

# Mirage 30 PM St. com #1H battery T19S, R 29E, Sec 30 API# 30-015-40753

# **Corrective Action Plan**

Release Date: March 9<sup>th</sup>, 2015

Unit Letter P, Section 30, Township 19 South, Range 29 East

March 12th, 2015

### Prepared by:

Environmental Department Diversified Field Service, Inc. 206 W. Snyder Hobbs, NM 88240 Phone: (575)964-8394 Fax: (575)393-8396 MEWBOURNE 03/12/2015

Mike Bratcher Environmental Specialist NM Oil Conservation District-Division 2 Artesia, NM 88210

RE: Mewbourne Mirage 30 PM St. Com 1H – Remediation Work Plan UL/P, Section 30, T19S, R29E API No. 30-015-40753

Mr. Bratcher,

Mewbourne has retained Diversified Field Service, Inc. (DFSI) to address environmental issues for the site detailed herein.

The site is located east of Carlsbad NM, in Eddy County. The leak site resulted from a hydrocarbon and produced water leak. The source of the leak was due to a compressor separator venting fluid onto the ground. A C-141 was submitted to the NMOCD on March 9th, 2015.

### Site Assessment and Delineation

On March 10th, 2015 DFSI personnel obtained surface and below grade surface (BGS) samples of the leak area. Field samples were taken on eight sample points, each sample was tested for chlorides levels as well as BTEX. The BTEX samples were performed using a Mini Rae Photoionization Detector (PID). All clean field samples found under the BLM/NMOCD standards, were taken to Cardinal Lab of Hobbs to obtain confirmation samples. The results will be provided once obtained from the lab. The field data is attached.

DFSI has conducted a groundwater study of the area and has determined that according to the New Mexico Office of the State Engineer the average depth to groundwater for this area is 100 foot below ground surface. Therefore, no eminent danger of groundwater impact or threat to life is anticipated.

MEWBOURNE 03/12/2015

### Conclusion

After careful review DFSI on behalf of Mewbourne would like to propose the following:

DFSI proposes to remove the contaminated soil in the areas of Sp #1, #2, #3, #7 to 4' bgs. We will remove the contaminated soil in the areas of SP #6 and #8 to 3' bgs, We will remove contaminated soil in the areas of SP #4 and #5 to 2' bgs. All contaminated soil will be hauled to a NM approved disposal facility. Before backfill we will take samples of the bottom of the excavation and send to the lab for confirmation. Once approved we will backfill with clean native soil and reseed to NMOCD/BLM standards.

Following the approval of the above plan, DFSI will submit all proper closure documentation to the NMOCD and BLM in accordance to the State and Federal Guidelines set forth.

Please feel free to contact me with any questions concerning this remediation plan request.

Sincerely,

Michael Burton

Environmental Operations Director

Michael Burton

Diversified Field Service, Inc.

206 West Snyder Hobbs, NM 88240

Office: (575)964-8394 Mobile: (575)390-5454

Fax: (575)964-8396

Email: Mburton@diversifiedfsi.com

MEWBOURNE 03/12/2015

### cc Heather Patterson NMOCD

Attachments:Initial Form C-141 Site/Sample Map Sample Data



Mirage 30 PM St. com #1H battery T19S, R 29E, Sec 30 API# 30-015-40753

# **Photo Page** 3/9/15









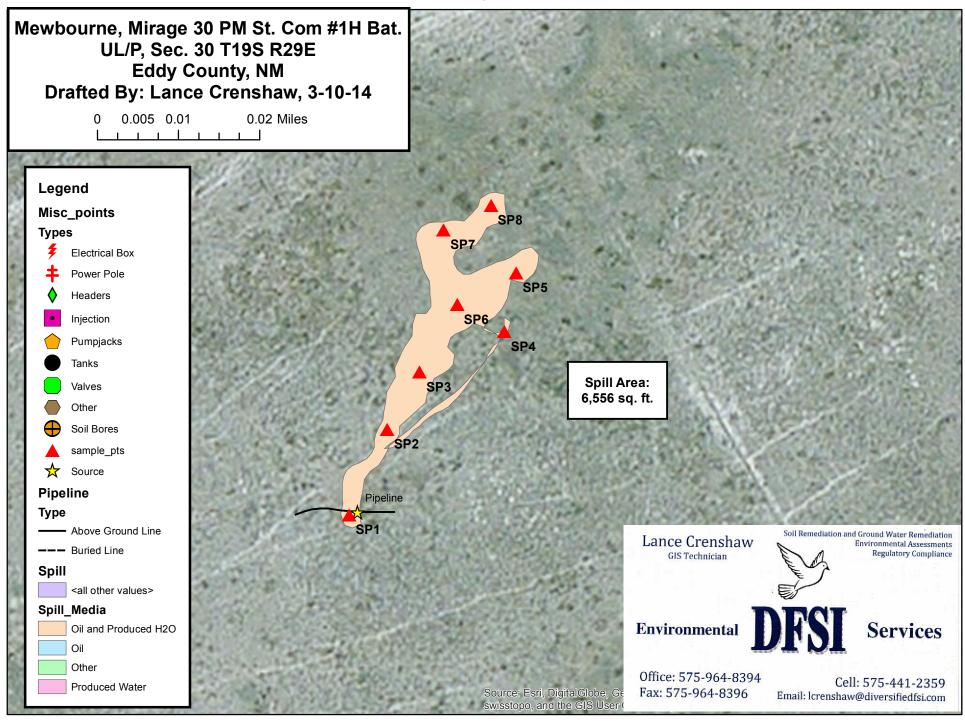








## **Site Diagram**



### **Diversified Environmental Services**

Company Name:Mewbourne oilSP Date:3/10/2015

Location Name: mirage 30 pm com 1h Rel Date:

PID

15,000

13,856 278.5 285.1 281.3 43.4

SP1	CHL	PID	SP2	CHL	
surf	999	4,738	surf	524	
1'	774	3883	1'	424	
2'	649	3523	2'	374	
3'	499	5886	3'	449	
4'	549	7838	4'	349	
2' 3' 4' 5' 6'	499	3552	5'	449	
6'	624	4322			
7'	499	4113			
8'	574	2834			
9'	524	1142			
10'	499	4664			
11'	499	132.8			
12'	449	107.8			
13'	474	179.8			
14'	auger refu	sale			
•					

CHL	PID
67	24 3664
39	99 3297
3	74 742.8
4	74 601.4
39	99 354.5
44	49 45.4
	6: 3: 4:

1800 868.2 476.3 360.8 39.4
476.3 360.8
360.8
39.4

	CHL	PID
surf	549	1017
1'	424	624.9
2'	499	314.7
3'	499	56.9
4'	524	17.8
	SP5 surf 1' 2' 3' 4'	surf 549 1' 424 2' 499 3' 499

SP6	CHL	PID	SP7	CHL	PID	SP8	CHL	PID	SP9	CHL	TPH	SP10	CHL	TPH
surf	1249	817.4	surf	349	5304	surf	449	1618						
.'	624	624.3	1'	499	1783	1'	324	354.2						
) '	574	667.2	2'	399	1243	2'	399	222.4						
<b>'</b>	499	271.4	3'	399	891.3	3'	474	154.2						
!'	499	241.1	4'	449	1281	4'	474	26.8						
1	524	215.6	5'	424	677.4									
) <sup>'</sup>	424	305.4	6'	424	979.5									
,1	499	296.2	7'	399	513.6									
1	474	103.3	8'	399	874.5									
1	499	86.9	9'	449	712.4									
.0'	474	73.4	10'	449	694.5									
			11'	399	725.3									
			12'	499	695.4									
			13'	399	27.4									
-														



March 17, 2015

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

RE: MIRAGE 30 PM STATE COM #1H

Enclosed are the results of analyses for samples received by the laboratory on 03/12/15 16:30.

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 <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.

Celey 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



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

Fax To: (575) 937-6252

Received: 03/12/2015 Sampling Date: 03/10/2015

Reported: 03/17/2015 Sampling Type: Soil

Project Name: MIRAGE 30 PM STATE COM #1H Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: NOT GIVEN

### Sample ID: SP. 2 @ 5' (H500681-01)

BTEX 8021B	mg/kg		Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/16/2015	ND	2.23	112	2.00	7.97	
Toluene*	< 0.050	0.050	03/16/2015	ND	2.04	102	2.00	9.48	
Ethylbenzene*	<0.050	0.050	03/16/2015	ND	1.97	98.6	2.00	9.75	
Total Xylenes*	<0.150	0.150	03/16/2015	ND	5.85	97.4	6.00	8.65	
Total BTEX	<0.300	0.300	03/16/2015	ND					
Surrogate: 4-Bromofluorobenzene (PID	103 %	61-154	!						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/16/2015	ND	400	100	400	3.92	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/14/2015	ND	181	90.5	200	3.49	
DRO >C10-C28	48.1	10.0	03/14/2015	ND	189	94.6	200	3.39	
Surrogate: 1-Chlorooctane	94.2 9	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	97.7	% 52.1-17	6						

### 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 whistoever 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 related only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



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

Fax To: (575) 937-6252

Received: 03/12/2015 Sampling Date: 03/10/2015

Reported: 03/17/2015 Sampling Type: Soil

Project Name: MIRAGE 30 PM STATE COM #1H Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: NOT GIVEN

### Sample ID: SP. 3 @ 5' (H500681-02)

BTEX 8021B	mg/kg		Analyze	Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/16/2015	ND	2.23	112	2.00	7.97	
Toluene*	< 0.050	0.050	03/16/2015	ND	2.04	102	2.00	9.48	
Ethylbenzene*	< 0.050	0.050	03/16/2015	ND	1.97	98.6	2.00	9.75	
Total Xylenes*	<0.150	0.150	03/16/2015	ND	5.85	97.4	6.00	8.65	
Total BTEX	<0.300	0.300	03/16/2015	ND					
Surrogate: 4-Bromofluorobenzene (PID	104 %	% 61-154	!						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	03/16/2015	ND	400	100	400	3.92	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/14/2015	ND	181	90.5	200	3.49	
DRO >C10-C28	322	10.0	03/14/2015	ND	189	94.6	200	3.39	
Surrogate: 1-Chlorooctane	102 9	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	106 9	52.1-17	6						

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 whistoever 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 related only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



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

Fax To: (575) 937-6252

Received: 03/12/2015 Sampling Date: 03/10/2015

Reported: 03/17/2015 Sampling Type: Soil

Project Name: MIRAGE 30 PM STATE COM #1H Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: NOT GIVEN

### Sample ID: SP. 4 @ 4' (H500681-03)

BTEX 8021B	mg/kg		Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/16/2015	ND	2.23	112	2.00	7.97	
Toluene*	<0.050	0.050	03/16/2015	ND	2.04	102	2.00	9.48	
Ethylbenzene*	<0.050	0.050	03/16/2015	ND	1.97	98.6	2.00	9.75	
Total Xylenes*	<0.150	0.150	03/16/2015	ND	5.85	97.4	6.00	8.65	
Total BTEX	<0.300	0.300	03/16/2015	ND					
Surrogate: 4-Bromofluorobenzene (PID	105 9	% 61-154	!						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/16/2015	ND	400	100	400	3.92	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/14/2015	ND	181	90.5	200	3.49	
DRO >C10-C28	51.2	10.0	03/14/2015	ND	189	94.6	200	3.39	
Surrogate: 1-Chlorooctane	81.5	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	90.8	% 52.1-17	6						

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 whistoever 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 related only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



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

Fax To: (575) 937-6252

Received: 03/12/2015 Sampling Date: 03/11/2015

Reported: 03/17/2015 Sampling Type: Soil

Project Name: MIRAGE 30 PM STATE COM #1H Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: NOT GIVEN

### Sample ID: SP. 5 @ 4' (H500681-04)

BTEX 8021B	mg/kg		Analyze	Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/16/2015	ND	2.23	112	2.00	7.97	
Toluene*	<0.050	0.050	03/16/2015	ND	2.04	102	2.00	9.48	
Ethylbenzene*	< 0.050	0.050	03/16/2015	ND	1.97	98.6	2.00	9.75	
Total Xylenes*	<0.150	0.150	03/16/2015	ND	5.85	97.4	6.00	8.65	
Total BTEX	<0.300	0.300	03/16/2015	ND					
Surrogate: 4-Bromofluorobenzene (PID	105 %	61-154	!						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/16/2015	ND	400	100	400	3.92	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/14/2015	ND	181	90.5	200	3.49	
DRO >C10-C28	<10.0	10.0	03/14/2015	ND	189	94.6	200	3.39	
Surrogate: 1-Chlorooctane	91.5	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	92.3	% 52.1-17	6						

### 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 whistoever 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 related only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



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

Fax To: (575) 937-6252

Received: 03/12/2015 Sampling Date: 03/11/2015

Reported: 03/17/2015 Sampling Type: Soil

Project Name: MIRAGE 30 PM STATE COM #1H Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: NOT GIVEN

### Sample ID: SP. 6 @ 10' (H500681-05)

BTEX 8021B	mg/kg		Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/16/2015	ND	2.23	112	2.00	7.97	
Toluene*	<0.050	0.050	03/16/2015	ND	2.04	102	2.00	9.48	
Ethylbenzene*	<0.050	0.050	03/16/2015	ND	1.97	98.6	2.00	9.75	
Total Xylenes*	0.243	0.150	03/16/2015	ND	5.85	97.4	6.00	8.65	
Total BTEX	<0.300	0.300	03/16/2015	ND					
Surrogate: 4-Bromofluorobenzene (PID	113	% 61-154	1						
Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	03/16/2015	ND	400	100	400	3.92	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	21.8	10.0	03/14/2015	ND	181	90.5	200	3.49	
DRO >C10-C28	693	10.0	03/14/2015	ND	189	94.6	200	3.39	
Surrogate: 1-Chlorooctane	96.4	% 47.2-15	7						
Surrogata: 1 Chloroctadacana	07.1	0/ 52 1 17	'6						

Surrogate: 1-Chlorooctadecane 97.1 % 52.1-176

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 whistoever 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 related only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



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

Fax To: (575) 937-6252

Received: 03/12/2015 Sampling Date: 03/11/2015

Reported: 03/17/2015 Sampling Type: Soil

Project Name: MIRAGE 30 PM STATE COM #1H Sampling Condition: Cool & Intact Sample Received By: Project Number: NONE GIVEN Jodi Henson

Project Location: **NOT GIVEN** 

### Sample ID: SP. 7 @ 13' (H500681-06)

BTEX 8021B	mg/kg		Analyze	Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/16/2015	ND	2.23	112	2.00	7.97	
Toluene*	<0.050	0.050	03/16/2015	ND	2.04	102	2.00	9.48	
Ethylbenzene*	<0.050	0.050	03/16/2015	ND	1.97	98.6	2.00	9.75	
Total Xylenes*	<0.150	0.150	03/16/2015	ND	5.85	97.4	6.00	8.65	
Total BTEX	<0.300	0.300	03/16/2015	ND					
Surrogate: 4-Bromofluorobenzene (PID	104 9	% 61-154	!						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/16/2015	ND	400	100	400	3.92	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/14/2015	ND	181	90.5	200	3.49	
DRO >C10-C28	46.1	10.0	03/14/2015	ND	189	94.6	200	3.39	
Surrogate: 1-Chlorooctane	90.2	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	104 9	% 52.1-17	6						

Surrogate: 1-Chlorooctadecane

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.



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

Fax To: (575) 937-6252

Received: 03/12/2015 Sampling Date: 03/11/2015

Reported: 03/17/2015 Sampling Type: Soil

Project Name: MIRAGE 30 PM STATE COM #1H Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: NOT GIVEN

### Sample ID: SP. 8 @ 4' (H500681-07)

BTEX 8021B	mg/kg		Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/16/2015	ND	2.23	112	2.00	7.97	
Toluene*	< 0.050	0.050	03/16/2015	ND	2.04	102	2.00	9.48	
Ethylbenzene*	< 0.050	0.050	03/16/2015	ND	1.97	98.6	2.00	9.75	
Total Xylenes*	<0.150	0.150	03/16/2015	ND	5.85	97.4	6.00	8.65	
Total BTEX	<0.300	0.300	03/16/2015	ND					
Surrogate: 4-Bromofluorobenzene (PID	104 %	61-154	!						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/16/2015	ND	400	100	400	3.92	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/14/2015	ND	181	90.5	200	3.49	
DRO >C10-C28	10.9	10.0	03/14/2015	ND	189	94.6	200	3.39	
Surrogate: 1-Chlorooctane	89.7	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	98.1	% 52.1-17	6						

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 whistoever 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 related only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



### **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

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 whistoever 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 related only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celeg D. Freene



# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Meuskarting	0						100	**	1	BILL	1 70	11.00 11.00 11.00 11.00					AN	ANALYSIS	515		C	KEQUES	2				-
0	2						P.O. #:	#	П																		-
Address:							Con	npa	ny:	M	Company: MCW boul Neo	Mean	,				40										-
	State: Zip:						Attn: Zock		0	2	Thomas	1 as															
e 非	Fax#:					_	Address:	res	S																		A PROPERTY OF
	Project Owner:						City:																				and the same of
Project Name:							State:	6.	!		Zip:																PRODUCTION
Project Location: Milage 30 PM State COM	State con	_	7		1		Phone #:	ne	*																		-
Sampler Name: How long						L	Fax #:	*		1																	rakemann.
- 1		$\dashv$	1	3	MATRIX			RE	PRESERV	~	SAMPLING	G															AND DESCRIPTION OF
	-	-								STATE AND DESCRIPTIONS			/	11	-51	7											
Lab I.D.   Sample I.D.	(G)RAB CR	GROUNDW	WASTEWAT	SOIL	OIL	SLUDGE	OTHER.	ACID/BASE	ICE / COOL	OTHER	DATE	TIME	7.	H2	XSF												
1 50265	9	-	-	×					~		3/05	1:45	X	X	X		1	-			-		T	_	+	$\dagger$	-
2 Sp3@5"	a			×					$\times$	-	-	12:25	X	X	×		$\vdash$	-			-			_	+	+	-
369,464	۵)		-	入					7		3-10-15	32	X	×	X	Í	+	-			+				+	+	-
4 5P.5@4"	9	-	-	×				_	>	_	3-11-15 0	3,05	X	X	X	_	+	+			+		T	_	+	+	and water to
5 52,600,0	La	~	+	×				_	×	_	3-11-15 8	8:36	X	X	X	(	$\dagger$	+			+		T		+	+	-
6 57013	Va.	-	-	×				_	X	_	3-11-15	9:30	X	-	X	1	+	-			+		T		+	+	-
7 6/804	<i>a</i>			$\times$					×		3-11-159;46	1,46	X	×	X	1	+	-			<del>i  </del>				+-	+++	
		-		-												1									-		
PLEASE NOTE. Liability and Damages. Cardinal's liability and client's exclusive renedy for any claim arising whether based in contract or lort, shall be limited to the arrount pland yet careful or up analyses. All claims including those for negligence and any other cause whitsoever shall be deemed warved unless made in wing and received by Cardinal within 30 days after completion of the applicable analyses. All claims including those for negligence and any other cause whitsoever shall be deemed warved unless made in contract and received by Cardinal within 30 days after completion of the applicable analyses. All claims including white analyses are not included by Cardinal within 30 days after completion of the applicable analyses.	exclusive remedy for any claim, whatsoever shall be deemed with all damages, including without li	claim arising whether based in contract med waived unless made in writing an hout limitation, business interruptions,	unless n, busi	made i	d in co	ntract ng and tions, i	recent oss of	ed by	Card or loss	inal w	I of lort, shall be limited to the amount paud by the cirent nor underted by Cardinal within 30 days after completion of the loss of use, or loss of profits incurred by Geneti, its subsortion of the loss of the loss of control and of the above stabled reasons or of the name.	by the chert for the completion of the completion of the chill, its subsidiaries or otherwise	applica ss.	Die .													
Relinquished By:	36 17/15 Rec	Received By:	d B	· ×					-			Phone Result: Fax Result:	H.	□ Yes		ON O	Ad	Add'l Phone #: Add'l Fax #:	one	*							
Cors	Time: 30 Rec	Received By:	D C	4	J.		2	6	<b>*</b>	9	7	REMARKS:		2		ā	2		3								
	Time:	-	,						2																		
Delivered By: (Circle One)		3		Sample Condition Cool Intact	Intact	ct nditi	9		CH	Dit	(Initials)																A STATE OF THE PARTY OF THE PAR
Sampler - UPS - Bus - Other:	-14.60	0,		No No	Yes No	No			5	7	Z																

District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III

1000 Rio Brazos Road, Aztec, NM 87410

District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

### State of New Mexico Energy Minerals and Natural Resources

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

Form C-141 Revised August 8, 2011

			Rele	ease Notific	catio	n and Co	orrective A	ction	ı				
						<b>OPERA</b>	ΓOR		Initial	al Report		Final	Repor
		Iewbourne C		any		Contact: Zac							
		0 Hobbs NM		I.B. #			No. 575-393-590						
Facility Nai	ne: Mirage	e 30 PM St.	Com #1F.	Battery		Facility Typ	e: Oil producing	g well					
Surface Ow	ner: State			Mineral C	Owner:	State			API No	. 30-015-	10753		
				LOCA	ATIO	N OF REI	LEASE						
Unit Letter P	Section 30	Township 19S	Range 29E	Feet from the 300'	North South	n/South Line	Feet from the 150'	East/\ East	West Line	County Eddy			
			La			_	104.1061163	32					
				NAT	URE	OF REL		1.10	1				
Type of Rele						bbls total f				Recovered:			d 
Source of Re	lease: Comp	pressor separa	itor			Date and H 3-9-15	Iour of Occurrenc	е	Date and 3-9-15	Hour of Di 9:30 ar		y	
Was Immedi	ate Notice (		Yes [	No Not R	equired	If YES, To Mike Brate	Whom? ther & Ian Dolby	,	,				
By Whom? 2	Zack Thoma	iS					Iour 3-9-15 1:4						
Was a Water	course Read	ched?	Yes ⊠	No		If YES, Vo	olume Impacting t	he Wat	ercourse.				
If a Watercon	irse was Im	pacted, Descr	ibe Fully.'	*								-,	
Cause of the	leak- Gas p		nps on sep	paration equipmen			id to compressor: t line was then re-				itor in t	urn vente	ed
Affected area fluid was rec	a- Fluid rar overed from	and Cleanup / n onto pad sur n pasture via v kfill then rese	face on No	orth side of comp	ressor b	pefore running i include remo	off the pad an est	imated I soil to	200 ft. out NMOCD	into the pas	sture. 5	5 bbls of ds and	total
regulations a public health should their or or the enviro	Il operators or the envir operations h nment. In a	are required tronment. The	o report and acceptant adequately OCD accept	nd/or file certain r ce of a C-141 repo investigate and r	elease rort by the emedia	notifications and the NMOCD must the contamination of the contamination	knowledge and und perform correct arked as "Final Roon that pose a three the operator of the control of the con	tive act eport" c eat to g	ions for rel loes not rel round wate	eases which ieve the op- r, surface w	h may e erator o vater, hu	endanger of liability uman hea	У
	2	11		1			OIL CONS	SERV	ATION	DIVISI	<u>ON</u>		
Signature:	e: Zack The	Mon	res			Approved by	Environmental S <sub>l</sub>	pecialis	t:				
Title: Enviro		-3102007				Approval Dat	te:		Expiration	Date:			
		s@mewbourn	e.com			Conditions of		40		Attache	 d П		
Date: 3-9-15	tional Ch-	ota If Nanas-		Phone: 575-602-2	188					, italia			
Attach Addi	понаг элес	tis II Necess	al y										