

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 April 3, 2017

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

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company Petro Mex LLC	Contact Linn Wilson	
Address P.O. Box 6724 Farmington NM	Telephone No. 505-486-5557	
Facility Name Kirtland 18#1	Facility Type Oil & Gas Well	
Surface Owner FEE	Mineral Owner	API No. 30-045-26203

LOCATION OF RELEASE

Unit Letter A	Section 18	Township 29N	Range 14W	Feet from the 990	North/South Line North	Feet from the 360	East/West Line East	County San Juan
------------------	---------------	-----------------	--------------	----------------------	---------------------------	----------------------	------------------------	--------------------

Latitude _____ Longitude _____ NAD83

NATURE OF RELEASE

Type of Release Produced Water	Volume of Release	Volume Recovered
Source of Release Pit	Date and Hour of Occurrence	Date and Hour of Discovery 2012
Was Immediate Notice Given? Yes <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? NMOCD	
By Whom?	Date and Hour	
Was a Watercourse Reached? No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

OIL CONS. DIV DIST. 3

DEC 8 2017

Describe Area Affected and Cleanup Action Taken.*

Resample Pit Area

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: <i>Linn Wilson</i>	OIL CONSERVATION DIVISION	
Printed Name: Linn Wilson	Approved by Environmental Specialist: <i>[Signature]</i>	
Title: V.P Operations	Approval Date: 12/18/17	Expiration Date: _____
E-mail Address: linn_wilson@sisna.com	Conditions of Approval: _____	Attached <input type="checkbox"/> _____
Date: 12/8/2017 Phone: 505-486-5557		

* Attach Additional Sheets If Necessary

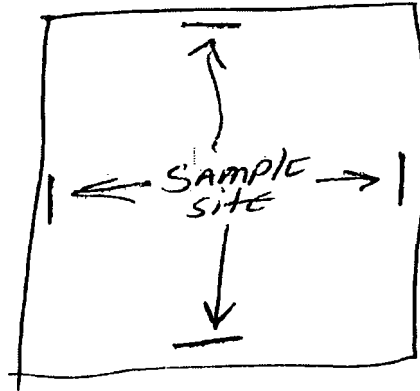
#NCS 1735233258

(26)

KIRTLAND 18-2

↑
North

SEPERATOR



TANKS
○ ○

SC1 Bottom Samples
SC2 SIDEWALL SAMPLES



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

November 30, 2017

Linn R. Wilson
Petro Mex
PO Box 6724
Farmington, NM
TEL: (505) 485-5557
FAX

RE: Kirtland 18-1

OrderNo.: 1711A94

Dear Linn R. Wilson:

Hall Environmental Analysis Laboratory received 2 sample(s) on 11/21/2017 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 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

Hall Environmental Analysis Laboratory, Inc.**Analytical Report**

Lab Order 1711A94

Date Reported: 11/30/2017

CLIENT: Petro Mex**Client Sample ID:** SCI**Project:** Kirtland 18-1**Collection Date:** 11/17/2017 11:05:00 AM**Lab ID:** 1711A94-001**Matrix:** SOIL**Received Date:** 11/21/2017 7:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	11/29/2017 1:09:22 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	11/29/2017 1:09:22 PM
Surr: DNOP	95.0	70-130		%Rec	1	11/29/2017 1:09:22 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/27/2017 9:52:43 AM
Surr: BFB	101	15-316		%Rec	1	11/27/2017 9:52:43 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	11/27/2017 9:52:43 AM
Toluene	ND	0.047		mg/Kg	1	11/27/2017 9:52:43 AM
Ethylbenzene	ND	0.047		mg/Kg	1	11/27/2017 9:52:43 AM
Xylenes, Total	ND	0.094		mg/Kg	1	11/27/2017 9:52:43 AM
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	11/27/2017 9:52:43 AM

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	Page 1 of 5
	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 Quantitative 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.**Analytical Report**

Lab Order 1711A94

Date Reported: 11/30/2017

CLIENT: Petro Mex**Client Sample ID:** SC2**Project:** Kirtland 18-1**Collection Date:** 11/17/2017 11:10:00 AM**Lab ID:** 1711A94-002**Matrix:** SOIL**Received Date:** 11/21/2017 7:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	120	9.7		mg/Kg	1	11/29/2017 1:31:33 PM
Motor Oil Range Organics (MRO)	230	49		mg/Kg	1	11/29/2017 1:31:33 PM
Surr: DNOP	98.7	70-130		%Rec	1	11/29/2017 1:31:33 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/27/2017 11:03:41 AM
Surr: BFB	95.8	15-316		%Rec	1	11/27/2017 11:03:41 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	11/27/2017 11:03:41 AM
Toluene	ND	0.048		mg/Kg	1	11/27/2017 11:03:41 AM
Ethylbenzene	ND	0.048		mg/Kg	1	11/27/2017 11:03:41 AM
Xylenes, Total	ND	0.096		mg/Kg	1	11/27/2017 11:03:41 AM
Surr: 4-Bromofluorobenzene	94.9	80-120		%Rec	1	11/27/2017 11:03:41 AM

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 Quantitative 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#: 1711A94

30-Nov-17

Client: Petro Mex
Project: Kirtland 18-1

Sample ID	LCS-35179	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	35179	RunNo:	47353					
Prep Date:	11/28/2017	Analysis Date:	11/28/2017	SeqNo:	1510946	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.4		5.000		88.0	70	130			

Sample ID	MB-35179	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	35179	RunNo:	47353					
Prep Date:	11/28/2017	Analysis Date:	11/28/2017	SeqNo:	1510947	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.1		10.00		91.5	70	130			

Sample ID	LCS-35149	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	35149	RunNo:	47353					
Prep Date:	11/27/2017	Analysis Date:	11/28/2017	SeqNo:	1511452	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	0	91.0	73.2	114			
Surr: DNOP	4.4		5.000		88.5	70	130			

Sample ID	MB-35149	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	35149	RunNo:	47353					
Prep Date:	11/27/2017	Analysis Date:	11/28/2017	SeqNo:	1511453	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	8.9		10.00		89.4	70	130			

Sample ID	LCS-35209	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	35209	RunNo:	47389					
Prep Date:	11/29/2017	Analysis Date:	11/29/2017	SeqNo:	1512108	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.4		5.000		88.5	70	130			

Sample ID	MB-35209	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	35209	RunNo:	47389					
Prep Date:	11/29/2017	Analysis Date:	11/29/2017	SeqNo:	1512109	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.1		10.00		91.0	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 Quantitative 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#: 1711A94

30-Nov-17

Client: Petro Mex
Project: Kirtland 18-1

Sample ID	MB-35130	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	35130	RunNo:	47349					
Prep Date:	11/22/2017	Analysis Date:	11/27/2017	SeqNo:	1510598	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	1000		1000		101	15	316			

Sample ID	LCS-35130	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	35130	RunNo:	47349					
Prep Date:	11/22/2017	Analysis Date:	11/27/2017	SeqNo:	1510600	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	99.6	75.9	131			
Surr: BFB	1100		1000		113	15	316			

Sample ID	1711A94-002AMS	SampType:	MS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	SC2	Batch ID:	35130	RunNo:	47349					
Prep Date:	11/22/2017	Analysis Date:	11/27/2017	SeqNo:	1510605	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.6	22.91	0	98.2	77.8	128			
Surr: BFB	1100		916.6		119	15	316			

Sample ID	1711A94-002AMSD	SampType:	MSD	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	SC2	Batch ID:	35130	RunNo:	47349					
Prep Date:	11/22/2017	Analysis Date:	11/27/2017	SeqNo:	1510607	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.7	23.56	0	97.5	77.8	128	2.13	20	
Surr: BFB	1100		942.5		112	15	316	0	0	

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 Quantitative 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#: 1711A94

30-Nov-17

Client: Petro Mex
Project: Kirtland 18-1

Sample ID	MB-35130	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID:	35130	RunNo:	47349					
Prep Date:	11/22/2017	Analysis Date:	11/27/2017	SeqNo:	1510626	Units:	mg/Kg			
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-Bromofluorobenzene	1.0		1.000		100	80	120			

Sample ID	LCS-35130		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles				
Client ID:	LCSS		Batch ID:	35130		RunNo:	47349				
Prep Date:	11/22/2017		Analysis Date:	11/27/2017		SeqNo:	1510827		Units:	mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.96	0.025	1.000	0	95.7	77.3	128				
Toluene	0.95	0.050	1.000	0	95.4	79.2	125				
Ethylbenzene	0.94	0.050	1.000	0	94.4	80.7	127				
Xylenes, Total	2.9	0.10	3.000	0	95.2	81.6	129				
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120				

Sample ID	1711A94-001AMS	SampType:	MS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	SC1	Batch ID:	35130	RunNo:	47349					
Prep Date:	11/22/2017	Analysis Date:	11/27/2017	SeqNo:	1510629	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.024	0.9560	0	92.4	80.9	132			
Toluene	0.88	0.048	0.9560	0	92.3	79.8	136			
Ethylbenzene	0.87	0.048	0.9560	0	91.5	79.4	140			
Xylenes, Total	2.6	0.096	2.868	0	92.4	78.5	142			
Surr: 4-Bromofluorobenzene	0.93		0.9560		97.1	80	120			

Sample ID	1711A94-001AMSD	SampType:	MSD	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	SC1	Batch ID:	35130	RunNo:	47349					
Prep Date:	11/22/2017	Analysis Date:	11/27/2017	SeqNo:	1510630	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.024	0.9615	0	91.4	80.9	132	0.502	20	
Toluene	0.87	0.048	0.9615	0	90.5	79.8	136	1.42	20	
Ethylbenzene	0.86	0.048	0.9615	0	89.4	79.4	140	1.77	20	
Xylenes, Total	2.6	0.096	2.885	0	90.0	78.5	142	2.01	20	
Surr: 4-Bromofluorobenzene	0.96		0.9615		100	80	120	0	0	

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 Quantitative 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
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: PETRO MEX

Work Order Number: 1711A94

RcptNo: 1

Received By: Anne Thorne

11/21/2017 7:10:00 AM

Anne Thorne

Completed By: Anne Thorne

11/21/2017 12:21:40 PM

Anne Thorne

Reviewed By: DDS

11/21/17

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 $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
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:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	_____		
Client Instructions:	_____		

17. Additional remarks:

18. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.2	Good	Yes			

Chain-of-Custody Record

Client: Petroleum

Turn-Around Time:
Project Name: Kithauo 18-2

Mailing Address: P.O. Box 6724

Freemington

Phone #: 505-481-5557

email or Fax#: lisa.wilson@simms.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation

☐ NELAP ☐ Other

☐ EDD (Type)

Project Manager: Lisa R. Wilson

Sampler: Lisa R. Wilson

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.2

Date Time Matrix Sample Request ID

Container Type and # Preservative Type

HEAL No.

11-05 Soil SC1 BOC Jar NA 11A94 -202

<input checked="" type="checkbox"/>	BTEX + MTBE + TMB's (8021)
<input checked="" type="checkbox"/>	BTEX + MTBE + TPH (Gas only)
<input checked="" type="checkbox"/>	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
	8250B (VOA)
	8270 (Semi-VOA)
	Air Bubbles (Y or N)



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: Relinquished by: Received by: Date Time

11-17-17 11:50 AM Dan Blaney

4:08 Tom Blaney

Remarks: See Results Ashley Maxwell Bill SMA

I warrant that samples submitted to Hall Environmental may be subjected to further analysis without notice. This serves as notice of its possibility. Any sub-contractor data will be clearly noted on the analytical report.



May 16, 2012

Cindy Gray

Souder, Miller and Associates

2101 San Juan Boulevard

Farmington, NM 87401

TEL: (505) 325-5667

FAX (505) 327-1496

OIL CONS. DIV DI

NOV 07 201

Samples over 08 Limits
Site Rank 20 Additional
work is possible.

No closure Report or C-1471
b2/b7C

RE: Petromax Pit Closures

OrderNo.: 1205344

Dear Cindy Gray:

Hall Environmental Analysis Laboratory received 1 sample(s) on 5/8/2012 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. 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. All samples are reported as received unless otherwise indicated.

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

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.**Analytical Report**

Lab Order 1205344

Date Reported: 5/16/2012

CLIENT: Souder, Miller and Associates**Client Sample ID:** Kirtland 18-1 5 pt. composite**Project:** Petromax Pit Closures**Collection Date:** 5/7/2012 9:00:00 AM**Lab ID:** 1205344-001**Matrix:** SOIL**Received Date:** 5/8/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	370	200		mg/Kg	20	5/9/2012 3:29:48 PM
Surr: DNOP	0	77.4-131	S	%REC	20	5/9/2012 3:29:48 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	49		mg/Kg	10	5/10/2012 4:39:33 AM
Surr: BFB	104	69.7-121		%REC	10	5/10/2012 4:39:33 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.49		mg/Kg	10	5/10/2012 4:39:33 AM
Toluene	ND	0.49		mg/Kg	10	5/10/2012 4:39:33 AM
Ethylbenzene	ND	0.49		mg/Kg	10	5/10/2012 4:39:33 AM
Xylenes, Total	ND	0.98		mg/Kg	10	5/10/2012 4:39:33 AM
Surr: 4-Bromofluorobenzene	93.2	80-120		%REC	10	5/10/2012 4:39:33 AM
EPA METHOD 418.1: TPH						Analyst: JMP
Petroleum Hydrocarbons, TR	2,300	200		mg/Kg	10	5/9/2012

Qualifiers: * / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1205344

16-May-12

Client: Souder, Miller and Associates

Project: Petromax Pit Closures

Sample ID	MB-1846	SampType:	MBLK	TestCode:	EPA Method 418.1: TPH					
Client ID:	PBS	Batch ID:	1846	RunNo:	2658					
Prep Date:	5/8/2012	Analysis Date:	5/9/2012	SeqNo:	73878	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	ND	20								

Sample ID	LCS-1846	SampType:	LCS	TestCode:	EPA Method 418.1: TPH					
Client ID:	LCSS	Batch ID:	1846	RunNo:	2658					
Prep Date:	5/8/2012	Analysis Date:	5/9/2012	SeqNo:	73879	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	98	20	100.0	0	98.3	87.8	115			

Sample ID	LCSD-1846	SampType:	LCSD	TestCode:	EPA Method 418.1: TPH					
Client ID:	LCSS02	Batch ID:	1846	RunNo:	2658					
Prep Date:	5/8/2012	Analysis Date:	5/9/2012	SeqNo:	73880	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	97	20	100.0	0	97.0	87.8	115	1.35	8.04	

Qualifiers:

*X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1205344

16-May-12

Client: Souder, Miller and Associates

Project: Petromax Pit Closures

Sample ID	MB-1847	SampType:	MBLK	TestCode:	EPA Method 8015B: Diesel Range Organics					
Client ID:	PBS	Batch ID:	1847	RunNo:	2657					
Prep Date:	5/8/2012	Analysis Date:	5/9/2012	SeqNo:	73841	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Sum: DNOP	9.8		10.00		97.5	77.4	131			

Sample ID	LCS-1847	SampType:	LCS	TestCode:	EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	1847	RunNo:	2657					
Prep Date:	5/8/2012	Analysis Date:	5/9/2012	SeqNo:	73848	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	54	10	50.00	0	108	62.7	139			
Sum: DNOP	4.7		5.000		93.6	77.4	131			

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1205344

16-May-12

Client: Souder, Miller and Associates

Project: Petromax Pit Closures

Sample ID	MB-1853	SampType:	MBLK	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	PBS	Batch ID:	1853	RunNo:	2682					
Prep Date:	5/8/2012	Analysis Date:	5/9/2012	SeqNo:	74500	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	1,000		1,000		103	69.7	121			

Sample ID	LCS-1853	SampType:	LCS	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	LCSS	Batch ID:	1853	RunNo:	2682					
Prep Date:	5/8/2012	Analysis Date:	5/9/2012	SeqNo:	74502	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	5.0	25.00	0	118	98.5	133			
Surr: BFB	1,100		1,000		111	69.7	121			

Qualifiers:

*X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1205344

16-May-12

Client: Souder, Miller and Associates

Project: Petromax Pit Closures

Sample ID	MB-1853		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	PBS		Batch ID:	1853		RunNo:	2682			
Prep Date:	5/8/2012		Analysis Date:	5/9/2012		SeqNo:	74553		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.94		1.000		94.1	80	120			

Sample ID	LCS-1853		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSS		Batch ID:	1853		RunNo:	2682			
Prep Date:	5/8/2012		Analysis Date:	5/9/2012		SeqNo:	74554		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.050	1.000	0	94.8	83.3	107			
Toluene	0.96	0.050	1.000	0	96.2	74.3	115			
Ethylbenzene	0.95	0.050	1.000	0	95.1	80.9	122			
Xylenes, Total	2.9	0.10	3.000	0	96.0	85.2	123			
Surr: 4-Bromofluorobenzene	0.97		1.000		97.5	80	120			

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87105
TEL: 505-345-3975 FAX: 505-345-4101
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name:	SMA-FARM	Work Order Number:	1205344
Received by/date:	<i>mg</i> 05/08/12		
Logged By:	Michelle Garcia	5/8/2012 10:00:00 AM	<i>Michelle Garcia</i>
Completed By:	Michelle Garcia	5/8/2012 12:08:52 PM	<i>Michelle Garcia</i>
Reviewed By:	<i>[Signature]</i>	05/08/12	

Chain of Custody

1. Were seals intact? Yes ☐ No ☐ Not Present ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Coolers are present? (see 18. for cooler specific information) Yes ☒ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
6. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☒ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
10. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
11. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
12. Were any sample containers received broken? Yes ☐ No ☒
13. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
14. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
15. Is it clear what analyses were requested? Yes ☒ No ☐
16. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

# of preserved bottles checked for pH:	_____
Adjusted?	_____
Checked by:	_____

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:	_____	Date:	_____
By Whom:	_____	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	_____		
Client Instructions:	_____		

18. Additional remarks:

19. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

Chain-of-Custody Record		Turn-Around Time:	
Client: <u>Petromax</u>		<input checked="" type="checkbox"/> Standard	<input type="checkbox"/> Rush
<u>C/O Sender Miller</u>		Project Name: <u>Petromax Pit Closures</u>	
Mailing Address: <u>2101 Sanduan Blvd</u>		Project #: <u>5121554</u>	
<u>Farmington</u>		Project Manager: <u>C. Gray</u>	
Phone #: _____		Sampler: <u>Abraham Sotelo</u>	
email or Fax#: <u>cindy.gray@sandermiller.com</u>		Sample Temperature: _____	
QA/QC Package:			
<input checked="" type="checkbox"/> Standard	<input type="checkbox"/> Level 4 (Full Validation)		
Accreditation			
<input type="checkbox"/> NELAP	<input type="checkbox"/> Other _____		
<input type="checkbox"/> EDD (Type)			

☒ **Standard** ☐ **Rush**

Petromax Pit Closures

5121554

C. Gray

Sampler: Abraham Sotelo

Sample Temperature

Preservative
Type

5/2/12	0400
--------	------

Soil

5 Pt. Compos. 1/8

402

Col

— 00

BTEX + MTBE + TMB's (8021)

BTEX + MTBE + TPH (Gas only)

TPH Method 8015B (Gas/Diesel)

TPH (Method 418.1)

EDB (Method 504.1)

8310 (PNA or PAH)

RCRA 8 Metals

Anions (F, Cl, NO₃)

8081 Pesticides / 8082 PCB's

8260B (VOA)

8270 (Semi-VOA)

2015/5108

DR0/CRO

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Remarks:

Date:	Time:
5/7/12	09:48

Relinquished by: Abraham Sotelo


Received by:

HAJ

Date	Time
------	------

5/7/12 10:45

Date: 5/12/12 Time: 1545

Relinquished by: 

Received by:

Christie Weeks

Date _____ Time _____

5/7/12 1545

If necessary, samples submitted to Unif Environmental may be subsubmitted to other specialized laboratories. This allows a range of this possibility. Any such subsubmitted data will be clearly indicated on the analytical report.



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

May 16, 2012

Cindy Gray

Souder, Miller and Associates
2101 San Juan Boulevard
Farmington, NM 87401
TEL: (505) 325-5667
FAX (505) 327-1496

RE: Petromax Pit Closures

OrderNo.: 1205344

Dear Cindy Gray:

Hall Environmental Analysis Laboratory received 1 sample(s) on 5/8/2012 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. 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. All samples are reported as received unless otherwise indicated.

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

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light gray rectangular background.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 1205344

Date Reported: 5/16/2012

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Souder, Miller and Associates**Client Sample ID:** Kirtland 18-1 5 pt. composite**Project:** Petromax Pit Closures**Collection Date:** 5/7/2012 9:00:00 AM**Lab ID:** 1205344-001**Matrix:** SOIL**Received Date:** 5/8/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	370	200		mg/Kg	20	5/9/2012 3:29:48 PM
Surr: DNOP	0	77.4-131	S	%REC	20	5/9/2012 3:29:48 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	49		mg/Kg	10	5/10/2012 4:39:33 AM
Surr: BFB	104	69.7-121		%REC	10	5/10/2012 4:39:33 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.49		mg/Kg	10	5/10/2012 4:39:33 AM
Toluene	ND	0.49		mg/Kg	10	5/10/2012 4:39:33 AM
Ethylbenzene	ND	0.49		mg/Kg	10	5/10/2012 4:39:33 AM
Xylenes, Total	ND	0.98		mg/Kg	10	5/10/2012 4:39:33 AM
Surr: 4-Bromofluorobenzene	93.2	80-120		%REC	10	5/10/2012 4:39:33 AM
EPA METHOD 418.1: TPH						Analyst: JMP
Petroleum Hydrocarbons, TR	2,300	200		mg/Kg	10	5/9/2012

Qualifiers: */X Value exceeds Maximum Contaminant Level.
 E Value above quantitation range
 J Analyte detected below quantitation limits
 R RPD outside accepted recovery limits
 S Spike Recovery outside accepted recovery limits

 B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit
 RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1205344

16-May-12

Client: Souder, Miller and Associates

Project: Petromax Pit Closures

Sample ID	MB-1846	SampType:	MBLK	TestCode:	EPA Method 418.1: TPH					
Client ID:	PBS	Batch ID:	1846	RunNo:	2658					
Prep Date:	5/8/2012	Analysis Date:	5/9/2012	SeqNo:	73878	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	ND	20								

Sample ID	LCS-1846	SampType:	LCS	TestCode:	EPA Method 418.1: TPH					
Client ID:	LCSS	Batch ID:	1846	RunNo:	2658					
Prep Date:	5/8/2012	Analysis Date:	5/9/2012	SeqNo:	73879	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	98	20	100.0	0	98.3	87.8	115			

Sample ID	LCSD-1846	SampType:	LCSD	TestCode:	EPA Method 418.1: TPH					
Client ID:	LCSS02	Batch ID:	1846	RunNo:	2658					
Prep Date:	5/8/2012	Analysis Date:	5/9/2012	SeqNo:	73880	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	97	20	100.0	0	97.0	87.8	115	1.35	8.04	

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1205344

16-May-12

Client: Souder, Miller and Associates

Project: Petromax Pit Closures

Sample ID	MB-1847		SampType:	MBLK		TestCode:	EPA Method 8015B: Diesel Range Organics				
Client ID:	PBS		Batch ID:	1847		RunNo:	2657				
Prep Date:	5/8/2012		Analysis Date:	5/9/2012		SeqNo:	73841		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	ND	10									
Surr: DNOP	9.8		10.00		97.5	77.4	131				

Sample ID	LCS-1847		SampType: LCS		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 1847		RunNo: 2657					
Prep Date:	5/8/2012		Analysis Date: 5/9/2012		SeqNo: 73848		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	54	10	50.00	0	108	62.7	139			
Surr: DNOP	4.7		5.000		93.6	77.4	131			

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1205344

16-May-12

Client: Souder, Miller and Associates

Project: Petromax Pit Closures

Sample ID	MB-1853		SampType: MBLK		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	PBS		Batch ID: 1853		RunNo: 2682					
Prep Date:	5/8/2012		Analysis Date: 5/9/2012		SeqNo: 74500		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	1,000		1,000		103	69.7	121			

Sample ID	LCS-1853		SampType: LCS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	LCSS		Batch ID: 1853		RunNo: 2682					
Prep Date:	5/8/2012		Analysis Date: 5/9/2012		SeqNo: 74502		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	5.0	25.00	0	118	98.5	133			
Surr: BFB	1,100		1,000		111	69.7	121			

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1205344

16-May-12

Client: Souder, Miller and Associates

Project: Petromax Pit Closures

Sample ID MB-1853	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 1853		RunNo: 2682							
Prep Date: 5/8/2012	Analysis Date: 5/9/2012		SeqNo: 74553		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.94		1.000		94.1	80	120			

Sample ID LCS-1853	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 1853		RunNo: 2682							
Prep Date: 5/8/2012	Analysis Date: 5/9/2012		SeqNo: 74554		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.050	1.000	0	94.8	83.3	107			
Toluene	0.96	0.050	1.000	0	96.2	74.3	115			
Ethylbenzene	0.95	0.050	1.000	0	95.1	80.9	122			
Xylenes, Total	2.9	0.10	3.000	0	96.0	85.2	123			
Surr: 4-Bromofluorobenzene	0.97		1.000		97.5	80	120			

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
 E Value above quantitation range
 J Analyte detected below quantitation limits
 R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit
 RL Reporting Detection Limit



HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE
Albuquerque, NM 87105
TEL: 505-345-3975 FAX: 505-345-4101
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name:	SMA-FARM	Work Order Number:	1205344
Received by/date:	<i>mg</i> 05/08/12		
Logged By:	Michelle Garcia	5/8/2012 10:00:00 AM	<i>Michelle Garcia</i>
Completed By:	Michelle Garcia	5/8/2012 12:08:52 PM	<i>Michelle Garcia</i>
Reviewed By:	<i>[Signature]</i> 05/08/12		

Chain of Custody

1. Were seals intact? Yes ☐ No ☐ Not Present ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☒ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
6. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☒ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
10. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
11. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
12. Were any sample containers received broken? Yes ☐ No ☒
13. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
14. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
15. Is it clear what analyses were requested? Yes ☒ No ☐
16. 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)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:	_____	Date:	_____
By Whom:	_____	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	_____		
Client Instructions:	_____		

18. Additional remarks:

19. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

Chain-of-Custody Record		Turn-Around Time:
Client: <u>Petromax</u>	<input checked="" type="checkbox"/> Standard	<input type="checkbox"/> Rush _____
<u>C/O Souder Miller</u>	Project Name: <u>Petromax Pit Closures</u>	
Mailing Address: <u>2101 Sanduan Blvd</u>	Project #: <u>5121554</u>	
<u>Farmington</u>	Project Manager: <u>C. Gray</u>	
Phone #: _____	Sampler: <u>Abraham Sotelo</u>	
email or Fax#: <u>andy.gray@soudermiller.com</u>	On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
QA/QC Package:	Sample Temperature: <u>10</u>	
<input checked="" type="checkbox"/> Standard		
<input type="checkbox"/> Level 4 (Full Validation)		
Accreditation		
<input type="checkbox"/> NELAP		
<input type="checkbox"/> Other _____		
<input type="checkbox"/> EDD (Type) _____		

☒ **Standard** ☐ **Rush**

Petromax Pit Closures

5121554

C. Gray

Sampler: Abraham Sotelo

On Ice: ☒ Yes ☐ No

Sample Temperature: 100°C

Date	Time	Matrix	Sample Request ID
5/2/12	0900	Soil	Kir Hand 18-1 5 Pt. Compos.

Container Type and #	Preservative Type
-------------------------	----------------------

1205344

-001

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

	BTEX + MTBE + TMB's (8021)
	BTEX + MTBE + TPH (Gas only)
	TPH Method 8015B (Gas/Diesel)
✓	TPH (Method 418.1)
	EDB (Method 504.1)
	8310 (PNA or PAH)
	RCRA 8 Metals
	Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄)
	8081 Pesticides / 8082 PCB's
	8260B (VOA)
	8270 (Semi-VOA)
✓	8015/8021 Combo
	DR0/CRO

8015/8021 Combo	
DR0/CRO	

Date:	Time:	Relinquished by:
5/7/12	09:48	Abraham Sotelo
Date:	Time:	Relinquished by:
5/7/12	1545	HAL

Received by:	Date	Time
<i>CHAS</i>	5/7/12	10:45
Received by:	Date	Time
<i>Christine Weeks</i>	5/7/12	1545

Remarks:

If necessary, samples submitted to Wall Environmental may be submitted to other accredited laboratories. This closes an option of this possibility. Any sub contracted data will be clearly stated on the analytical report.