



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

September 29, 2015

ZACK THOMAS

MEWBOURNE OIL COMPANY

P. O. BOX 5270

HOBBS, NM 88240

RE: SANTO NINO 29 FED SWD #1

Enclosed are the results of analyses for samples received by the laboratory on 09/23/15 9:20.

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.

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:	09/23/2015	Sampling Date:	09/22/2015
Reported:	09/29/2015	Sampling Type:	Soil
Project Name:	SANTO NINO 29 FED SWD #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: PT. 3 @ 1.5' (H502514-01)

BTX 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	09/28/2015	ND	2.04	102	2.00	2.21	
Toluene*	<0.050	0.050	09/28/2015	ND	1.75	87.4	2.00	1.79	
Ethylbenzene*	<0.050	0.050	09/28/2015	ND	1.67	83.5	2.00	1.51	
Total Xylenes*	<0.150	0.150	09/28/2015	ND	5.37	89.5	6.00	1.51	
Total BTX	<0.300	0.300	09/28/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 85.6-137

Chloride, SM4500Cl-B			mg/kg		Analyzed By: CK				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	09/25/2015	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	09/25/2015	ND	162	80.9	200	1.42	
DRO >C10-C28	<10.0	10.0	09/25/2015	ND	173	86.3	200	0.855	

Surrogate: 1-Chlorooctane 68.4 % 47.2-157

Surrogate: 1-Chlorooctadecane 75.4 % 52.1-176

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

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Received:	09/23/2015	Sampling Date:	09/22/2015
Reported:	09/29/2015	Sampling Type:	Soil
Project Name:	SANTO NINO 29 FED SWD #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: PT. 4 @ 2.5' (H502514-02)

BTX 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	09/28/2015	ND	2.04	102	2.00	2.21	
Toluene*	<0.050	0.050	09/28/2015	ND	1.75	87.4	2.00	1.79	
Ethylbenzene*	<0.050	0.050	09/28/2015	ND	1.67	83.5	2.00	1.51	
Total Xylenes*	<0.150	0.150	09/28/2015	ND	5.37	89.5	6.00	1.51	
Total BTX	<0.300	0.300	09/28/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 85.6-137

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	09/25/2015	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	09/25/2015	ND	186	92.8	200	4.70	
DRO >C10-C28	<10.0	10.0	09/25/2015	ND	197	98.6	200	3.89	

Surrogate: 1-Chlorooctane 114 % 47.2-157

Surrogate: 1-Chlorooctadecane 131 % 52.1-176

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Reported:	09/29/2015	Sampling Type:	Soil
Project Name:	SANTO NINO 29 FED SWD #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: PT. 7 @ 2.5' (H502514-03)

BTX 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	09/28/2015	ND	2.04	102	2.00	2.21	
Toluene*	<0.050	0.050	09/28/2015	ND	1.75	87.4	2.00	1.79	
Ethylbenzene*	<0.050	0.050	09/28/2015	ND	1.67	83.5	2.00	1.51	
Total Xylenes*	<0.150	0.150	09/28/2015	ND	5.37	89.5	6.00	1.51	
Total BTX	<0.300	0.300	09/28/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 85.6-137

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	09/25/2015	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	09/25/2015	ND	186	92.8	200	4.70	
DRO >C10-C28	<10.0	10.0	09/25/2015	ND	197	98.6	200	3.89	

Surrogate: 1-Chlorooctane 111 % 47.2-157

Surrogate: 1-Chlorooctadecane 130 % 52.1-176

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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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