



December 16, 2016

ZACK THOMAS
MEWBOURNE OIL COMPANY
P. O. BOX 5270
HOBBS, NM 88240

RE: BRADLEY 28 FED COM #2

Enclosed are the results of analyses for samples received by the laboratory on 12/09/16 12:20.

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 with a large, flowing "C" and "K".

Celey D. Keene
Lab Director/Quality Manager

Analytical Results For:

 MEWBOURNE OIL COMPANY
 ZACK THOMAS
 P. O. BOX 5270
 HOBBS NM, 88240
 Fax To: (575) 937-6252

Received:	12/09/2016	Sampling Date:	12/09/2016
Reported:	12/16/2016	Sampling Type:	Soil
Project Name:	BRADLEY 28 FED COM #2	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SP 1 @ 6" (H602767-01)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/13/2016	ND	1.96	97.8	2.00	10.2	
Toluene*	<0.050	0.050	12/13/2016	ND	2.00	100	2.00	10.6	
Ethylbenzene*	<0.050	0.050	12/13/2016	ND	1.95	97.7	2.00	10.5	
Total Xylenes*	<0.150	0.150	12/13/2016	ND	5.99	99.8	6.00	11.0	
Total BTEX	<0.300	0.300	12/13/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 120 % 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	12/13/2016	ND	400	100	400	3.92	

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	12/13/2016	ND	175	87.4	200	5.25	
DRO >C10-C28	<10.0	10.0	12/13/2016	ND	177	88.3	200	9.51	

Surrogate: 1-Chlorooctane 76.2 % 35-147
Surrogate: 1-Chlorooctadecane 69.3 % 28-171

Cardinal Laboratories

* = Accredited Analyte

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Received:	12/09/2016	Sampling Date:	12/09/2016
Reported:	12/16/2016	Sampling Type:	Soil
Project Name:	BRADLEY 28 FED COM #2	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SP 1 @ 1.5' (H602767-02)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/13/2016	ND	1.96	97.8	2.00	10.2		
Toluene*	<0.050	0.050	12/13/2016	ND	2.00	100	2.00	10.6		
Ethylbenzene*	<0.050	0.050	12/13/2016	ND	1.95	97.7	2.00	10.5		
Total Xylenes*	<0.150	0.150	12/13/2016	ND	5.99	99.8	6.00	11.0		
Total BTEX	<0.300	0.300	12/13/2016	ND						

Surrogate: 4-Bromofluorobenzene (PID) 119 % 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	12/13/2016	ND	400	100	400	3.92		

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	12/13/2016	ND	175	87.4	200	5.25		
DRO >C10-C28	<10.0	10.0	12/13/2016	ND	177	88.3	200	9.51		

Surrogate: 1-Chlorooctane 88.4 % 35-147

Surrogate: 1-Chlorooctadecane 96.1 % 28-171

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*=Accredited Analyte

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Received:	12/09/2016	Sampling Date:	12/09/2016
Reported:	12/16/2016	Sampling Type:	Soil
Project Name:	BRADLEY 28 FED COM #2	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SP 2 @ 6" (H602767-03)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/13/2016	ND	1.96	97.8	2.00	10.2	
Toluene*	<0.050	0.050	12/13/2016	ND	2.00	100	2.00	10.6	
Ethylbenzene*	<0.050	0.050	12/13/2016	ND	1.95	97.7	2.00	10.5	
Total Xylenes*	<0.150	0.150	12/13/2016	ND	5.99	99.8	6.00	11.0	
Total BTEX	<0.300	0.300	12/13/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 118 % 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	12/13/2016	ND	400	100	400	3.92	

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	12/13/2016	ND	175	87.4	200	5.25	
DRO >C10-C28	<10.0	10.0	12/13/2016	ND	177	88.3	200	9.51	

Surrogate: 1-Chlorooctane 83.4 % 35-147
Surrogate: 1-Chlorooctadecane 79.3 % 28-171

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Received:	12/09/2016	Sampling Date:	12/09/2016
Reported:	12/16/2016	Sampling Type:	Soil
Project Name:	BRADLEY 28 FED COM #2	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SP 2 @ 1.5' (H602767-04)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/13/2016	ND	1.96	97.8	2.00	10.2		
Toluene*	<0.050	0.050	12/13/2016	ND	2.00	100	2.00	10.6		
Ethylbenzene*	<0.050	0.050	12/13/2016	ND	1.95	97.7	2.00	10.5		
Total Xylenes*	<0.150	0.150	12/13/2016	ND	5.99	99.8	6.00	11.0		
Total BTEX	<0.300	0.300	12/13/2016	ND						

Surrogate: 4-Bromofluorobenzene (PID) 119 % 73.6-140

Chloride, SM4500CI-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	12/13/2016	ND	400	100	400	3.92		

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	12/13/2016	ND	175	87.4	200	5.25		
DRO >C10-C28	<10.0	10.0	12/13/2016	ND	177	88.3	200	9.51		

Surrogate: 1-Chlorooctane 89.0 % 35-147

Surrogate: 1-Chlorooctadecane 97.8 % 28-171

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

- QR-02 The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- 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 SM4500Cl-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



CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Wendburne P.O. #: ANALYSIS REQUEST

Project Manager: Company:

Address: Attn:

City: State: Zip: Address:

Phone #: Fax #: Project Owner: City:

Project #: Project Name: Bradley 28 Fed Com #2 State: Zip:

Project Location: Eddy Co, NM Phone #:

Sampler Name: Fax #:

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	ANALYSIS REQUEST
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :			
H602767	SP1 0 6"11		9							12/9/16	8:00	CE TPH BTEX
	2 SP1 0 1.5'											
	3 SP2 0 6"11											
	4 SP2 0 1.5'											

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Relinquished By: Date: 12/9/16 Received By: Phone Result: Yes No Add'l Phone #:

Relinquished By: Time: 12:50 Received By: Fax Result: Yes No Add'l Fax #:

Delivered By: Date: 12/9/16 Time: 12:20 Sample Condition: Intact Cool Yes No Yes No CHECKED BY:

Sampler - UPS - Bus - Other: 5.42