Kg	1	10/30/2018 14:26
m,p-Xylene	U		0.014	0.060	mg/Kg	1	10/30/2018 14:26
o-Xylene	U		0.012	0.030	mg/Kg	1	10/30/2018 14:26
Toluene	U		0.0082	0.030	mg/Kg	1	10/30/2018 14:26
Xylenes, Total	U		0.026	0.090	mg/Kg	1	10/30/2018 14:26
Surr: 1,2-Dichloroethane-d4	99.6			70-130	%REC	1	10/30/2018 14:26
Surr: 4-Bromofluorobenzene	94.0			70-130	%REC	1	10/30/2018 14:26
Surr: Dibromofluoromethane	94.0			70-130	%REC	1	10/30/2018 14:26
Surr: Toluene-d8	97.4			70-130	%REC	1	10/30/2018 14:26
ELECTRICAL CONDUCTIVITY (SAR)			Method: USDA H60 METHOD 2		Prep: USDA Method 20B / 10/31/18		Analyst: JB
Electrical Conductivity @ Saturation	8.2		0.011	0.10	mmhos/cm @25°	20	11/1/2018 20:00
CHROMIUM, TRIVALENT			Method: CALCULATION				Analyst: JB
Chromium, Trivalent	17		0.38	1.2	mg/Kg-dry	1	10/31/2018 13:30
CHROMIUM, HEXAVALENT			Method: SW7196A		Prep: SW3060A / 10/30/18		Analyst: JEB
Chromium, Hexavalent	1.0	J	0.37	1.2	mg/Kg-dry	1	10/31/2018 10:10
MOISTURE			Method: SW3550C				Analyst: RBS
Moisture	18		0.025	0.050	% of sample	1	10/31/2018 16:58
PH			Method: SW9045D		Prep: EXTRACT / 10/31/18		Analyst: RZM
pH	8.22		0.10	0.100	s.u.	1	10/31/2018 13:55

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

ALS Group, USA

Date: 05-Nov-18

Client: HRL Compliance Solutions, Inc
Project: Terra Energy - RGU 33-24 Spill
Sample ID: South
Collection Date: 10/26/2018 10:44 AM

Work Order: 18101838
Lab ID: 18101838-03
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID							
			Method: SW8015M		Prep: SW3546 / 10/30/18		Analyst: RP
DRO (C10-C28)	U		3.3	5.8	mg/Kg-dry	1	10/30/2018 21:30
Surr: 4-Terphenyl-d14	80.8			33-111	%REC	1	10/30/2018 21:30
GASOLINE RANGE ORGANICS BY GC-FID							
			Method: SW8015D		Prep: SW5035 / 10/29/18		Analyst: RP
GRO (C6-C10)	4.8	J	2.9	6.9	mg/Kg	1	10/30/2018 04:46
Surr: Toluene-d8	96.2			71-123	%REC	1	10/30/2018 04:46
MERCURY BY CVAA							
			Method: SW7471B		Prep: SW7471 / 10/29/18		Analyst: RSH
Mercury	0.016	J	0.0020	0.020	mg/Kg-dry	1	10/30/2018 14:00
METALS ANALYSIS BY ICP							
			Method: SW846 6010C		Prep: SW3050B / 10/29/18		Analyst: ABL
Arsenic	4.7		0.13	0.48	mg/Kg-dry	1	10/31/2018 03:12
Barium	270		0.19	0.48	mg/Kg-dry	1	10/31/2018 03:12
Cadmium	0.097	J	0.047	0.97	mg/Kg-dry	1	10/31/2018 03:12
Chromium	18		0.027	0.48	mg/Kg-dry	1	10/31/2018 03:12
Copper	14		0.21	0.97	mg/Kg-dry	1	10/31/2018 03:12
Lead	8.3		0.10	0.48	mg/Kg-dry	1	10/31/2018 14:28
Nickel	12		0.19	0.48	mg/Kg-dry	1	10/31/2018 03:12
Selenium	U		0.27	0.97	mg/Kg-dry	1	10/31/2018 03:12
Silver	U		0.060	0.48	mg/Kg-dry	1	10/31/2018 03:12
Zinc	42		0.078	0.97	mg/Kg-dry	1	10/31/2018 03:12
SOLUBLE CATIONS FOR SAR							
			Method: SW6020A		Prep: USDA Method 20B / 10/31/18		Analyst: STP
Calcium	150		0.86	5.0	mg/L	10	10/31/2018 23:58
Magnesium	120		0.068	2.0	mg/L	10	10/31/2018 23:58
Sodium	860		0.34	2.0	mg/L	10	10/31/2018 23:58
SODIUM ADSORPTION RATIO							
			Method: USDA H60 METHOD 2		Prep: USDA Method 20B / 10/31/18		Analyst: STP
Sodium Adsorption Ratio	13		0.010	0.010	none	1	10/31/2018
SEMI-VOLATILE ORGANIC COMPOUNDS							
			Method: SW846 8270D		Prep: SW3546 / 10/30/18		Analyst: KAW
Acenaphthene	U		5.6	7.8	µg/Kg-dry	1	10/30/2018 16:54
Anthracene	U		5.5	7.8	µg/Kg-dry	1	10/30/2018 16:54
Benzo(a)anthracene	U		6.7	7.8	µg/Kg-dry	1	10/30/2018 16:54
Benzo(a)pyrene	U		4.8	7.8	µg/Kg-dry	1	10/30/2018 16:54
Benzo(b)fluoranthene	U		5.8	7.8	µg/Kg-dry	1	10/30/2018 16:54
Benzo(k)fluoranthene	U		5.9	7.8	µg/Kg-dry	1	10/30/2018 16:54
Chrysene	U		6.3	7.8	µg/Kg-dry	1	10/30/2018 16:54
Dibenzo(a,h)anthracene	U		4.2	7.8	µg/Kg-dry	1	10/30/2018 16:54
Fluoranthene	U		3.7	7.8	µg/Kg-dry	1	10/30/2018 16:54

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

ALS Group, USA

Date: 05-Nov-18

Client: HRL Compliance Solutions, Inc
Project: Terra Energy - RGU 33-24 Spill
Sample ID: South
Collection Date: 10/26/2018 10:44 AM

