New Mexico Oil Conservation Division, District I
1625 N. French Drive OMB No. 1004-0137
Hobbs, NM 88246 Expires: October 31, 2014

# UNITED STATES DEPARTMENT OF THE INTERIOR 5. Lease Serial No. NMNM0145685 BUREAU OF LAND MANAGEMENT

Do not use this		ORTS ON WELLS o drill or to re-enter a PD) for such proposa	n	ndian, Allottee o	r Tribe Name
SUBM	T IN TRIPLICATE - Other	instructions on pageQBBS	OCD 7. If I	Jnit of CA/Agree	ment, Name and/or No.
1. Type of Well  ✓ Oil Well  Gas V		NOV 1		ell Name and No. on Federal #4	
2. Name of Operator EOR Operating Company				I Well No. 41-10104	1
3a. Address 200 N. Loraine, STE 1440 Midland, TX 79701		3b. Phone No. (include area e 432-687-0303	10. Fi	eld and Pool or E esand-San Andr	
4. Location of Well (Footage, Sec., T. 1650 FNL & 1650 FWL Sec. 30, T 08S, R 35E	R.,M., or Survey Description)			ounty or Parish, S sevelt	State
12. CHEG	K THE APPROPRIATE BO	X(ES) TO INDICATE NATUR	E OF NOTICE, RE	PORT OR OTHE	ER DATA
TYPE OF SUBMISSION		Т	YPE OF ACTION		
Notice of Intent	Acidize Alter Casing	Deepen Fracture Treat	Production (	(Start/Resume)	Water Shut-Off Well Integrity
✓ Subsequent Report	Casing Repair Change Plans	New Construction	Recomplete		✓ Other WO - 12BS17W
Final Abandonment Notice	Convert to Injection	Plug and Abandon Plug Back	☐ Temporarily ☐ Water Dispo		
testing has been completed. Final determined that the site is ready for the state of the state o	eport for areas tested arour	nd Horton #4.	its, including rectain	ation, have been	completed and the operator has
14. I hereby certify that the foregoing is t	rue and correct. Name (Printed)	/Typed)			
Jana True		Title Mgr - R	egulatory		
Signature Au	etu	Date 06/28/2	012		
	THIS SPACE F	FOR FEDERAL OR ST	ATE OFFICE	USE	
Approved by					2
Conditions of approval, if any, are attached	Approval of this notice does	not warrant or certify		D	ate
that the applicant holds legal or equitable t	itle to those rights in the subject				KZ

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)



June 27, 2012

MARCELINO GALINDO ENHANCED OIL RESOURCES 200 N. LORAINE, SUITE 1440 MIDLAND, TX 79701

RE: HORTON #4

Enclosed are the results of analyses for samples received by the laboratory on 06/22/12 15:22.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. 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 <a href="https://www.tceq.texas.gov/field/ga/lab">www.tceq.texas.gov/field/ga/lab</a> accred certif.html.

Cardinal Laboratories is accreditated 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.

Celeg D. Keine

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,

Celey D. Keene

Lab Director/Quality Manager



# Analytical Results For:

ENHANCED OIL RESOURCES MARCELINO GALINDO 200 N. LORAINE, SUITE 1440 MIDLAND TX, 79701

Fax To:

(432) 687-0321

Received: Reported: 06/22/2012

06/27/2012

Project Name: Project Number: HORTON #4

Project Location:

NONE GIVEN

ROOSEVELT COUNTY, NM

Sampling Date:

06/22/2012

Sampling Type:

Soil

Sampling Condition: Sample Received By: \*\* (See Notes)

Jodi Henson

Sample ID: WELL HEAD (H201431-01)

BTEX 8021B	mg,	/kg	Analyze	Analyzed By: ZZZ			*		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/26/2012	ND	1.91	95.5	2.00	2.28	
Toluene*	< 0.050	0.050	06/26/2012	ND	1.92	96.1	2.00	1.21	
Ethylbenzene*	0.190	0.050	06/26/2012	ND	1.95	97.5	2.00	0.918	
Total Xylenes*	0.285	0.150	06/26/2012 ND		5.87	97.8	6.00	0.301	
Surrogate: 4-Bromofluorobenzene (PIL	119 % 89.4-12		6						
Chloride, SM4500CI-B	mg/kg		Analyzed By: HM						
Analyte	Result Reporting Limit		Analyzed Method Blank		BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<b>17800</b> 16.0		06/25/2012 ND		432	108	400	3.77	
TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0 50.0		06/25/2012	06/25/2012 ND		85.0	200	1.96	
DRO >C10-C28	<b>1210</b> 50.0		06/25/2012	ND	177	88.3	200	2.58	
Surrogate: 1-Chlorooctane	82.6	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	127 % 63.6-15		4						

# Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's tability and client's exclusive remedy for any any other cause whatsoever shall be deemed valved 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 dam 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 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.

Celeg & Keine

Celey D. Keene, Lab Director/Quality Manager



# Analytical Results For:

ENHANCED OIL RESOURCES MARCELINO GALINDO 200 N. LORAINE, SUITE 1440 MIDLAND TX, 79701

Fax To:

(432) 687-0321

Received:

06/22/2012

06/27/2012

Reported: Project Name:

DTEV GOOD

HORTON #4

Project Number:

NONE GIVEN

Project Location:

ROOSEVELT COUNTY, NM

Sampling Date:

06/22/2012

Sampling Type:

Soil

Sampling Condition:

\*\* (See Notes)

Sample Received By:

Jodi Henson

# Sample ID: NW OFF PAD (H201431-02)

BTEX 8021B	mg	/kg	Analyze	ed By: ZZZ					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/25/2012	ND	1.91	95.5	2.00	2.28	
Toluene*	<0.050	0.050	06/25/2012	ND	1.92	96.1	2.00	1.21	
Ethylbenzene*	<0.050	0.050	06/25/2012	ND	1.95	97.5	2.00	0.918	
Total Xylenes*	<0.150	0.150	06/25/2012 ND		5.87	97.8	6.00	0.301	
Surrogate: 4-Bromofluorobenzene (PIL	107 % 89.4-12		6						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: HM						
Analyte	Result Reporting Limit		Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0 16.0		06/25/2012 ND		432	108	400	3.77	
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		06/25/2012	25/2012 ND		85.0	200	1.96	
DRO >C10-C28	<10.0 10.0		06/25/2012	ND	177	88.3	200	2.58	
Surrogate: 1-Chlorooctane	87.8	% 65.2-14	0				9	4	
Surrogate: 1-Chlorooctadecane	101 % 63.6-15		4						

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\*=Accredited Analyte

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Celeg D. Keene

Celey D. Keene, Lab Director/Quality Manager



# Analytical Results For:

ENHANCED OIL RESOURCES MARCELINO GALINDO 200 N. LORAINE, SUITE 1440 MIDLAND TX, 79701

Fax To:

(432) 687-0321

Applymed By 777

Received:

06/22/2012

Sampling Date:

06/22/2012

Reported:

Soil

DTEV 00310

06/27/2012

Sampling Type:

\*\* (See Notes)

Project Name:

HORTON #4 NONE GIVEN

man /len

Sampling Condition: Sample Received By:

Jodi Henson

Project Number: Project Location:

ROOSEVELT COUNTY, NM

Sample ID: MIDDLE LOCATION (H201431-03)

BTEX 8021B	mg/	kg	Analyzed By: ZZZ						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	< 0.050	0.050	06/25/2012	ND	1.91	95.5	2.00	2.28	
Toluene*	<0.050	0.050	06/25/2012	ND	1.92	96.1	2.00	1.21	
Ethylbenzene*	< 0.050	0.050	06/25/2012	ND	1.95	97.5	2.00	0.918	
Total Xylenes*	<0.150	0.150	06/25/2012 ND		5.87	97.8	6.00	0.301	
Surrogate: 4-Bromofluorobenzene (PIL	106 % 89.4-12		6						
Chloride, SM4500CI-B	mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<b>32.0</b> 16.0		06/25/2012 ND		432	108	400	3.77	
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		06/25/2012	ND	170	85.0	200	1.96	
DRO >C10-C28	<10.0 10.0		06/25/2012	ND	177	88.3	200	2.58	
Surrogate: 1-Chlorooctane	92.7	65.2-14	0						
Surrogate: 1-Chlorooctadecane	103 9	6 63.6-15	4						

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\*=Accredited Analyte

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 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 & Keene



## **Notes and Definitions**

QM-4X

The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance

limits

ND

Analyte NOT DETECTED at or above the reporting limit

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Relative Percent Difference

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Samples not received at proper temperature of 6°C or below.

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Insufficient time to reach temperature.

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Chloride by SM4500CI-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

Cardinal Laboratories

\*=Accredited Analyte

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Celey & Keine

Celey D. Keene, Lab Director/Quality Manager

CARDINAL

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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andress. All claims including these for regignate and any data seatherine transcribed for any claim while under the control of purpose of services hereunder by Cardinal, ceparitiess of whether such claim is based upon any of the

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FREMARKS:

YOUNG PLINDSCH LACTOR JOHN CONTROL CON

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

Page 6 of 6