



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

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June 17, 2014

ZACK THOMAS

MEWBOURNE OIL COMPANY

P. O. BOX 5270

HOBBS, NM 88240

RE: QUICK DRAW 10 G #1 BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 06/10/14 16:45.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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](http://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, flowing style.

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:	06/10/2014	Sampling Date:	06/10/2014
Reported:	06/17/2014	Sampling Type:	Soil
Project Name:	QUICK DRAW 10 G #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: #1 @ 4' BOTTOM (H401769-01)**

BTX 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	06/13/2014	ND	2.10	105	2.00	2.72	
Toluene*	<0.050	0.050	06/13/2014	ND	2.25	113	2.00	3.44	
Ethylbenzene*	<0.050	0.050	06/13/2014	ND	2.03	102	2.00	3.01	
Total Xylenes*	<0.150	0.150	06/13/2014	ND	6.28	105	6.00	3.21	
Total BTX	<0.300	0.300	06/13/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	06/16/2014	ND	400	100	400	0.00	

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	06/17/2014	ND	178	88.9	200	3.26	
DRO >C10-C28	179	10.0	06/17/2014	ND	186	93.2	200	10.1	

Surrogate: 1-Chlorooctane 82.0 % 65.2-140

Surrogate: 1-Chlorooctadecane 87.7 % 63.6-154

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

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Received:	06/10/2014	Sampling Date:	06/10/2014
Reported:	06/17/2014	Sampling Type:	Soil
Project Name:	QUICK DRAW 10 G #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: #2 WEST WALL 2' (H401769-02)**

BTX 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	06/13/2014	ND	2.10	105	2.00	2.72		
Toluene*	<0.050	0.050	06/13/2014	ND	2.25	113	2.00	3.44		
Ethylbenzene*	<0.050	0.050	06/13/2014	ND	2.03	102	2.00	3.01		
Total Xylenes*	<0.150	0.150	06/13/2014	ND	6.28	105	6.00	3.21		
Total BTX	<0.300	0.300	06/13/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	06/16/2014	ND	400	100	400	0.00	

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	06/17/2014	ND	178	88.9	200	3.26	
DRO >C10-C28	<10.0	10.0	06/17/2014	ND	186	93.2	200	10.1	

Surrogate: 1-Chlorooctane 73.8 % 65.2-140

Surrogate: 1-Chlorooctadecane 82.5 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager

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Received:	06/10/2014	Sampling Date:	06/10/2014
Reported:	06/17/2014	Sampling Type:	Soil
Project Name:	QUICK DRAW 10 G #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: #3 NORTH WALL 2' (H401769-03)**

BTX 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	06/13/2014	ND	2.10	105	2.00	2.72		
Toluene*	<0.050	0.050	06/13/2014	ND	2.25	113	2.00	3.44		
Ethylbenzene*	<0.050	0.050	06/13/2014	ND	2.03	102	2.00	3.01		
Total Xylenes*	<0.150	0.150	06/13/2014	ND	6.28	105	6.00	3.21		
Total BTX	<0.300	0.300	06/13/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 89.4-126

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	06/16/2014	ND	400	100	400	0.00	

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	06/17/2014	ND	178	88.9	200	3.26	
DRO >C10-C28	29.0	10.0	06/17/2014	ND	186	93.2	200	10.1	

Surrogate: 1-Chlorooctane 78.5 % 65.2-140

Surrogate: 1-Chlorooctadecane 83.6 % 63.6-154

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Received:	06/10/2014	Sampling Date:	06/10/2014
Reported:	06/17/2014	Sampling Type:	Soil
Project Name:	QUICK DRAW 10 G #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: #4 EAST WALL 2' (H401769-04)**

BTX 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	06/13/2014	ND	2.10	105	2.00	2.72		
Toluene*	<0.050	0.050	06/13/2014	ND	2.25	113	2.00	3.44		
Ethylbenzene*	<0.050	0.050	06/13/2014	ND	2.03	102	2.00	3.01		
Total Xylenes*	<0.150	0.150	06/13/2014	ND	6.28	105	6.00	3.21		
Total BTX	<0.300	0.300	06/13/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	06/16/2014	ND	416	104	400	0.00	

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	06/17/2014	ND	178	88.9	200	3.26	
DRO >C10-C28	25.7	10.0	06/17/2014	ND	186	93.2	200	10.1	

Surrogate: 1-Chlorooctane 70.3 % 65.2-140

Surrogate: 1-Chlorooctadecane 78.0 % 63.6-154

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Received:	06/10/2014	Sampling Date:	06/10/2014
Reported:	06/17/2014	Sampling Type:	Soil
Project Name:	QUICK DRAW 10 G #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: #5 EAST BOTTOM 4' (H401769-05)**

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	06/13/2014	ND	2.10	105	2.00	2.72		
Toluene*	<0.050	0.050	06/13/2014	ND	2.25	113	2.00	3.44		
Ethylbenzene*	<0.050	0.050	06/13/2014	ND	2.03	102	2.00	3.01		
Total Xylenes*	<0.150	0.150	06/13/2014	ND	6.28	105	6.00	3.21		
Total BTEx	<0.300	0.300	06/13/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	320	16.0	06/16/2014	ND	416	104	400	0.00		

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	06/17/2014	ND	178	88.9	200	3.26	
DRO >C10-C28	1150	10.0	06/17/2014	ND	186	93.2	200	10.1	

Surrogate: 1-Chlorooctane 77.2 % 65.2-140

Surrogate: 1-Chlorooctadecane 111 % 63.6-154

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Fax To: (575) 937-6252

Received:	06/10/2014	Sampling Date:	06/10/2014
Reported:	06/17/2014	Sampling Type:	Soil
Project Name:	QUICK DRAW 10 G #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: #6 SOUTH WALL 2' (H401769-06)**

BTX 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	06/13/2014	ND	2.10	105	2.00	2.72		
Toluene*	<0.050	0.050	06/13/2014	ND	2.25	113	2.00	3.44		
Ethylbenzene*	<0.050	0.050	06/13/2014	ND	2.03	102	2.00	3.01		
Total Xylenes*	<0.150	0.150	06/13/2014	ND	6.28	105	6.00	3.21		
Total BTX	<0.300	0.300	06/13/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	06/16/2014	ND	416	104	400	0.00		

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	06/17/2014	ND	178	88.9	200	3.26	
DRO >C10-C28	<10.0	10.0	06/17/2014	ND	186	93.2	200	10.1	

Surrogate: 1-Chlorooctane 65.9 % 65.2-140

Surrogate: 1-Chlorooctadecane 72.4 % 63.6-154

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

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

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\*=Accredited Analyte

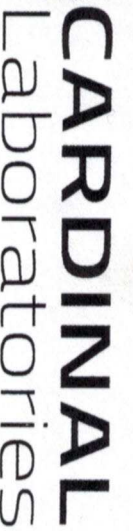
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Celey D. Keene, Lab Director/Quality Manager





# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476 #54