Work Order: 18101838
Lab ID: 18101838-03
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Fluorene	U		5.6	7.8	µg/Kg-dry	1	10/30/2018 16:54
Indeno(1,2,3-cd)pyrene	U		5.4	7.8	µg/Kg-dry	1	10/30/2018 16:54
Naphthalene	U		5.0	7.8	µg/Kg-dry	1	10/30/2018 16:54
Pyrene	U		1.4	7.8	µg/Kg-dry	1	10/30/2018 16:54
Surr: 2-Fluorobiphenyl	63.3			44-107	%REC	1	10/30/2018 16:54
Surr: 4-Terphenyl-d14	71.0			52-123	%REC	1	10/30/2018 16:54
Surr: Nitrobenzene-d5	55.1			41-94	%REC	1	10/30/2018 16:54
VOLATILE ORGANIC COMPOUNDS			Method: SW8260C		Prep: SW5035 / 10/29/18		Analyst: AK
Benzene	U		0.0051	0.030	mg/Kg	1	10/30/2018 14:42
Ethylbenzene	U		0.0063	0.030	mg/Kg	1	10/30/2018 14:42
m,p-Xylene	U		0.014	0.060	mg/Kg	1	10/30/2018 14:42
o-Xylene	U		0.012	0.030	mg/Kg	1	10/30/2018 14:42
Toluene	U		0.0082	0.030	mg/Kg	1	10/30/2018 14:42
Xylenes, Total	U		0.026	0.090	mg/Kg	1	10/30/2018 14:42
Surr: 1,2-Dichloroethane-d4	101			70-130	%REC	1	10/30/2018 14:42
Surr: 4-Bromofluorobenzene	100			70-130	%REC	1	10/30/2018 14:42
Surr: Dibromofluoromethane	90.4			70-130	%REC	1	10/30/2018 14:42
Surr: Toluene-d8	98.6			70-130	%REC	1	10/30/2018 14:42
ELECTRICAL CONDUCTIVITY (SAR)			Method: USDA H60 METHOD 2		Prep: USDA Method 20B / 10/31/18		Analyst: JB
Electrical Conductivity @ Saturation	6.5		0.011	0.10	mmhos/cm @25°	20	11/1/2018 20:00
CHROMIUM, TRIVALENT			Method: CALCULATION				Analyst: JB
Chromium, Trivalent	18		0.37	1.2	mg/Kg-dry	1	10/31/2018 13:30
CHROMIUM, HEXAVALENT			Method: SW7196A		Prep: SW3060A / 10/30/18		Analyst: JEB
Chromium, Hexavalent	0.86	J	0.37	1.2	mg/Kg-dry	1	10/31/2018 10:10
MOISTURE			Method: SW3550C				Analyst: RBS
Moisture	16		0.025	0.050	% of sample	1	10/31/2018 16:58
PH			Method: SW9045D		Prep: EXTRACT / 10/31/18		Analyst: RZM
pH	8.39		0.10	0.100	s.u.	1	10/31/2018 13:55

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

ALS Group, USA

Date: 05-Nov-18

Client: HRL Compliance Solutions, Inc
Project: Terra Energy - RGU 33-24 Spill
Sample ID: Spoils
Collection Date: 10/26/2018 10:51 AM

Work Order: 18101838
Lab ID: 18101838-04
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID							
			Method: SW8015M		Prep: SW3546 / 10/30/18		Analyst: RP
DRO (C10-C28)	460		3.2	5.7	mg/Kg-dry	1	10/30/2018 22:00
Surr: 4-Terphenyl-d14	84.4			33-111	%REC	1	10/30/2018 22:00
GASOLINE RANGE ORGANICS BY GC-FID							
			Method: SW8015D		Prep: SW5035 / 10/29/18		Analyst: RP
GRO (C6-C10)	660		2.7	6.5	mg/Kg	1	10/30/2018 05:12
Surr: Toluene-d8	105			71-123	%REC	1	10/30/2018 05:12
MERCURY BY CVAA							
			Method: SW7471B		Prep: SW7471 / 10/29/18		Analyst: RSH
Mercury	0.025		0.0020	0.020	mg/Kg-dry	1	10/30/2018 14:10
METALS ANALYSIS BY ICP							
			Method: SW846 6010C		Prep: SW3050B / 10/29/18		Analyst: ABL
Arsenic	4.6		0.099	0.38	mg/Kg-dry	1	10/31/2018 03:18
Barium	1,100		0.15	0.38	mg/Kg-dry	1	10/31/2018 03:18
Cadmium	0.074	J	0.037	0.76	mg/Kg-dry	1	10/31/2018 03:18
Chromium	29		0.021	0.38	mg/Kg-dry	1	10/31/2018 03:18
Copper	16		0.17	0.76	mg/Kg-dry	1	10/31/2018 03:18
Lead	7.3		0.081	0.38	mg/Kg-dry	1	10/31/2018 14:34
Nickel	14		0.15	0.38	mg/Kg-dry	1	10/31/2018 03:18
Selenium	0.35	J	0.21	0.76	mg/Kg-dry	1	10/31/2018 03:18
Silver	U		0.047	0.38	mg/Kg-dry	1	10/31/2018 03:18
Zinc	43		0.061	0.76	mg/Kg-dry	1	10/31/2018 03:18
SOLUBLE CATIONS FOR SAR							
			Method: SW6020A		Prep: USDA Method 20B / 10/31/18		Analyst: STP
Calcium	610		0.86	5.0	mg/L	10	11/1/2018
Magnesium	170		0.068	2.0	mg/L	10	11/1/2018
Sodium	1,300		0.34	2.0	mg/L	10	11/1/2018
SODIUM ADSORPTION RATIO							
			Method: USDA H60 METHOD 2		Prep: USDA Method 20B / 10/31/18		Analyst: STP
Sodium Adsorption Ratio	12		0.010	0.010	none	1	10/31/2018
SEMI-VOLATILE ORGANIC COMPOUNDS							
			Method: SW846 8270D		Prep: SW3546 / 10/30/18		Analyst: KAW
Acenaphthene	U		5.5	7.6	µg/Kg-dry	1	10/30/2018 17:18
Anthracene	U		5.4	7.6	µg/Kg-dry	1	10/30/2018 17:18
Benzo(a)anthracene	U		6.6	7.6	µg/Kg-dry	1	10/30/2018 17:18
Benzo(a)pyrene	U		4.7	7.6	µg/Kg-dry	1	10/30/2018 17:18
Benzo(b)fluoranthene	U		5.7	7.6	µg/Kg-dry	1	10/30/2018 17:18
Benzo(k)fluoranthene	U		5.8	7.6	µg/Kg-dry	1	10/30/2018 17:18
Chrysene	U		6.1	7.6	µg/Kg-dry	1	10/30/2018 17:18
Dibenzo(a,h)anthracene	U		4.1	7.6	µg/Kg-dry	1	10/30/2018 17:18
Fluoranthene	U		3.6	7.6	µg/Kg-dry	1	10/30/2018 17:18

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

ALS Group, USA

Date: 05-Nov-18

Client: HRL Compliance Solutions, Inc
Project: Terra Energy - RGU 33-24 Spill
Sample ID: Spoils
Collection Date: 10/26/2018 10:51 AM

Work Order: 18101838
Lab ID: 18101838-04
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Fluorene	260		5.5	7.6	µg/Kg-dry	1	10/30/2018 17:18
Indeno(1,2,3-cd)pyrene	U		5.3	7.6	µg/Kg-dry	1	10/30/2018 17:18
Naphthalene	1,000		4.9	7.6	µg/Kg-dry	1	10/30/2018 17:18
Pyrene	U		1.4	7.6	µg/Kg-dry	1	10/30/2018 17:18
Surr: 2-Fluorobiphenyl	64.7			44-107	%REC	1	10/30/2018 17:18
Surr: 4-Terphenyl-d14	79.8			52-123	%REC	1	10/30/2018 17:18
Surr: Nitrobenzene-d5	59.3			41-94	%REC	1	10/30/2018 17:18
VOLATILE ORGANIC COMPOUNDS			Method: SW8260C		Prep: SW5035 / 10/29/18		Analyst: WH
Benzene	0.033	J	0.0067	0.039	mg/Kg	1	10/29/2018 18:06
Ethylbenzene	1.1		0.0082	0.039	mg/Kg	1	10/29/2018 18:06
m,p-Xylene	19		0.057	0.24	mg/Kg	4	10/30/2018 14:58
o-Xylene	3.6		0.015	0.039	mg/Kg	1	10/29/2018 18:06
Toluene	1.9		0.011	0.039	mg/Kg	1	10/29/2018 18:06
Xylenes, Total	23		0.10	0.36	mg/Kg	4	10/30/2018 14:58
Surr: 1,2-Dichloroethane-d4	99.6			70-130	%REC	1	10/29/2018 18:06
Surr: 1,2-Dichloroethane-d4	98.4			70-130	%REC	4	10/30/2018 14:58
Surr: 4-Bromofluorobenzene	113			70-130	%REC	1	10/29/2018 18:06
Surr: 4-Bromofluorobenzene	112			70-130	%REC	4	10/30/2018 14:58
Surr: Dibromofluoromethane	97.8			70-130	%REC	1	10/29/2018 18:06
Surr: Dibromofluoromethane	91.1			70-130	%REC	4	10/30/2018 14:58
Surr: Toluene-d8	106			70-130	%REC	1	10/29/2018 18:06
Surr: Toluene-d8	98.4			70-130	%REC	4	10/30/2018 14:58
ELECTRICAL CONDUCTIVITY (SAR)			Method: USDA H60 METHOD 2		Prep: USDA Method 20B / 10/31/18		Analyst: JB
Electrical Conductivity @ Saturation	12		0.011	0.10	mmhos/cm @25°	20	11/1/2018 20:00
CHROMIUM, TRIVALENT			Method: CALCULATION				Analyst: JB
Chromium, Trivalent	29		0.36	1.2	mg/Kg-dry	1	10/31/2018 13:30
CHROMIUM, HEXAVALENT			Method: SW7196A		Prep: SW3060A / 10/30/18		Analyst: JEB
Chromium, Hexavalent	U		0.36	1.2	mg/Kg-dry	1	10/31/2018 10:10
MOISTURE			Method: SW3550C				Analyst: RBS
Moisture	13		0.025	0.050	% of sample	1	10/31/2018 16:58
PH			Method: SW9045D		Prep: EXTRACT / 10/31/18		Analyst: RZM
pH	8.38		0.10	0.100	s.u.	1	10/31/2018 13:55

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

ALS Group, USA

Date: 05-Nov-18

Client: HRL Compliance Solutions, Inc
Project: Terra Energy - RGU 33-24 Spill
Sample ID: BKGD 1
Collection Date: 10/26/2018 11:04 AM

Work Order: 18101838
Lab ID: 18101838-05
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
<hr/>							
METALS ANALYSIS BY ICP			Method: SW846 6010C		Prep: SW3050B / 10/29/18	Analyst: ABL	
Arsenic	4.9		0.10	0.39	mg/Kg-dry	1	10/31/2018 03:24
MOISTURE			Method: SW3550C			Analyst: RBS	
Moisture	14		0.025	0.050	% of sample	1	10/31/2018 16:58

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

ALS Group, USA

Date: 05-Nov-18

Client: HRL Compliance Solutions, Inc
Project: Terra Energy - RGU 33-24 Spill
Sample ID: BKGD 2
Collection Date: 10/26/2018 11:10 AM

Work Order: 18101838
Lab ID: 18101838-06
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
<hr/>							
METALS ANALYSIS BY ICP			Method: SW846 6010C		Prep: SW3050B / 10/29/18	Analyst: ABL	
Arsenic	3.0		0.099	0.38	mg/Kg-dry	1	10/31/2018 03:31
MOISTURE			Method: SW3550C			Analyst: RBS	
Moisture	13		0.025	0.050	% of sample	1	10/31/2018 16:58

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

ALS Group, USA

Date: 05-Nov-18

Client: HRL Compliance Solutions, Inc
Project: Terra Energy - RGU 33-24 Spill
Sample ID: BKGD 3
Collection Date: 10/26/2018 11:17 AM

Work Order: 18101838
Lab ID: 18101838-07
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
METALS ANALYSIS BY ICP							
Arsenic	5.8		0.11	0.40	mg/Kg-dry	1	10/31/2018 03:37
SOLUBLE CATIONS FOR SAR							
Calcium	270		0.86	5.0	mg/L	10	11/1/2018 00:02
Magnesium	42		0.068	2.0	mg/L	10	11/1/2018 00:02
Sodium	24		0.34	2.0	mg/L	10	11/1/2018 00:02
SODIUM ADSORPTION RATIO							
Sodium Adsorption Ratio	0.36		0.010	0.010	none	1	10/31/2018
ELECTRICAL CONDUCTIVITY (SAR)							
Electrical Conductivity @ Saturation	1.6		0.011	0.10	mmhos/cm @25°	20	11/1/2018 20:00
MOISTURE							
Moisture	16		0.025	0.050	% of sample	1	10/31/2018 16:58
PH							
pH	8.46		0.10	0.100	s.u.	1	10/31/2018 13:55

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

Client: HRL Compliance Solutions, Inc
Work Order: 18101838
Project: Terra Energy - RGU 33-24 Spill

QC BATCH REPORT

Batch ID: **126998** Instrument ID **GC8** Method: **SW8015M**

MBLK		Sample ID: DBLKS1-126998-126998				Units: mg/Kg		Analysis Date: 10/30/2018 06:35 PM		
Client ID:		Run ID: GC8_181030C				SeqNo: 5354860		Prep Date: 10/30/2018		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 2.987 0 3.33 0 89.7 33-111 0

LCS		Sample ID: DLCSS1-126998-126998				Units: mg/Kg		Analysis Date: 10/30/2018 07:04 PM		
Client ID:		Run ID: GC8_181030C				SeqNo: 5354861		Prep Date: 10/30/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28) 233.6 5.0 333 0 70.1 58-111 0
 Surr: 4-Terphenyl-d14 2.53 0 3.33 0 76 33-111 0

MS		Sample ID: 18101838-01A MS				Units: mg/Kg		Analysis Date: 10/30/2018 07:33 PM		
Client ID: North		Run ID: GC8_181030C				SeqNo: 5354862		Prep Date: 10/30/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28) 249.2 4.9 326.3 0 76.4 58-111 0
 Surr: 4-Terphenyl-d14 2.423 0 3.263 0 74.3 33-111 0

MSD		Sample ID: 18101838-01A MSD				Units: mg/Kg		Analysis Date: 10/30/2018 08:03 PM		
Client ID: North		Run ID: GC8_181030C				SeqNo: 5354863		Prep Date: 10/30/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28) 220.7 4.9 324.5 0 68 58-111 249.2 12.2 30
 Surr: 4-Terphenyl-d14 2.424 0 3.245 0 74.7 33-111 2.423 0.0449 30

The following samples were analyzed in this batch:

18101838-01A	18101838-02A	18101838-03A
18101838-04A		

Client: HRL Compliance Solutions, Inc
Work Order: 18101838
Project: Terra Energy - RGU 33-24 Spill

QC BATCH REPORT

Batch ID: **126976** Instrument ID **GC10** Method: **SW8015D**

MBLK		Sample ID: MBLK-126976-126976				Units: µg/Kg-dry		Analysis Date: 10/30/2018 02:08 A		
Client ID:		Run ID: GC10_181029B				SeqNo: 5351754		Prep Date: 10/29/2018		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>	4746	0	5000	0	94.9	71-123	0			

LCS		Sample ID: LCS-126976-126976				Units: µg/Kg-dry		Analysis Date: 10/30/2018 01:15 A		
Client ID:		Run ID: GC10_181029B				SeqNo: 5351753		Prep Date: 10/29/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	480800	5,000	500000	0	96.2	71-123	0			
<i>Surr: Toluene-d8</i>	4667	0	5000	0	93.3	71-123	0			

MS		Sample ID: 18101838-01A MS				Units: µg/Kg-dry		Analysis Date: 10/30/2018 05:38 A		
Client ID: North		Run ID: GC10_181029B				SeqNo: 5351762		Prep Date: 10/29/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	694200	6,800	676500	0	103	71-123	0			
<i>Surr: Toluene-d8</i>	6775	0	6765	0	100	71-123	0			

MSD		Sample ID: 18101838-01A MSD				Units: µg/Kg-dry		Analysis Date: 10/30/2018 06:31 A		
Client ID: North		Run ID: GC10_181029B				SeqNo: 5351763		Prep Date: 10/29/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	687400	6,800	676500	0	102	71-123	694200	0.99	30	
<i>Surr: Toluene-d8</i>	6920	0	6765	0	102	71-123	6775	2.11	30	

The following samples were analyzed in this batch:

18101838-01A	18101838-02A	18101838-03A
18101838-04A		

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

Client: HRL Compliance Solutions, Inc
Work Order: 18101838
Project: Terra Energy - RGU 33-24 Spill

QC BATCH REPORT

Batch ID: **126968** Instrument ID **HG1** Method: **SW7471B**

MBLK		Sample ID: MBLK-126968-126968				Units: mg/Kg		Analysis Date: 10/30/2018 12:58 PM		
Client ID:		Run ID: HG1_181030A				SeqNo: 5353428		Prep Date: 10/29/2018		DF: 1
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: LCS-126968-126968				Units: mg/Kg		Analysis Date: 10/30/2018 01:07 PM		
Client ID:		Run ID: HG1_181030A				SeqNo: 5353432		Prep Date: 10/29/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1742 0.020 0.1665 0 105 80-120 0

MS		Sample ID: 18101769-03B MS				Units: mg/Kg		Analysis Date: 10/30/2018 01:17 PM		
Client ID:		Run ID: HG1_181030A				SeqNo: 5353436		Prep Date: 10/29/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1952 0.017 0.1413 0.06419 92.7 75-125 0

MSD		Sample ID: 18101769-03B MSD				Units: mg/Kg		Analysis Date: 10/30/2018 01:20 PM		
Client ID:		Run ID: HG1_181030A				SeqNo: 5353437		Prep Date: 10/29/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1876 0.017 0.1409 0.06419 87.6 75-125 0.1952 3.97 35

The following samples were analyzed in this batch:

18101838-01A	18101838-02A	18101838-03A
18101838-04A		

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

Client: HRL Compliance Solutions, Inc
Work Order: 18101838
Project: Terra Energy - RGU 33-24 Spill

QC BATCH REPORT

Batch ID: **127006**

Instrument ID **ICP2**

Method: **SW846 6010C**

Sample ID: MBLK-127006-127006				Units: mg/Kg			Analysis Date: 10/31/2018 12:28 A			
Client ID:		Run ID: ICP2_181030A			SeqNo: 5354443		Prep Date: 10/29/2018		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	0.165	0.25								J
Cadmium	U	0.50								
Chromium	0.1535	0.25								J
Copper	0.1245	0.50								J
Lead	0.152	0.25								J
Nickel	U	0.25								
Selenium	U	0.50								
Silver	U	0.25								
Zinc	0.248	0.50								J

LCS				Sample ID: LCS-127006-127006				Units: mg/Kg		Analysis Date: 10/31/2018 12:35 A	
Client ID:			Run ID: ICP2_181030A			SeqNo: 5354444		Prep Date: 10/29/2018		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Arsenic	4.855	0.25	5	0	97.1	80-120	0				
Barium	5.179	0.25	5	0	104	80-120	0				
Cadmium	5.274	0.50	5	0	105	80-120	0				
Chromium	5.246	0.25	5	0	105	80-120	0				
Copper	5.549	0.50	5	0	111	80-120	0				
Lead	5.239	0.25	5	0	105	80-120	0				
Nickel	5.35	0.25	5	0	107	80-120	0				
Selenium	4.865	0.50	5	0	97.3	80-120	0				
Silver	4.675	0.25	5	0	93.5	80-120	0				
Zinc	5.294	0.50	5	0	106	80-120	0				

MS				Sample ID: 18101621-11BMS			Units: mg/Kg		Analysis Date: 10/31/2018 01:05 A		
Client ID:			Run ID: ICP2_181030A			SeqNo: 5354449		Prep Date: 10/29/2018		DF: 10	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Arsenic	33.99	3.6	7.246	32.66	18.3	75-125	0			SO	
Barium	77.25	3.6	7.246	57.76	269	75-125	0			SO	
Cadmium	7.629	7.2	7.246	0.7983	94.3	75-125	0				
Chromium	199.2	3.6	7.246	163.2	497	75-125	0			SO	
Copper	82.02	7.2	7.246	70.68	156	75-125	0			SO	
Lead	90.41	3.6	7.246	95.5	-70.1	75-125	0			SO	
Nickel	25.94	3.6	7.246	21.04	67.6	75-125	0			S	
Selenium	5.681	7.2	7.246	0.4405	72.3	75-125	0			JS	
Silver	7.681	3.6	7.246	0.2489	103	75-125	0				
Zinc	686	7.2	7.246	788	-1410	75-125	0			SO	

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

Client: HRL Compliance Solutions, Inc
Work Order: 18101838
Project: Terra Energy - RGU 33-24 Spill

QC BATCH REPORT

Batch ID: **127006** Instrument ID **ICP2** Method: **SW846 6010C**

MSD				Sample ID: 18101621-11BMSD			Units: mg/Kg		Analysis Date: 10/31/2018 01:11 A	
Client ID:				Run ID: ICP2_181030A			SeqNo: 5354450		Prep Date: 10/29/2018	
									DF: 10	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	33.97	3.6	7.289	32.66	18	75-125	33.99	0.0603	20	SO
Barium	84.17	3.6	7.289	57.76	362	75-125	77.25	8.57	20	SO
Cadmium	7.507	7.3	7.289	0.7983	92	75-125	7.629	1.61	20	
Chromium	158.5	3.6	7.289	163.2	-64.2	75-125	199.2	22.7	20	SRO
Copper	74.19	7.3	7.289	70.68	48.1	75-125	82.02	10	20	SO
Lead	88.24	3.6	7.289	95.5	-99.6	75-125	90.41	2.44	20	SO
Nickel	23.25	3.6	7.289	21.04	30.3	75-125	25.94	10.9	20	S
Selenium	6.224	7.3	7.289	0.4405	79.4	75-125	5.681	0	20	J
Silver	8.382	3.6	7.289	0.2489	112	75-125	7.681	8.73	20	
Zinc	716.3	7.3	7.289	788	-984	75-125	686	4.32	20	SO

The following samples were analyzed in this batch:

18101838-01A	18101838-02A	18101838-03A
18101838-04A	18101838-05A	18101838-06A
18101838-07A		

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

Client: HRL Compliance Solutions, Inc
Work Order: 18101838
Project: Terra Energy - RGU 33-24 Spill

QC BATCH REPORT

Batch ID: **127191** Instrument ID **ICPMS3** Method: **SW6020A**

DUP		Sample ID: 18101838-07BDUP				Units: mg/L		Analysis Date: 11/1/2018 12:03 AM		
Client ID: BKGD 3		Run ID: ICPMS3_181031A				SeqNo: 5358202		Prep Date: 10/31/2018		DF: 10
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	279.3	5.0	0	0	0	0-0	271.8	2.71		
Magnesium	42.98	2.0	0	0	0	0-0	42.26	1.67		
Sodium	24.32	2.0	0	0	0	0-0	24.04	1.14		

The following samples were analyzed in this batch:

18101838-07B

Batch ID: **127191** Instrument ID **SAR** Method: **USDA H60 Metho**

DUP		Sample ID: 18101838-07BDUP				Units: none		Analysis Date: 10/31/2018		
Client ID: BKGD 3		Run ID: SAR_181031A				SeqNo: 5358667		Prep Date: 10/31/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	0.3578	0.010	0	0	0		0.3582	0.109	50	

The following samples were analyzed in this batch:

18101838-07B

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

Client: HRL Compliance Solutions, Inc
Work Order: 18101838
Project: Terra Energy - RGU 33-24 Spill

QC BATCH REPORT

Batch ID: **126997** Instrument ID **SVMS5** Method: **SW846 8270D**

MBLK		Sample ID: SBLKS1-126997-126997				Units: µg/Kg		Analysis Date: 10/30/2018 02:12 PM		
Client ID:		Run ID: SVMS5_181030A				SeqNo: 5353228		Prep Date: 10/30/2018		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								
<hr/>										
<i>Surr: 2-Fluorobiphenyl</i>	2514	0	3333	0	75.4	44-107	0			
<i>Surr: 4-Terphenyl-d14</i>	3112	0	3333	0	93.4	52-123	0			
<hr/>										
<i>Surr: Nitrobenzene-d5</i>	2147	0	3333	0	64.4	41-94	0			

LCS		Sample ID: SLCSS1-126997-126997				Units: µg/Kg		Analysis Date: 10/30/2018 02:36 PM		
Client ID:		Run ID: SVMS5_181030A				SeqNo: 5353229		Prep Date: 10/30/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1199	6.7	1333	0	90	55-101	0			
Anthracene	1265	6.7	1333	0	94.9	67-105	0			
Benzo(a)anthracene	1298	6.7	1333	0	97.4	68-105	0			
Benzo(a)pyrene	1239	6.7	1333	0	92.9	68-110	0			
Benzo(b)fluoranthene	1269	6.7	1333	0	95.2	65-110	0			
Benzo(k)fluoranthene	1226	6.7	1333	0	92	66-113	0			
Chrysene	1230	6.7	1333	0	92.3	68-108	0			
Dibenzo(a,h)anthracene	1309	6.7	1333	0	98.2	62-119	0			
Fluoranthene	1297	6.7	1333	0	97.3	67-106	0			
Fluorene	1321	6.7	1333	0	99.1	59-107	0			
Indeno(1,2,3-cd)pyrene	1316	6.7	1333	0	98.7	56-120	0			
Naphthalene	1084	6.7	1333	0	81.3	46-98	0			
Pyrene	1259	6.7	1333	0	94.4	60-119	0			
<hr/>										
<i>Surr: 2-Fluorobiphenyl</i>	2717	0	3333	0	81.5	44-107	0			
<i>Surr: 4-Terphenyl-d14</i>	2833	0	3333	0	85	52-123	0			
<hr/>										
<i>Surr: Nitrobenzene-d5</i>	2553	0	3333	0	76.6	41-94	0			

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

Client: HRL Compliance Solutions, Inc
Work Order: 18101838
Project: Terra Energy - RGU 33-24 Spill

QC BATCH REPORT

Batch ID: **126997** Instrument ID **SVMS5** Method: **SW846 8270D**

MS				Sample ID: 18101602-35B MS				Units: µg/Kg		Analysis Date: 10/30/2018 05:42 PM	
Client ID:			Run ID: SVMS5_181030A			SeqNo: 5355509		Prep Date: 10/30/2018		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	1022	6.6	1324	0	77.2	55-101	0				
Anthracene	1172	6.6	1324	0	88.6	67-105	0				
Benzo(a)anthracene	1235	6.6	1324	0	93.3	68-105	0				
Benzo(a)pyrene	1213	6.6	1324	0	91.6	68-110	0				
Benzo(b)fluoranthene	1202	6.6	1324	0	90.8	65-110	0				
Benzo(k)fluoranthene	1160	6.6	1324	0	87.6	66-113	0				
Chrysene	1160	6.6	1324	0	87.6	68-108	0				
Dibenzo(a,h)anthracene	1194	6.6	1324	0	90.2	62-119	0				
Fluoranthene	1216	6.6	1324	8.616	91.2	67-106	0				
Fluorene	1179	6.6	1324	0	89.1	59-107	0				
Indeno(1,2,3-cd)pyrene	1214	6.6	1324	0	91.7	56-120	0				
Naphthalene	871.2	6.6	1324	0	65.8	46-98	0				
Pyrene	1239	6.6	1324	6.627	93.1	60-119	0				
Surr: 2-Fluorobiphenyl	2378	0	3310	0	71.8	44-107	0				
Surr: 4-Terphenyl-d14	2929	0	3310	0	88.5	52-123	0				
Surr: Nitrobenzene-d5	2177	0	3310	0	65.8	41-94	0				

MSD				Sample ID: 18101602-35B MSD			Units: µg/Kg		Analysis Date: 10/30/2018 06:06 PM		
Client ID:			Run ID: SVMS5_181030A			SeqNo: 5355510		Prep Date: 10/30/2018		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	1000	6.6	1325	0	75.5	55-101	1022	2.17	30		
Anthracene	1110	6.6	1325	0	83.8	67-105	1172	5.45	30		
Benzo(a)anthracene	1141	6.6	1325	0	86.2	68-105	1235	7.86	30		
Benzo(a)pyrene	1125	6.6	1325	0	84.9	68-110	1213	7.53	30		
Benzo(b)fluoranthene	1101	6.6	1325	0	83.1	65-110	1202	8.74	30		
Benzo(k)fluoranthene	1078	6.6	1325	0	81.4	66-113	1160	7.28	30		
Chrysene	1059	6.6	1325	0	79.9	68-108	1160	9.13	30		
Dibenzo(a,h)anthracene	1110	6.6	1325	0	83.8	62-119	1194	7.24	30		
Fluoranthene	1167	6.6	1325	8.616	87.5	67-106	1216	4.11	30		
Fluorene	1106	6.6	1325	0	83.5	59-107	1179	6.43	30		
Indeno(1,2,3-cd)pyrene	1129	6.6	1325	0	85.2	56-120	1214	7.29	30		
Naphthalene	857.2	6.6	1325	0	64.7	46-98	871.2	1.63	30		
Pyrene	1143	6.6	1325	6.627	85.8	60-119	1239	8.06	30		
Surr: 2-Fluorobiphenyl	2377	0	3312	0	71.8	44-107	2378	0.0518	40		
Surr: 4-Terphenyl-d14	2755	0	3312	0	83.2	52-123	2929	6.14	40		
Surr: Nitrobenzene-d5	2202	0	3312	0	66.5	41-94	2177	1.12	40		

The following samples were analyzed in this batch:

18101838-01A	18101838-02A	18101838-03A
18101838-04A		

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

Client: HRL Compliance Solutions, Inc
Work Order: 18101838
Project: Terra Energy - RGU 33-24 Spill

QC BATCH REPORT

Batch ID: **126974** Instrument ID **VMS7** Method: **SW8260C**

MBLK		Sample ID: MBLK-126974-126974				Units: µg/Kg-dry		Analysis Date: 10/29/2018 12:30 PM		
Client ID:		Run ID: VMS7_181029A				SeqNo: 5350301		Prep Date: 10/29/2018		DF: 1
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								
Surr: 1,2-Dichloroethane-d4	1022	0	1000	0	102	70-130	0			
Surr: 4-Bromofluorobenzene	997.5	0	1000	0	99.8	70-130	0			
Surr: Dibromofluoromethane	984	0	1000	0	98.4	70-130	0			
Surr: Toluene-d8	914.5	0	1000	0	91.4	70-130	0			

LCS		Sample ID: LCS-126974-126974				Units: µg/Kg-dry		Analysis Date: 10/29/2018 11:59 A		
Client ID:		Run ID: VMS7_181029A				SeqNo: 5350300		Prep Date: 10/29/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1044	30	1000	0	104	75-125	0			
Ethylbenzene	964.5	30	1000	0	96.4	75-125	0			
m,p-Xylene	1852	60	2000	0	92.6	80-125	0			
o-Xylene	987.5	30	1000	0	98.8	75-125	0			
Toluene	970	30	1000	0	97	70-125	0			
Xylenes, Total	2839	90	3000	0	94.6	75-125	0			
Surr: 1,2-Dichloroethane-d4	1000	0	1000	0	100	70-130	0			
Surr: 4-Bromofluorobenzene	1040	0	1000	0	104	70-130	0			
Surr: Dibromofluoromethane	1025	0	1000	0	102	70-130	0			
Surr: Toluene-d8	940	0	1000	0	94	70-130	0			

MS		Sample ID: 18101838-01A MS				Units: µg/Kg-dry		Analysis Date: 11/1/2018 04:07 AM		
Client ID: North		Run ID: VMS10_181031B				SeqNo: 5358498		Prep Date: 10/29/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	674	30	750	0	89.9	75-125	0			
Ethylbenzene	745	30	750	0	99.3	75-125	0			
m,p-Xylene	1500	60	750	0	200	80-125	0			S
o-Xylene	806.5	30	750	0	108	75-125	0			
Toluene	655	30	750	0	87.3	70-125	0			
Xylenes, Total	2307	90	2250	0	103	75-125	0			
Surr: 1,2-Dichloroethane-d4	916.5	0	1000	0	91.6	70-130	0			
Surr: 4-Bromofluorobenzene	1024	0	1000	0	102	70-130	0			
Surr: Dibromofluoromethane	886	0	1000	0	88.6	70-130	0			
Surr: Toluene-d8	997	0	1000	0	99.7	70-130	0			

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

Client: HRL Compliance Solutions, Inc
Work Order: 18101838
Project: Terra Energy - RGU 33-24 Spill

QC BATCH REPORT

Batch ID: **126974** Instrument ID **VMS7** Method: **SW8260C**

MSD				Sample ID: 18101838-01A MSD				Units: µg/Kg-dry		Analysis Date: 11/1/2018 04:23 AM			
Client ID: North				Run ID: VMS10_181031B				SeqNo: 5358499		Prep Date: 10/29/2018		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
Benzene	830	30	750	0	111	75-125	674	20.7	30				
Ethylbenzene	925.5	30	750	0	123	75-125	745	21.6	30				
m,p-Xylene	1857	60	750	0	248	80-125	1500	21.2	30	S			
o-Xylene	971	30	750	0	129	75-125	806.5	18.5	30	S			
Toluene	805.5	30	750	0	107	70-125	655	20.6	30				
Xylenes, Total	2828	90	2250	0	126	75-125	2307	20.3	30	S			
Surr: 1,2-Dichloroethane-d4	906	0	1000	0	90.6	70-130	916.5	1.15	30				
Surr: 4-Bromofluorobenzene	1021	0	1000	0	102	70-130	1024	0.342	30				
Surr: Dibromofluoromethane	878	0	1000	0	87.8	70-130	886	0.907	30				
Surr: Toluene-d8	998.5	0	1000	0	99.8	70-130	997	0.15	30				

The following samples were analyzed in this batch:

18101838-01A	18101838-02A	18101838-03A
18101838-04A		

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

Client: HRL Compliance Solutions, Inc
Work Order: 18101838
Project: Terra Energy - RGU 33-24 Spill

QC BATCH REPORT

Batch ID: **127109** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK		Sample ID: MBLK-127109-127109				Units: mg/Kg		Analysis Date: 10/31/2018 10:10 A		
Client ID:		Run ID: WETCHEM_181031B		SeqNo: 5354868		Prep Date: 10/30/2018		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.33	1.0								J

LCS		Sample ID: LCS-127109-127109				Units: mg/Kg		Analysis Date: 10/31/2018 10:10 A		
Client ID:		Run ID: WETCHEM_181031B		SeqNo: 5354869		Prep Date: 10/30/2018		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	4.23	1.0	5	0	84.6	80-120	0			

MS		Sample ID: 18101838-01A MS				Units: mg/Kg		Analysis Date: 10/31/2018 10:10 A		
Client ID: North		Run ID: WETCHEM_181031B		SeqNo: 5354871		Prep Date: 10/30/2018		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	3.931	0.99	4.95	0.07	78	75-125	0			

MS		Sample ID: 18101838-01A MSI				Units: mg/Kg		Analysis Date: 10/31/2018 10:10 A		
Client ID: North		Run ID: WETCHEM_181031B		SeqNo: 5354873		Prep Date: 10/30/2018		DF: 100		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	2063	100	2253	0.07	91.6	75-125	0			

MSD		Sample ID: 18101838-01A MSD				Units: mg/Kg		Analysis Date: 10/31/2018 10:10 A		
Client ID: North		Run ID: WETCHEM_181031B		SeqNo: 5354872		Prep Date: 10/30/2018		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	3.786	1.0	5.102	0.07	72.8	75-125	3.931	3.76	20	S

The following samples were analyzed in this batch:

18101838-01A	18101838-02A	18101838-03A
18101838-04A		

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

Client: HRL Compliance Solutions, Inc
Work Order: 18101838
Project: Terra Energy - RGU 33-24 Spill

QC BATCH REPORT

Batch ID: **127166** Instrument ID **WETCHEM** Method: **SW9045D**

LCS		Sample ID: LCS-127166-127166				Units: s.u.		Analysis Date: 10/31/2018 01:55 PM			
Client ID:		Run ID: WETCHEM_181031O				SeqNo: 5356200		Prep Date: 10/31/2018		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

pH	3.92	0.10	4	0	98	90-110	0			
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DUP				Sample ID: 18101575-01B DUP				Units: s.u.			Analysis Date: 10/31/2018 01:55 PM			
Client ID:				Run ID: WETCHEM_181031O				SeqNo: 5356203			Prep Date: 10/31/2018		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual				

pH	8.92	0.10	0	0	0	0-0	8.88	0.449	20	H
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DUP				Sample ID: 18101796-02A DUP				Units: s.u.			Analysis Date: 10/31/2018 01:55 PM				
Client ID:				Run ID: WETCHEM_181031O				SeqNo: 5356213			Prep Date: 10/31/2018			DF: 1	
Analyte				Result		PQL	SPK Val	SPK Ref Value	%REC		Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

pH	7.97	0.10	0	0	0	0-0	8.26	3.57	20	
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The following samples were analyzed in this batch:

18101838-01A	18101838-02A	18101838-03A
18101838-04A	18101838-07A	

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

Client: HRL Compliance Solutions, Inc
Work Order: 18101838
Project: Terra Energy - RGU 33-24 Spill

QC BATCH REPORT

Batch ID: **127191** Instrument ID **WETCHEM** Method: **USDA H60 Metho**

DUP		Sample ID: 18101838-07B DUP				Units: mmhos/cm @25°		Analysis Date: 11/1/2018 08:00 PM		
Client ID: BKGD 3		Run ID: WETCHEM_181101T		SeqNo: 5361416		Prep Date: 10/31/2018		DF: 20		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ Saturation	1.664	0.10	0	0	0		1.564	6.2	50	

The following samples were analyzed in this batch:

18101838-07B

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

Client: HRL Compliance Solutions, Inc
Work Order: 18101838
Project: Terra Energy - RGU 33-24 Spill

QC BATCH REPORT

Batch ID: **R248324** Instrument ID **MOIST** Method: **SW3550C**

MBLK		Sample ID: WBLKS-R248324				Units: % of sample		Analysis Date: 10/31/2018 04:58 PM		
Client ID:		Run ID: MOIST_181031B				SeqNo: 5361336		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	0.03	0.050								J

LCS		Sample ID: LCS-R248324				Units: % of sample		Analysis Date: 10/31/2018 04:58 PM		
Client ID:		Run ID: MOIST_181031B				SeqNo: 5361335		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	100	0.050	100	0	100	99.5-100.5	0			

DUP		Sample ID: 18101868-01A DUP				Units: % of sample		Analysis Date: 10/31/2018 04:58 PM		
Client ID:		Run ID: MOIST_181031B				SeqNo: 5361312		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	8.99	0.050	0	0	0	0-0	9.14	1.65	10	

DUP		Sample ID: 18101838-02A DUP				Units: % of sample		Analysis Date: 10/31/2018 04:58 PM		
Client ID: Middle		Run ID: MOIST_181031B				SeqNo: 5361317		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	17.68	0.050	0	0	0	0-0	17.61	0.397	10	

The following samples were analyzed in this batch:

18101838-02A	18101838-03A	18101838-04A
18101838-05A	18101838-06A	18101838-07A

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

Client: HRL Compliance Solutions, Inc
Work Order: 18101838
Project: Terra Energy - RGU 33-24 Spill

QC BATCH REPORT

Batch ID: **R248521** Instrument ID **MOIST** Method: **SW3550C**

MBLK		Sample ID: WBLKS-R248521				Units: % of sample		Analysis Date: 11/2/2018 04:50 PM		
Client ID:		Run ID: MOIST_181102D				SeqNo: 5365144		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture U 0.050

LCS		Sample ID: LCS-R248521				Units: % of sample		Analysis Date: 11/2/2018 04:50 PM		
Client ID:		Run ID: MOIST_181102D				SeqNo: 5365143		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 100 0.050 100 0 100 99.5-100.5 0

DUP		Sample ID: 18101838-01A DUP				Units: % of sample		Analysis Date: 11/2/2018 04:50 PM		
Client ID: North		Run ID: MOIST_181102D				SeqNo: 5365142		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 15.14 0.050 0 0 0 0-0 15.13 0.0661 10

The following samples were analyzed in this batch:

18101838-01A

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



ALS Laboratory Group

3352 128th Ave. Holland, MI 49424

TF: (800) 443-1511 PH: (616) 399-6070 FX: (616) 399-6185

Chain-of-Custody

Form 202r8

WORKORDER
#

18101838

PROJECT NAME		Terra Energy - RCU 23-24 Spill		SAMPLER		Casey Richardson		DATE		10-26-18		PAGE		1 of 1		
PROJECT No.		RCU 33-24 SPILL		SITE ID				TURNAROUND		24 HR		DISPOSAL		By Lab or Return to Client		
COMPANY NAME		HRL Compliance Solutions, Inc.		EDD FORMAT												
SEND REPORT TO		Kris Rowe, Mike Gardner		PURCHASE ORDER												
ADDRESS		2385 F 1/2 Road		BILL TO COMPANY		Terra Energy										
CITY / STATE / ZIP		Grand Junction, CO. 81505		INVOICE ATTN TO		Mike Gardner										
PHONE		970-243-3271		ADDRESS		1058 County Road 215										
FAX		970-243-3280		CITY / STATE / ZIP		Parachute, CO 81635										
E-MAIL		krowe@hrlcomp.com, mgardner@terraep.com		PHONE		970-263-2760										
				FAX												
				E-MAIL		mgardner@terraep.com										
Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	DRO	GRO	BTEX	Metals (COGCC Table 910-1)	Semi-Vols - PAH	SAR	EC	pH	ARSENIC
1	NORTH	S	10-26-18	1012	3	8	II	Y	Y	Y	Y	Y	Y	Y	Y	
2	MIDDLE			1038	3			Y	Y	Y	Y	Y	Y	Y	Y	
3	SOUTH			1044	3			Y	Y	Y	Y	Y	Y	Y	Y	
4	SPOILS			1051	3			Y	Y	Y	Y	Y	Y	Y	Y	
5	BKGD 1			1104	1											Y
6	BKGD 2			1110	1											Y
7	BKGD 3			1117	2											Y

*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:	QC PACKAGE (check below)
SPC 4.2°C (C)	<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
RELINQUISHED BY: [Signature]	Casey Richardson	10-26-18	1325
RECEIVED BY: [Signature]	W. Martin	10-26-18	1325
RELINQUISHED BY: [Signature]	W. Martin	10-26-18	1830
RECEIVED BY: [Signature]	Kevin W. ERENOW	10/27/18	1000
RELINQUISHED BY:			
RECEIVED BY:			

Sample Receipt Checklist

Client Name: **HRL**

Date/Time Received: **27-Oct-18 10:00**

Work Order: **18101838**

Received by: **KRW**

Checklist completed by Keith Wurenga
eSignature

27-Oct-18
Date

Reviewed by: Chad Whelton
eSignature

29-Oct-18
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>4.2/4.2 C</u>		<u>SR2</u>
Cooler(s)/Kit(s):	<u></u>		
Date/Time sample(s) sent to storage:	<u>10/27/2018 11:12:53 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: