Souder, Miller & Associates♦201 S. Halagueno St.♦Carlsbad, NM 88220
(575) 689-8801

September 18, 2017

#5E25941-BG11

NMOCD District II
Mike Bratcher
811 S. First St.
Artesia, NM 88210

SUBJECT: SOIL REMEDIATION CLOSURE REPORT FOR THE INCIDENT AT THE BEESON STATION RELEASE, EDDY COUNTY, NEW MEXICO

Dear Mr. Bratcher,

On behalf of Holly Energy Partners (Holly), Souder, Miller & Associates (SMA) has prepared this CLOSURE REPORT that describes the assessment, initial delineation and remediation for a release associated with the Beeson Station. The site is in UNIT C, SECTION 3, TOWNSHIP 18S, RANGE 30E, NMPM, Eddy County, New Mexico, on State land. Figure 1 illustrates the vicinity and location of the site.

Table 1, below, summarizes information regarding the release.

Table 1: Release information and Site Ranking	
Name	Beeson Station
Company	Holly Energy Partners
RP Number	2RP-4352
API Number	fJMW1329537876
Location	32.782336°, -103.96058 °
Estimated Date of Release	8/8/2017
Date Reported to NMOCD	8/21/2017
Land Owner	Federal
Reported To	Crystal Weaver
Source of Release	Sump
Released Material	Crude Oil
Released Volume	16.5
Recovered Volume	3 bbl
Net Release	13.5 bbl
Nearest Waterway	22 miles from Pecos River
Depth to Groundwater	Estimated to be greater than 100’
Nearest Domestic Water Source	Greater than 1,000 feet
NMOCD Ranking	0
SMA Response Dates	Initial: 8/31/2017

1.0 Background

A valve which led to a sump was left open at the Beeson pump station. This resulted in a small release at the valve location and a larger spill where the sump overfilled. The total amount of crude oil released was 16.5 barrels (bbls), 3 bbls of which were collected by vacuum truck. The impacted gravel was collected onto a lined surface and the weed cloth barrier that existed underneath the gravel was cut and hauled off. The surface impact near the sump is approximately 80 feet long by 25 feet wide.

2.0 Site Ranking and Land Jurisdiction

The release site is located approximately 22 miles east of the Pecos River, with an elevation of approximately 3,530 feet above sea level. SMA searched the New Mexico State Engineer's Office (NMOSE) online water well database for water wells in the vicinity of the release. There were no wells within a 3-mile radius and one well just outside the radius. This well (RA 11914) was installed for soil contamination delineation. After evaluation of the site using aerial photography and topographic maps, depth to groundwater is estimated to be greater than 100 feet below ground surface (bgs).

Recommended Remediation Action Levels (RRALs) are determined by the site ranking according to the NMOCD *Guidelines for Remediation of Leaks, Spills, and Releases* (1993). Below in Table 2 are the remediation standards and the site ranking for this location. Justification for this site ranking is found in Figure 1 and Appendix B.

Table 2.

Soil Remediation Standards	0 to 9	10 to 19	>19
Benzene	10 PPM	10 PPM	10 PPM
BTEX	50 PPM	50 PPM	50 PPM
TPH	5000 PPM	1000 PPM	100 PPM

Depth to Groundwater	NMOCD Numeric Rank
< 50 BGS = 20	
50' to 99' = 10	
>100' = 0	0
Distance to Nearest Surface Water	**NMOCD Numeric Rank**
< 200' = 20	
200' - 1000' = 10	
>1000' = 0	0
Well Head Protection	**NMOCD Numeric Rank**
<1000' (or <200' domestic) = 20	
> 1000' = 0	0
Total Site Ranking	**0**

3.0 Release Characterization

On August 31, 2017 after receiving 811 clearance, SMA field personnel assessed the release area. Soil samples were field-screened using an PID meter. Several sample locations were collected to a

maximum depth of 0.8 feet bgs Samples were collected to characterize and delineate the release. All samples were collected and processed according to NMOCD soil sampling procedures. The samples were sent under chain-of-custody protocols to Hall Environmental Analysis Laboratory for analyses including chlorides by Method 300.0, volatile organics (BTEX) by Method 8021B, and MRO, DRO, and GRO by EPA Method 8015D. Sample locations are depicted on Figure 2. All field screening and laboratory results are summarized in Table 3. Laboratory reports are included in Appendix C.

The entire area was carefully scraped and excavated by hand as part of initial actions. It is believed that this action, plus the existence of the weed cloth under the gravel, sufficiently remediated the release and prevented further downward migration of contaminants. The entire area was scraped to 0.5 feet, with isolated pooling areas excavated an additional 3 inches. Sample locations L1, L2, and L3 are located at the pooling areas from the sump overflow, while sample points L4 and L5 represent the valve release point at the pump.

4.0 Soil Remediation

With approval from area utilities owners via 811, SMA excavated the affected soils by hand. The area excavated is shown in Figure 2, and is listed in Table 3. Excavation occurred to depths of approximately 0.8 feet bgs. SMA continuously guided the excavation activities by collecting soil samples for field screening with a calibrated PID. According to the results of the laboratory confirmation samples, all remaining soil is below NMOCD RRALs. Approximately 20 cubic yards of contaminated soil were removed and placed on a liner. The contaminated soil will be transported for proper disposal at an NMOCD permitted disposal facility. SMA recommends no further action at the Beeson Station release site.

5.0 Scope and Limitations

The scope of our services consisted of the performance of assessment sampling, verification of release stabilization, remediation, closure sample collection, regulatory liaison, and preparation of this closure report. All work has been performed in accordance with generally accepted professional environmental consulting practices for oil and gas releases in the Permian Basin in New Mexico.

If there are any questions regarding this report, please contact either Austin Weyant at 575-689-8801 or Shawna Chubbuck at 505-325-7535.

Submitted by:
SOUDER, MILLER & ASSOCIATES

Austin Weyant
Project Scientist

Reviewed by:

Shawna Chubbuck
Senior Scientist

ATTACHMENTS:

Figures:

Figure 1: Vicinity and Well Head Protection Map
Figure 2: Site and Sample Location Map

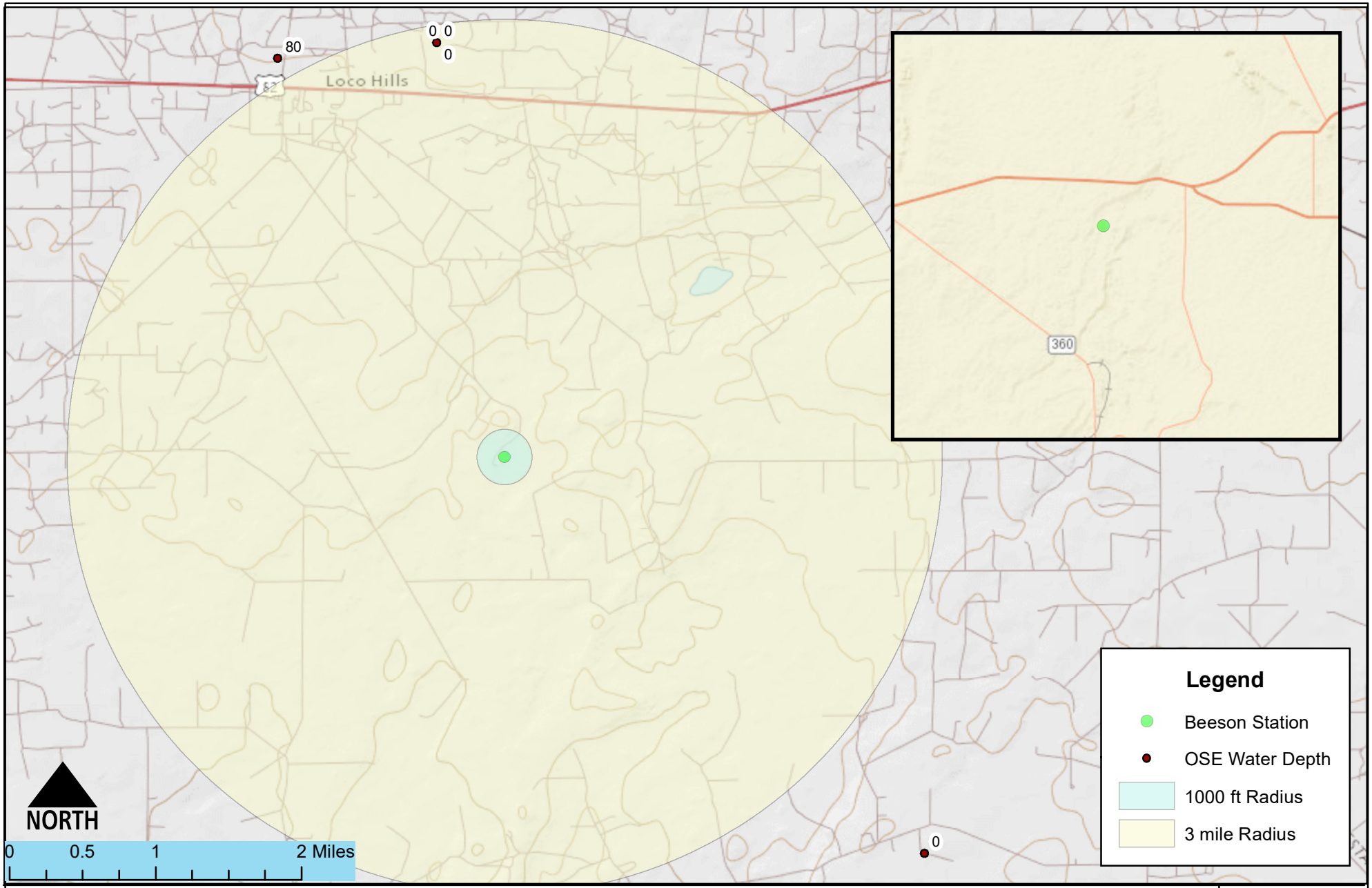
Tables:

Table 3: Summary of Sample Results

Appendices:

Appendix A: Form C141 Initial and Final
Appendix B: NMOSE Wells Report
Appendix C: Laboratory Analytical Reports

FIGURE 1
VICINITY AND NMOSE DATA MAP



Vicinity and NMOSE Wells Map
Beeson Station - Holly
S 3-T18S-R30E, New Mexico

Figure 1

Date Saved: 8/31/2017

Revisions
By: Date: Descr:
By: Date: Descr:

Drawn Heather Patterson
Checked
Approved

SMA
201 South Halagueña Street
Carlsbad, New Mexico 88221
(575) 689-7040
www.soudermiller.com
Serving the Southwest & Rocky Mountains

FIGURE 2
SITE AND SAMPLE
LOCATION MAP

Site and Sample Location Map
Beeson Station - Holly
S 3-T18S-R30E, New Mexico

Figure 2

Date Saved: 9/1/2017

Revisions
By: Date: Descr:
By: Date: Descr:

Drawn Heather Patterson
Checked
Approved

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TABLE 3
SUMMARY SAMPLE RESULTS

Beeson Station

Table 3.

Sample Number on Figure 2	Sample Date	Depth (feet bgs)	Proposed Action	BTEX ppm	Benzene mg/Kg	GRO mg/Kg	DRO mg/Kg	MRO mg/Kg	**Total TPH** mg/Kg	PID Field Screens (ppm)	Cl- Laboratory mg/Kg
NMOCD RRAL's for Site Ranking 0				50 mg/Kg	10 mg/Kg				5000 mg/Kg		
L1	8/31/2017	0.5	excavated	--	--	--	--	--	--	156	--
	8/31/2017	0.8	in-situ	<0.094	<0.023	8.3	270	120	398.3	52	<30
L2	8/31/2017	0.5	in-situ	<0.091	<0.023	<4.6	44	<48	44	58	--
L3	8/31/2017	0.5	in-situ	<0.095	<0.024	<4.8	41	63	104	72	--
L4	8/31/2017	0.5	excavated	--	--	--	--	--	--	128	--
	8/31/2017	0.8	in-situ	<0.092	<0.023	<4.6	290	200	490	48	--
L5	8/31/2017	0.5	excavated	--	--	--	--	--	--	137	--
	8/31/2017	0.8	in-situ	<0.096	<0.024	<4.8	890	540	1430	32	--
BG	8/31/2017	0.5	in-situ	--	--	--	--	--	--	--	<30
SP	8/31/2017	comp	haul	<0.10	<0.025	31	9200	5100	14331	--	--

"--" = Not Analyzed

APPENDIX A
FORM C141 INITIAL AND FINAL

NM OIL CONSERVATION
ARTESIA DISTRICT
AUG 21 2017
RECEIVED

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

fJMW1329537876

Release Notification and Corrective Action

nAB1723349152

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company HOLLY ENERGY PARTNERS 247939	Contact MELANIE NOLAN
Address 1602 W. MAIN, ARTESIA NM 88210	Telephone No. 214-605-8303
Facility Name LOVINGTON REFINERY	Facility Type BEESON PUMP STATION
Beeson Pump Unit 1	
Surface Owner BLM	Mineral Owner	API No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
C	3	18S	30E					LEA Eddy

32.782336 Latitude ~~32.465726~~ Longitude -103.573793 -103.96058

NATURE OF RELEASE

Type of Release Crude Oil	Volume of Release 16.5 Barrels	Volume Recovered 3 Barrels
Source of Release Overfill of Sump	Date and Hour of Occurrence 8/8/2017	Date and Hour of Discovery 8/8/2017 1223
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom? NRC & NMPRC DUE TO BEING A REGULATED LINE	
By Whom? CODY ALLEN - HEP	Date and Hour 8/8/2017 1634	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.*
N/A

Describe Cause of Problem and Remedial Action Taken.*
At this time it appears that the spill was caused by a behavior based incident of a valve being left open. Upon discovery of the problem all incoming and outgoing piping was stopped at the location. Valve was closed and no further problems were present. The release was contained on station; a vacuum truck was utilized and collected approximately 3 barrels of crude. The surface consisted of gravel and penetration of soil was less than an inch. Contaminated gravel and soil was collected onto plastic. No further action taken until Souder, Miller & Associates conduct their site assessment and recommendations.

Describe Area Affected and Cleanup Action Taken.* A detailed work plan will be submitted once site assessment is completed by Souder, Miller & Associates.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: Melanie Nolan	OIL CONSERVATION DIVISION
Printed Name: MELANIE NOLAN	Approved by Environmental Specialist: Signed By Mike Bratcher
Title: ENVIRONMENTAL SPECIALIST I	Approval Date: 8/31/17 Expiration Date: NA
E-mail Address: MELANIE.ISENBERG@HOLLYENERGY.COM	Conditions of Approval: See attached Attached ☐ 2RP-4352
Date: 8/21/17 Phone: 575-748-8972	

* Attach Additional Sheets If Necessary

Please refer to the New Mexico Oil Conservation Division Website for updated form(s) at: http://www.emnrd.state.nm.us/OCD/forms.html Thank you

Operator/Responsible Party,

The OCD has received the form C-141 you provided on 8/21/2017 regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number 2RP-4352 has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

> *The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC.* [emphasis added]

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District 2 office in ARTESIA on or before 9/21/2017. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

- Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.

- Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.

- Nominal detection limits for field and laboratory analyses must be provided.

- Composite sampling is not generally allowed.

- Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

•Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

• If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

• Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.

Jim Griswold
OCD Environmental Bureau Chief
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
505-476-3465
jim.griswold@state.nm.us

APPENDIX B
NMOSE WELLS REPORT

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 water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
RA 11914 POD1		ED	2	4	2	20	17S	30E	594801	3632002	5088	85	80	5

Average Depth to Water: **80 feet**

Minimum Depth: **80 feet**

Maximum Depth: **80 feet**

Record Count: 1

UTMNAD83 Radius Search (in meters):

Easting (X): 597335.34 **Northing (Y):** 3627589.67 **Radius:** 6000

New Mexico Office of the State Engineer
Transaction Summary

EXPL Permit To Explore

Transaction Number: 522948 **Transaction Desc:** RA-11914 EXPL **File Date:** 02/22/2013

Primary Status: PMT Permit
Secondary Status: LOG Well Log Received
Person Assigned: *******
Agent: LINN ENERGY
Contact: OSCAR FRAYRE

Events

Date	Type	Description	Comment	Processed By
02/22/2013	APP	Application Received	*	*******
02/25/2013	FTN	Finalize non-published Trans.		*******
04/09/2013	LOG	Well Log Received	*	*******
07/08/2013	QAT	Quality Assurance Completed	DATA	*******

Water Right Information

WR File Nbr	Acres	Diversion	Consumptive	Purpose of Use
RA 11914	0	0		EXP EXPLORATION
**Point of Diversion				
RA 11914 POD1		594801	3632002	

Remarks

"EXPLORATORY WELL FOR DELENATION OF SOIL CONTAMINATION; SOIL SAMPLES WILL BE COLLECTED AND TESTED FOR ANALYTICAL STUDIES"

Conditions

1A	Depth of the well shall not exceed the thickness of the valley fill.
4	No water shall be appropriated and beneficially used under this permit.
B	The well shall be drilled by a driller licensed in the State of New Mexico in accordance with Section 72-12-12 New Mexico Statutes Annotated.
7	The Permittee shall utilize the highest and best technology available to ensure conservation of water to the maximum extent practical.
C	Driller's well record must be filed with the State Engineer within 20 days after the well is drilled or driven. Well record forms will be provided by the State Engineer upon request.
C2	No water shall be diverted from this well except for testing purposes which shall not exceed twenty (20) cumulative days, and well shall be plugged or capped on or before , unless a permit to use water from this well is acquired from the Office of the State Engineer.
P	The well shall be constructed, maintained, and operated to prevent inter-aquifer exchange of water and to prevent loss of hydraulic head between geologic zones.

Action of the State Engineer

**** See Image For Any Additional Conditions of Approval ****

Approval Code: A - Approved

Action Date: 02/25/2013

Log Due Date: 02/28/2014

State Engineer: Scott A. Verhines, P.

9/11/17 1:01 PM TRANSACTION SUMMARY

APPENDIX C

LABORATORY ANALYTICAL REPORTS

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

September 14, 2017

Austin Weyant
Souder, Miller & Associates
201 S Halagueno
Carlsbad, NM 88221
TEL: (575) 689-7040
FAX

RE: Beeson HEP OrderNo.: 1709271

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 7 sample(s) on 9/6/2017 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 www.hallenvironmental.com 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 Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1709271**
Date Reported: **9/14/2017**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: BG
Project: Beeson HEP
Collection Date: 8/31/2017 9:30:00 AM
Lab ID: 1709271-001 **Matrix:** SOIL **Received Date:** 9/6/2017 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	9/13/2017 3:28:52 PM	33825

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: SP
Project: Beeson HEP
Collection Date: 8/31/2017 9:00:00 AM
Lab ID: 1709271-002
Matrix: SOIL
Received Date: 9/6/2017 11:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	31	5.0		mg/Kg	1	9/8/2017 7:14:37 PM	33745
Surr: BFB	99.9	70-130		%Rec	1	9/8/2017 7:14:37 PM	33745
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	9200	95		mg/Kg	10	9/8/2017 9:44:08 AM	33747
Motor Oil Range Organics (MRO)	5100	470		mg/Kg	10	9/8/2017 9:44:08 AM	33747
Surr: DNOP	0	70-130	S	%Rec	10	9/8/2017 9:44:08 AM	33747
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	9/8/2017 7:14:37 PM	33745
Benzene	ND	0.025		mg/Kg	1	9/8/2017 7:14:37 PM	33745
Toluene	ND	0.050		mg/Kg	1	9/8/2017 7:14:37 PM	33745
Ethylbenzene	ND	0.050		mg/Kg	1	9/8/2017 7:14:37 PM	33745
Xylenes, Total	0.40	0.10		mg/Kg	1	9/8/2017 7:14:37 PM	33745
Surr: 1,2-Dichloroethane-d4	124	70-130		%Rec	1	9/8/2017 7:14:37 PM	33745
Surr: 4-Bromofluorobenzene	99.3	70-130		%Rec	1	9/8/2017 7:14:37 PM	33745
Surr: Dibromofluoromethane	120	70-130		%Rec	1	9/8/2017 7:14:37 PM	33745
Surr: Toluene-d8	93.7	70-130		%Rec	1	9/8/2017 7:14:37 PM	33745

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: L1-0.8
Project: Beeson HEP
Collection Date: 8/31/2017 8:00:00 AM
Lab ID: 1709271-003 **Matrix:** SOIL **Received Date:** 9/6/2017 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	9/13/2017 4:06:06 PM	33825
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	8.3	4.7		mg/Kg	1	9/8/2017 7:43:18 PM	33745
Surr: BFB	97.5	70-130		%Rec	1	9/8/2017 7:43:18 PM	33745
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	270	10		mg/Kg	1	9/8/2017 10:33:21 AM	33747
Motor Oil Range Organics (MRO)	120	50		mg/Kg	1	9/8/2017 10:33:21 AM	33747
Surr: DNOP	112	70-130		%Rec	1	9/8/2017 10:33:21 AM	33747
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Methyl tert-butyl ether (MTBE)	ND	0.047		mg/Kg	1	9/8/2017 7:43:18 PM	33745
Benzene	ND	0.023		mg/Kg	1	9/8/2017 7:43:18 PM	33745
Toluene	ND	0.047		mg/Kg	1	9/8/2017 7:43:18 PM	33745
Ethylbenzene	ND	0.047		mg/Kg	1	9/8/2017 7:43:18 PM	33745
Xylenes, Total	ND	0.094		mg/Kg	1	9/8/2017 7:43:18 PM	33745
Surr: 1,2-Dichloroethane-d4	125	70-130		%Rec	1	9/8/2017 7:43:18 PM	33745
Surr: 4-Bromofluorobenzene	92.4	70-130		%Rec	1	9/8/2017 7:43:18 PM	33745
Surr: Dibromofluoromethane	122	70-130		%Rec	1	9/8/2017 7:43:18 PM	33745
Surr: Toluene-d8	96.5	70-130		%Rec	1	9/8/2017 7:43:18 PM	33745

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: L2-0.5
Project: Beeson HEP
Collection Date: 8/31/2017 8:15:00 AM
Lab ID: 1709271-004
Matrix: SOIL
Received Date: 9/6/2017 11:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	9/8/2017 8:11:57 PM	33745
Surr: BFB	93.3	70-130		%Rec	1	9/8/2017 8:11:57 PM	33745
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	44	9.6		mg/Kg	1	9/8/2017 1:01:53 PM	33747
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/8/2017 1:01:53 PM	33747
Surr: DNOP	99.9	70-130		%Rec	1	9/8/2017 1:01:53 PM	33747
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Methyl tert-butyl ether (MTBE)	ND	0.046		mg/Kg	1	9/8/2017 8:11:57 PM	33745
Benzene	ND	0.023		mg/Kg	1	9/8/2017 8:11:57 PM	33745
Toluene	ND	0.046		mg/Kg	1	9/8/2017 8:11:57 PM	33745
Ethylbenzene	ND	0.046		mg/Kg	1	9/8/2017 8:11:57 PM	33745
Xylenes, Total	ND	0.091		mg/Kg	1	9/8/2017 8:11:57 PM	33745
Surr: 1,2-Dichloroethane-d4	120	70-130		%Rec	1	9/8/2017 8:11:57 PM	33745
Surr: 4-Bromofluorobenzene	91.0	70-130		%Rec	1	9/8/2017 8:11:57 PM	33745
Surr: Dibromofluoromethane	116	70-130		%Rec	1	9/8/2017 8:11:57 PM	33745
Surr: Toluene-d8	96.7	70-130		%Rec	1	9/8/2017 8:11:57 PM	33745

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: L3-0.5
Project: Beeson HEP
Collection Date: 8/31/2017 8:20:00 AM
Lab ID: 1709271-005 **Matrix:** SOIL **Received Date:** 9/6/2017 11:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/8/2017 8:40:33 PM	33745
Surr: BFB	92.1	70-130		%Rec	1	9/8/2017 8:40:33 PM	33745
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	41	9.7		mg/Kg	1	9/8/2017 1:26:52 PM	33747
Motor Oil Range Organics (MRO)	63	48		mg/Kg	1	9/8/2017 1:26:52 PM	33747
Surr: DNOP	101	70-130		%Rec	1	9/8/2017 1:26:52 PM	33747
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Methyl tert-butyl ether (MTBE)	ND	0.048		mg/Kg	1	9/8/2017 8:40:33 PM	33745
Benzene	ND	0.024		mg/Kg	1	9/8/2017 8:40:33 PM	33745
Toluene	ND	0.048		mg/Kg	1	9/8/2017 8:40:33 PM	33745
Ethylbenzene	ND	0.048		mg/Kg	1	9/8/2017 8:40:33 PM	33745
Xylenes, Total	ND	0.095		mg/Kg	1	9/8/2017 8:40:33 PM	33745
Surr: 1,2-Dichloroethane-d4	122	70-130		%Rec	1	9/8/2017 8:40:33 PM	33745
Surr: 4-Bromofluorobenzene	86.8	70-130		%Rec	1	9/8/2017 8:40:33 PM	33745
Surr: Dibromofluoromethane	118	70-130		%Rec	1	9/8/2017 8:40:33 PM	33745
Surr: Toluene-d8	97.7	70-130		%Rec	1	9/8/2017 8:40:33 PM	33745

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: L4-0.8
Project: Beeson HEP
Collection Date: 8/31/2017 8:25:00 AM
Lab ID: 1709271-006
Matrix: SOIL
Received Date: 9/6/2017 11:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	9/8/2017 11:03:32 PM	33745
Surr: BFB	88.9	70-130		%Rec	1	9/8/2017 11:03:32 PM	33745
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	290	10		mg/Kg	1	9/8/2017 11:47:38 AM	33747
Motor Oil Range Organics (MRO)	200	50		mg/Kg	1	9/8/2017 11:47:38 AM	33747
Surr: DNOP	105	70-130		%Rec	1	9/8/2017 11:47:38 AM	33747
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Methyl tert-butyl ether (MTBE)	ND	0.046		mg/Kg	1	9/8/2017 11:03:32 PM	33745
Benzene	ND	0.023		mg/Kg	1	9/8/2017 11:03:32 PM	33745
Toluene	ND	0.046		mg/Kg	1	9/8/2017 11:03:32 PM	33745
Ethylbenzene	ND	0.046		mg/Kg	1	9/8/2017 11:03:32 PM	33745
Xylenes, Total	ND	0.092		mg/Kg	1	9/8/2017 11:03:32 PM	33745
Surr: 1,2-Dichloroethane-d4	125	70-130		%Rec	1	9/8/2017 11:03:32 PM	33745
Surr: 4-Bromofluorobenzene	86.5	70-130		%Rec	1	9/8/2017 11:03:32 PM	33745
Surr: Dibromofluoromethane	122	70-130		%Rec	1	9/8/2017 11:03:32 PM	33745
Surr: Toluene-d8	98.2	70-130		%Rec	1	9/8/2017 11:03:32 PM	33745

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: L5-0.8
Project: Beeson HEP
Collection Date: 8/31/2017 8:30:00 AM
Lab ID: 1709271-007
Matrix: SOIL
Received Date: 9/6/2017 11:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/8/2017 11:32:15 PM	33745
Surr: BFB	93.7	70-130		%Rec	1	9/8/2017 11:32:15 PM	33745
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	890	97		mg/Kg	10	9/8/2017 1:51:47 PM	33747
Motor Oil Range Organics (MRO)	540	490		mg/Kg	10	9/8/2017 1:51:47 PM	33747
Surr: DNOP	0	70-130	S	%Rec	10	9/8/2017 1:51:47 PM	33747
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Methyl tert-butyl ether (MTBE)	ND	0.048		mg/Kg	1	9/8/2017 11:32:15 PM	33745
Benzene	ND	0.024		mg/Kg	1	9/8/2017 11:32:15 PM	33745
Toluene	ND	0.048		mg/Kg	1	9/8/2017 11:32:15 PM	33745
Ethylbenzene	ND	0.048		mg/Kg	1	9/8/2017 11:32:15 PM	33745
Xylenes, Total	ND	0.096		mg/Kg	1	9/8/2017 11:32:15 PM	33745
Surr: 1,2-Dichloroethane-d4	130	70-130		%Rec	1	9/8/2017 11:32:15 PM	33745
Surr: 4-Bromofluorobenzene	90.8	70-130		%Rec	1	9/8/2017 11:32:15 PM	33745
Surr: Dibromofluoromethane	128	70-130		%Rec	1	9/8/2017 11:32:15 PM	33745
Surr: Toluene-d8	96.4	70-130		%Rec	1	9/8/2017 11:32:15 PM	33745

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1709271**

14-Sep-17

Client: Souder, Miller & Associates

Project: Beeson HEP

Sample ID	**MB-33825**	SampType:	**mblk**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**33825**	RunNo:	**45622**					
Prep Date:	**9/12/2017**	Analysis Date:	**9/13/2017**	SeqNo:	**1447246**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-33825**	SampType:	**lcs**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**33825**	RunNo:	**45622**					
Prep Date:	**9/12/2017**	Analysis Date:	**9/13/2017**	SeqNo:	**1447247**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.6	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1709271**

14-Sep-17

Client: Souder, Miller & Associates

Project: Beeson HEP

Sample ID	**MB-33747**	SampType:	**MBLK**	TestCode:	**EPA Method 8015M/D: Diesel Range Organics**					
Client ID:	**PBS**	Batch ID:	**33747**	RunNo:	**45495**					
Prep Date:	**9/7/2017**	Analysis Date:	**9/8/2017**	SeqNo:	**1442120**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.8		10.00		98.3	70	130			

Sample ID	**LCS-33747**	SampType:	**LCS**	TestCode:	**EPA Method 8015M/D: Diesel Range Organics**					
Client ID:	**LCSS**	Batch ID:	**33747**	RunNo:	**45495**					
Prep Date:	**9/7/2017**	Analysis Date:	**9/8/2017**	SeqNo:	**1442271**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	96.6	73.2	114			
Surr: DNOP	4.5		5.000		89.7	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1709271**

14-Sep-17

Client: Souder, Miller & Associates

Project: Beeson HEP

Sample ID **mb-33745**	SampType: **MBLK**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBS**	Batch ID: **33745**	RunNo: **45532**
Prep Date: **9/7/2017**	Analysis Date: **9/8/2017**	SeqNo: **1443300** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.050								
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.65		0.5000		130	70	130			
Surr: 4-Bromofluorobenzene	0.42		0.5000		84.4	70	130			
Surr: Dibromofluoromethane	0.62		0.5000		124	70	130			
Surr: Toluene-d8	0.49		0.5000		97.2	70	130			

Sample ID **lcs-33745**	SampType: **LCS**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **LCSS**	Batch ID: **33745**	RunNo: **45532**
Prep Date: **9/7/2017**	Analysis Date: **9/8/2017**	SeqNo: **1443301** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.2	0.025	1.000	0	117	70	130			
Toluene	0.89	0.050	1.000	0	89.2	70	130			
Surr: 1,2-Dichloroethane-d4	0.62		0.5000		124	70	130			
Surr: 4-Bromofluorobenzene	0.44		0.5000		88.4	70	130			
Surr: Dibromofluoromethane	0.56		0.5000		112	70	130			
Surr: Toluene-d8	0.48		0.5000		95.2	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1709271**

14-Sep-17

Client: Souder, Miller & Associates

Project: Beeson HEP

Sample ID	**mb-33745**	SampType:	**MBLK**	TestCode:	**EPA Method 8015D Mod: Gasoline Range**					
Client ID:	**PBS**	Batch ID:	**33745**	RunNo:	**45532**					
Prep Date:	**9/7/2017**	Analysis Date:	**9/8/2017**	SeqNo:	**1443325**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	430		500.0		86.2	70	130			

Sample ID	**lcs-33745**	SampType:	**LCS**	TestCode:	**EPA Method 8015D Mod: Gasoline Range**					
Client ID:	**LCSS**	Batch ID:	**33745**	RunNo:	**45532**					
Prep Date:	**9/7/2017**	Analysis Date:	**9/8/2017**	SeqNo:	**1443326**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	97.5	70	130			
Surr: BFB	450		500.0		90.0	70	130			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: SMA-CARLSBAD Work Order Number: 1709271 RcptNo: 1

Received By: Richie Eriacho 9/6/2017 11:15:00 AM

Completed By: Ashley Gallegos 9/6/2017 6:05:43 PM

Reviewed By:

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?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☐	No ☑	NA ☐
Samples were collected the same day and chilled.			
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) properly 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 broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
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 ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special 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:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.7	Good	Not Present			

Chain-of-Custody Record

Client: ~~BEESON~~ SMA

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☑ Standard ☐ Rush _____

Project Name:
Beeson (HEP)

Project #:

Project Manager:
Austin Weyant.

Sampler: JAW

On Ice: ☒ Yes ☐ No

Sample Temperature: 4.7

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1709271	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F^-,Cl^-,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles (Y or N)
08/31/17	9:30	soil	BG	402.		-001								X								
	9am		SP			-002	X		X													
	8am		L1 -0.8			-003	X		X					X								
	8:15am		L2 -0.5			-004	X		X													
	8:20am		L3 -0.5			-005	X		X													
	8:25am		L4 -0.8			-006	X		X													
↓	8:30am	↓	L5 -0.8	↓		-007	X		X													

Date:	Time:	Relinquished by:	Received by:	Date	Time
		J. Hall		9/6/17	1115
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: