# **Energy Quest II, LLC**

## State AO Delineation Report

## Unit Letter C, Section 4, T12S, R33E Lea County, New Mexico

October 23, 2017



**APPROVED** By Olivia Yu at 10:54 am, Dec 19, 2017

NMOCD approves of the delineation completed for 1RP-4359. No further remediation is required.

**Prepared for:** 

EnergyQuest II, LLC 4526 Research Forest Drive, Suite 200 The Woodlands, TX 77381

By:

Safety & Environmental Solutions, Inc. 703 East Clinton Street Hobbs, New Mexico 88240 (575) 397-0510

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#### I. Company Contacts

Representative	Company	Telephone	E-mail
Larry Davis	Energy Quest	281-651-5201	Larry.davis@energyquest.us
Bob Allen	SESI	575-397-0510	ballen@sesi-nm.com

#### II. Background

Safety and Environmental Solutions, Inc., hereinafter referred to as (SESI) was engaged by Energy Quest to perform site delineation on the State AO #001. This site is situated in Lea County, Section 4, Township 12S, and Range 33E.

#### III. Surface and Ground Water

There is no record of groundwater in the immediate vicinity of this site location. According to research of the New Mexico Office of the State Engineer records indicate the average depth to groundwater for the area to be 64' bgs.

#### IV. Characterization

The target cleanup levels are determined using the *Guidelines for Remediation of Leaks, Spills and Releases* published by the NMOCD (August 13, 1993). Based on the ranking criteria presented below, the applicable Recommended Remediation Action Levels (RRAL) are 10 parts per million (ppm) Benzene, 50 ppm combined benzene, toluene, ethyl benzene, and total xylenes (BTEX), and 5,000 ppm Total Petroleum Hydrocarbons (TPH). Characterization of vertical extent of chloride concentration to a level of 250 mg/kg (PPM) is also required.

Depth to Ground Water:			
(Vertical distance from contaminants to	Less than 50 feet	20 points	
seasonal high water elevation of	50 feet to 99 feet	10 points	X
groundwater)	>100 feet	0 points	
Wellhead Protection Area:			
(Less than 200 feet from a private domestic	Yes	20 points	
water source; or less than 1000 feet from all	No 0 points		Χ
other water sources)			
Distance to Surface Water:			
(Horizontal distance to perennial lakes,	Less than 200 feet	20 points	
ponds, rivers, streams, creeks, irrigation	200 feet to 1000 feet	10 points	
canals and ditches)	>1000 feet	0 points	Χ
RANKING SCORE (TOTAL POINTS)			10

#### V. Work Performed

On October 12, 2017, SESI personnel was onsite at the Energy Quest State AO #001 with Energy Quest personnel to install auger holes to determine vertical extent. Energy Quest personnel had already pin flagged the areas to be sampled. Auger hole installation began, where SP-1 West met refusal at one foot. Auger hole SP-1 North was installed and met refusal at 3 to 4 inches. Auger hole SP-1 South was installed and met refusal at 6 inches. Auger hole SP-2 North was installed and met refusal at 3 to 4 inches. At that time that Energy Quest personnel decided to use a back hoe to install the trenches. All samples were field tested and the time of sample. The area was pin flagged with white flags, and a one call was placed.

From October 18, 2017, to October 20, 2017 SESI personnel was onsite at the Energy Quest AO State #1 with SDR Enterprises back hoe operator and spotter to install test trenches to determine vertical extent of contamination. Trench installation began. All soil samples were field tested for Chlorides while the trench was installed. The trenches that met refusal were at hard solid rock where the back hoe could not penetrate or break up the rock. The location and trenches were mapped using the Juno 3B and site photos were taken. Representative soil samples were properly packaged, preserved and transported to Hall Laboratories, Albuquerque New Mexico and analyzed for Chloride (CI<sup>-</sup>) (Method SM 4500CI-B), TPH(total petroleum hydrocarbons)(Method 8015M), and BTEX. The results of the analysis are presented in the tables below:

Lab Con	Lab Confirmations Sample Date: 10-27-17									
SAMPLE ID	ТРН	BTEX	CHLORIDES							
1 West @ 1'	ND	ND	ND							
1 West @ 2'	ND	ND	ND							
1 West @ 13'	ND	ND	ND							
1 South @ 1'	ND	ND	ND							
1 South @ 2'	ND	ND	ND							
1 South @ 13'	ND	ND	ND							
2 South @ 1'	ND	ND	ND							
2 South @ 2'	ND	ND	ND							
2 South @ 13'	ND	ND	ND							
2 East @ 1'	ND	ND	ND							
2 East @ 2'	ND	ND	ND							
2 East @ 13'	ND	ND	ND							
2 North @ 1'	ND	ND	ND							
2 North @ 2'	ND	ND	ND							
2 North @ 7'	ND	ND	ND							
1 North @ 1'	ND	ND	ND							
1 North @ 2'	ND	ND	ND							
1 North @ 13'	ND	ND	ND							

Lab Confirmations Sample Date: 10-30-17									
SAMPLE ID	ТРН	BTEX	CHLORIDES						
2 West @ 1'	ND	ND	ND						
2 West @ 2'	ND	ND	ND						
2 West @ 13'	ND	ND	ND						
1 East @ 1'	ND	ND	ND						
1 East @ 2'	ND	ND	ND						
1 East @ 3'	ND	ND	ND						
3 North @ 1'	ND	ND	ND						
3 North @ 2'	ND	ND	ND						
3 North @ 13'	ND	ND	ND						
3 West @ 1'	ND	ND	ND						
3 West @ 2'	ND	ND	ND						
3 West @ 3'	ND	ND	ND						
3 South @ 1'	ND	ND	ND						
3 South @ 2'	ND	ND	ND						
3 South @ 3'	ND	ND	ND						
3 East @ 1'	ND	ND	ND						
3 East @ 2'	ND	ND	ND						
3 East @ 3'	ND	ND	ND						

#### VI. Action Plan

Due to the lack of contamination as represented in the analysis results listed above, SESI and Energy Quest request that no further action be required for this site.

#### VII. Figures & Appendices

Figure 1 – Vicinity Map Figure 2 – Site Plan Appendix A – Groundwater Appendix B – Analytical Results Appendix C – Photo Documentation

# Figure 1 Vicinity Map



# Figure 2 Site Plan



## Appendix A Groundwater



# New Mexico Office of the State Engineer Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a	(R=POD has been replace O=orphaned, C=the file is	d,	rters	are	1–NI	M 2-N	IE 3=SW	(4-SF)				
water right file.)	closed)						largest)	-	3 UTM in meters)		(In fee	t)
	POD Sub-		0	ຊີດ						Donth	Donth	Motor
POD Number	Code basin	County				: Tws	Rng	x	Y	-	-	Water Column
L 00348	R L	LE	2	2 2	31	12S	33E	626027	3678780* 🌍	115		
L 00348 POD2	L	LE	1 2	2 1	35	12S	33E	631556	3678951 🌍	115		
L 01125 POD1	L	LE	3	34	03	12S	33E	630365	3685679* 🌍	90	50	40
L 01129 POD1	L	LE	2	4	02	12S	33E	632375	3685708* 🌍	130	55	75
L 01233 POD1	L	LE	2	1	03	12S	33E	629949	3686478* 🌍	130	45	85
L 01241	L	LE	2	2 3	03	12S	33E	629955	3686075* 🌍	119	50	69
L 01255	L	LE	1 4	4	22	12S	33E	630726	3680952* 🌍	140	92	48
L 01282	L	LE	3	32	02	12S	33E	631961	3686508* 🌍	122	55	67
L 01287	L	LE	1	2	11	12S	33E	631979	3685300* 🌍	130	65	65
L 01291	L	LE	3	3 1	12	12S	33E	632787	3684908* 🌍	90	55	35
L 01331	L	LE	2	2 1	03	12S	33E	629943	3686880* 🌍	125	68	57
L 01396	L	LE	2	2 1	02	12S	33E	631552	3686905* 🌍	126	45	81
L 01470	L	LE	2	2 2	02	12S	33E	632356	3686915* 🌍	110	45	65
L 02073	L	LE	1 4	4	11	12S	33E	632295	3684197* 🌍	130	49	81
L 02165	L	LE	3 1	1	02	12S	33E	631049	3686799* 🌍	114		
L 02981	L	LE	2 2	2 2	04	12S	33E	629237	3686969* 🌍	143	70	73
L 03257	L	LE	1 1	1	01	12S	33E	632657	3687020* 🌍	155	55	100
L 03338	L	LE	32	2 4	34	12S	33E	630762	3677935* 🌍	138	90	48
L 03411	L	LE	2 2	2 1	02	12S	33E	631651	3687004* 🌍	121	50	71
L 05009	L	LE	3	3 2	04	12S	33E	628741	3686462* 🌍	110	40	70
L 05479	L	LE	3 4	1	35	12S	33E	631561	3678349* 🌍	157		
L 05479 EXPL	0	LE	4 2	2 1	26	12S	33E	631736	3680361* 🌍	157		
L 05479 POD2	L	LE	3 1	1	35	12S	33E	631154	3678745* 🌍	202		
L 05568 POD4	L	LE	2 2	2 1	28	12S	33E	628516	3680519* 🌍	182	95	87
L 05613	L	LE	2	4	25	12S	33E	634065	3679288* 🌍	152	78	74
L 05899	R L	LE	2	4	33	12S	33E	629260	3677614* 🌍	136	100	36

\*UTM location was derived from PLSS - see Help

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)	(R=POD has been replaced O=orphaned, C=the file is closed)	(quar					IE 3=SV	V 4=SE) ) (NAD83	3 UTM in meters)		(In feet	)
	POD											
	Sub-		QQ	Q						Depth	Depth	Water
POD Number	Code basin C	ounty	64 16	4 \$	Sec	Tws	Rng	Х	Y	Well	Water	Column
L 06112	L	LE		4 2	29	12S	33E	627429	3679399* 🌍	120	80	40
			1	2 (	01	12S	22E	622562	3686931* 🦲	100	46	76
L 06241	L	LE	1	2 (	UI	125	ാാ⊏	633562	3000931	122	46	76

1 2 15 12S 33E

2 2 05 12S 33E

4 4 20

1 1 3 05

1 1 2 04

4 4 29

3 3 3 31 12S 33E

3 3 3 03 12S 33E

4 2 2 09 12S 33E

1 1 1 22 12S 33E

1 1 1 10 12S 33E

4 2 4 09 12S 33E

1 1 1 15 12S 33E

1 3 2 02 12S 33E

2 1 3 02 12S 33E

4 4 14 12S 33E

3 18 12S 33E

12S 33E

12S 33E

12S 33E

12S 33E

630390

627528

627608

626233

628634

627629

624723

629457

629259

629503

629462

629269

629483

631860

632417

624968

631190

3683666\*

3686850\*

3680813\*

3686127\*

3686964\*

3679203\*

3677457\*

3685565\*

3685158\*

3682143\*

3685363\*

3684353\*

3683753\*

3686607\*

3682487\*

3682590\*

3686119 |

Average Depth to Water:

Minimum Depth: Maximum Depth:

135

120

154

133

130

95

135

130

125

142

124

140

145

134

145

120

59

80

80

95

80

60

28

55

58

85

65

80

80

42

55

70

64 feet 28 feet

100 feet

Record Count: 45

L

L

L

L

L

L

L

L

L

L

L

L

L

L

L

L

L

LE

PLSS Search:

L 06279

L 06319

L 06363

L 06451

L 06521

L 06559

L 06615

L 06668

L 06738

L 06775

L 06789

L 06877

L 06890

L 10231

L 10634

L 10718

L 14214 POD1

Township: 12S Range: 33E

#### \*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

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59

60

65

92

90

50

# Appendix B Analytical Results



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: <u>www.hallenvironmental.com</u>

October 27, 2017

Bob Allen Safety & Environmental Solutions PO Box 1613 Hobbs, NM 88241 TEL: (575) 397-0510 FAX (575) 393-4388

RE: Energy Quest AO State 1

OrderNo.: 1710B78

Dear Bob Allen:

Hall Environmental Analysis Laboratory received 18 sample(s) on 10/21/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <u>www.hallenvironmental.com</u> or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

Energy Quest AO State 1

**Project:** 

Client Sample ID: 1 West 1 Ft Collection Date: 10/18/2017 11:00:00 AM Received Date: 10/21/2017 11:15:00 AM

Lab ID: 1710B78-001	Matrix:	SOIL	<b>Received</b>	Date: 10/	21/2017 11:15:00 AN	1
Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: MRA
Chloride	ND	30	mg/Kg	20	10/24/2017 1:44:37 PM	1 34597
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	6			Analys	t: TOM
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	10/24/2017 1:57:57 PN	/ 34570
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	10/24/2017 1:57:57 PN	/ 34570
Surr: DNOP	84.9	70-130	%Rec	1	10/24/2017 1:57:57 PN	1 34570
EPA METHOD 8015D: GASOLINE RAM	NGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	10/24/2017 10:11:48 A	M 34554
Surr: BFB	111	15-316	%Rec	1	10/24/2017 10:11:48 A	M 34554
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.023	mg/Kg	1	10/24/2017 10:11:48 A	M 34554
Toluene	ND	0.046	mg/Kg	1	10/24/2017 10:11:48 A	M 34554
Ethylbenzene	ND	0.046	mg/Kg	1	10/24/2017 10:11:48 A	M 34554
Xylenes, Total	ND	0.092	mg/Kg	1	10/24/2017 10:11:48 A	M 34554
Surr: 4-Bromofluorobenzene	111	80-120	%Rec	1	10/24/2017 10:11:48 A	M 34554

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 1 of 22
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

Energy Quest AO State 1

**Project:** 

Client Sample ID: 1 West 2 Ft Collection Date: 10/18/2017 11:05:00 AM **Received Date:** 10/21/2017 11:15:00 AM

Lab ID: 1710B78-002	Matrix:	SOIL	<b>Received</b>	Date: 10/	/21/2017 11:15:00 AN	1
Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: MRA
Chloride	ND	30	mg/Kg	20	10/24/2017 1:57:02 PM	/ 34597
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	6			Analys	t: TOM
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	10/24/2017 3:21:35 PM	/ 34570
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	10/24/2017 3:21:35 PM	/ 34570
Surr: DNOP	87.1	70-130	%Rec	1	10/24/2017 3:21:35 PM	/ 34570
EPA METHOD 8015D: GASOLINE RAI	NGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	10/24/2017 10:35:28 A	M 34554
Surr: BFB	116	15-316	%Rec	1	10/24/2017 10:35:28 A	M 34554
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.024	mg/Kg	1	10/24/2017 10:35:28 A	M 34554
Toluene	ND	0.048	mg/Kg	1	10/24/2017 10:35:28 A	M 34554
Ethylbenzene	ND	0.048	mg/Kg	1	10/24/2017 10:35:28 A	M 34554
Xylenes, Total	ND	0.097	mg/Kg	1	10/24/2017 10:35:28 A	M 34554
Surr: 4-Bromofluorobenzene	114	80-120	%Rec	1	10/24/2017 10:35:28 A	M 34554

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- \* Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix
- Н
- Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S
- В Analyte detected in the associated Method Blank
- Е Value above quantitation range
- Analyte detected below quantitation limits Page 2 of 22 J
- Р Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified W

Analytical Report Lab Order 1710B78

Date Reported: 10/27/2017

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

Energy Quest AO State 1

**Project:** 

Client Sample ID: 1 West 13 Ft Collection Date: 10/18/2017 12:35:00 PM Received Date: 10/21/2017 11:15:00 AM

Lab ID: 1710B78-003	Matrix:	SOIL	<b>Received</b>	Received Date: 10/21/2017 11:15:00 AM				
Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch		
EPA METHOD 300.0: ANIONS					Analys	st: MRA		
Chloride	38	30	mg/Kg	20	10/24/2017 2:09:26 PM	M 34597		
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	6			Analys	st: TOM		
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	10/24/2017 4:17:18 PI	M 34570		
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	10/24/2017 4:17:18 PI	M 34570		
Surr: DNOP	87.8	70-130	%Rec	1	10/24/2017 4:17:18 PM	M 34570		
EPA METHOD 8015D: GASOLINE RAI	NGE				Analys	st: NSB		
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	10/24/2017 10:59:09 A	AM 34554		
Surr: BFB	110	15-316	%Rec	1	10/24/2017 10:59:09 A	AM 34554		
EPA METHOD 8021B: VOLATILES					Analys	st: NSB		
Benzene	ND	0.024	mg/Kg	1	10/24/2017 10:59:09 A	AM 34554		
Toluene	ND	0.048	mg/Kg	1	10/24/2017 10:59:09 A	AM 34554		
Ethylbenzene	ND	0.048	mg/Kg	1	10/24/2017 10:59:09 A	AM 34554		
Xylenes, Total	ND	0.097	mg/Kg	1	10/24/2017 10:59:09 A	AM 34554		
Surr: 4-Bromofluorobenzene	110	80-120	%Rec	1	10/24/2017 10:59:09 A	AM 34554		

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- \* Value exceeds Maximum Contaminant Level.D Sample Diluted Due to Matrix
- D Sample Diffeed Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 3 of 22
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

Energy Quest AO State 1

**Project:** 

Client Sample ID: 1 South 1 Ft Collection Date: 10/18/2017 1:10:00 PM Received Date: 10/21/2017 11:15:00 AM

Lab ID: 1710B78-004	Matrix:	SOIL	Received 1	Received Date: 10/21/2017 11:15:00 AM				
Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch		
EPA METHOD 300.0: ANIONS					Analys	st: MRA		
Chloride	ND	30	mg/Kg	20	10/24/2017 3:11:29 Pl	M 34597		
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	6			Analys	st: TOM		
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	10/24/2017 4:45:03 Pl	M 34570		
Motor Oil Range Organics (MRO)	ND	51	mg/Kg	1	10/24/2017 4:45:03 PI	M 34570		
Surr: DNOP	85.5	70-130	%Rec	1	10/24/2017 4:45:03 Pl	M 34570		
EPA METHOD 8015D: GASOLINE RAI	NGE				Analys	st: NSB		
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	10/24/2017 11:22:44 /	AM 34554		
Surr: BFB	109	15-316	%Rec	1	10/24/2017 11:22:44 /	AM 34554		
EPA METHOD 8021B: VOLATILES					Analys	st: NSB		
Benzene	ND	0.025	mg/Kg	1	10/24/2017 11:22:44 /	AM 34554		
Toluene	ND	0.049	mg/Kg	1	10/24/2017 11:22:44 /	AM 34554		
Ethylbenzene	ND	0.049	mg/Kg	1	10/24/2017 11:22:44 /	AM 34554		
Xylenes, Total	ND	0.099	mg/Kg	1	10/24/2017 11:22:44 /	AM 34554		
Surr: 4-Bromofluorobenzene	108	80-120	%Rec	1	10/24/2017 11:22:44 /	AM 34554		

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 4 of 22
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

Energy Quest AO State 1

**Project:** 

Client Sample ID: 1 South 2 Ft Collection Date: 10/18/2017 1:15:00 PM Received Date: 10/21/2017 11:15:00 AM

Lab ID: 1710B78-005	Matrix:	SOIL	<b>Received</b>	Received Date: 10/21/2017 11:15:00 AM				
Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch		
EPA METHOD 300.0: ANIONS					Analys	t: MRA		
Chloride	ND	30	mg/Kg	20	10/24/2017 3:23:54 PM	1 34597		
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	6			Analys	t: TOM		
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	10/24/2017 5:13:07 PM	1 34570		
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	10/24/2017 5:13:07 PM	1 34570		
Surr: DNOP	87.2	70-130	%Rec	1	10/24/2017 5:13:07 PM	1 34570		
EPA METHOD 8015D: GASOLINE RAI	NGE				Analys	t: NSB		
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	10/24/2017 11:46:18 A	M 34554		
Surr: BFB	108	15-316	%Rec	1	10/24/2017 11:46:18 A	M 34554		
EPA METHOD 8021B: VOLATILES					Analys	t: NSB		
Benzene	ND	0.024	mg/Kg	1	10/24/2017 11:46:18 A	M 34554		
Toluene	ND	0.049	mg/Kg	1	10/24/2017 11:46:18 A	M 34554		
Ethylbenzene	ND	0.049	mg/Kg	1	10/24/2017 11:46:18 A	M 34554		
Xylenes, Total	ND	0.098	mg/Kg	1	10/24/2017 11:46:18 A	M 34554		
Surr: 4-Bromofluorobenzene	107	80-120	%Rec	1	10/24/2017 11:46:18 A	M 34554		

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 5 of 22
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

Energy Quest AO State 1

**Project:** 

Client Sample ID: 1 South 13 Ft Collection Date: 10/18/2017 2:00:00 PM **Received Date:** 10/21/2017 11:15:00 AM

Lab ID: 1710B78-006	Matrix: SOIL		Received 1	Received Date: 10/21/2017 11:15:00 AM			
Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch	
EPA METHOD 300.0: ANIONS					Analys	st: MRA	
Chloride	ND	30	mg/Kg	20	10/24/2017 3:36:19 Pl	M 34597	
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	6			Analys	st: TOM	
Diesel Range Organics (DRO)	ND	9.2	mg/Kg	1	10/24/2017 5:41:10 Pl	M 34570	
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	10/24/2017 5:41:10 Pl	M 34570	
Surr: DNOP	81.3	70-130	%Rec	1	10/24/2017 5:41:10 Pl	M 34570	
EPA METHOD 8015D: GASOLINE RAM	IGE				Analys	st: NSB	
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	10/24/2017 12:09:55 F	PM 34554	
Surr: BFB	112	15-316	%Rec	1	10/24/2017 12:09:55 F	PM 34554	
EPA METHOD 8021B: VOLATILES					Analys	st: NSB	
Benzene	ND	0.024	mg/Kg	1	10/24/2017 12:09:55 F	PM 34554	
Toluene	ND	0.048	mg/Kg	1	10/24/2017 12:09:55 F	PM 34554	
Ethylbenzene	ND	0.048	mg/Kg	1	10/24/2017 12:09:55 F	PM 34554	
Xylenes, Total	ND	0.096	mg/Kg	1	10/24/2017 12:09:55 F	PM 34554	
Surr: 4-Bromofluorobenzene	110	80-120	%Rec	1	10/24/2017 12:09:55 F	PM 34554	

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- \* Value exceeds Maximum Contaminant Level. D
- Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S
- В Analyte detected in the associated Method Blank
- Е Value above quantitation range
- Analyte detected below quantitation limits Page 6 of 22 J
- Р Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified W

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

Energy Quest AO State 1

Project:

Client Sample ID: 2 South 1 Ft Collection Date: 10/18/2017 2:10:00 PM Received Date: 10/21/2017 11:15:00 AM

Lab ID: 1710B78-007	Matrix:	Matrix: SOIL		Received Date: 10/21/2017 11:15:00 AM			
Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch	
EPA METHOD 300.0: ANIONS					Analyst	MRA	
Chloride	ND	30	mg/Kg	20	10/24/2017 3:48:44 PM	34597	
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	6			Analyst	том	
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	10/24/2017 6:09:14 PM	34570	
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	10/24/2017 6:09:14 PM	34570	
Surr: DNOP	81.2	70-130	%Rec	1	10/24/2017 6:09:14 PM	34570	
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst	: NSB	
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	10/24/2017 12:33:26 PM	M 34554	
Surr: BFB	110	15-316	%Rec	1	10/24/2017 12:33:26 PM	M 34554	
EPA METHOD 8021B: VOLATILES					Analyst	NSB	
Benzene	ND	0.023	mg/Kg	1	10/24/2017 12:33:26 PM	M 34554	
Toluene	ND	0.046	mg/Kg	1	10/24/2017 12:33:26 PM	M 34554	
Ethylbenzene	ND	0.046	mg/Kg	1	10/24/2017 12:33:26 PM	M 34554	
Xylenes, Total	ND	0.092	mg/Kg	1	10/24/2017 12:33:26 PM	M 34554	
Surr: 4-Bromofluorobenzene	109	80-120	%Rec	1	10/24/2017 12:33:26 PM	M 34554	

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 7 of 22
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

Energy Quest AO State 1

**Project:** 

Client Sample ID: 2 South 2 Ft Collection Date: 10/18/2017 2:15:00 PM Received Date: 10/21/2017 11:15:00 AM

Lab ID: 1710B78-008	Matrix:	Matrix: SOIL		Received Date: 10/21/2017 11:15:00 AM			
Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch	
EPA METHOD 300.0: ANIONS					Analys	st: MRA	
Chloride	30	30	mg/Kg	20	10/24/2017 4:01:08 PI	M 34597	
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	6			Analys	st: TOM	
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	10/24/2017 6:37:15 PI	M 34570	
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	10/24/2017 6:37:15 PI	M 34570	
Surr: DNOP	80.2	70-130	%Rec	1	10/24/2017 6:37:15 PI	M 34570	
EPA METHOD 8015D: GASOLINE RAI	NGE				Analys	st: NSB	
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	10/24/2017 12:56:55 F	PM 34554	
Surr: BFB	110	15-316	%Rec	1	10/24/2017 12:56:55 F	PM 34554	
EPA METHOD 8021B: VOLATILES					Analys	st: NSB	
Benzene	ND	0.024	mg/Kg	1	10/24/2017 12:56:55 F	PM 34554	
Toluene	ND	0.047	mg/Kg	1	10/24/2017 12:56:55 F	PM 34554	
Ethylbenzene	ND	0.047	mg/Kg	1	10/24/2017 12:56:55 F	PM 34554	
Xylenes, Total	ND	0.094	mg/Kg	1	10/24/2017 12:56:55 F	PM 34554	
Surr: 4-Bromofluorobenzene	108	80-120	%Rec	1	10/24/2017 12:56:55 F	PM 34554	

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 8 of 22
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

Energy Quest AO State 1

**Project:** 

Client Sample ID: 2 South 13 Ft Collection Date: 10/18/2017 2:45:00 PM Received Date: 10/21/2017 11:15:00 AM

Lab ID: 1710B78-009	Matrix: SOIL		<b>Received</b>	Received Date: 10/21/2017 11:15:00 AM			
Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch	
EPA METHOD 300.0: ANIONS					Analyst	MRA	
Chloride	ND	30	mg/Kg	20	10/24/2017 4:13:33 PN	34597	
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	5			Analyst	: ТОМ	
Diesel Range Organics (DRO)	ND	9.2	mg/Kg	1	10/24/2017 7:05:01 PN	34570	
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	10/24/2017 7:05:01 PM	34570	
Surr: DNOP	77.6	70-130	%Rec	1	10/24/2017 7:05:01 PN	34570	
EPA METHOD 8015D: GASOLINE RAM	IGE				Analyst	: NSB	
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	10/24/2017 1:20:24 PN	34554	
Surr: BFB	111	15-316	%Rec	1	10/24/2017 1:20:24 PN	34554	
EPA METHOD 8021B: VOLATILES					Analyst	: NSB	
Benzene	ND	0.024	mg/Kg	1	10/24/2017 1:20:24 PN	34554	
Toluene	ND	0.049	mg/Kg	1	10/24/2017 1:20:24 PN	34554	
Ethylbenzene	ND	0.049	mg/Kg	1	10/24/2017 1:20:24 PN	34554	
Xylenes, Total	ND	0.097	mg/Kg	1	10/24/2017 1:20:24 PN	34554	
Surr: 4-Bromofluorobenzene	110	80-120	%Rec	1	10/24/2017 1:20:24 PN	34554	

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 9 of 22
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

Energy Quest AO State 1

Project:

Client Sample ID: 2 East 1 Ft Collection Date: 10/18/2017 3:00:00 PM Received Date: 10/21/2017 11:15:00 AM

Lab ID: 1710B78-010	Matrix: SOIL		<b>Received</b>	Received Date: 10/21/2017 11:15:00 AM			
Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch	
EPA METHOD 300.0: ANIONS					Analy	st: MRA	
Chloride	ND	30	mg/Kg	20	10/25/2017 10:41:24	AM 34619	
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	6			Analy	st: TOM	
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	10/24/2017 7:33:08 P	M 34570	
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	10/24/2017 7:33:08 P	M 34570	
Surr: DNOP	83.9	70-130	%Rec	1	10/24/2017 7:33:08 P	M 34570	
EPA METHOD 8015D: GASOLINE RAM	NGE				Analy	st: NSB	
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	10/24/2017 5:15:31 P	M 34554	
Surr: BFB	108	15-316	%Rec	1	10/24/2017 5:15:31 P	M 34554	
EPA METHOD 8021B: VOLATILES					Analy	st: NSB	
Benzene	ND	0.025	mg/Kg	1	10/24/2017 5:15:31 P	M 34554	
Toluene	ND	0.049	mg/Kg	1	10/24/2017 5:15:31 P	M 34554	
Ethylbenzene	ND	0.049	mg/Kg	1	10/24/2017 5:15:31 P	M 34554	
Xylenes, Total	ND	0.099	mg/Kg	1	10/24/2017 5:15:31 P	M 34554	
Surr: 4-Bromofluorobenzene	110	80-120	%Rec	1	10/24/2017 5:15:31 P	M 34554	

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 10 of 22
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions Client Sample ID: 2 East 2 Ft **Project:** Energy Quest AO State 1 Collection Date: 10/18/2017 3:05:00 PM Lab ID: 1710B78-011 Matrix: SOIL Received Date: 10/21/2017 11:15:00 AM Analyses Result PQL Qual Units **DF** Date Analyzed Batch **EPA METHOD 300.0: ANIONS** Analyst: MRA Chloride ND 30 mg/Kg 20 10/25/2017 11:18:38 AM 34619 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: TOM 0

		-			· · · · · · · · · · · · · · · · · · ·
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	10/24/2017 8:01:04 PM 34570
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	10/24/2017 8:01:04 PM 34570
Surr: DNOP	79.0	70-130	%Rec	1	10/24/2017 8:01:04 PM 34570
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	10/24/2017 5:39:02 PM 34554
Surr: BFB	110	15-316	%Rec	1	10/24/2017 5:39:02 PM 34554
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.023	mg/Kg	1	10/24/2017 5:39:02 PM 34554
Toluene	ND	0.046	mg/Kg	1	10/24/2017 5:39:02 PM 34554
Ethylbenzene	ND	0.046	mg/Kg	1	10/24/2017 5:39:02 PM 34554
Xylenes, Total	ND	0.092	mg/Kg	1	10/24/2017 5:39:02 PM 34554
Surr: 4-Bromofluorobenzene	115	80-120	%Rec	1	10/24/2017 5:39:02 PM 34554

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	
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\*

- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded

Value exceeds Maximum Contaminant Level.

- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 11 of 22
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

Energy Quest AO State 1

Project:

Client Sample ID: 2 East 13 Ft Collection Date: 10/18/2017 3:30:00 PM Received Date: 10/21/2017 11:15:00 AM

Lab ID: 1710B78-012	Matrix:	Matrix: SOIL		Received Date: 10/21/2017 11:15:00 AM			
Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch	
EPA METHOD 300.0: ANIONS					Analy	st: MRA	
Chloride	ND	30	mg/Kg	20	10/25/2017 12:20:42	PM 34619	
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	6			Analy	st: TOM	
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	10/24/2017 8:28:52 F	PM 34570	
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	10/24/2017 8:28:52 F	PM 34570	
Surr: DNOP	86.5	70-130	%Rec	1	10/24/2017 8:28:52 F	PM 34570	
EPA METHOD 8015D: GASOLINE RA	NGE				Analy	st: NSB	
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	10/24/2017 6:02:37 F	PM 34554	
Surr: BFB	113	15-316	%Rec	1	10/24/2017 6:02:37 F	PM 34554	
EPA METHOD 8021B: VOLATILES					Analy	st: NSB	
Benzene	ND	0.024	mg/Kg	1	10/24/2017 6:02:37 F	PM 34554	
Toluene	ND	0.048	mg/Kg	1	10/24/2017 6:02:37 F	PM 34554	
Ethylbenzene	ND	0.048	mg/Kg	1	10/24/2017 6:02:37 F	PM 34554	
Xylenes, Total	ND	0.095	mg/Kg	1	10/24/2017 6:02:37 F	PM 34554	
Surr: 4-Bromofluorobenzene	117	80-120	%Rec	1	10/24/2017 6:02:37 F	PM 34554	

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 12 of 22
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

Energy Quest AO State 1

Project:

Client Sample ID: 2 North 1 Ft Collection Date: 10/18/2017 3:50:00 PM Provised Date: 10/21/2017 11:15:00 AM

Lab ID: 1710B78-013	Matrix:	Matrix: SOIL		Received Date: 10/21/2017 11:15:00 AM			
Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch	
EPA METHOD 300.0: ANIONS					Analy	st: MRA	
Chloride	ND	30	mg/Kg	20	10/25/2017 12:33:07	PM 34619	
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	6			Analy	st: TOM	
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	10/24/2017 8:56:38 F	M 34570	
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	10/24/2017 8:56:38 F	M 34570	
Surr: DNOP	85.5	70-130	%Rec	1	10/24/2017 8:56:38 F	PM 34570	
EPA METHOD 8015D: GASOLINE RAI	NGE				Analy	st: NSB	
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	10/24/2017 6:26:13 F	M 34554	
Surr: BFB	111	15-316	%Rec	1	10/24/2017 6:26:13 F	M 34554	
EPA METHOD 8021B: VOLATILES					Analy	st: NSB	
Benzene	ND	0.025	mg/Kg	1	10/24/2017 6:26:13 F	M 34554	
Toluene	ND	0.049	mg/Kg	1	10/24/2017 6:26:13 F	M 34554	
Ethylbenzene	ND	0.049	mg/Kg	1	10/24/2017 6:26:13 F	M 34554	
Xylenes, Total	ND	0.099	mg/Kg	1	10/24/2017 6:26:13 F	M 34554	
Surr: 4-Bromofluorobenzene	114	80-120	%Rec	1	10/24/2017 6:26:13 F	M 34554	

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- \* Value exceeds Maximum Contaminant Level. D
- Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S
- В Analyte detected in the associated Method Blank
- Е Value above quantitation range
- Analyte detected below quantitation limit Page 13 of 22 J
- Р Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified W

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

Energy Quest AO State 1

**Project:** 

Client Sample ID: 2 North 2 Ft Collection Date: 10/18/2017 3:55:00 PM Received Date: 10/21/2017 11:15:00 AM

Lab ID: 1710B78-014	Matrix:	Matrix: SOIL		<b>Received Date:</b> 10/21/2017 11:15:00 AM			
Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch	
EPA METHOD 300.0: ANIONS					Analy	st: MRA	
Chloride	ND	30	mg/Kg	20	10/25/2017 12:45:32	PM 34619	
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	6			Analy	st: TOM	
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	10/24/2017 9:24:25 P	M 34570	
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	10/24/2017 9:24:25 P	M 34570	
Surr: DNOP	89.2	70-130	%Rec	1	10/24/2017 9:24:25 P	M 34570	
EPA METHOD 8015D: GASOLINE RA	NGE				Analy	st: NSB	
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	10/24/2017 6:49:53 P	M 34554	
Surr: BFB	111	15-316	%Rec	1	10/24/2017 6:49:53 P	M 34554	
EPA METHOD 8021B: VOLATILES					Analy	st: NSB	
Benzene	ND	0.025	mg/Kg	1	10/24/2017 6:49:53 P	M 34554	
Toluene	ND	0.049	mg/Kg	1	10/24/2017 6:49:53 P	M 34554	
Ethylbenzene	ND	0.049	mg/Kg	1	10/24/2017 6:49:53 P	M 34554	
Xylenes, Total	ND	0.098	mg/Kg	1	10/24/2017 6:49:53 P	M 34554	
Surr: 4-Bromofluorobenzene	114	80-120	%Rec	1	10/24/2017 6:49:53 P	M 34554	

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 14 of 22
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

Energy Quest AO State 1

**Project:** 

Client Sample ID: 2 North 7 Ft Collection Date: 10/18/2017 4:15:00 PM Received Date: 10/21/2017 11:15:00 AM

Lab ID: 1710B78-015	Matrix:	Matrix: SOIL		Received Date: 10/21/2017 11:15:00 AM			
Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch	
EPA METHOD 300.0: ANIONS					Analy	st: MRA	
Chloride	31	30	mg/Kg	20	10/25/2017 12:57:57	PM 34619	
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS	6			Analy	st: TOM	
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	10/24/2017 9:51:56 F	M 34570	
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	10/24/2017 9:51:56 F	M 34570	
Surr: DNOP	74.8	70-130	%Rec	1	10/24/2017 9:51:56 F	PM 34570	
EPA METHOD 8015D: GASOLINE RA	NGE				Analy	st: NSB	
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	10/24/2017 7:13:29 F	M 34554	
Surr: BFB	111	15-316	%Rec	1	10/24/2017 7:13:29 F	M 34554	
EPA METHOD 8021B: VOLATILES					Analy	st: NSB	
Benzene	ND	0.025	mg/Kg	1	10/24/2017 7:13:29 F	M 34554	
Toluene	ND	0.049	mg/Kg	1	10/24/2017 7:13:29 F	M 34554	
Ethylbenzene	ND	0.049	mg/Kg	1	10/24/2017 7:13:29 F	M 34554	
Xylenes, Total	ND	0.099	mg/Kg	1	10/24/2017 7:13:29 F	M 34554	
Surr: 4-Bromofluorobenzene	112	80-120	%Rec	1	10/24/2017 7:13:29 F	M 34554	

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 15 of 22
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

Energy Quest AO State 1

Project:

Client Sample ID: 1 North 1 Ft Collection Date: 10/18/2017 4:30:00 PM Provised Date: 10/21/2017 11:15:00 AM

Lab ID: 1710B78-016	Matrix:	Matrix: SOIL		Received Date: 10/21/2017 11:15:00 AM			
Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch	
EPA METHOD 300.0: ANIONS					Analy	st: MRA	
Chloride	ND	30	mg/Kg	20	10/25/2017 1:10:22 F	PM 34619	
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	6			Analy	st: TOM	
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	10/24/2017 10:19:27	PM 34570	
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	10/24/2017 10:19:27	PM 34570	
Surr: DNOP	74.5	70-130	%Rec	1	10/24/2017 10:19:27	PM 34570	
EPA METHOD 8015D: GASOLINE RAM	NGE				Analy	st: NSB	
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	10/24/2017 7:37:08 F	PM 34554	
Surr: BFB	115	15-316	%Rec	1	10/24/2017 7:37:08 F	PM 34554	
EPA METHOD 8021B: VOLATILES					Analy	st: <b>NSB</b>	
Benzene	ND	0.024	mg/Kg	1	10/24/2017 7:37:08 F	PM 34554	
Toluene	ND	0.048	mg/Kg	1	10/24/2017 7:37:08 F	PM 34554	
Ethylbenzene	ND	0.048	mg/Kg	1	10/24/2017 7:37:08 F	PM 34554	
Xylenes, Total	ND	0.095	mg/Kg	1	10/24/2017 7:37:08 F	PM 34554	
Surr: 4-Bromofluorobenzene	114	80-120	%Rec	1	10/24/2017 7:37:08 F	PM 34554	

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- \* Value exceeds Maximum Contaminant Level. D
- Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S
- В Analyte detected in the associated Method Blank
- Е Value above quantitation range
- Analyte detected below quantitation limits Page 16 of 22 J
- Р Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified W

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

Energy Quest AO State 1

Project:

Client Sample ID: 1 North 2 Ft Collection Date: 10/18/2017 4:35:00 PM Provised Date: 10/21/2017 11:15:00 AM

Lab ID: 1710B78-017	Matrix:	<b>Received</b>	Received Date: 10/21/2017 11:15:00 AM					
Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch		
EPA METHOD 300.0: ANIONS					Analy	st: MRA		
Chloride	ND	30	mg/Kg	20	10/25/2017 1:22:46 F	PM 34619		
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	6			Analy	st: TOM		
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	10/24/2017 10:47:00	PM 34570		
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	10/24/2017 10:47:00	PM 34570		
Surr: DNOP	77.2	70-130	%Rec	1	10/24/2017 10:47:00	PM 34570		
EPA METHOD 8015D: GASOLINE RAM	NGE				Analy	vst: NSB		
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	10/24/2017 8:00:37 F	PM 34554		
Surr: BFB	112	15-316	%Rec	1	10/24/2017 8:00:37 F	PM 34554		
EPA METHOD 8021B: VOLATILES					Analy	vst: NSB		
Benzene	ND	0.024	mg/Kg	1	10/24/2017 8:00:37 F	PM 34554		
Toluene	ND	0.047	mg/Kg	1	10/24/2017 8:00:37 F	PM 34554		
Ethylbenzene	ND	0.047	mg/Kg	1	10/24/2017 8:00:37 F	PM 34554		
Xylenes, Total	ND	0.095	mg/Kg	1	10/24/2017 8:00:37 F	PM 34554		
Surr: 4-Bromofluorobenzene	111	80-120	%Rec	1	10/24/2017 8:00:37 F	PM 34554		

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- \* Value exceeds Maximum Contaminant Level. D
- Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S
- В Analyte detected in the associated Method Blank
- Е Value above quantitation range
- Analyte detected below quantitation limit Page 17 of 22 J
- Р Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified W

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

Energy Quest AO State 1

**Project:** 

Client Sample ID: 1 North 13 Ft Collection Date: 10/18/2017 5:00:00 PM Received Date: 10/21/2017 11:15:00 AM

Lab ID: 1710B78-018	Matrix:	SOIL	<b>Received</b>	Received Date: 10/21/2017 11:15:00 AM					
Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch			
EPA METHOD 300.0: ANIONS					Analy	st: MRA			
Chloride	34	30	mg/Kg	20	10/25/2017 1:35:11 F	M 34619			
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	6			Analy	st: TOM			
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	10/24/2017 11:14:15	PM 34570			
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	10/24/2017 11:14:15	PM 34570			
Surr: DNOP	72.3	70-130	%Rec	1	10/24/2017 11:14:15	PM 34570			
EPA METHOD 8015D: GASOLINE RAI	NGE				Analy	st: NSB			
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	10/24/2017 8:24:13 F	M 34554			
Surr: BFB	118	15-316	%Rec	1	10/24/2017 8:24:13 F	PM 34554			
EPA METHOD 8021B: VOLATILES					Analy	st: NSB			
Benzene	ND	0.023	mg/Kg	1	10/24/2017 8:24:13 F	PM 34554			
Toluene	ND	0.047	mg/Kg	1	10/24/2017 8:24:13 F	M 34554			
Ethylbenzene	ND	0.047	mg/Kg	1	10/24/2017 8:24:13 F	M 34554			
Xylenes, Total	ND	0.094	mg/Kg	1	10/24/2017 8:24:13 F	M 34554			
Surr: 4-Bromofluorobenzene	119	80-120	%Rec	1	10/24/2017 8:24:13 F	M 34554			

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 18 of 22
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

WO#:	1710B78

27-Oct-17
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Client: Project:	•	& Environmental Solutions Quest AO State 1	
Sample ID	MB-34597	SampType: mblk	TestCode: EPA Method 300.0: Anions
Client ID:	PBS	Batch ID: 34597	RunNo: <b>46586</b>
Prep Date:	10/24/2017	Analysis Date: 10/24/2017	SeqNo: 1483966 Units: mg/Kg
Analyte Chloride		Result PQL SPK value ND 1.5	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Sample ID	LCS-34597	SampType: Ics	TestCode: EPA Method 300.0: Anions
Client ID:	LCSS	Batch ID: 34597	RunNo: <b>46586</b>
Prep Date:	10/24/2017	Analysis Date: 10/24/2017	SeqNo: 1483967 Units: mg/Kg
Analyte		Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride		14 1.5 15.00	0 94.7 90 110
Sample ID	MB-34619	SampType: mblk	TestCode: EPA Method 300.0: Anions
Client ID:	PBS	Batch ID: 34619	RunNo: <b>46627</b>
Prep Date:	10/25/2017	Analysis Date: 10/25/2017	SeqNo: 1486632 Units: mg/Kg
Analyte Chloride		Result PQL SPK value ND 1.5	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Sample ID	LCS-34619	SampType: Ics	TestCode: EPA Method 300.0: Anions
Client ID:	LCSS	Batch ID: 34619	RunNo: <b>46627</b>
Prep Date:	10/25/2017	Analysis Date: 10/25/2017	SeqNo: 1486633 Units: mg/Kg
Analyte			SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride		14 1.5 15.00	0 96.0 90 110

#### **Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

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WO#:	1710B78
	27-Oct-17

Client: Project:	•	Environm Quest AO S		olutions							
Sample ID	MB-34570 SampType: MBLK				Tes	TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch	n ID: 34	570	F	RunNo: 4	6575				
Prep Date:	10/23/2017	Analysis D	Date: 10	0/24/2017	5	SeqNo: 1	483951	Units: mg/h	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range	Organics (DRO)	ND	10								
Motor Oil Rang	e Organics (MRO)	ND	50								
Surr: DNOP		8.3		10.00		83.3	70	130			
Sample ID	LCS-34570	SampT	ype: LC	s	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	LCSS	Batch	n ID: 34	570	F	RunNo: 4	6575				
Prep Date:	10/23/2017	Analysis D	Date: 10	0/24/2017	SeqNo: 1484039			Units: <b>mg/Kg</b>			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range	Organics (DRO)	50	10	50.00	0	99.2	73.2	114			
Surr: DNOP		4.3		5.000		86.8	70	130			
Sample ID	1710B78-001AMS	SampT	уре: М	6	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	1 West 1 Ft	Batch	n ID: 34	570	RunNo: <b>46575</b>						
Prep Date:	10/23/2017	Analysis D	Date: 10	0/24/2017	S	SeqNo: 1	484854	Units: <b>mg/k</b>	ζg		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range	Organics (DRO)	48	9.8	48.78	0	99.4	55.8	122			
Surr: DNOP		4.6		4.878		94.2	70	130			
Sample ID	1710B78-001AMS	D SampT	уре: М	SD	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	1 West 1 Ft	Batch	n ID: 34	570	F	RunNo: 4	6575				
Prep Date:	10/23/2017	Analysis D	Date: 10	0/24/2017	S	SeqNo: 1	484855	Units: <b>mg/k</b>	٤g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range	Organics (DRO)	48	9.6	48.03	0	100	55.8	122	0.605	20	
Surr: DNOP		4.5		4.803		93.4	70	130	0	0	

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- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified
- Page 20 of 22

WO#:	1710B78
	27-Oct-17

Client: Project:	•	Environme Juest AO St		olutions								
	MB-34554	-	ype: ME	BLK	TestCode: EPA Method 8015D: Gasoline Range							
Client ID:	PBS	Batch ID: 34554			R	unNo: 40	6593					
Prep Date:	10/23/2017	Analysis D	ate: 10	0/24/2017	S	eqNo: 14	484430	Units: mg/k	(g			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	- %RPD	RPDLimit	Qual	
,	e Organics (GRO)	ND	5.0	or revalue		/01120	LowLink	- ingri Linin			Quai	
Surr: BFB	, , , ,	1200		1000		115	15	316				
Sample ID LCS-34554 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range												
Client ID:	LCSS	Batch	ID: 34	554	R	unNo: 4	6593		-			
Prep Date:	10/23/2017	Analysis D	ate: 10	0/24/2017	S	eqNo: 14	484431	Units: mg/K	Units: mg/Kg			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Rang	ge Organics (GRO)	26	5.0	25.00	0	103	75.9	131				
Surr: BFB		1200		1000		121	15	316				
Sample ID	e ID 1710B78-002AMS SampType: MS TestCode: EPA Method 8015D: Gasoline Range											
Sample ID	1710B78-002AMS	Batch ID: 34554					RunNo: <b>46593</b>					
•	1710B78-002AMS 1 West 2 Ft	• •	ID: 34	554	R	unNo: 40	6593					
•	1 West 2 Ft	• •				unNo: 40 eqNo: 14		Units: <b>mg/K</b>	ζg			
Client ID:	1 West 2 Ft	Batch		0/24/2017		eqNo: 14		Units: <b>mg/k</b> HighLimit	<b>⁄g</b> %RPD	RPDLimit	Qual	
Client ID: Prep Date: Analyte	1 West 2 Ft	Batch Analysis D	ate: 10	0/24/2017	S	eqNo: 14	484434	•	•	RPDLimit	Qual	
Client ID: Prep Date: Analyte	1 West 2 Ft 10/23/2017	Batch Analysis Da Result	ate: <b>10</b> PQL	<b>0/24/2017</b> SPK value	S SPK Ref Val	eqNo: 14 %REC	<b>184434</b> LowLimit	HighLimit	•	RPDLimit	Qual	
Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB	1 West 2 Ft 10/23/2017	Batch Analysis Da Result 28 1100	ate: <b>10</b> PQL	D/24/2017 SPK value 23.02 920.8	SPK Ref Val 0	eqNo: 14 %REC 121 123	484434 LowLimit 77.8 15	HighLimit 128	%RPD		Qual	
Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB Sample ID	1 West 2 Ft 10/23/2017 ge Organics (GRO)	Batch Analysis Da Result 28 1100 D SampT	ate: <b>1(</b> PQL 4.6	D/24/2017 SPK value 23.02 920.8 SD	S SPK Ref Val 0 Test	eqNo: 14 %REC 121 123	484434 LowLimit 77.8 15 PA Method	HighLimit 128 316	%RPD		Qual	
Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB Sample ID Client ID:	1 West 2 Ft 10/23/2017 ge Organics (GRO) 1710B78-002AMS	Batch Analysis Da Result 28 1100 D SampT	ate: 10 PQL 4.6 ype: <b>MS</b>	D/24/2017 SPK value 23.02 920.8 SD 554	SPK Ref Val 0 Test	eqNo: 14 %REC 121 123 Code: EF	184434 LowLimit 77.8 15 PA Method 6593	HighLimit 128 316	%RPD		Qual	
Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB Sample ID Client ID:	1 West 2 Ft 10/23/2017 ge Organics (GRO) 1710B78-002AMS 1 West 2 Ft	Batch Analysis Da Result 28 1100 <b>D</b> SampTy Batch	ate: 10 PQL 4.6 ype: <b>MS</b>	D/24/2017 SPK value 23.02 920.8 SD 554 D/24/2017	SPK Ref Val 0 Test	eqNo: 14 %REC 121 123 Code: EF	184434 LowLimit 77.8 15 PA Method 6593	HighLimit 128 316 8015D: Gasc	%RPD		Qual	
Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB Sample ID Client ID: Prep Date: Analyte	1 West 2 Ft 10/23/2017 ge Organics (GRO) 1710B78-002AMS 1 West 2 Ft	Batch Analysis Da Result 28 1100 D SampTy Batch Analysis Da	ate: 10 PQL 4.6 ype: MS ID: 34 ate: 10	D/24/2017 SPK value 23.02 920.8 SD 554 D/24/2017	S SPK Ref Val 0 Test R S	eqNo: 14 %REC 121 123 Code: EF cunNo: 46 reqNo: 14	484434 LowLimit 77.8 15 PA Method 6593 484435	HighLimit 128 316 8015D: Gasc Units: mg/K	%RPD	e		

#### **Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

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Client: Project:	-	Environm Juest AO S		olutions							
Sample ID	MB-34554	SampType: MBLK				tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	PBS	Batc	h ID: 34	554	F	RunNo: 4	6593				
Prep Date:	10/23/2017	Analysis [	Date: 10	0/24/2017	5	SeqNo: 1	484567	Units: <b>mg/k</b>	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		ND	0.025								
Toluene		ND	0.050								
Ethylbenzene		ND	0.050								
Xylenes, Total		ND	0.10								
Surr: 4-Brom	ofluorobenzene	1.2		1.000		117	80	120			
Sample ID	LCS-34554	Samp	Гуре: <b>LC</b>	s	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	LCSS	Batc	h ID: 34	554	RunNo: <b>46593</b>						
Prep Date:	10/23/2017	Analysis D	Date: 10	0/24/2017	S	SeqNo: 1484568 Units: mg/Kg					
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		1.0	0.025	1.000	0	104	77.3	128			
Toluene		1.0	0.050	1.000	0	102	79.2	125			
Ethylbenzene		1.0	0.050	1.000	0	104	80.7	127			
Xylenes, Total		3.2	0.10	3.000	0	106	81.6	129			
Surr: 4-Brom	ofluorobenzene	1.1		1.000		115	80	120			
Sample ID	1710B78-001AMS	Samp1	Гуре: МS	6	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	1 West 1 Ft	Batc	h ID: 34	554	F	RunNo: 4	6593				
Prep Date:	10/23/2017	Analysis E	Date: 10	0/24/2017	S	SeqNo: 1	484578	Units: <b>mg/k</b>	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		1.1	0.024	0.9588	0	115	80.9	132			
Toluene		1.1	0.048	0.9588	0	115	79.8	136			
Ethylbenzene		1.1	0.048	0.9588	0	117	79.4	140			
Xylenes, Total		3.4	0.096	2.876	0	118	78.5	142			
Surr: 4-Brom	ofluorobenzene	1.1		0.9588		115	80	120			

Sample ID 1710B78-001AMSD SampType: MSD				TestCode: EPA Method 8021B: Volatiles						
Client ID: 1 West 1 Ft	: 1 West 1 Ft Batch ID: 34554				RunNo: <b>46593</b>					
Prep Date: 10/23/2017	SeqNo: 1484579 Units: mg/Kg									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.024	0.9728	0	107	80.9	132	6.07	20	
Toluene	1.1	0.049	0.9728	0	109	79.8	136	4.45	20	
Ethylbenzene	1.1	0.049	0.9728	0	113	79.4	140	2.22	20	
Xylenes, Total	3.4	0.097	2.918	0	115	78.5	142	0.668	20	
Surr: 4-Bromofluorobenzene	1.1		0.9728		114	80	120	0	0	

#### **Qualifiers:**

- Value exceeds Maximum Contaminant Level. \*
- Sample Diluted Due to Matrix D
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- Practical Quanitative Limit PQL
- S % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- Reporting Detection Limit RL
- W Sample container temperature is out of limit as specified

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HALL ENVIRONMENTAL ANALYSIS LABORATORY		91 Huwkins Ni me, NM 8710 505-345-110	San	nple Log-In Check List
Client Name: Safety Env Solutions	Vork Order Number: 171	0B78		RcptNo: 1
Received By: John Caldwell 10/	21/2017 11:15:00 AM		John Calle	U
Completed By: Erin Melendrez 10/ Reviewed By: Sy2 10/23/17	23/2017 9:09:13 AM	l	John Caller R. M.Z.	7
Chain of Custody				
1. Custody seals intact on sample bottles?	Ye		No 🗆	Not Present
2. Is Chain of Custody complete?	Ye		No 🗌	Not Present
3. How was the sample delivered?	Co	irier		
Log In				
4. Was an attempt made to cool the samples?	Ye		No 🗆	
5. Were all samples received at a temperature of a	0° C to 6.0°C Yes	V	No 🗌	NA
6. Sample(s) in proper container(s)?	Ye		No 🗌	
7, Sufficient sample volume for indicated test(s)?	Yes		No 🗌	
8. Are samples (except VOA and ONG) properly pro	served? Yes	<b>~</b>	No 🗌	
9. Was preservative added to bottles?	Yes		No 🗸	NA 🗌
10.VOA vials have zero headspace?	Yes		No 🗌	No VOA Vials
11. Were any sample containers received broken?	Yes		No 🔽	
12.Does paperwork match bottle labels?		~	No. 171	# of preserved bollues checked for pH:
(Note discrepancies on chain of custody)	Yes	0e	No L	(<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Cust	dy? Yes	~	Na	Adjusted?
14. Is it clear what analyses were requested?	Yes		No	
<ol> <li>Were all holding times able to be met? (If no, notify customer for authorization.)</li> </ol>	Yes	V	No	Checked by:
pecial Handling (if applicable)				
16. Was client notified of all discrepancies with this or	der? Yes		No 🗆	NA 🗹
Person Notified:	Date:			
By Whom:	Via: C eMa	il Phone	e 🗌 Fax	In Person
Regarding:			- III a	
Client Instructions:				
17. Additional remarks:				
8. Cooler Information				
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Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: <u>www.hallenvironmental.com</u>

October 30, 2017

Bob Allen Safety & Environmental Solutions PO Box 1613 Hobbs, NM 88241 TEL: (575) 397-0510 FAX (575) 393-4388

RE: Energy Quest AO State 1

OrderNo.: 1710B79

Dear Bob Allen:

Hall Environmental Analysis Laboratory received 18 sample(s) on 10/21/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <u>www.hallenvironmental.com</u> or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

Energy Quest AO State 1

**Project:** 

Client Sample ID: 2 West 1 Ft Collection Date: 10/20/2017 8:30:00 AM Received Date: 10/21/2017 11:15:00 AM

Lab ID: 1710B79-001	Matrix:	SOIL	<b>Received</b>	Date: 10/	21/2017 11:15:00 AM	[
Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20	10/25/2017 1:47:35 PM	34619
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS	6			Analyst	TOM
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	10/24/2017 9:05:42 PM	34575
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	10/24/2017 9:05:42 PM	34575
Surr: DNOP	88.2	70-130	%Rec	1	10/24/2017 9:05:42 PM	34575
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	10/24/2017 8:56:47 PM	34566
Surr: BFB	83.0	15-316	%Rec	1	10/24/2017 8:56:47 PM	34566
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.024	mg/Kg	1	10/24/2017 8:56:47 PM	34566
Toluene	ND	0.048	mg/Kg	1	10/24/2017 8:56:47 PM	34566
Ethylbenzene	ND	0.048	mg/Kg	1	10/24/2017 8:56:47 PM	34566
Xylenes, Total	ND	0.096	mg/Kg	1	10/24/2017 8:56:47 PM	34566
Surr: 4-Bromofluorobenzene	105	80-120	%Rec	1	10/24/2017 8:56:47 PM	34566

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 1 of 22
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions Client Sample ID: 2 West 2 Ft **Project:** Energy Quest AO State 1 Collection Date: 10/20/2017 8:35:00 AM Lab ID: 1710B79-002 Matrix: SOIL Received Date: 10/21/2017 11:15:00 AM Analyses Result **PQL** Qual Units **DF** Date Analyzed Batch **EPA METHOD 300.0: ANIONS** Analyst: MRA Chloride ND 30 mg/Kg 20 10/25/2017 2:24:48 PM 34619 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: TOM ND **Diesel Range Organics (DRO)** 9.7 10/24/2017 10:11:56 PM 34575 mg/Kg 1 Motor Oil Range Organics (MRO) ND 49 mg/Kg 10/24/2017 10:11:56 PM 34575 1 Surr DNOP 10/24/2017 10 11 56 PM 34575 101 70-130 %Rec 1

Sull DNOP	101	70-130	%Rec	I	10/24/2017 10.11.50 PW 34575
EPA METHOD 8015D: GASOLINE RANGE	E				Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	10/24/2017 10:06:59 PM 34566
Surr: BFB	84.4	15-316	%Rec	1	10/24/2017 10:06:59 PM 34566
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.023	mg/Kg	1	10/24/2017 10:06:59 PM 34566
Toluene	ND	0.046	mg/Kg	1	10/24/2017 10:06:59 PM 34566
Ethylbenzene	ND	0.046	mg/Kg	1	10/24/2017 10:06:59 PM 34566
Xylenes, Total	ND	0.093	mg/Kg	1	10/24/2017 10:06:59 PM 34566
Surr: 4-Bromofluorobenzene	107	80-120	%Rec	1	10/24/2017 10:06:59 PM 34566

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- \* Value exceeds Maximum Contaminant Level.D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 2 of 22
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

Energy Quest AO State 1

**Project:** 

Client Sample ID: 2 West 13 Ft Collection Date: 10/20/2017 9:10:00 AM Received Date: 10/21/2017 11:15:00 AM

Lab ID: 1710B79-003	Matrix:	SOIL	Received 1	<b>Date:</b> 10/	21/2017 11:15:00 A	М
Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analy	st: MRA
Chloride	ND	30	mg/Kg	20	10/25/2017 2:37:13 F	M 34619
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	5			Analy	st: TOM
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	10/24/2017 10:34:03	PM 34575
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	10/24/2017 10:34:03	PM 34575
Surr: DNOP	101	70-130	%Rec	1	10/24/2017 10:34:03	PM 34575
EPA METHOD 8015D: GASOLINE RAN	IGE				Analy	st: NSB
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	10/24/2017 11:17:01	PM 34566
Surr: BFB	85.3	15-316	%Rec	1	10/24/2017 11:17:01	PM 34566
EPA METHOD 8021B: VOLATILES					Analy	st: NSB
Benzene	ND	0.023	mg/Kg	1	10/24/2017 11:17:01	PM 34566
Toluene	ND	0.046	mg/Kg	1	10/24/2017 11:17:01	PM 34566
Ethylbenzene	ND	0.046	mg/Kg	1	10/24/2017 11:17:01	PM 34566
Xylenes, Total	ND	0.093	mg/Kg	1	10/24/2017 11:17:01	PM 34566
Surr: 4-Bromofluorobenzene	111	80-120	%Rec	1	10/24/2017 11:17:01	PM 34566

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 3 of 22
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions Client Sample ID: 1 East 1 Ft Energy Quest AO State 1 Collection Date: 10/20/2017 9:20:00 AM 1710B79-004 Matrix: SOIL Received Date: 10/21/2017 11:15:00 AM Result **PQL Qual Units DF** Date Analyzed Batch

EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	ND	30	mg/Kg	20	10/25/2017 2:49:37 PM 34619
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS	6			Analyst: TOM
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	10/24/2017 10:56:09 PM 34575
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	10/24/2017 10:56:09 PM 34575
Surr: DNOP	104	70-130	%Rec	1	10/24/2017 10:56:09 PM 34575
EPA METHOD 8015D: GASOLINE RANGE	E				Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	10/24/2017 11:40:28 PM 34566
Surr: BFB	83.4	15-316	%Rec	1	10/24/2017 11:40:28 PM 34566
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	10/24/2017 11:40:28 PM 34566
Toluene	ND	0.048	mg/Kg	1	10/24/2017 11:40:28 PM 34566
Ethylbenzene	ND	0.048	mg/Kg	1	10/24/2017 11:40:28 PM 34566
Xylenes, Total	ND	0.096	mg/Kg	1	10/24/2017 11:40:28 PM 34566
Surr: 4-Bromofluorobenzene	107	80-120	%Rec	1	10/24/2017 11:40:28 PM 34566

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Project:** 

Lab ID:

Analyses

- \* Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix
- Н
- Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S
- В Analyte detected in the associated Method Blank
- Е Value above quantitation range
- Analyte detected below quantitation limits Page 4 of 22 J
- Р Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified W

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions Client Sample ID: 1 East 2 Ft **Project:** Energy Quest AO State 1 Collection Date: 10/20/2017 9:25:00 AM Lab ID: 1710B79-005 Matrix: SOIL Received Date: 10/21/2017 11:15:00 AM Analyses Result **PQL** Qual Units **DF** Date Analyzed Batch **EPA METHOD 300.0: ANIONS** Analyst: MRA 10/25/2017 3:02:02 PM 34619 Chloride ND 30 mg/Kg 20 EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: TOM **Diesel Range Organics (DRO)** ND mg/Kg 10/24/2017 11:18:07 PM 34575 9.4 1 Motor Oil Range Organics (MRO) ND 47 mg/Kg 1 10/24/2017 11:18:07 PM 34575 Surr: DNOP 85.6 70-130 %Rec 1 10/24/2017 11:18:07 PM 34575 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 4.7 mg/Kg 1 10/25/2017 12:03:53 AM 34566 Surr: BFB 82.8 10/25/2017 12:03:53 AM 34566 15-316 %Rec 1 **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 0.023 mg/Kg 1 10/25/2017 12:03:53 AM 34566 Toluene ND 0.047 mg/Kg 10/25/2017 12:03:53 AM 34566 1 Ethylbenzene ND 0.047 mg/Kg 10/25/2017 12:03:53 AM 34566 1

0.094

80-120

mg/Kg

%Rec

1

1

10/25/2017 12:03:53 AM 34566

10/25/2017 12:03:53 AM 34566

ND

109

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

\*

Xylenes, Total

Surr: 4-Bromofluorobenzene

- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded

Value exceeds Maximum Contaminant Level.

- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 5 of 22
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

Energy Quest AO State 1

**Project:** 

Client Sample ID: 1 East 3 Ft Collection Date: 10/20/2017 10:05:00 AM Received Date: 10/21/2017 11:15:00 AM

Lab ID: 1710B79-006	Matrix:	SOIL	<b>Received</b>	Date: 10/	/21/2017 11:15:00 A	М
Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analy	/st: MRA
Chloride	30	30	mg/Kg	20	10/25/2017 3:14:26 F	PM 34619
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	6			Analy	/st: TOM
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	10/24/2017 11:40:10	PM 34575
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	10/24/2017 11:40:10	PM 34575
Surr: DNOP	95.2	70-130	%Rec	1	10/24/2017 11:40:10	PM 34575
EPA METHOD 8015D: GASOLINE RAI	NGE				Analy	/st: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	10/25/2017 12:27:12	AM 34566
Surr: BFB	81.4	15-316	%Rec	1	10/25/2017 12:27:12	AM 34566
EPA METHOD 8021B: VOLATILES					Analy	/st: NSB
Benzene	ND	0.023	mg/Kg	1	10/25/2017 12:27:12	AM 34566
Toluene	ND	0.047	mg/Kg	1	10/25/2017 12:27:12	AM 34566
Ethylbenzene	ND	0.047	mg/Kg	1	10/25/2017 12:27:12	AM 34566
Xylenes, Total	ND	0.093	mg/Kg	1	10/25/2017 12:27:12	AM 34566
Surr: 4-Bromofluorobenzene	108	80-120	%Rec	1	10/25/2017 12:27:12	AM 34566

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 6 of 22
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

Energy Quest AO State 1

**Project:** 

Client Sample ID: 3 North 1 Ft Collection Date: 10/20/2017 10:40:00 AM Received Date: 10/21/2017 11:15:00 AM

Lab ID: 1710B79-007	Matrix:	SOIL	<b>Received</b>	Date: 10/	21/2017 11:15:00 A	М
Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analy	/st: MRA
Chloride	ND	30	mg/Kg	20	10/25/2017 3:26:50 H	PM 34619
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	6			Analy	st: TOM
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	10/25/2017 12:01:58	AM 34575
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	10/25/2017 12:01:58	AM 34575
Surr: DNOP	88.2	70-130	%Rec	1	10/25/2017 12:01:58	AM 34575
EPA METHOD 8015D: GASOLINE RAI	NGE				Analy	/st: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	10/25/2017 12:50:32	AM 34566
Surr: BFB	84.2	15-316	%Rec	1	10/25/2017 12:50:32	AM 34566
EPA METHOD 8021B: VOLATILES					Analy	/st: NSB
Benzene	ND	0.024	mg/Kg	1	10/25/2017 12:50:32	AM 34566
Toluene	ND	0.047	mg/Kg	1	10/25/2017 12:50:32	AM 34566
Ethylbenzene	ND	0.047	mg/Kg	1	10/25/2017 12:50:32	AM 34566
Xylenes, Total	ND	0.095	mg/Kg	1	10/25/2017 12:50:32	AM 34566
Surr: 4-Bromofluorobenzene	109	80-120	%Rec	1	10/25/2017 12:50:32	AM 34566

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 7 of 22
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

Energy Quest AO State 1

**Project:** 

Client Sample ID: 3 North 2 Ft Collection Date: 10/20/2017 10:45:00 AM Received Date: 10/21/2017 11:15:00 AM

Lab ID: 1710B79-008	Matrix:	SOIL	<b>Received</b>	Date: 10/	/21/2017 11:15:00 A	Μ
Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analy	st: MRA
Chloride	ND	30	mg/Kg	20	10/25/2017 3:39:15 F	PM 34619
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS	6			Analy	st: TOM
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	10/25/2017 12:23:58	AM 34575
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	10/25/2017 12:23:58	AM 34575
Surr: DNOP	88.6	70-130	%Rec	1	10/25/2017 12:23:58	AM 34575
EPA METHOD 8015D: GASOLINE RA	NGE				Analy	st: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	10/25/2017 1:13:50 A	M 34566
Surr: BFB	80.6	15-316	%Rec	1	10/25/2017 1:13:50 A	M 34566
EPA METHOD 8021B: VOLATILES					Analy	st: NSB
Benzene	ND	0.023	mg/Kg	1	10/25/2017 1:13:50 A	M 34566
Toluene	ND	0.047	mg/Kg	1	10/25/2017 1:13:50 A	M 34566
Ethylbenzene	ND	0.047	mg/Kg	1	10/25/2017 1:13:50 A	M 34566
Xylenes, Total	ND	0.094	mg/Kg	1	10/25/2017 1:13:50 A	M 34566
Surr: 4-Bromofluorobenzene	106	80-120	%Rec	1	10/25/2017 1:13:50 A	M 34566

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- \* Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix
- Н
- Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S
- В Analyte detected in the associated Method Blank
- Е Value above quantitation range
- Analyte detected below quantitation limits Page 8 of 22 J
- Р Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified W

**Analytical Report** Lab Order 1710B79

Date Reported: 10/30/2017

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

Energy Quest AO State 1

**Project:** 

Client Sample ID: 3 North 13 Ft Collection Date: 10/20/2017 11:05:00 AM Received Date: 10/21/2017 11:15:00 AM

Lab ID: 1710B79-009	Matrix: SOIL		<b>Received</b>	Received Date: 10/21/2017 11:15:00 AM		
Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analy	st: MRA
Chloride	ND	30	mg/Kg	20	10/26/2017 2:40:06 F	M 34664
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	6			Analy	st: TOM
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	10/25/2017 12:45:44	AM 34575
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	10/25/2017 12:45:44	AM 34575
Surr: DNOP	83.8	70-130	%Rec	1	10/25/2017 12:45:44	AM 34575
EPA METHOD 8015D: GASOLINE RAI	NGE				Analy	st: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	10/25/2017 1:37:08 A	M 34566
Surr: BFB	83.4	15-316	%Rec	1	10/25/2017 1:37:08 A	M 34566
EPA METHOD 8021B: VOLATILES					Analy	st: NSB
Benzene	ND	0.025	mg/Kg	1	10/25/2017 1:37:08 A	M 34566
Toluene	ND	0.049	mg/Kg	1	10/25/2017 1:37:08 A	M 34566
Ethylbenzene	ND	0.049	mg/Kg	1	10/25/2017 1:37:08 A	M 34566
Xylenes, Total	ND	0.098	mg/Kg	1	10/25/2017 1:37:08 A	M 34566
Surr: 4-Bromofluorobenzene	111	80-120	%Rec	1	10/25/2017 1:37:08 A	M 34566

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- \* Value exceeds Maximum Contaminant Level. D
- Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S
- В Analyte detected in the associated Method Blank
- Е Value above quantitation range
- Analyte detected below quantitation limits Page 9 of 22 J
- Р Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified W

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

Energy Quest AO State 1

**Project:** 

Client Sample ID: 3 West 1 Ft Collection Date: 10/20/2017 11:20:00 AM Received Date: 10/21/2017 11:15:00 AM

Lab ID: 1710B79-010	Matrix: SOIL		<b>Received</b>	Received Date: 10/21/2017 11:15:00 AM			
Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch	
EPA METHOD 300.0: ANIONS					Analyst	MRA	
Chloride	ND	30	mg/Kg	20	10/26/2017 2:52:31 PM	34664	
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	6			Analyst	том	
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	10/25/2017 1:07:36 AM	34575	
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	10/25/2017 1:07:36 AM	34575	
Surr: DNOP	74.5	70-130	%Rec	1	10/25/2017 1:07:36 AM	34575	
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst	: NSB	
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	10/24/2017 8:47:52 PM	34566	
Surr: BFB	110	15-316	%Rec	1	10/24/2017 8:47:52 PM	34566	
EPA METHOD 8021B: VOLATILES					Analyst	: NSB	
Benzene	ND	0.024	mg/Kg	1	10/24/2017 8:47:52 PM	34566	
Toluene	ND	0.047	mg/Kg	1	10/24/2017 8:47:52 PM	34566	
Ethylbenzene	ND	0.047	mg/Kg	1	10/24/2017 8:47:52 PM	34566	
Xylenes, Total	ND	0.094	mg/Kg	1	10/24/2017 8:47:52 PM	34566	
Surr: 4-Bromofluorobenzene	110	80-120	%Rec	1	10/24/2017 8:47:52 PM	34566	

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 10 of 22
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

Energy Quest AO State 1

**Project:** 

Client Sample ID: 3 West 2 Ft Collection Date: 10/20/2017 11:25:00 AM Received Date: 10/21/2017 11:15:00 AM

Lab ID: 1710B79-011	Matrix:	Matrix: SOIL		Received Date: 10/21/2017 11:15:00 AM		
Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20	10/26/2017 3:04:55 PN	34664
EPA METHOD 8015M/D: DIESEL RAI	NGE ORGANICS	6			Analyst	: TOM
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	10/25/2017 1:29:28 AM	34575
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	10/25/2017 1:29:28 AN	34575
Surr: DNOP	94.8	70-130	%Rec	1	10/25/2017 1:29:28 AN	34575
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	10/25/2017 2:23:33 PM	34566
Surr: BFB	82.2	15-316	%Rec	1	10/25/2017 2:23:33 PM	34566
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.024	mg/Kg	1	10/25/2017 2:23:33 PN	34566
Toluene	ND	0.047	mg/Kg	1	10/25/2017 2:23:33 PM	34566
Ethylbenzene	ND	0.047	mg/Kg	1	10/25/2017 2:23:33 PM	34566
Xylenes, Total	ND	0.094	mg/Kg	1	10/25/2017 2:23:33 PM	34566
Surr: 4-Bromofluorobenzene	98.2	80-120	%Rec	1	10/25/2017 2:23:33 PM	34566

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 11 of 22
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

Energy Quest AO State 1

**Project:** 

Client Sample ID: 3 West 3 Ft Collection Date: 10/20/2017 11:40:00 AM Received Date: 10/21/2017 11:15:00 AM

Lab ID: 1710B79-012	Matrix: SOIL		<b>Received</b>	Received Date: 10/21/2017 11:15:00 AM			
Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch	
EPA METHOD 300.0: ANIONS					Analyst	MRA	
Chloride	ND	30	mg/Kg	20	10/26/2017 3:42:10 PM	34664	
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS	6			Analyst	: TOM	
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	10/25/2017 1:51:26 AM	34575	
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	10/25/2017 1:51:26 AM	34575	
Surr: DNOP	76.0	70-130	%Rec	1	10/25/2017 1:51:26 AM	34575	
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	: NSB	
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	10/25/2017 2:46:58 PM	34566	
Surr: BFB	85.5	15-316	%Rec	1	10/25/2017 2:46:58 PM	34566	
EPA METHOD 8021B: VOLATILES					Analyst	: NSB	
Benzene	ND	0.024	mg/Kg	1	10/25/2017 2:46:58 PM	34566	
Toluene	ND	0.048	mg/Kg	1	10/25/2017 2:46:58 PM	34566	
Ethylbenzene	ND	0.048	mg/Kg	1	10/25/2017 2:46:58 PM	34566	
Xylenes, Total	ND	0.096	mg/Kg	1	10/25/2017 2:46:58 PM	34566	
Surr: 4-Bromofluorobenzene	103	80-120	%Rec	1	10/25/2017 2:46:58 PM	34566	

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 12 of 22
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

Energy Quest AO State 1

**Project:** 

Client Sample ID: 3 South 1 Ft Collection Date: 10/20/2017 11:45:00 AM Received Date: 10/21/2017 11:15:00 AM

Lab ID: 1710B79-013	Matrix:	Matrix: SOIL		Received Date: 10/21/2017 11:15:00 AM			
Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch	
EPA METHOD 300.0: ANIONS					Analyst	MRA	
Chloride	ND	30	mg/Kg	20	10/26/2017 3:54:34 PM	34664	
EPA METHOD 8015M/D: DIESEL RAM	IGE ORGANICS	6			Analyst	TOM	
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	10/25/2017 2:13:24 AM	34575	
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	10/25/2017 2:13:24 AM	34575	
Surr: DNOP	74.4	70-130	%Rec	1	10/25/2017 2:13:24 AM	34575	
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	NSB	
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	10/25/2017 3:15:02 PM	34566	
Surr: BFB	83.0	15-316	%Rec	1	10/25/2017 3:15:02 PM	34566	
EPA METHOD 8021B: VOLATILES					Analyst	: NSB	
Benzene	ND	0.024	mg/Kg	1	10/25/2017 3:15:02 PM	34566	
Toluene	ND	0.048	mg/Kg	1	10/25/2017 3:15:02 PM	34566	
Ethylbenzene	ND	0.048	mg/Kg	1	10/25/2017 3:15:02 PM	34566	
Xylenes, Total	ND	0.097	mg/Kg	1	10/25/2017 3:15:02 PM	34566	
Surr: 4-Bromofluorobenzene	102	80-120	%Rec	1	10/25/2017 3:15:02 PM	34566	

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 13 of 22
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

Energy Quest AO State 1

**Project:** 

Client Sample ID: 3 South 2 Ft Collection Date: 10/20/2017 11:50:00 AM Received Date: 10/21/2017 11:15:00 AM

Lab ID: 1710B79-014	Matrix: SOIL		<b>Received</b>	Received Date: 10/21/2017 11:15:00 AM			
Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch	
EPA METHOD 300.0: ANIONS					Analyst	MRA	
Chloride	ND	30	mg/Kg	20	10/26/2017 4:06:59 PM	34664	
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	6			Analyst	том	
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	10/25/2017 2:35:32 AM	34575	
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	10/25/2017 2:35:32 AM	34575	
Surr: DNOP	80.2	70-130	%Rec	1	10/25/2017 2:35:32 AM	34575	
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst	NSB	
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	10/25/2017 3:38:20 PM	34566	
Surr: BFB	81.8	15-316	%Rec	1	10/25/2017 3:38:20 PM	34566	
EPA METHOD 8021B: VOLATILES					Analyst	: NSB	
Benzene	ND	0.024	mg/Kg	1	10/25/2017 3:38:20 PM	34566	
Toluene	ND	0.048	mg/Kg	1	10/25/2017 3:38:20 PM	34566	
Ethylbenzene	ND	0.048	mg/Kg	1	10/25/2017 3:38:20 PM	34566	
Xylenes, Total	ND	0.096	mg/Kg	1	10/25/2017 3:38:20 PM	34566	
Surr: 4-Bromofluorobenzene	99.6	80-120	%Rec	1	10/25/2017 3:38:20 PM	34566	

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 14 of 22
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

Energy Quest AO State 1

**Project:** 

Client Sample ID: 3 South 3 Ft Collection Date: 10/20/2017 11:55:00 AM Received Date: 10/21/2017 11:15:00 AM

Lab ID: 1710B79-015	Matrix: SOIL		<b>Received</b>	Received Date: 10/21/2017 11:15:00 AM			
Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch	
EPA METHOD 300.0: ANIONS					Analys	t: MRA	
Chloride	ND	30	mg/Kg	20	10/26/2017 4:44:12 PM	1 34664	
EPA METHOD 8015M/D: DIESEL RAM	IGE ORGANICS	6			Analys	t: TOM	
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	10/25/2017 2:57:43 AM	1 34575	
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	10/25/2017 2:57:43 AN	1 34575	
Surr: DNOP	72.7	70-130	%Rec	1	10/25/2017 2:57:43 AM	1 34575	
EPA METHOD 8015D: GASOLINE RA	NGE				Analys	t: NSB	
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	10/25/2017 4:01:53 PM	1 34566	
Surr: BFB	83.7	15-316	%Rec	1	10/25/2017 4:01:53 PM	1 34566	
EPA METHOD 8021B: VOLATILES					Analys	t: NSB	
Benzene	ND	0.024	mg/Kg	1	10/25/2017 4:01:53 PM	1 34566	
Toluene	ND	0.049	mg/Kg	1	10/25/2017 4:01:53 PM	1 34566	
Ethylbenzene	ND	0.049	mg/Kg	1	10/25/2017 4:01:53 PM	1 34566	
Xylenes, Total	ND	0.097	mg/Kg	1	10/25/2017 4:01:53 PM	1 34566	
Surr: 4-Bromofluorobenzene	103	80-120	%Rec	1	10/25/2017 4:01:53 PM	1 34566	

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 15 of 22
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

Energy Quest AO State 1

**Project:** 

Client Sample ID: 3 East 1 Ft Collection Date: 10/20/2017 12:00:00 PM Received Date: 10/21/2017 11:15:00 AM

Lab ID: 1710B79-016	Matrix: SOIL		<b>Received</b>	Received Date: 10/21/2017 11:15:00 AM			
Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch	
EPA METHOD 300.0: ANIONS					Analyst	MRA	
Chloride	ND	30	mg/Kg	20	10/26/2017 4:56:37 PM	34664	
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS	6			Analyst	TOM	
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	10/25/2017 3:20:06 AM	34575	
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	10/25/2017 3:20:06 AM	34575	
Surr: DNOP	85.6	70-130	%Rec	1	10/25/2017 3:20:06 AM	34575	
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	: NSB	
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	10/25/2017 4:25:28 PM	34566	
Surr: BFB	81.8	15-316	%Rec	1	10/25/2017 4:25:28 PM	34566	
EPA METHOD 8021B: VOLATILES					Analyst	: NSB	
Benzene	ND	0.025	mg/Kg	1	10/25/2017 4:25:28 PM	34566	
Toluene	ND	0.049	mg/Kg	1	10/25/2017 4:25:28 PM	34566	
Ethylbenzene	ND	0.049	mg/Kg	1	10/25/2017 4:25:28 PM	34566	
Xylenes, Total	ND	0.098	mg/Kg	1	10/25/2017 4:25:28 PM	34566	
Surr: 4-Bromofluorobenzene	99.3	80-120	%Rec	1	10/25/2017 4:25:28 PM	34566	

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 16 of 22
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

Energy Quest AO State 1

**Project:** 

Client Sample ID: 3 East 2 Ft Collection Date: 10/20/2017 12:05:00 PM Received Date: 10/21/2017 11:15:00 AM

Lab ID: 1710B79-017	Matrix: SOIL		<b>Received</b>	Received Date: 10/21/2017 11:15:00 AM			
Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch	
EPA METHOD 300.0: ANIONS					Analyst	MRA	
Chloride	ND	30	mg/Kg	20	10/26/2017 5:09:03 PM	34664	
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	6			Analyst	том	
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	10/25/2017 3:42:26 AM	34575	
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	10/25/2017 3:42:26 AM	34575	
Surr: DNOP	77.2	70-130	%Rec	1	10/25/2017 3:42:26 AM	34575	
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst	NSB	
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	10/25/2017 4:49:03 PM	34566	
Surr: BFB	83.1	15-316	%Rec	1	10/25/2017 4:49:03 PM	34566	
EPA METHOD 8021B: VOLATILES					Analyst	: NSB	
Benzene	ND	0.025	mg/Kg	1	10/25/2017 4:49:03 PM	34566	
Toluene	ND	0.050	mg/Kg	1	10/25/2017 4:49:03 PM	34566	
Ethylbenzene	ND	0.050	mg/Kg	1	10/25/2017 4:49:03 PM	34566	
Xylenes, Total	ND	0.099	mg/Kg	1	10/25/2017 4:49:03 PM	34566	
Surr: 4-Bromofluorobenzene	99.2	80-120	%Rec	1	10/25/2017 4:49:03 PM	34566	

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 17 of 22
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

Energy Quest AO State 1

**Project:** 

Client Sample ID: 3 East 3 Ft Collection Date: 10/20/2017 12:20:00 PM Received Date: 10/21/2017 11:15:00 AM

Lab ID: 1710B79-018	Matrix: SOIL		<b>Received</b>	Received Date: 10/21/2017 11:15:00 AM			
Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch	
EPA METHOD 300.0: ANIONS					Analyst	MRA	
Chloride	ND	30	mg/Kg	20	10/26/2017 5:21:27 PM	34664	
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	6			Analyst	TOM	
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	10/25/2017 4:04:36 AM	34575	
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	10/25/2017 4:04:36 AM	34575	
Surr: DNOP	78.0	70-130	%Rec	1	10/25/2017 4:04:36 AM	34575	
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst	: NSB	
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	10/25/2017 5:12:38 PM	34566	
Surr: BFB	81.4	15-316	%Rec	1	10/25/2017 5:12:38 PM	34566	
EPA METHOD 8021B: VOLATILES					Analyst	: NSB	
Benzene	ND	0.024	mg/Kg	1	10/25/2017 5:12:38 PM	34566	
Toluene	ND	0.049	mg/Kg	1	10/25/2017 5:12:38 PM	34566	
Ethylbenzene	ND	0.049	mg/Kg	1	10/25/2017 5:12:38 PM	34566	
Xylenes, Total	ND	0.097	mg/Kg	1	10/25/2017 5:12:38 PM	34566	
Surr: 4-Bromofluorobenzene	98.5	80-120	%Rec	1	10/25/2017 5:12:38 PM	34566	

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 18 of 22
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

WO#:	1710B79
	20 Oct 17

Client:	Safety a	& Environmental S	olutions							
Project:	Energy	Quest AO State 1								
Sample ID	MB-34619	SampType: <b>m</b>	blk	Tes	Code: EP	A Method	300.0: Anion	s		
Client ID:	PBS	Batch ID: 34	619	F	unNo: <b>46</b>	627				
Prep Date:	10/25/2017	Analysis Date: 1	0/25/2017	S	eqNo: 14	86632	Units: mg/K	g		
Analyte		Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND 1.5								
Sample ID	LCS-34619	SampType: Ic	s	Tes	tCode: EP	A Method	300.0: Anion	s		
Client ID:	LCSS	Batch ID: 34	619	F	unNo: <b>46</b>	627				
Prep Date:	10/25/2017	Analysis Date: 1	0/25/2017	5	eqNo: 14	86633	Units: mg/K	g		
Analyte		Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14 1.5	15.00	0	96.0	90	110			
		14 1.5	10.00	0	00.0	50	110			
Sample ID	MB-34664	SampType: m		-			300.0: Anion	s		
Sample ID Client ID:	MB-34664 PBS	-	blk	Tes		A Method	-	S		
	PBS	SampType: m	blk 1664	Tes	tCode: EP	PA Method	-			
Client ID:	PBS	SampType: m Batch ID: 34	blk 1664 0/26/2017	Tes	tCode: EP tunNo: 46 GeqNo: 14	PA Method	300.0: Anion		RPDLimit	Qual
Client ID: Prep Date:	PBS	SampType: m Batch ID: 34 Analysis Date: 1	blk 1664 0/26/2017 SPK value	Tes F	tCode: EP tunNo: 46 GeqNo: 14	PA Method 6677 888010	<b>300.0: Anion</b> Units: <b>mg/K</b>	g	RPDLimit	Qual
Client ID: Prep Date: Analyte Chloride	PBS	SampType: m Batch ID: 34 Analysis Date: 1 Result PQL	blk 1664 0/26/2017 SPK value	Tes F S SPK Ref Val	tCode: EP tunNo: 46 seqNo: 14 %REC	2A Method 6677 188010 LowLimit	<b>300.0: Anion</b> Units: <b>mg/K</b>	<b>g</b> %RPD	RPDLimit	Qual
Client ID: Prep Date: Analyte Chloride	PBS 10/26/2017 LCS-34664	SampType: m Batch ID: 34 Analysis Date: 1 Result PQL ND 1.5	blk 1664 0/26/2017 SPK value	Tes F SPK Ref Val Tes	tCode: EP tunNo: 46 seqNo: 14 %REC	PA Method 6677 488010 LowLimit PA Method	300.0: Anion Units: mg/K HighLimit	<b>g</b> %RPD	RPDLimit	Qual
Client ID: Prep Date: Analyte Chloride Sample ID	PBS 10/26/2017 LCS-34664 LCSS	SampType: m Batch ID: 34 Analysis Date: 1 Result PQL ND 1.5 SampType: Ic	blk 1664 0/26/2017 SPK value s 1664	Tes F SPK Ref Val Tes F	tCode: EP tunNo: 46 GeqNo: 14 %REC	A Method 6677 888010 LowLimit A Method 6677	300.0: Anion Units: mg/K HighLimit	<b>g</b> %RPD s	RPDLimit	Qual
Client ID: Prep Date: Analyte Chloride Sample ID Client ID:	PBS 10/26/2017 LCS-34664 LCSS	SampType: m Batch ID: 34 Analysis Date: 1 Result PQL ND 1.5 SampType: Ic Batch ID: 34	blk 1664 0/26/2017 SPK value s 1664 0/26/2017	Tes F SPK Ref Val Tes F	Code: EP tunNo: 46 SeqNo: 14 %REC tCode: EP tunNo: 46 SeqNo: 14	A Method 6677 888010 LowLimit A Method 6677	300.0: Anion Units: mg/K HighLimit 300.0: Anion	<b>g</b> %RPD s	RPDLimit	Qual

#### **Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
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- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

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WO#:	1710B79

30-Oct-17

Client:	Safety & Environ	mental So	olutions							
Project:	Energy Quest AC	State 1								
Sample ID 1710B	79-001AMS Sam	рТуре: <b>МЅ</b>	6	Tes	tCode: El	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID: 2 West	t <b>1 Ft</b> Ba	tch ID: 34	575	R	anNo: 4	6574				
Prep Date: 10/23	/2017 Analysis	Date: 10	)/24/2017	S	SeqNo: 14	484794	Units: <b>mg/k</b>	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (	(DRO) 47	9.9	49.31	0	95.5	55.8	122			
Surr: DNOP	4.6		4.931		92.5	70	130			
Sample ID 1710B	79-001AMSD Sam	рТуре: <b>МЅ</b>	SD	Tes	tCode: El	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID: 2 West	t <b>1Ft</b> Ba	tch ID: 34	575	R	RunNo: 4	6574				
Prep Date: 10/23	/2017 Analysis	Date: 10	)/24/2017	S	SeqNo: 14	484795	Units: mg/K	ζg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics	(DRO) 50	9.8	48.88	0	102	55.8	122	6.01	20	
Surr: DNOP	4.8		4.888		97.9	70	130	0	0	
Sample ID LCS-34	<b>1575</b> Sam	рТуре: <b>LC</b>	S	Tes	tCode: El	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID: LCSS	Ba	tch ID: 34	575	R	RunNo: 4	6574				
Prep Date: 10/23	/2017 Analysis	Date: 10	)/24/2017	S	SeqNo: 14	484813	Units: mg/K	ζg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (	(DRO) 45	10	50.00	0	89.1	73.2	114			
Surr: DNOP	4.1		5.000		81.3	70	130			
Sample ID MB-34	575 Sam	рТуре: <b>МЕ</b>	BLK	Tes	tCode: El	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID: PBS	Ba	tch ID: 34	575	R	RunNo: 4	6574				
Prep Date: 10/23	/2017 Analysis	Date: 10	)/24/2017	S	SeqNo: 14	484814	Units: <b>mg/k</b>	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics		10								
Motor Oil Range Organio	cs (MRO) ND	50								
Surr: DNOP	9.0		10.00		90.1	70	130			

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- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified
- Page 20 of 22

WO#:	1710B79

30-Oct-17

Client: Project:	•	Environme Juest AO St		olutions							
Sample ID	MB-34566	SampTy	vpe: ME	BLK	Tes	tCode: E	PA Method	8015D: Gaso	oline Rang	e	
Client ID:	PBS	Batch	ID: 34	566	F	RunNo: 4	6592				
Prep Date:	10/23/2017	Analysis Da	ate: 10	0/24/2017	5	SeqNo: 1	484492	Units: <b>mg/k</b>	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	ge Organics (GRO)	ND	5.0								
Surr: BFB		820		1000		82.2	15	316			
Sample ID	LCS-34566	SampTy	pe: LC	s	Tes	tCode: E	PA Method	8015D: Gaso	oline Rang	e	
Client ID:	LCSS	Batch	ID: 34	566	F	RunNo: 4	6592				
Prep Date:	10/23/2017	Analysis Da	ate: 10	0/24/2017	S	SeqNo: 1	484494	Units: <b>mg/ł</b>	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	ge Organics (GRO)	25	5.0	25.00	0	98.2	75.9	131			
Surr: BFB		940		1000		94.2	15	316			
Sample ID	1710B79-002AMS	SampTy	/pe: <b>M</b> \$	S	Tes	tCode: E	PA Method	8015D: Gaso	oline Rang	e	
Client ID:	2 West 2 Ft	Batch	ID: 34	566	F	RunNo: 4	6592				
Prep Date:	10/23/2017	Analysis Da	ate: 10	0/24/2017	S	SeqNo: 1	484497	Units: <b>mg/ł</b>	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	ge Organics (GRO)	28	4.8	24.02	0	116	77.8	128			
Surr: BFB		950		960.6		99.1	15	316			
Sample ID	1710B79-002AMS	D SampTy	/pe: <b>M\$</b>	SD	Tes	tCode: E	PA Method	8015D: Gaso	oline Rang	e	
Client ID:	2 West 2 Ft	Batch	ID: 34	566	F	RunNo: 4	6592				
Prep Date:	10/23/2017	Analysis Da	ate: 10	0/24/2017	S	SeqNo: 1	484498	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	ge Organics (GRO)	27	4.7	23.28	0	114	77.8	128	4.16	20	

#### **Qualifiers:**

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

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Client: Project:	•	Environm Juest AO S		olutions							
Sample ID	MB-34566	Samp	Гуре: МЕ	BLK	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	PBS	Batc	h ID: 34	566	R	RunNo: 4	6592				
Prep Date:	10/23/2017	Analysis E	Date: 10	)/24/2017	S	SeqNo: 1	484519	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		ND	0.025					0			
Toluene		ND	0.050								
Ethylbenzene		ND	0.050								
Xylenes, Total		ND	0.10								
Surr: 4-Bron	nofluorobenzene	1.1		1.000		106	80	120			
Sample ID	LCS-34566	Samp	Гуре: <b>LC</b>	S	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	LCSS	Batc	h ID: 34	566	R	RunNo: 4	6592				
Prep Date:	10/23/2017	Analysis E	Date: 10	)/24/2017	S	SeqNo: 1	484520	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		1.1	0.025	1.000	0	108	77.3	128			
Toluene		1.1	0.050	1.000	0	106	79.2	125			
Ethylbenzene		1.1	0.050	1.000	0	106	80.7	127			
Xylenes, Total		3.2	0.10	3.000	0	107	81.6	129			
Surr: 4-Bron	nofluorobenzene	1.0		1.000		103	80	120			
Sample ID	1710B79-001AMS	Samp	Гуре: МS	6	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	2 West 1 Ft	Batc	h ID: 34	566	R	RunNo: 4	6592				
_											
Prep Date:	10/23/2017	Analysis E	Date: 10	0/24/2017	S	SeqNo: 1	484522	Units: mg/k	(g		
Prep Date: Analyte	10/23/2017	Analysis I Result	Date: 10 PQL		SPK Ref Val	SeqNo: 1 %REC	484522 LowLimit	Units: <b>mg/r</b> HighLimit	<b>(g</b> %RPD	RPDLimit	Qual
Analyte Benzene	10/23/2017	Result 1.3	PQL 0.024	SPK value 0.9756	SPK Ref Val 0	* %REC 136	LowLimit 80.9	HighLimit 132	-	RPDLimit	S
Analyte Benzene Toluene	10/23/2017	Result 1.3 1.3	PQL 0.024 0.049	SPK value 0.9756 0.9756	SPK Ref Val 0 0	%REC 136 137	LowLimit 80.9 79.8	HighLimit 132 136	-	RPDLimit	
Analyte Benzene Toluene Ethylbenzene	10/23/2017	Result 1.3 1.3 1.3	PQL 0.024 0.049 0.049	SPK value 0.9756 0.9756 0.9756	SPK Ref Val 0 0 0	%REC 136 137 137	LowLimit 80.9 79.8 79.4	HighLimit 132 136 140	-	RPDLimit	S
Analyte Benzene Toluene Ethylbenzene Xylenes, Total		Result 1.3 1.3 1.3 4.0	PQL 0.024 0.049	SPK value 0.9756 0.9756 0.9756 2.927	SPK Ref Val 0 0	%REC 136 137 137 137	LowLimit 80.9 79.8 79.4 78.5	HighLimit 132 136 140 142	-	RPDLimit	S
Analyte Benzene Toluene Ethylbenzene Xylenes, Total	10/23/2017	Result 1.3 1.3 1.3	PQL 0.024 0.049 0.049	SPK value 0.9756 0.9756 0.9756	SPK Ref Val 0 0 0	%REC 136 137 137	LowLimit 80.9 79.8 79.4	HighLimit 132 136 140	-	RPDLimit	S
Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bron		Result 1.3 1.3 1.3 4.0 1.1	PQL 0.024 0.049 0.049	SPK value 0.9756 0.9756 2.927 0.9756	SPK Ref Val 0 0 0 0	%REC 136 137 137 137 137 111	LowLimit 80.9 79.8 79.4 78.5 80	HighLimit 132 136 140 142	%RPD	RPDLimit	S
Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bron	nofluorobenzene	Result           1.3           1.3           1.3           4.0           1.1	PQL 0.024 0.049 0.049 0.098	SPK value 0.9756 0.9756 2.927 0.9756	SPK Ref Val 0 0 0 0 0 Tes	%REC 136 137 137 137 137 111	LowLimit 80.9 79.8 79.4 78.5 80 PA Method	HighLimit 132 136 140 142 120	%RPD	RPDLimit	S
Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bron Sample ID	nofluorobenzene 1710B79-001AMS 2 West 1 Ft	Result           1.3           1.3           1.3           4.0           1.1	PQL 0.024 0.049 0.049 0.098 Type: <b>MS</b>	SPK value 0.9756 0.9756 2.927 0.9756 50 566	SPK Ref Val 0 0 0 0 Tes R	%REC 136 137 137 137 111 tCode: El	LowLimit 80.9 79.8 79.4 78.5 80 PA Method 6592	HighLimit 132 136 140 142 120	%RPD	RPDLimit	S
Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bron Sample ID Client ID:	nofluorobenzene 1710B79-001AMS 2 West 1 Ft	Result           1.3           1.3           1.3           4.0           1.1           D           Samp           Batc           Analysis E           Result	PQL 0.024 0.049 0.049 0.098 Type: MS h ID: 34 Date: 10 PQL	SPK value 0.9756 0.9756 2.927 0.9756 50 566 0/24/2017 SPK value	SPK Ref Val 0 0 0 0 Tes R	%REC 136 137 137 137 111 tCode: El RunNo: 4 SeqNo: 1 %REC	LowLimit 80.9 79.8 79.4 78.5 80 PA Method 6592	HighLimit 132 136 140 142 120 8021B: Vola	%RPD tiles {g %RPD	RPDLimit	S S Qual
Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bron Sample ID Client ID: Prep Date:	nofluorobenzene 1710B79-001AMS 2 West 1 Ft	Result           1.3           1.3           1.3           4.0           1.1           D           Samp1           Batcl           Analysis E	PQL 0.024 0.049 0.098 Type: MS h ID: 34 Date: 10	SPK value 0.9756 0.9756 2.927 0.9756 566 566 0/24/2017	SPK Ref Val 0 0 0 0 Tes R S	%REC 136 137 137 137 111 tCode: El RunNo: 4 SeqNo: 1	LowLimit 80.9 79.8 79.4 78.5 80 PA Method 6592 484523	HighLimit 132 136 140 142 120 8021B: Vola Units: mg/k	%RPD tiles		S S Qual S
Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bron Client ID: Prep Date: Analyte Benzene Toluene	nofluorobenzene 1710B79-001AMS 2 West 1 Ft	Result           1.3           1.3           1.3           4.0           1.1           D           Samp <sup>1</sup> Batc           Analysis E           Result           1.3           1.3	PQL 0.024 0.049 0.049 0.098 Type: MS h ID: 34 Date: 10 PQL	SPK value 0.9756 0.9756 2.927 0.9756 50 566 0/24/2017 SPK value	SPK Ref Val 0 0 0 Tes F SPK Ref Val	%REC 136 137 137 137 111 tCode: El RunNo: 4 SeqNo: 1 %REC	LowLimit 80.9 79.8 79.4 78.5 80 PA Method 6592 484523 LowLimit	HighLimit 132 136 140 142 120 8021B: Vola Units: mg/P HighLimit	%RPD tiles {g %RPD	RPDLimit	S S Qual S S
Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bron Sample ID Client ID: Prep Date: Analyte Benzene	nofluorobenzene 1710B79-001AMS 2 West 1 Ft	Result           1.3           1.3           1.3           4.0           1.1           D           Samp <sup>1</sup> Batc           Analysis I           Result           1.3	PQL 0.024 0.049 0.098 Type: MS h ID: 344 Date: 10 PQL 0.024	SPK value 0.9756 0.9756 2.927 0.9756 566 566 566 5724/2017 SPK value 0.9551	SPK Ref Val 0 0 0 Tes: F SPK Ref Val 0	%REC 136 137 137 137 111 tCode: El RunNo: 4 SeqNo: 1 %REC 139	LowLimit 80.9 79.8 79.4 78.5 80 PA Method 6592 484523 LowLimit 80.9	HighLimit 132 136 140 142 120 8021B: Vola Units: mg/k HighLimit 132	%RPD tiles (g %RPD 0.115	RPDLimit 20	S S Qual S

#### **Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix

Surr: 4-Bromofluorobenzene

H Holding times for preparation or analysis exceeded

1.1

- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range

113

- J Analyte detected below quantitation limits
- P Sample pH Not In Range

0.9551

- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

80

120

0

0

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WO#: 1710B79 30-Oct-17

ENVIRONMENTAL ANALYSIS LABORATORY	Albi TEL: 505-345-3975 Website: www.ha	4901 Hawki uquerque, NM FAX: 505-345	87109 <b>Sam</b> -4107	ple Log-In Check List
Client Name: Safety Env Solutions	Work Order Number:	1710B79		RcptNo: 1
Received By: John Caldwell	10/21/2017 11:15:00 A	M	John Colline	K
Completed By: Erin Melendrez	10/23/2017 9:35:12 AM	Л	Gen Celline	<del>,</del>
Reviewed By: SRR 10/23/17	7			
Chain of Custody				
1. Custody seals intact on sample bottles?		Yes 🗌	No 🗌	Not Present 🗹
2. Is Chain of Custody complete?		Yes 🗹	No 🗌	Not Present
3. How was the sample delivered?		<u>Courier</u>		
Log In				
4. Was an attempt made to cool the samples	?	Yes 🗹	No 🗌	
5. Were all samples received at a temperature	e of >0° C to 6.0°C	Yes 🗹	No 🗌	
6. Sample(s) in proper container(s)?		Yes 🗹	No 🗌	
7. Sufficient sample volume for indicated test(	s)?	Yes 🖌	No 🗌	
8. Are samples (except VOA and ONG) prope	rly preserved?	Yes 🗹	No 🗌	
9. Was preservative added to bottles?		Yes 🗌	No 🗹	NA 🗌
10.VOA vials have zero headspace?		Yes	No 🗌	No VOA Vials 🗹
11. Were any sample containers received brok	en?	Yes	No 🗹	# of preserved
10 -		G		bottles checked
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)		Yes 🗹	No 🗔	for pH: (<2 or >12 unless not
3. Are matrices correctly identified on Chain of	f Custody?	Yes 🔽	No 🗌	Adjusted?
14. Is it clear what analyses were requested?		Yes 🗹	No 🗌	
15. Were all holding times able to be met? (If no, notify customer for authorization.)		Yes 🗹	No 🗌	Checked by:
pecial Handling (if applicable)				
16. Was client notified of all discrepancies with	this order?	Yes 🗌	No 🗌	NA 🗹
Person Notified:	Date:			
By Whom:	Via:	eMail 🗌	Phone 🗌 Fax	In Person
Regarding:				
Client Instructions:				
17. Additional remarks:				
8. <u>Cooler Information</u> Cooler No Temp °C Condition S 1 2.4 Good Ye		Seal Date	Signed By	

Pag	ge	1	of	1	

Address     Townunder     Clanda       Address     703     6.     Clanda       Fax#:     275     775     775       Address     10     1     20       Address     1     1     1	ne: Gelugy Quest Surve: +1 Q-17-001	
M     Froject Nat       E. Clowrow     Project Nat       M     82240       Project #     Project Ma       Z-05770     Project Ma       Revel 4 (Full Validation)     Robect Ma	12-00	ANALYSIS LABORATORY
G. Clewrow     HO       M     88240     Project #       7-0570     Project Ma       7-0570     Robert #       8     Robert #       1     Level 4 (Full Validation)       8     Sampler       1     Sampler       1     Sampler	2-17-001	www.hallenvironmental.com
M \$\$240 Project # 7-0570 Project Ma Project Ma Roject Ma	0-17-001	4901 Hawkins NE - Albuquerque, NM 67109
Tys-372-0570     EA       Project Ma       ex       I Level 4 (Full Validation)       Robert       Other       Other       Other	1-17-001	
e   Level 4 (Full Validation)  Other		Analysis
Level 4 (Full Validation)      Other	ager:	(۲) (0) (0)
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roke roos 5 / busin 3.25	-006	
coloo loyo 5 3 North 150	-007	
10/20 louts 5 3 work 2A	-008	
rolzo 1105 5 Browh 1307	-009	
(0/20 (120 5 B WERT (A	-010	
	-011	
0 ((40 S B wey 35r	-012	X X X
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Date: Time: Relinquishedburd by	Dale Time	

Mailing Address: 703 C. Clart Reline Address: 703 C. Clart (Lebbs NM 882 Phone #: 525-397-0510	うちろうこ									l					į
10	Solution	ž	Project Name: Colory	Entergy	Quest		11	AN	ANALYSIS LABORATORY www.hallenvironmental.com	SIS	LAI	BOI	RAT	OR	>
325	703 E Cl	Clarton	1.1	STATE &	1	4	901 Ha	wkins N	4901 Hawkins NE - Albuquerque, NM 87109	puquer	due. N	M 87	60		
525	2	18240	Project #:	~			Tel. 505	505-345-3975	975	Fax 5(	505-345-4107	4107			
	- 397 - 0510		CN	5NU-17-001	01				Ana		Request				
email or Fax#:			Project Manager:	ider:		-	1	-		-		T		-	1
QA/QC Package:	Level 4 (Full Validation)	(Validation)	Rob	Rob (Alow	>				(SWI		PCB's	1	(00		
Accreditation	ther		Sampler.	A Vec	- No		_		S 0728		2808 /		1 (30		(N )
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# Appendix C Site Photographs

# ENERGY QUEST

## State AO























































