20-Jul-2016

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

Re: **Terra Energy - TR 24-28-597 - Pad Site Inves.** Work Order: **1607608**

Dear Kris,

ALS Environmental received 4 samples on 13-Jul-2016 10:30 AM for the analyses presented in the following report.

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

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

The total number of pages in this report is 30.

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

Sincerely,

Electronically approved by: Chad Whelton

Chad Whelton
Project Manager

Certificate No: MN 998501

ADDRESS 3352 128th Avenue Holland, Michigan 49424-9263 | PHONE (616) 399-6070 | FAX (616) 399-6185
ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

ALS Group USA, Corp

Date: 20-Jul-16

Client: HRL Compliance Solutions, Inc
Project: Terra Energy - TR 24-28-597 - Pad Site Inves.
Work Order: **1607608**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1607608-01	Exc Conf- Tier 1 - Side Wall (SE Corner)	Soil		7/11/2016 08:00	7/13/2016 10:30	☐
1607608-02	Exc. Conf- Tier 1- Center Side Wall	Soil		7/11/2016 08:15	7/13/2016 10:30	☐
1607608-03	Exc. Conf- Tier 1- Excavation Bottom	Soil		7/11/2016 08:30	7/13/2016 10:30	☐
1607608-04	Exc. Conf- Bottom Tier- Excavation Bottom	Soil		7/11/2016 08:45	7/13/2016 10:30	☐

Client: HRL Compliance Solutions, Inc
Project: Terra Energy - TR 24-28-597 - Pad Site Inves.
Work Order: 1607608

Case Narrative

Batch 88552, Method CR6_7196_S, Sample 1607608-03A MS/MSD: The MS and MSD recovery was below the lower control limit for Hexavalent Chromium. The corresponding result in the parent sample may be biased low.

Batch 88649, Method ICP_6010_S, Sample 1607608-03A MS/MSD: The MS and MSD recovery was outside of the control limit for Zinc; however, the result in the parent sample is greater than 4x the spike amount. No qualification is required.

Batch 88649, Method ICP_6010_S, Sample 1607608-03A MS/MSD: The MS recovery was outside of the control limit for Arsenic. However, the MSD recovery and the RPD between the MS and MSD were in control. No qualification is required.

Batch 88649, Method ICP_6010_S, Sample 1607608-03A MSD: The MSD recovery was outside of the control limit for Nickel. However, the MS recovery and the RPD between the MS and MSD were in control. No qualification is required.

Batch 88649, Method ICP_6010_S, Sample 1607608-03A MS/MSD: The MS and MSD recoveries were above the upper control limits for Cadmium, Chromium and Copper. The corresponding results in the parent sample may be biased high.

Batch 88649, Method ICP_6010_S, Samples 1607608-01A, -02A, -03A and -04A: The metals reporting limits are elevated due to internal standard failure in the undiluted runs.

ALS Group USA, Corp

Date: 20-Jul-16

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte is present at an estimated concentration between the MDL and Report Limit
n	Not offered for accreditation
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.

Acronym	Description
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

Units Reported	Description
% of sample	Percent of Sample
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, Corp

Date: *20-Jul-16*

Client: HRL Compliance Solutions, Inc
Project: Terra Energy - TR 24-28-597 - Pad Site Inves. **Work Order:** 1607608
Sample ID: Exc Conf- Tier 1 - Side Wall (SE Corner) **Lab ID:** 1607608-01
Collection Date: 7/11/2016 08:00 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep: SW3550 / 7/13/16	Analyst: **IT**
DRO (C10-C28)	**20**		**5.1**	**mg/Kg-dry**	1	7/14/2016 05:12 AM
Surr: 4-Terphenyl-d14	*64.2*		*39-133*	*%REC*	1	7/14/2016 05:12 AM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015D**		Prep: SW5035 / 7/13/16	Analyst: **IT**
GRO (C6-C10)	ND		3.6	mg/Kg-dry	1	7/13/2016 05:00 PM
Surr: Toluene-d8	*106*		*50-150*	*%REC*	1	7/13/2016 05:00 PM
MERCURY BY CVAA			**SW7471B**		Prep: SW7471 / 7/13/16	Analyst: **LR**
Mercury	**0.035**		**0.016**	**mg/Kg-dry**	1	7/13/2016 07:13 PM
METALS ANALYSIS BY ICP			**SW846 6010C**		Prep: SW3050B / 7/15/16	Analyst: **JEC**
Arsenic	**26**		**2.4**	**mg/Kg-dry**	5	7/19/2016 12:46 PM
Barium	**580**		**2.4**	**mg/Kg-dry**	5	7/19/2016 12:46 PM
Cadmium	ND		0.96	mg/Kg-dry	1	7/18/2016 07:08 PM
Chromium	**33**		**2.4**	**mg/Kg-dry**	5	7/19/2016 12:46 PM
Copper	**28**		**0.96**	**mg/Kg-dry**	1	7/18/2016 07:08 PM
Lead	**17**		**2.4**	**mg/Kg-dry**	5	7/19/2016 12:46 PM
Nickel	**30**		**0.48**	**mg/Kg-dry**	1	7/18/2016 07:08 PM
Selenium	ND		4.8	mg/Kg-dry	5	7/19/2016 12:46 PM
Silver	ND		0.48	mg/Kg-dry	1	7/18/2016 07:08 PM
Zinc	**81**		**4.8**	**mg/Kg-dry**	5	7/19/2016 12:46 PM
SOLUBLE CATIONS FOR SAR			**SW846 6010C**		Prep: USDA Method 20B / 7/18/16	Analyst: **JEC**
Calcium	**180**		**5.0**	**mg/L**	10	7/18/2016 09:51 PM
Magnesium	**36**		**2.0**	**mg/L**	10	7/18/2016 09:51 PM
Sodium	**77**		**2.0**	**mg/L**	10	7/19/2016 04:19 PM
SODIUM ADSORPTION RATIO			**USDA H60 METHO**		Prep: USDA Method 20B / 7/18/16	Analyst: **JEC**
Sodium Adsorption Ratio	**1.4**		**0.010**	**none**	1	7/19/2016
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW846 8270D**		Prep: SW3550 / 7/13/16	Analyst: **RM**
Acenaphthene	ND		0.0082	mg/Kg-dry	1	7/14/2016 02:06 AM
Anthracene	ND		0.0082	mg/Kg-dry	1	7/14/2016 02:06 AM
Benzo(a)anthracene	ND		0.0082	mg/Kg-dry	1	7/14/2016 02:06 AM
Benzo(a)pyrene	ND		0.0082	mg/Kg-dry	1	7/14/2016 02:06 AM
Benzo(b)fluoranthene	ND		0.0082	mg/Kg-dry	1	7/14/2016 02:06 AM
Benzo(k)fluoranthene	ND		0.0082	mg/Kg-dry	1	7/14/2016 02:06 AM
Chrysene	ND		0.0082	mg/Kg-dry	1	7/14/2016 02:06 AM
Dibenzo(a,h)anthracene	ND		0.0082	mg/Kg-dry	1	7/14/2016 02:06 AM
Fluoranthene	ND		0.0082	mg/Kg-dry	1	7/14/2016 02:06 AM

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

Client: HRL Compliance Solutions, Inc
Project: Terra Energy - TR 24-28-597 - Pad Site Inves. **Work Order:** 1607608
Sample ID: Exc Conf- Tier 1 - Side Wall (SE Corner) **Lab ID:** 1607608-01
Collection Date: 7/11/2016 08:00 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Fluorene	ND		0.0082	mg/Kg-dry	1	7/14/2016 02:06 AM
Indeno(1,2,3-cd)pyrene	ND		0.0082	mg/Kg-dry	1	7/14/2016 02:06 AM
Naphthalene	ND		0.0082	mg/Kg-dry	1	7/14/2016 02:06 AM
Pyrene	ND		0.0082	mg/Kg-dry	1	7/14/2016 02:06 AM
Surr: 2-Fluorobiphenyl	*73.2*		*12-100*	*%REC*	1	7/14/2016 02:06 AM
Surr: 4-Terphenyl-d14	*89.9*		*25-137*	*%REC*	1	7/14/2016 02:06 AM
Surr: Nitrobenzene-d5	*57.3*		*37-107*	*%REC*	1	7/14/2016 02:06 AM
VOLATILE ORGANIC COMPOUNDS			**SW8260B**		Prep: SW5035 / 7/13/16	Analyst: **LSY**
Benzene	ND		0.030	mg/Kg-dry	1	7/13/2016 01:24 PM
Ethylbenzene	ND		0.030	mg/Kg-dry	1	7/13/2016 01:24 PM
m,p-Xylene	ND		0.060	mg/Kg-dry	1	7/13/2016 01:24 PM
o-Xylene	ND		0.030	mg/Kg-dry	1	7/13/2016 01:24 PM
Toluene	ND		0.030	mg/Kg-dry	1	7/13/2016 01:24 PM
Xylenes, Total	ND		0.090	mg/Kg-dry	1	7/13/2016 01:24 PM
Surr: 1,2-Dichloroethane-d4	*100*		*70-130*	*%REC*	1	7/13/2016 01:24 PM
Surr: 4-Bromofluorobenzene	*95.7*		*70-130*	*%REC*	1	7/13/2016 01:24 PM
Surr: Dibromofluoromethane	*97.2*		*70-130*	*%REC*	1	7/13/2016 01:24 PM
Surr: Toluene-d8	*96.8*		*70-130*	*%REC*	1	7/13/2016 01:24 PM
ELECTRICAL CONDUCTIVITY (SAR)			**USDA H60 METHO**		Prep: USDA Method 20B / 7/18/16	Analyst: **JB**
Electrical Conductivity @ Saturation	**1.6**		**0.050**	**mmhos/cm @2**	10	7/18/2016 01:30 PM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **MB**
Chromium, Trivalent	**33**		**0.62**	**mg/Kg-dry**	1	7/19/2016 04:00 PM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep: SW3060A / 7/13/16	Analyst: **MB**
Chromium, Hexavalent	ND		1.2	mg/Kg-dry	1	7/14/2016 03:30 PM
MOISTURE			**SW3550C**			Analyst: **EDL**
Moisture	**19**		**0.050**	**% of sample**	1	7/15/2016 02:09 PM
PH			**SW9045D**		Prep: EXTRACT / 7/13/16	Analyst: **KF**
pH	**7.9**			**s.u.**	1	7/13/2016 06:07 PM

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

ALS Group USA, Corp

Date: *20-Jul-16*

Client: HRL Compliance Solutions, Inc
Project: Terra Energy - TR 24-28-597 - Pad Site Inves.
Work Order: 1607608
Sample ID: Exc. Conf- Tier 1- Center Side Wall
Lab ID: 1607608-02
Collection Date: 7/11/2016 08:15 AM
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep: SW3550 / 7/13/16	Analyst: **IT**
DRO (C10-C28)	**34**		**5.1**	**mg/Kg-dry**	1	7/14/2016 05:42 AM
Surr: 4-Terphenyl-d14	*61.6*		*39-133*	*%REC*	1	7/14/2016 05:42 AM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015D**		Prep: SW5035 / 7/13/16	Analyst: **IT**
GRO (C6-C10)	ND		3.6	mg/Kg-dry	1	7/13/2016 05:25 PM
Surr: Toluene-d8	*104*		*50-150*	*%REC*	1	7/13/2016 05:25 PM
MERCURY BY CVAA			**SW7471B**		Prep: SW7471 / 7/13/16	Analyst: **LR**
Mercury	**0.032**		**0.015**	**mg/Kg-dry**	1	7/13/2016 07:16 PM
METALS ANALYSIS BY ICP			**SW846 6010C**		Prep: SW3050B / 7/15/16	Analyst: **JEC**
Arsenic	**16**		**2.2**	**mg/Kg-dry**	5	7/19/2016 12:51 PM
Barium	**550**		**2.2**	**mg/Kg-dry**	5	7/19/2016 12:51 PM
Cadmium	**0.58**		**0.35**	**mg/Kg-dry**	1	7/18/2016 07:13 PM
Chromium	**31**		**2.2**	**mg/Kg-dry**	5	7/19/2016 12:51 PM
Copper	**26**		**0.44**	**mg/Kg-dry**	1	7/18/2016 07:13 PM
Lead	**14**		**2.2**	**mg/Kg-dry**	5	7/19/2016 12:51 PM
Nickel	**29**		**0.44**	**mg/Kg-dry**	1	7/18/2016 07:13 PM
Selenium	ND		2.2	mg/Kg-dry	5	7/19/2016 12:51 PM
Silver	ND		0.44	mg/Kg-dry	1	7/18/2016 07:13 PM
Zinc	**69**		**4.4**	**mg/Kg-dry**	5	7/19/2016 12:51 PM
SOLUBLE CATIONS FOR SAR			**SW846 6010C**		Prep: USDA Method 20B / 7/18/16	Analyst: **JEC**
Calcium	**240**		**5.0**	**mg/L**	10	7/18/2016 09:56 PM
Magnesium	**56**		**2.0**	**mg/L**	10	7/18/2016 09:56 PM
Sodium	**68**		**4.0**	**mg/L**	20	7/19/2016 04:27 PM
SODIUM ADSORPTION RATIO			**USDA H60 METHO**		Prep: USDA Method 20B / 7/18/16	Analyst: **JEC**
Sodium Adsorption Ratio	**1.0**		**0.010**	**none**	1	7/19/2016
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW846 8270D**		Prep: SW3550 / 7/13/16	Analyst: **RM**
Acenaphthene	ND		0.0081	mg/Kg-dry	1	7/14/2016 02:27 AM
Anthracene	ND		0.0081	mg/Kg-dry	1	7/14/2016 02:27 AM
Benzo(a)anthracene	ND		0.0081	mg/Kg-dry	1	7/14/2016 02:27 AM
Benzo(a)pyrene	ND		0.0081	mg/Kg-dry	1	7/14/2016 02:27 AM
Benzo(b)fluoranthene	ND		0.0081	mg/Kg-dry	1	7/14/2016 02:27 AM
Benzo(k)fluoranthene	ND		0.0081	mg/Kg-dry	1	7/14/2016 02:27 AM
Chrysene	ND		0.0081	mg/Kg-dry	1	7/14/2016 02:27 AM
Dibenzo(a,h)anthracene	ND		0.0081	mg/Kg-dry	1	7/14/2016 02:27 AM
Fluoranthene	ND		0.0081	mg/Kg-dry	1	7/14/2016 02:27 AM

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

Client: HRL Compliance Solutions, Inc
Project: Terra Energy - TR 24-28-597 - Pad Site Inves. **Work Order:** 1607608
Sample ID: Exc. Conf- Tier 1- Center Side Wall **Lab ID:** 1607608-02
Collection Date: 7/11/2016 08:15 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Fluorene	ND		0.0081	mg/Kg-dry	1	7/14/2016 02:27 AM
Indeno(1,2,3-cd)pyrene	ND		0.0081	mg/Kg-dry	1	7/14/2016 02:27 AM
Naphthalene	ND		0.0081	mg/Kg-dry	1	7/14/2016 02:27 AM
Pyrene	ND		0.0081	mg/Kg-dry	1	7/14/2016 02:27 AM
Surr: 2-Fluorobiphenyl	*76.4*		*12-100*	*%REC*	1	7/14/2016 02:27 AM
Surr: 4-Terphenyl-d14	*90.0*		*25-137*	*%REC*	1	7/14/2016 02:27 AM
Surr: Nitrobenzene-d5	*59.2*		*37-107*	*%REC*	1	7/14/2016 02:27 AM
VOLATILE ORGANIC COMPOUNDS			**SW8260B**		Prep: SW5035 / 7/13/16	Analyst: **LSY**
Benzene	ND		0.030	mg/Kg-dry	1	7/13/2016 01:49 PM
Ethylbenzene	ND		0.030	mg/Kg-dry	1	7/13/2016 01:49 PM
m,p-Xylene	ND		0.060	mg/Kg-dry	1	7/13/2016 01:49 PM
o-Xylene	ND		0.030	mg/Kg-dry	1	7/13/2016 01:49 PM
Toluene	ND		0.030	mg/Kg-dry	1	7/13/2016 01:49 PM
Xylenes, Total	ND		0.090	mg/Kg-dry	1	7/13/2016 01:49 PM
Surr: 1,2-Dichloroethane-d4	*104*		*70-130*	*%REC*	1	7/13/2016 01:49 PM
Surr: 4-Bromofluorobenzene	*94.7*		*70-130*	*%REC*	1	7/13/2016 01:49 PM
Surr: Dibromofluoromethane	*98.4*		*70-130*	*%REC*	1	7/13/2016 01:49 PM
Surr: Toluene-d8	*97.6*		*70-130*	*%REC*	1	7/13/2016 01:49 PM
ELECTRICAL CONDUCTIVITY (SAR)			**USDA H60 METHO**		Prep: USDA Method 20B / 7/18/16	Analyst: **JB**
Electrical Conductivity @ Saturation	**1.2**		**0.050**	**mmhos/cm @2**	10	7/18/2016 01:30 PM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **MB**
Chromium, Trivalent	**31**		**0.61**	**mg/Kg-dry**	1	7/19/2016 04:00 PM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep: SW3060A / 7/13/16	Analyst: **MB**
Chromium, Hexavalent	ND		1.2	mg/Kg-dry	1	7/14/2016 03:30 PM
MOISTURE			**SW3550C**			Analyst: **EDL**
Moisture	**18**		**0.050**	**% of sample**	1	7/13/2016 01:45 PM
PH			**SW9045D**		Prep: EXTRACT / 7/13/16	Analyst: **KF**
pH	**8.5**			**s.u.**	1	7/13/2016 06:07 PM

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

ALS Group USA, Corp

Date: *20-Jul-16*

Client: HRL Compliance Solutions, Inc
Project: Terra Energy - TR 24-28-597 - Pad Site Inves.
Work Order: 1607608
Sample ID: Exc. Conf- Tier 1- Excavation Bottom
Lab ID: 1607608-03
Collection Date: 7/11/2016 08:30 AM
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep: SW3550 / 7/13/16	Analyst: **IT**
DRO (C10-C28)	**22**		**5.0**	**mg/Kg-dry**	1	7/14/2016 03:42 AM
Surr: 4-Terphenyl-d14	*65.1*		*39-133*	*%REC*	1	7/14/2016 03:42 AM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015D**		Prep: SW5035 / 7/13/16	Analyst: **IT**
GRO (C6-C10)	ND		3.5	mg/Kg-dry	1	7/13/2016 06:41 PM
Surr: Toluene-d8	*104*		*50-150*	*%REC*	1	7/13/2016 06:41 PM
MERCURY BY CVAA			**SW7471B**		Prep: SW7471 / 7/13/16	Analyst: **LR**
Mercury	**0.035**		**0.015**	**mg/Kg-dry**	1	7/13/2016 07:18 PM
METALS ANALYSIS BY ICP			**SW846 6010C**		Prep: SW3050B / 7/15/16	Analyst: **JEC**
Arsenic	**16**		**2.4**	**mg/Kg-dry**	5	7/19/2016 12:56 PM
Barium	**570**		**2.4**	**mg/Kg-dry**	5	7/19/2016 12:56 PM
Cadmium	**0.74**		**0.38**	**mg/Kg-dry**	1	7/18/2016 07:19 PM
Chromium	**31**		**2.4**	**mg/Kg-dry**	5	7/19/2016 12:56 PM
Copper	**27**		**0.48**	**mg/Kg-dry**	1	7/18/2016 07:19 PM
Lead	**15**		**2.4**	**mg/Kg-dry**	5	7/19/2016 12:56 PM
Nickel	**30**		**0.48**	**mg/Kg-dry**	1	7/18/2016 07:19 PM
Selenium	ND		2.4	mg/Kg-dry	5	7/19/2016 12:56 PM
Silver	ND		0.48	mg/Kg-dry	1	7/18/2016 07:19 PM
Zinc	**68**		**4.8**	**mg/Kg-dry**	5	7/19/2016 12:56 PM
SOLUBLE CATIONS FOR SAR			**SW846 6010C**		Prep: USDA Method 20B / 7/18/16	Analyst: **JEC**
Calcium	**180**		**5.0**	**mg/L**	10	7/18/2016 10:18 PM
Magnesium	**47**		**2.0**	**mg/L**	10	7/18/2016 10:18 PM
Sodium	**180**		**2.0**	**mg/L**	10	7/18/2016 10:18 PM
SODIUM ADSORPTION RATIO			**USDA H60 METHO**		Prep: USDA Method 20B / 7/18/16	Analyst: **JEC**
Sodium Adsorption Ratio	**3.1**		**0.010**	**none**	1	7/19/2016
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW846 8270D**		Prep: SW3550 / 7/13/16	Analyst: **RM**
Acenaphthene	ND		0.0080	mg/Kg-dry	1	7/14/2016 02:47 AM
Anthracene	ND		0.0080	mg/Kg-dry	1	7/14/2016 02:47 AM
Benzo(a)anthracene	ND		0.0080	mg/Kg-dry	1	7/14/2016 02:47 AM
Benzo(a)pyrene	ND		0.0080	mg/Kg-dry	1	7/14/2016 02:47 AM
Benzo(b)fluoranthene	ND		0.0080	mg/Kg-dry	1	7/14/2016 02:47 AM
Benzo(k)fluoranthene	ND		0.0080	mg/Kg-dry	1	7/14/2016 02:47 AM
Chrysene	ND		0.0080	mg/Kg-dry	1	7/14/2016 02:47 AM
Dibenzo(a,h)anthracene	ND		0.0080	mg/Kg-dry	1	7/14/2016 02:47 AM
Fluoranthene	ND		0.0080	mg/Kg-dry	1	7/14/2016 02:47 AM

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

Client: HRL Compliance Solutions, Inc
Project: Terra Energy - TR 24-28-597 - Pad Site Inves. **Work Order:** 1607608
Sample ID: Exc. Conf- Tier 1- Excavation Bottom **Lab ID:** 1607608-03
Collection Date: 7/11/2016 08:30 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Fluorene	ND		0.0080	mg/Kg-dry	1	7/14/2016 02:47 AM
Indeno(1,2,3-cd)pyrene	ND		0.0080	mg/Kg-dry	1	7/14/2016 02:47 AM
Naphthalene	ND		0.0080	mg/Kg-dry	1	7/14/2016 02:47 AM
Pyrene	ND		0.0080	mg/Kg-dry	1	7/14/2016 02:47 AM
Surr: 2-Fluorobiphenyl	*75.3*		*12-100*	*%REC*	1	7/14/2016 02:47 AM
Surr: 4-Terphenyl-d14	*87.2*		*25-137*	*%REC*	1	7/14/2016 02:47 AM
Surr: Nitrobenzene-d5	*62.8*		*37-107*	*%REC*	1	7/14/2016 02:47 AM
VOLATILE ORGANIC COMPOUNDS			**SW8260B**		Prep: SW5035 / 7/13/16	Analyst: **LSY**
Benzene	ND		0.030	mg/Kg-dry	1	7/13/2016 02:13 PM
Ethylbenzene	ND		0.030	mg/Kg-dry	1	7/13/2016 02:13 PM
m,p-Xylene	ND		0.060	mg/Kg-dry	1	7/13/2016 02:13 PM
o-Xylene	ND		0.030	mg/Kg-dry	1	7/13/2016 02:13 PM
Toluene	ND		0.030	mg/Kg-dry	1	7/13/2016 02:13 PM
Xylenes, Total	ND		0.090	mg/Kg-dry	1	7/13/2016 02:13 PM
Surr: 1,2-Dichloroethane-d4	*99.4*		*70-130*	*%REC*	1	7/13/2016 02:13 PM
Surr: 4-Bromofluorobenzene	*94.4*		*70-130*	*%REC*	1	7/13/2016 02:13 PM
Surr: Dibromofluoromethane	*95.2*		*70-130*	*%REC*	1	7/13/2016 02:13 PM
Surr: Toluene-d8	*96.4*		*70-130*	*%REC*	1	7/13/2016 02:13 PM
ELECTRICAL CONDUCTIVITY (SAR)			**USDA H60 METHO**		Prep: USDA Method 20B / 7/18/16	Analyst: **JB**
Electrical Conductivity @ Saturation	**2.7**		**0.25**	**mmhos/cm @2**	50	7/18/2016 01:30 PM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **MB**
Chromium, Trivalent	**31**		**0.60**	**mg/Kg-dry**	1	7/19/2016 04:00 PM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep: SW3060A / 7/13/16	Analyst: **MB**
Chromium, Hexavalent	ND		1.2	mg/Kg-dry	1	7/14/2016 03:30 PM
MOISTURE			**SW3550C**			Analyst: **EDL**
Moisture	**16**		**0.050**	**% of sample**	1	7/13/2016 01:45 PM
PH			**SW9045D**		Prep: EXTRACT / 7/13/16	Analyst: **KF**
pH	**8.0**			**s.u.**	1	7/13/2016 06:07 PM

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

ALS Group USA, Corp

Date: *20-Jul-16*

Client: HRL Compliance Solutions, Inc
Project: Terra Energy - TR 24-28-597 - Pad Site Inves.
Work Order: 1607608
Sample ID: Exc. Conf- Bottom Tier- Excavation Bottom
Lab ID: 1607608-04
Collection Date: 7/11/2016 08:45 AM
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep: SW3550 / 7/13/16	Analyst: **IT**
DRO (C10-C28)	**40**		**5.0**	**mg/Kg-dry**	1	7/14/2016 06:12 AM
Surr: 4-Terphenyl-d14	*62.4*		*39-133*	*%REC*	1	7/14/2016 06:12 AM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015D**		Prep: SW5035 / 7/13/16	Analyst: **IT**
GRO (C6-C10)	ND		3.5	mg/Kg-dry	1	7/13/2016 06:15 PM
Surr: Toluene-d8	*106*		*50-150*	*%REC*	1	7/13/2016 06:15 PM
MERCURY BY CVAA			**SW7471B**		Prep: SW7471 / 7/13/16	Analyst: **LR**
Mercury	**0.049**		**0.018**	**mg/Kg-dry**	1	7/13/2016 07:20 PM
METALS ANALYSIS BY ICP			**SW846 6010C**		Prep: SW3050B / 7/15/16	Analyst: **JEC**
Arsenic	**18**		**2.4**	**mg/Kg-dry**	5	7/19/2016 01:42 PM
Barium	**690**		**2.4**	**mg/Kg-dry**	5	7/19/2016 01:42 PM
Cadmium	**0.69**		**0.39**	**mg/Kg-dry**	1	7/18/2016 07:52 PM
Chromium	**34**		**2.4**	**mg/Kg-dry**	5	7/19/2016 01:42 PM
Copper	**30**		**2.4**	**mg/Kg-dry**	5	7/19/2016 01:42 PM
Lead	**19**		**2.4**	**mg/Kg-dry**	5	7/19/2016 01:42 PM
Nickel	**30**		**0.48**	**mg/Kg-dry**	1	7/18/2016 07:52 PM
Selenium	ND		2.4	mg/Kg-dry	5	7/19/2016 01:42 PM
Silver	ND		0.48	mg/Kg-dry	1	7/18/2016 07:52 PM
Zinc	**82**		**4.8**	**mg/Kg-dry**	5	7/19/2016 01:42 PM
SOLUBLE CATIONS FOR SAR			**SW846 6010C**		Prep: USDA Method 20B / 7/18/16	Analyst: **JEC**
Calcium	**93**		**5.0**	**mg/L**	10	7/18/2016 10:24 PM
Magnesium	**23**		**2.0**	**mg/L**	10	7/18/2016 10:24 PM
Sodium	**82**		**2.0**	**mg/L**	10	7/18/2016 10:24 PM
SODIUM ADSORPTION RATIO			**USDA H60 METHO**		Prep: USDA Method 20B / 7/18/16	Analyst: **JEC**
Sodium Adsorption Ratio	**2.0**		**0.010**	**none**	1	7/19/2016
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW846 8270D**		Prep: SW3550 / 7/13/16	Analyst: **RM**
Acenaphthene	ND		0.0079	mg/Kg-dry	1	7/13/2016 11:20 PM
Anthracene	ND		0.0079	mg/Kg-dry	1	7/13/2016 11:20 PM
Benzo(a)anthracene	ND		0.0079	mg/Kg-dry	1	7/13/2016 11:20 PM
Benzo(a)pyrene	ND		0.0079	mg/Kg-dry	1	7/13/2016 11:20 PM
Benzo(b)fluoranthene	ND		0.0079	mg/Kg-dry	1	7/13/2016 11:20 PM
Benzo(k)fluoranthene	ND		0.0079	mg/Kg-dry	1	7/13/2016 11:20 PM
Chrysene	ND		0.0079	mg/Kg-dry	1	7/13/2016 11:20 PM
Dibenzo(a,h)anthracene	ND		0.0079	mg/Kg-dry	1	7/13/2016 11:20 PM
Fluoranthene	ND		0.0079	mg/Kg-dry	1	7/13/2016 11:20 PM

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

ALS Group USA, Corp

Date: *20-Jul-16*

Client: HRL Compliance Solutions, Inc
Project: Terra Energy - TR 24-28-597 - Pad Site Inves. **Work Order:** 1607608
Sample ID: Exc. Conf- Bottom Tier- Excavation Bottom **Lab ID:** 1607608-04
Collection Date: 7/11/2016 08:45 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Fluorene	ND		0.0079	mg/Kg-dry	1	7/13/2016 11:20 PM
Indeno(1,2,3-cd)pyrene	ND		0.0079	mg/Kg-dry	1	7/13/2016 11:20 PM
Naphthalene	ND		0.0079	mg/Kg-dry	1	7/13/2016 11:20 PM
Pyrene	ND		0.0079	mg/Kg-dry	1	7/13/2016 11:20 PM
Surr: 2-Fluorobiphenyl	*73.3*		*12-100*	*%REC*	1	7/13/2016 11:20 PM
Surr: 4-Terphenyl-d14	*75.2*		*25-137*	*%REC*	1	7/13/2016 11:20 PM
Surr: Nitrobenzene-d5	*56.5*		*37-107*	*%REC*	1	7/13/2016 11:20 PM
VOLATILE ORGANIC COMPOUNDS			**SW8260B**		Prep: SW5035 / 7/13/16	Analyst: **LSY**
Benzene	ND		0.030	mg/Kg-dry	1	7/13/2016 02:38 PM
Ethylbenzene	ND		0.030	mg/Kg-dry	1	7/13/2016 02:38 PM
m,p-Xylene	ND		0.060	mg/Kg-dry	1	7/13/2016 02:38 PM
o-Xylene	ND		0.030	mg/Kg-dry	1	7/13/2016 02:38 PM
Toluene	ND		0.030	mg/Kg-dry	1	7/13/2016 02:38 PM
Xylenes, Total	ND		0.090	mg/Kg-dry	1	7/13/2016 02:38 PM
Surr: 1,2-Dichloroethane-d4	*103*		*70-130*	*%REC*	1	7/13/2016 02:38 PM
Surr: 4-Bromofluorobenzene	*95.5*		*70-130*	*%REC*	1	7/13/2016 02:38 PM
Surr: Dibromofluoromethane	*96.8*		*70-130*	*%REC*	1	7/13/2016 02:38 PM
Surr: Toluene-d8	*98.2*		*70-130*	*%REC*	1	7/13/2016 02:38 PM
ELECTRICAL CONDUCTIVITY (SAR)			**USDA H60 METHO**		Prep: USDA Method 20B / 7/18/16	Analyst: **JB**
Electrical Conductivity @ Saturation	**1.2**		**0.050**	**mmhos/cm @2**	10	7/18/2016 01:30 PM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **MB**
Chromium, Trivalent	**34**		**0.60**	**mg/Kg-dry**	1	7/19/2016 04:00 PM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep: SW3060A / 7/13/16	Analyst: **MB**
Chromium, Hexavalent	ND		1.2	mg/Kg-dry	1	7/14/2016 03:30 PM
MOISTURE			**SW3550C**			Analyst: **EDL**
Moisture	**16**		**0.050**	**% of sample**	1	7/13/2016 01:45 PM
PH			**SW9045D**		Prep: EXTRACT / 7/13/16	Analyst: **KF**
pH	**8.0**			**s.u.**	1	7/13/2016 06:07 PM

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

QC BATCH REPORT

Batch ID: **88542** Instrument ID **GC8** Method: **SW8015M**

MBLK Sample ID: **DBLKS1-88542-88542** Units: **mg/Kg** Analysis Date: **7/14/2016 01:42 AM**

Client ID: Run ID: **GC8_160713C** SeqNo: **3922652** Prep Date: **7/13/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	ND	5.0								
Surr: 4-Terphenyl-d14	*1.664*	0	*2*	0	*83.2*	*39-133*	0			

LCS Sample ID: **DLCSS1-88542-88542** Units: **mg/Kg** Analysis Date: **7/14/2016 02:12 AM**

Client ID: Run ID: **GC8_160713C** SeqNo: **3922653** Prep Date: **7/13/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	175.7	5.0	200	0	87.8	61-109	0			
Surr: 4-Terphenyl-d14	*1.314*	0	*2*	0	*65.7*	*39-133*	0			

MS Sample ID: **1607608-03A MS** Units: **mg/Kg** Analysis Date: **7/14/2016 02:42 AM**

Client ID: **Exc. Conf- Tier 1- Excavation Bottom** Run ID: **GC8_160713C** SeqNo: **3922654** Prep Date: **7/13/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	137.1	4.1	164.2	18.57	72.2	48-110	0			
Surr: 4-Terphenyl-d14	*1.161*	0	*1.642*	0	*70.7*	*39-133*	0			

MSD Sample ID: **1607608-03A MSD** Units: **mg/Kg** Analysis Date: **7/14/2016 03:12 AM**

Client ID: **Exc. Conf- Tier 1- Excavation Bottom** Run ID: **GC8_160713C** SeqNo: **3922655** Prep Date: **7/13/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	136.2	4.1	166	18.57	70.8	48-110	137.1	0.667	30	
Surr: 4-Terphenyl-d14	*1.141*	0	*1.66*	0	*68.7*	*39-133*	1.161	*1.74*	*30*	

The following samples were analyzed in this batch: 1607608-01A 1607608-02A 1607608-03A 1607608-04A

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

Client: HRL Compliance Solutions, Inc
Work Order: 1607608
Project: Terra Energy - TR 24-28-597 - Pad Site Inves.

QC BATCH REPORT

Batch ID: **88550** Instrument ID **GC9** Method: **SW8015D**

MBLK Sample ID: **MBLK-88550-88550** Units: **µg/Kg-dry** Analysis Date: **7/13/2016 02:31 PM**
Client ID: Run ID: **GC9_160713A** SeqNo: **3921706** Prep Date: **7/13/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	2,500								
Surr: Toluene-d8	*5077*	0	*5000*	0	*102*	*50-150*	0			

LCS Sample ID: **LCS-88550-88550** Units: **µg/Kg-dry** Analysis Date: **7/13/2016 04:10 PM**
Client ID: Run ID: **GC9_160713A** SeqNo: **3921709** Prep Date: **7/13/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	519100	2,500	500000	0	104	70-130	0			
Surr: Toluene-d8	*5110*	0	*5000*	0	*102*	*50-150*	0			

MS Sample ID: **1607608-01A MS** Units: **µg/Kg-dry** Analysis Date: **7/13/2016 07:31 PM**
Client ID: **Exc Conf- Tier 1 - Side Wall (SE Corner)** Run ID: **GC9_160713A** SeqNo: **3922622** Prep Date: **7/13/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	672800	3,600	719500	0	93.5	70-130	0			
Surr: Toluene-d8	*7192*	0	*7195*	0	*100*	*50-150*	0			

MSD Sample ID: **1607608-01A MSD** Units: **µg/Kg-dry** Analysis Date: **7/13/2016 07:56 PM**
Client ID: **Exc Conf- Tier 1 - Side Wall (SE Corner)** Run ID: **GC9_160713A** SeqNo: **3922623** Prep Date: **7/13/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	676000	3,600	719500	0	93.9	70-130	672800	0.474	30	
Surr: Toluene-d8	*7547*	0	*7195*	0	*105*	*50-150*	7192	*4.81*	*30*	

The following samples were analyzed in this batch: 1607608-01A 1607608-02A 1607608-03A 1607608-04A

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

Client: HRL Compliance Solutions, Inc
Work Order: 1607608
Project: Terra Energy - TR 24-28-597 - Pad Site Inves.

QC BATCH REPORT

Batch ID: **88537** Instrument ID **HG1** Method: **SW7471B**

MBLK Sample ID: **MBLK-88537-88537** Units: **mg/Kg** Analysis Date: **7/13/2016 06:15 PM**
Client ID: Run ID: **HG1_160713A** SeqNo: **3922157** Prep Date: **7/13/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	ND	0.020								

LCS Sample ID: **LCS-88537-88537** Units: **mg/Kg** Analysis Date: **7/13/2016 06:17 PM**
Client ID: Run ID: **HG1_160713A** SeqNo: **3922158** Prep Date: **7/13/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1933	0.020	0.1665	0	116	80-120	0			

MS Sample ID: **1607520-12BMS** Units: **mg/Kg** Analysis Date: **7/13/2016 06:55 PM**
Client ID: Run ID: **HG1_160713A** SeqNo: **3922175** Prep Date: **7/13/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1609	0.013	0.1112	0.02701	120	75-125	0			

MSD Sample ID: **1607520-12BMSD** Units: **mg/Kg** Analysis Date: **7/13/2016 07:04 PM**
Client ID: Run ID: **HG1_160713A** SeqNo: **3922179** Prep Date: **7/13/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1549	0.013	0.1098	0.02701	117	75-125	0.1609	3.78	35	

The following samples were analyzed in this batch: 1607608-01A 1607608-02A 1607608-03A 1607608-04A

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

Client: HRL Compliance Solutions, Inc
Work Order: 1607608
Project: Terra Energy - TR 24-28-597 - Pad Site Inves.

QC BATCH REPORT

Batch ID: **88562** Instrument ID **ICP2** Method: **SW846 6010C**

DUP Sample ID: **1607687-04BDUP** Units: **mg/L** Analysis Date: **7/18/2016 10:35 PM**
Client ID: Run ID: **ICP2_160718A** SeqNo: **3929321** Prep Date: **7/18/2016** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	138.6	5.0	0	0	0	0-0	150.8	8.39		
Magnesium	27.82	2.0	0	0	0	0-0	29.98	7.45		
Sodium	47.36	2.0	0	0	0	0-0	51.84	9.03		

DUP Sample ID: **1607687-04BDUP** Units: **none** Analysis Date: **7/19/2016**
Client ID: Run ID: **SAR_160719A** SeqNo: **3931063** Prep Date: **7/18/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	0.96	0.010	0	0	0		1.009	4.96	50	

The following samples were analyzed in this batch: 1607608-01A 1607608-02A 1607608-03A 1607608-04A

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

Client: HRL Compliance Solutions, Inc
Work Order: 1607608
Project: Terra Energy - TR 24-28-597 - Pad Site Inves.

QC BATCH REPORT

Batch ID: **88649** Instrument ID **ICP2** Method: **SW846 6010C**

MBLK Sample ID: **MBLK-88649-88649** Units: **mg/Kg** Analysis Date: **7/15/2016 08:00 PM**
Client ID: Run ID: **ICP2_160715A** SeqNo: **3926461** Prep Date: **7/15/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	ND	0.25								
Barium	ND	0.25								
Cadmium	ND	0.50								
Chromium	0.02475	0.25								J
Copper	ND	0.50								
Lead	ND	0.25								
Nickel	ND	0.25								
Selenium	ND	0.50								
Silver	ND	0.25								
Zinc	0.1295	0.50								J

LCS Sample ID: **LCS-88649-88649** Units: **mg/Kg** Analysis Date: **7/15/2016 08:05 PM**
Client ID: Run ID: **ICP2_160715A** SeqNo: **3926462** Prep Date: **7/15/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	5.085	0.25	5	0	102	80-120	0			
Barium	4.661	0.25	5	0	93.2	80-120	0			
Cadmium	5.043	0.50	5	0	101	80-120	0			
Chromium	5.384	0.25	5	0	108	80-120	0			
Copper	5.208	0.50	5	0	104	80-120	0			
Lead	4.897	0.25	5	0	97.9	80-120	0			
Nickel	5.022	0.25	5	0	100	80-120	0			
Selenium	4.875	0.50	5	0	97.5	80-120	0			
Silver	5.037	0.25	5	0	101	80-120	0			
Zinc	5.083	0.50	5	0	102	80-120	0			

MS Sample ID: **1607608-03AMS** Units: **mg/Kg** Analysis Date: **7/18/2016 07:24 PM**
Client ID: **Exc. Conf- Tier 1- Excavation Bottom** Run ID: **ICP2_160718A** SeqNo: **3929269** Prep Date: **7/15/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cadmium	11.22	0.79	7.937	0.6164	134	75-125	0			S
Copper	32.78	0.79	7.937	22.57	129	75-125	0			S
Nickel	34.64	0.40	7.937	25.45	116	75-125	0			
Silver	9.163	0.40	7.937	-0.1227	117	75-125	0			

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

Client: HRL Compliance Solutions, Inc
Work Order: 1607608
Project: Terra Energy - TR 24-28-597 - Pad Site Inves.

QC BATCH REPORT

Batch ID: **88649** Instrument ID **ICP2** Method: **SW846 6010C**

MS Sample ID: **1607608-03AMS** Units: **mg/Kg** Analysis Date: **7/19/2016 01:02 PM**
Client ID: **Exc. Conf- Tier 1- Excavation Bottom** Run ID: **ICP2_160719A** SeqNo: **3930328** Prep Date: **7/15/2016** DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	24.46	2.0	7.937	13.34	140	75-125	0			S
Chromium	41.15	2.0	7.937	25.51	197	75-125	0			S
Lead	21.53	2.0	7.937	12.73	111	75-125	0			
Selenium	9.226	4.0	7.937	0.5914	109	75-125	0			
Zinc	75.02	4.0	7.937	57.17	225	75-125	0			SO

MSD Sample ID: **1607608-03AMSD** Units: **mg/Kg** Analysis Date: **7/18/2016 07:30 PM**
Client ID: **Exc. Conf- Tier 1- Excavation Bottom** Run ID: **ICP2_160718A** SeqNo: **3929270** Prep Date: **7/15/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cadmium	11.77	0.80	8.026	0.6164	139	75-125	11.22	4.76	20	S
Copper	33.03	0.80	8.026	22.57	130	75-125	32.78	0.76	20	S
Nickel	37.38	0.40	8.026	25.45	149	75-125	34.64	7.6	20	S
Silver	9.513	0.40	8.026	-0.1227	120	75-125	9.163	3.75	20	

MSD Sample ID: **1607608-03AMSD** Units: **mg/Kg** Analysis Date: **7/19/2016 01:07 PM**
Client ID: **Exc. Conf- Tier 1- Excavation Bottom** Run ID: **ICP2_160719A** SeqNo: **3930329** Prep Date: **7/15/2016** DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	22.78	2.0	8.026	13.34	118	75-125	24.46	7.08	20	
Chromium	40.23	2.0	8.026	25.51	183	75-125	41.15	2.25	20	S
Lead	20.92	2.0	8.026	12.73	102	75-125	21.53	2.89	20	
Selenium	8.908	4.0	8.026	0.5914	104	75-125	9.226	3.51	20	
Zinc	74.18	4.0	8.026	57.17	212	75-125	75.02	1.13	20	SO

The following samples were analyzed in this batch: 1607608-01A 1607608-02A 1607608-03A 1607608-04A

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

Client: HRL Compliance Solutions, Inc
Work Order: 1607608
Project: Terra Energy - TR 24-28-597 - Pad Site Inves.

QC BATCH REPORT

Batch ID: **88541** Instrument ID **SVMS8** Method: **SW846 8270D**

MBLK Sample ID: **SBLKS1-88541-88541** Units: **µg/Kg** Analysis Date: **7/13/2016 08:05 PM**
Client ID: Run ID: **SVMS8_160713A** SeqNo: **3923797** Prep Date: **7/13/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	ND	6.7								
Anthracene	ND	6.7								
Benzo(a)anthracene	ND	6.7								
Benzo(a)pyrene	ND	6.7								
Benzo(b)fluoranthene	ND	6.7								
Benzo(k)fluoranthene	ND	6.7								
Chrysene	ND	6.7								
Dibenzo(a,h)anthracene	ND	6.7								
Fluoranthene	ND	6.7								
Fluorene	ND	6.7								
Indeno(1,2,3-cd)pyrene	ND	6.7								
Naphthalene	ND	6.7								
Pyrene	ND	6.7								
Surr: 2-Fluorobiphenyl	*1273*	0	*1667*	0	*76.4*	*12-100*	0			
Surr: 4-Terphenyl-d14	*1549*	0	*1667*	0	*92.9*	*25-137*	0			
Surr: Nitrobenzene-d5	*1111*	0	*1667*	0	*66.7*	*37-107*	0			

LCS Sample ID: **SLCSS1-88541-88541** Units: **µg/Kg** Analysis Date: **7/13/2016 08:26 PM**
Client ID: Run ID: **SVMS8_160713A** SeqNo: **3923798** Prep Date: **7/13/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	627.7	6.7	666.7	0	94.1	45-110	0			
Anthracene	696.3	6.7	666.7	0	104	55-105	0			
Benzo(a)anthracene	700.3	6.7	666.7	0	105	50-110	0			
Benzo(a)pyrene	717.7	6.7	666.7	0	108	50-110	0			
Benzo(b)fluoranthene	726.3	6.7	666.7	0	109	45-115	0			
Benzo(k)fluoranthene	723	6.7	666.7	0	108	45-115	0			
Chrysene	699.7	6.7	666.7	0	105	55-110	0			
Dibenzo(a,h)anthracene	725.7	6.7	666.7	0	109	40-125	0			
Fluoranthene	687.7	6.7	666.7	0	103	55-115	0			
Fluorene	652.3	6.7	666.7	0	97.8	50-110	0			
Indeno(1,2,3-cd)pyrene	721	6.7	666.7	0	108	40-120	0			
Naphthalene	607.3	6.7	666.7	0	91.1	40-105	0			
Pyrene	729.3	6.7	666.7	0	109	45-125	0			
Surr: 2-Fluorobiphenyl	*1463*	0	*1667*	0	*87.8*	*12-100*	0			
Surr: 4-Terphenyl-d14	*1586*	0	*1667*	0	*95.1*	*25-137*	0			
Surr: Nitrobenzene-d5	*1379*	0	*1667*	0	*82.7*	*37-107*	0			

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

Client: HRL Compliance Solutions, Inc
Work Order: 1607608
Project: Terra Energy - TR 24-28-597 - Pad Site Inves.

QC BATCH REPORT

Batch ID: **88541** Instrument ID **SVMS8** Method: **SW846 8270D**

MS Sample ID: **1607608-04A MS** Units: **µg/Kg** Analysis Date: **7/13/2016 10:39 PM**

Client ID: **Exc. Conf- Bottom Tier-Excavation Bottom** Run ID: **SVMS8_160713A** SeqNo: **3923799** Prep Date: **7/13/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	520.9	6.6	661.5	0	78.7	45-110	0			
Anthracene	620.2	6.6	661.5	0	93.7	55-105	0			
Benzo(a)anthracene	610.2	6.6	661.5	0	92.2	50-110	0			
Benzo(a)pyrene	615.2	6.6	661.5	0	93	50-110	0			
Benzo(b)fluoranthene	605.6	6.6	661.5	0	91.5	45-115	0			
Benzo(k)fluoranthene	618.2	6.6	661.5	0	93.4	45-115	0			
Chrysene	614.2	6.6	661.5	0	92.8	55-110	0			
Dibenzo(a,h)anthracene	618.8	6.6	661.5	0	93.5	40-125	0			
Fluoranthene	602.3	6.6	661.5	0	91	55-115	0			
Fluorene	558	6.6	661.5	0	84.3	50-110	0			
Indeno(1,2,3-cd)pyrene	631.7	6.6	661.5	0	95.5	40-120	0			
Naphthalene	535.8	6.6	661.5	0	81	40-105	0			
Pyrene	616.2	6.6	661.5	0	93.1	45-125	0			
Surr: 2-Fluorobiphenyl	*1392*	0	*1654*	0	*84.2*	*12-100*	0			
Surr: 4-Terphenyl-d14	*1479*	0	*1654*	0	*89.5*	*25-137*	0			
Surr: Nitrobenzene-d5	*1203*	0	*1654*	0	*72.7*	*37-107*	0			

MSD Sample ID: **1607608-04A MSD** Units: **µg/Kg** Analysis Date: **7/13/2016 11:00 PM**

Client ID: **Exc. Conf- Bottom Tier-Excavation Bottom** Run ID: **SVMS8_160713A** SeqNo: **3923800** Prep Date: **7/13/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	520.4	6.6	663.9	0	78.4	45-110	520.9	0.0942	30	
Anthracene	632	6.6	663.9	0	95.2	55-105	620.2	1.89	30	
Benzo(a)anthracene	610.7	6.6	663.9	0	92	50-110	610.2	0.0798	30	
Benzo(a)pyrene	637.9	6.6	663.9	0	96.1	50-110	615.2	3.63	30	
Benzo(b)fluoranthene	622.7	6.6	663.9	0	93.8	45-115	605.6	2.78	30	
Benzo(k)fluoranthene	623.3	6.6	663.9	0	93.9	45-115	618.2	0.832	30	
Chrysene	620	6.6	663.9	0	93.4	55-110	614.2	0.942	30	
Dibenzo(a,h)anthracene	652.9	6.6	663.9	0	98.3	40-125	618.8	5.35	30	
Fluoranthene	592.1	6.6	663.9	0	89.2	55-115	602.3	1.7	30	
Fluorene	578.9	6.6	663.9	0	87.2	50-110	558	3.67	30	
Indeno(1,2,3-cd)pyrene	643.3	6.6	663.9	0	96.9	40-120	631.7	1.81	30	
Naphthalene	506.8	6.6	663.9	0	76.3	40-105	535.8	5.56	30	
Pyrene	634.3	6.6	663.9	0	95.5	45-125	616.2	2.89	30	
Surr: 2-Fluorobiphenyl	*1371*	0	*1660*	0	*82.6*	*12-100*	1392	*1.5*	*40*	
Surr: 4-Terphenyl-d14	*1497*	0	*1660*	0	*90.2*	*25-137*	1479	*1.2*	*40*	
Surr: Nitrobenzene-d5	*1102*	0	*1660*	0	*66.4*	*37-107*	1203	*8.71*	*40*	

The following samples were analyzed in this batch: 1607608-01A 1607608-02A 1607608-03A 1607608-04A

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

Client: HRL Compliance Solutions, Inc
Work Order: 1607608
Project: Terra Energy - TR 24-28-597 - Pad Site Inves.

QC BATCH REPORT

Batch ID: **88549** Instrument ID **VMS10** Method: **SW8260B**

MBLK Sample ID: **MBLK-88549-88549** Units: **µg/Kg-dry** Analysis Date: **7/14/2016 11:39 AM**
Client ID: Run ID: **VMS10_160714A** SeqNo: **3923765** Prep Date: **7/13/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	30								
Ethylbenzene	ND	30								
m,p-Xylene	ND	60								
o-Xylene	ND	30								
Toluene	ND	30								
Xylenes, Total	ND	90								
Surr: 1,2-Dichloroethane-d4	*985*	0	*1000*	0	*98.5*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*1026*	0	*1000*	0	*103*	*70-130*	0			
Surr: Dibromofluoromethane	*902*	0	*1000*	0	*90.2*	*70-130*	0			
Surr: Toluene-d8	*982*	0	*1000*	0	*98.2*	*70-130*	0			

LCS Sample ID: **LCS-88549-88549** Units: **µg/Kg-dry** Analysis Date: **7/14/2016 10:29 AM**
Client ID: Run ID: **VMS10_160714A** SeqNo: **3923764** Prep Date: **7/13/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1096	30	1000	0	110	75-125	0			
Ethylbenzene	1155	30	1000	0	116	75-125	0			
m,p-Xylene	2358	60	2000	0	118	80-125	0			
o-Xylene	1130	30	1000	0	113	75-125	0			
Toluene	1105	30	1000	0	110	70-125	0			
Xylenes, Total	3489	90	3000	0	116	75-125	0			
Surr: 1,2-Dichloroethane-d4	*1002*	0	*1000*	0	*100*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*1029*	0	*1000*	0	*103*	*70-130*	0			
Surr: Dibromofluoromethane	*997*	0	*1000*	0	*99.7*	*70-130*	0			
Surr: Toluene-d8	*1012*	0	*1000*	0	*101*	*70-130*	0			

MS Sample ID: **1607476-04A MS** Units: **µg/Kg-dry** Analysis Date: **7/16/2016 02:17 AM**
Client ID: Run ID: **VMS5_160715A** SeqNo: **3926590** Prep Date: **7/13/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1569	44	1469	0	107	75-125	0			
Ethylbenzene	1582	44	1469	0	108	75-125	0			
m,p-Xylene	3218	88	2938	0	110	80-125	0			
o-Xylene	1552	44	1469	0	106	75-125	0			
Toluene	1559	44	1469	0	106	70-125	0			
Xylenes, Total	4770	130	4407	0	108	75-125	0			
Surr: 1,2-Dichloroethane-d4	*1465*	0	*1469*	0	*99.8*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*1470*	0	*1469*	0	*100*	*70-130*	0			
Surr: Dibromofluoromethane	*1483*	0	*1469*	0	*101*	*70-130*	0			
Surr: Toluene-d8	*1452*	0	*1469*	0	*98.8*	*70-130*	0			

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

Client: HRL Compliance Solutions, Inc
Work Order: 1607608
Project: Terra Energy - TR 24-28-597 - Pad Site Inves.

QC BATCH REPORT

Batch ID: **88549** Instrument ID **VMS10** Method: **SW8260B**

MSD Sample ID: **1607476-04A MSD** Units: **µg/Kg-dry** Analysis Date: **7/16/2016 02:43 AM**
Client ID: Run ID: **VMS5_160715A** SeqNo: **3926591** Prep Date: **7/13/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1606	44	1469	0	109	75-125	1569	2.31	30	
Ethylbenzene	1638	44	1469	0	112	75-125	1582	3.47	30	
m,p-Xylene	3388	88	2938	0	115	80-125	3218	5.14	30	
o-Xylene	1618	44	1469	0	110	75-125	1552	4.13	30	
Toluene	1616	44	1469	0	110	70-125	1559	3.61	30	
Xylenes, Total	5005	130	4407	0	114	75-125	4770	4.81	30	
Surr: 1,2-Dichloroethane-d4	*1449*	0	*1469*	0	*98.6*	*70-130*	1465	*1.16*	*30*	
Surr: 4-Bromofluorobenzene	*1470*	0	*1469*	0	*100*	*70-130*	1470	*0*	*30*	
Surr: Dibromofluoromethane	*1468*	0	*1469*	0	*99.9*	*70-130*	1483	*1.05*	*30*	
Surr: Toluene-d8	*1443*	0	*1469*	0	*98.2*	*70-130*	1452	*0.558*	*30*	

The following samples were analyzed in this batch: 1607608-01A 1607608-02A 1607608-03A 1607608-04A

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

Client: HRL Compliance Solutions, Inc
Work Order: 1607608
Project: Terra Energy - TR 24-28-597 - Pad Site Inves.

QC BATCH REPORT

Batch ID: **88552** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK Sample ID: **MBLK-88552-88552** Units: **mg/Kg** Analysis Date: **7/14/2016 03:30 PM**
Client ID: Run ID: **WETCHEM_160714J** SeqNo: **3924120** Prep Date: **7/13/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	ND	1.0								

LCS Sample ID: **LCS-88552-88552** Units: **mg/Kg** Analysis Date: **7/14/2016 03:30 PM**
Client ID: Run ID: **WETCHEM_160714J** SeqNo: **3924119** Prep Date: **7/13/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	4.563	0.97	4.854	0	94	80-120	0			

MS Sample ID: **1607608-03A MS** Units: **mg/Kg** Analysis Date: **7/14/2016 03:30 PM**
Client ID: **Exc. Conf- Tier 1- Excavation Bottom** Run ID: **WETCHEM_160714J** SeqNo: **3924112** Prep Date: **7/13/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	2.83	1.0	5	0.34	49.8	75-125	0			S

MS Sample ID: **1607608-03A MSI** Units: **mg/Kg** Analysis Date: **7/14/2016 03:30 PM**
Client ID: **Exc. Conf- Tier 1- Excavation Bottom** Run ID: **WETCHEM_160714J** SeqNo: **3924114** Prep Date: **7/13/2016** DF: **100**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	2820	100	2961	0.34	95.2	75-125	0			

MSD Sample ID: **1607608-03A MSD** Units: **mg/Kg** Analysis Date: **7/14/2016 03:30 PM**
Client ID: **Exc. Conf- Tier 1- Excavation Bottom** Run ID: **WETCHEM_160714J** SeqNo: **3924113** Prep Date: **7/13/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	3.137	0.98	4.902	0.34	57.1	75-125	2.83	10.3	20	S

The following samples were analyzed in this batch: 1607608-01A 1607608-02A 1607608-03A 1607608-04A

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

Client: HRL Compliance Solutions, Inc
Work Order: 1607608
Project: Terra Energy - TR 24-28-597 - Pad Site Inves.

QC BATCH REPORT

Batch ID: **88557** Instrument ID **WETCHEM** Method: **SW9045D**

LCS Sample ID: **LCS-88557-88557** Units: **s.u.** Analysis Date: **7/13/2016 06:07 PM**
Client ID: Run ID: **WETCHEM_160713W** SeqNo: **3921938** Prep Date: **7/13/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	3.98	0	4	0	99.5	90-110	0			

DUP Sample ID: **1607606-02A DUP** Units: **s.u.** Analysis Date: **7/13/2016 06:07 PM**
Client ID: Run ID: **WETCHEM_160713W** SeqNo: **3921941** Prep Date: **7/13/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	8.18	0	0	0	0	0-0	8.36	2.18	20	

DUP Sample ID: **1607607-01A DUP** Units: **s.u.** Analysis Date: **7/13/2016 06:07 PM**
Client ID: Run ID: **WETCHEM_160713W** SeqNo: **3921943** Prep Date: **7/13/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	8.5	0	0	0	0	0-0	8.56	0.703	20	H

The following samples were analyzed in this batch: 1607608-01A 1607608-02A 1607608-03A 1607608-04A

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

Client: HRL Compliance Solutions, Inc
Work Order: 1607608
Project: Terra Energy - TR 24-28-597 - Pad Site Inves.

QC BATCH REPORT

Batch ID: **88562** Instrument ID **WETCHEM** Method: **USDA H60 Metho**

DUP Sample ID: **1607687-04B DUP** Units: **mmhos/cm @25°** Analysis Date: **7/18/2016 01:30 PM**
Client ID: Run ID: **WETCHEM_160718D** SeqNo: **3928264** Prep Date: **7/18/2016** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ Saturation	1.477	0.050	0	0	0		1.463	0.952	50	

The following samples were analyzed in this batch: 1607608-01A 1607608-02A 1607608-03A 1607608-04A

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

Client: HRL Compliance Solutions, Inc
Work Order: 1607608
Project: Terra Energy - TR 24-28-597 - Pad Site Inves.

QC BATCH REPORT

Batch ID: **R191485** Instrument ID **MOIST** Method: **SW3550C**

MBLK Sample ID: **WBLKS-R191485** Units: **% of sample** Analysis Date: **7/13/2016 01:45 PM**
Client ID: Run ID: **MOIST_160713A** SeqNo: **3922593** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	ND	0.050								

LCS Sample ID: **LCS-R191485** Units: **% of sample** Analysis Date: **7/13/2016 01:45 PM**
Client ID: Run ID: **MOIST_160713A** SeqNo: **3922592** 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: **1607490-03B DUP** Units: **% of sample** Analysis Date: **7/13/2016 01:45 PM**
Client ID: Run ID: **MOIST_160713A** SeqNo: **3922571** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	21.88	0.050	0	0	0		22.45	2.57	20	

DUP Sample ID: **1607490-04B DUP** Units: **% of sample** Analysis Date: **7/13/2016 01:45 PM**
Client ID: Run ID: **MOIST_160713A** SeqNo: **3922573** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	23.08	0.050	0	0	0		23.04	0.173	20	

The following samples were analyzed in this batch: 1607608-01A 1607608-02A 1607608-03A 1607608-04A

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

Client: HRL Compliance Solutions, Inc
Work Order: 1607608
Project: Terra Energy - TR 24-28-597 - Pad Site Inves.

QC BATCH REPORT

Batch ID: **R191670** Instrument ID **MOIST** Method: **SW3550C**

MBLK Sample ID: **WBLKS-R191670** Units: **% of sample** Analysis Date: **7/15/2016 02:09 PM**
Client ID: Run ID: **MOIST_160715B** SeqNo: **3926699** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	ND	0.050								

LCS Sample ID: **LCS-R191670** Units: **% of sample** Analysis Date: **7/15/2016 02:09 PM**
Client ID: Run ID: **MOIST_160715B** SeqNo: **3926698** 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: **1607608-01A DUP** Units: **% of sample** Analysis Date: **7/15/2016 02:09 PM**
Client ID: **Exc Conf- Tier 1 - Side Wall (SE Corner)** Run ID: **MOIST_160715B** SeqNo: **3926697** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	18.21	0.050	0	0	0		18.78	3.08	20	

The following samples were analyzed in this batch: 1607608-01A

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

ALS Laboratory Group

225 Commerce Drive, Fort Collins, Colorado 80524
TF: (800) 443-1511 PH: (970) 490-1511 FX: (970) 490-1522

Chain-of-Custody

Form 202r8

WORKORDER #	1600C008
PAGE	1 of 2
DISPOSAL	By Lab or Return to Client

PROJECT NAME	Terra Energy -TR 24-28-597 - Pad Site Inves.	SAMPLER	Kris Rowe
PROJECT No.		SITE ID	Trail Ridge 24-28-597 Pad
		EDD FORMAT	
		PURCHASE ORDER	
COMPANY NAME	HRL COMPLIANCE SOLUTIONS Inc.	BILL TO COMPANY	Terra Energy
SEND REPORT TO	KRIS ROWE	INVOICE ATTN TO	Mike Gardner
ADDRESS	2385 F 1/2	ADDRESS	
CITY / STATE / ZIP	GRAND JUNCTION CO 81505	CITY / STATE / ZIP	
PHONE	970-243-3271	PHONE	
FAX	970-243-3280	FAX	
E-MAIL	KROWE@HRLCOMP.COM	E-MAIL	

DATE: 7/11/2016
TURNAROUND: 24 Rush

Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	DRO	GRO	BTEX	910-1 Metals	Saml Vols - PAH	SAR / EC / pH
	Exc Conf. - Tier 1 - Side Wall (SE Corner)	S	7/11/2016	8:00	2			x	x	x	x	x	x
	Exc. Conf - Tier 1 - Center Side Wall	S	7/11/2016	8:15	2			x	x	x	x	x	x
	Exc. Conf - Tier 1 - Excavation Bottom	S	7/11/2016	8:30	2			x	x	x	x	x	x
	Exc. Conf - Bottom Tier - Excavation Bottom	S	7/11/2016	8:45	2								

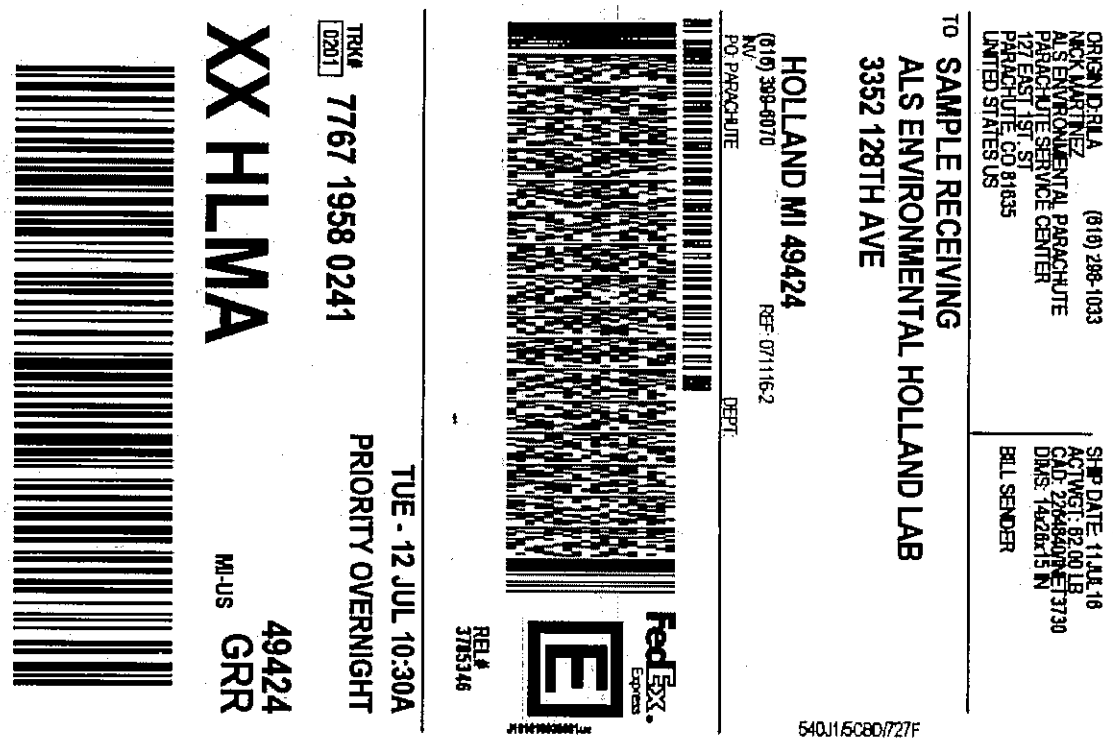
*Time Zone (Circle): EST CST MST PST Matrix: O = oil S = soil NS = non-soil solid W = water L = liquid E = extract F = filter

For metals or anions, please detail analytes below.

Comments:	QC PACKAGE (check below)
24 HR Rush - DRO/GRO/BTEX/PAH Standard TAT - Metals SAR/EC/ph	LEVEL II (Standard QC)
	LEVEL III (Std QC + forms)
	LEVEL IV (Std QC + forms + raw data)
2.0C	

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		Kris Rowe	7/7/2016	
RECEIVED BY			7-11-16	1830
RELINQUISHED BY			7-11-16	1830
RECEIVED BY	MBeeett	MBroadbent	7/13/16	1030
RELINQUISHED BY				
RECEIVED BY				



After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

ALS Group USA, Corp

Sample Receipt Checklist

Client Name: **HRL** Date/Time Received: **13-Jul-16 10:30**

Work Order: **1607608** Received by: **MEB**

Checklist completed by Meghan Broadbent (eSignature) 13-Jul-16 (Date) Reviewed by: Chad Whelton (eSignature) 13-Jul-16 (Date)

Matrices: soil

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Sample(s) received on ice?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	2.0/2.0	SR2	
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	7/13/2016 10:52:41 AM		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:	-		

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction: