



January 12, 2017

ED HAMBLIN

SHERIDAN PRODUCTION COMPANY,LLC

1602 W. BROADWAY

ANDREWS, TX 79714

RE: MONTERREY FED #1 BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 01/12/17 8:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style.

Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

 SHERIDAN PRODUCTION COMPANY,LLC
 ED HAMBLIN
 1602 W. BROADWAY
 ANDREWS TX, 79714
 Fax To: (432) 523-1099

Received:	01/12/2017	Sampling Date:	01/12/2017
Reported:	01/12/2017	Sampling Type:	Soil
Project Name:	MONTERREY FED #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SP 2 @ 3' (H700081-01)

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/12/2017	ND	2.07	103	2.00	1.42	
Toluene*	<0.050	0.050	01/12/2017	ND	2.03	102	2.00	1.08	
Ethylbenzene*	<0.050	0.050	01/12/2017	ND	2.04	102	2.00	0.415	
Total Xylenes*	<0.150	0.150	01/12/2017	ND	5.77	96.2	6.00	0.616	
Total BTEX	<0.300	0.300	01/12/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.7 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	01/12/2017	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	01/12/2017	ND	180	89.8	200	0.628	
DRO >C10-C28	98.7	10.0	01/12/2017	ND	188	93.8	200	0.234	

Surrogate: 1-Chlorooctane 93.3 % 35-147
Surrogate: 1-Chlorooctadecane 109 % 28-171

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 SHERIDAN PRODUCTION COMPANY,LLC
 ED HAMBLIN
 1602 W. BROADWAY
 ANDREWS TX, 79714
 Fax To: (432) 523-1099

Received:	01/12/2017	Sampling Date:	01/12/2017
Reported:	01/12/2017	Sampling Type:	Soil
Project Name:	MONTERREY FED #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SP 2 @ 2' (H700081-02)

BTEX 8021B		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	01/12/2017	ND	2.07	103	2.00	1.42		
Toluene*	<0.050	0.050	01/12/2017	ND	2.03	102	2.00	1.08		
Ethylbenzene*	<0.050	0.050	01/12/2017	ND	2.04	102	2.00	0.415		
Total Xylenes*	<0.150	0.150	01/12/2017	ND	5.77	96.2	6.00	0.616		
Total BTEX	<0.300	0.300	01/12/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	01/12/2017	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	01/12/2017	ND	180	89.8	200	0.628		
DRO >C10-C28	60.4	10.0	01/12/2017	ND	188	93.8	200	0.234		

Surrogate: 1-Chlorooctane 89.5 % 35-147

Surrogate: 1-Chlorooctadecane 99.3 % 28-171

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 SHERIDAN PRODUCTION COMPANY,LLC
 ED HAMBLIN
 1602 W. BROADWAY
 ANDREWS TX, 79714
 Fax To: (432) 523-1099

Received:	01/12/2017	Sampling Date:	01/12/2017
Reported:	01/12/2017	Sampling Type:	Soil
Project Name:	MONTERREY FED #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SP 1 @ 2' (H700081-03)

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.200	0.200	01/12/2017	ND	2.07	103	2.00	1.42	
Toluene*	0.563	0.200	01/12/2017	ND	2.03	102	2.00	1.08	
Ethylbenzene*	1.19	0.200	01/12/2017	ND	2.04	102	2.00	0.415	
Total Xylenes*	8.88	0.600	01/12/2017	ND	5.77	96.2	6.00	0.616	
Total BTEX	10.6	1.20	01/12/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 113 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	01/12/2017	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	438	10.0	01/12/2017	ND	180	89.8	200	0.628		
DRO >C10-C28	2410	10.0	01/12/2017	ND	188	93.8	200	0.234		

Surrogate: 1-Chlorooctane 151 % 35-147

Surrogate: 1-Chlorooctadecane 154 % 28-171

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 SHERIDAN PRODUCTION COMPANY,LLC
 ED HAMBLIN
 1602 W. BROADWAY
 ANDREWS TX, 79714
 Fax To: (432) 523-1099

Received:	01/12/2017	Sampling Date:	01/12/2017
Reported:	01/12/2017	Sampling Type:	Soil
Project Name:	MONTERREY FED #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SP 1 @ 3' (H700081-04)

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/12/2017	ND	2.07	103	2.00	1.42	
Toluene*	<0.050	0.050	01/12/2017	ND	2.03	102	2.00	1.08	
Ethylbenzene*	0.050	0.050	01/12/2017	ND	2.04	102	2.00	0.415	
Total Xylenes*	0.494	0.150	01/12/2017	ND	5.77	96.2	6.00	0.616	
Total BTEX	0.544	0.300	01/12/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	01/12/2017	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	01/12/2017	ND	180	89.8	200	0.628	
DRO >C10-C28	96.8	10.0	01/12/2017	ND	188	93.8	200	0.234	

Surrogate: 1-Chlorooctane 99.6 % 35-147

Surrogate: 1-Chlorooctadecane 112 % 28-171

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

- S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM450Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report



Celey D. Keene, Lab Director/Quality Manager

RUSTH!!

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
 (575) 393-2326 FAX (575) 393-2476

BILL TO

ANALYSIS REQUEST

Company Name: <u>Sheridan</u>		P.O. #:	
Project Manager: <u>prockelberg</u>		Company: <u>Sheridan</u>	
Address:		Attn:	
City:		Address:	
Phone #:		City:	
Project #:		State:	
Project Name: <u>Sheridan</u>		Zip:	
Project Location: <u>Montevideo Fed Bld #1</u>		Phone #:	
Sample Name: <u>Ricken Shuman</u>		Fax #:	
FOR LAB USE ONLY		PRESERV	
Lab I.D. <u>H7D0081</u>		SAMPLING	
Sample I.D.		(G)RAB OR (C)OMP.	
1 SP203		# CONTAINERS	
2 SP102		GROUNDWATER	
3 SP102		WASTEWATER	
4 SP103		SOIL	
		OIL	
		SLUDGE	
		OTHER:	
		ACID/BASE:	
		ICE / COOL	
		OTHER:	
		DATE	
		TIME	
		CL	
		B-Tex	
		TPH	

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analysis. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: [Signature] Date: 11/21/17 Received By: [Signature]
 Relinquished By: [Signature] Date: 8/15 Received By: [Signature]

Delivered By: (Circle One) UPS 75 5.00 Sample Condition: Intact Cool Yes No
 Checked By: [Signature]

REMARKS: Quality #0: L-Tows @ Diversified 451.com

Phone Result: Yes No Add'l Phone #: [Blank]
 Fax Result: Yes No Add'l Fax #: [Blank]
 in Alves @ in burlin @ in pallerson @ Alvarez

* Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326