RECEIVED By Kellie Jones at 9:55 am, Oct 22, 2015



Bone Springs Water Flood Central Facility

BLM #NMNM 88523X Lea County, NM

Work Plan

MEWBOURNE 10/16/2015

Kellie Jones Environmental Specialist NM Oil Conservation District – Division 1 1625 N. French Dr. Hobbs, NM 88240

RE: Mewbourne Bone Springs Water Flood Central – Remediation Work Plan

Ms. Jones,

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

The site is located southwest of Maljamar, NM, in Lea County. The spill was the result of a lightning strike that burned three tanks and some surrounding equipment.

Site Assessment and Delineation

On August 6, 2015 and August 14, 2015, DFSI personnel obtained 10 surface and BGS (below ground surface) samples of the leak area. Each sample was tested for chloride levels as well as BTEX. The BTEX samples were performed using a Mini Rae Photoionization Detector (PID). All the clean field samples found under the BLM/NMOCD standards will be taken to a lab for confirmation. Those results are 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 550 foot below ground surface. Therefore, no eminent danger of groundwater impact or threat to life is anticipated.

Conclusion

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

MEWBOURNE 10/16/2015

DFSI proposes to remove the contaminated soil in the area of SP #1 to 6" BGS. In the area of SP #2, we will excavate to 1'bgs. In the areas of SP #4, SP #5, SP #9 and SP #10, we will remove down to 2' BGS. The contaminated soil in the area of SP #3 will be excavated to 3' BGS. The areas of SP #7 and SP #8 will be excavated to 4' BGS, and a 20 mil liner will be installed in the area of SP #8. We will further delineate SP #6 during excavation to obtain confirmation samples.

Before backfill, bottom samples will be taken to ensure all contaminates have been remediated. These samples will be taken to an approved lab for confirmation before backfilling. After lab confirmation, the areas will be backfilled with fresh caliche on location and like for like topsoil in the pasture area. The pasture area will be seeded with a BLM approved seed mix. All contaminated materials will be hauled to an approved NM state disposal.

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.

1

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

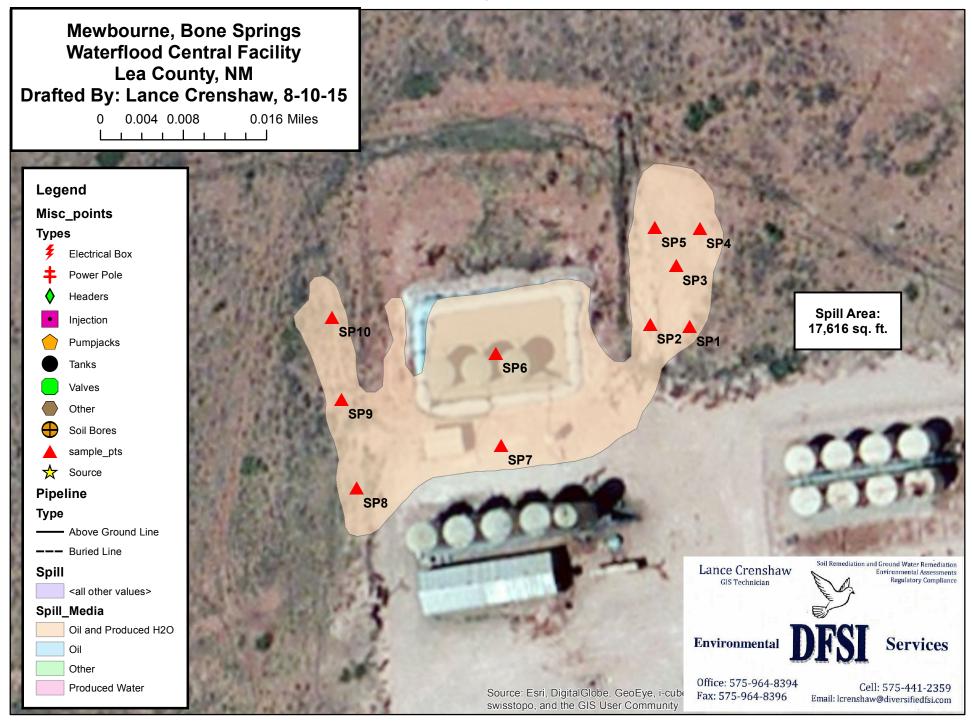
Email: Mburton@diversifiedfsi.com

cc Shelly Tucker BLM

MEWBOURNE 10/16/2015

Attachments: Site/Sample Map Sample Data Groundwater survey Initial C-141

Site Diagram



Company Name:MewbourneSP Date:9/18/2015Location Name:Water FloodRel Date:

SP1	CHL	PID	SP2	CHL	PID	SP3	CHL	PID	SP4	CHL	PID	SP5	CHL	PID
SURF	125	0	SURF	2,374	28.4	SURF	28,866	0	SURF	4,748	0	SURF	2,324	15.4
1'	100	0	1'	624		1'	8,747		1'	1,499	0	1'	999	
			2'	375	0	2'	1,999		2'	575		2'	999	0
						3'	1,249					3'	875	2.7
						4'	874							
						5'	674	0						
						6'	475	0.4						

SP6	CHL	PID	SP7	CHL	PID	SP8	CHL	PID	SP9	CHL	PID	SP10	CHL	PID
Surf	1,000	175	SURF	4698	0	SURF	15,495	0	SURF	10,296	0	SURF	30,940	C
1'	100	1,315	1'	2749	0	1'	3124	0	1'	1,399	0	1'	2024	C
			2'	2,749	0	2'	4973	0	2'	599	0	2'	599	C
			3'	2,474	0	3'	3473	0	3'	750	0.7	3'	425	0.2
			4'	699	0	4'	1499	0	4'	450	0.7	4'	700	2.2
			5'	225	0.7	5'	1,874	0				5'	200	0.6
						6'	1499	0						
						7'	700	2.1						



September 28, 2015

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

RE: BONE SPRINGS WATERFLOOD CENTRAL FACILITY

Enclosed are the results of analyses for samples received by the laboratory on 09/21/15 16:12.

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/ga/lab 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: 09/21/2015 Sampling Date: 09/21/2015

Reported: 09/28/2015 Sampling Type: Soil

Project Name: BONE SPRINGS WATERFLOOD CENTRAL Sampling Condition: ** (See Notes)
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: NOT GIVEN

Sample ID: SP 1 @ 1' (H502483-01)

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	09/23/2015	ND	1.86	93.1	2.00	11.4	
Toluene*	<0.050	0.050	09/23/2015	ND	1.62	80.9	2.00	11.5	
Ethylbenzene*	<0.050	0.050	09/23/2015	ND	1.52	76.2	2.00	11.8	
Total Xylenes*	<0.150	0.150	09/23/2015	ND	4.77	79.5	6.00	10.8	
Total BTEX	<0.300	0.300	09/23/2015	ND					
Surrogate: 4-Bromofluorobenzene (PID	105 9	% 85.6-13	7						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	09/23/2015	ND	416	104	400	3.77	
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	09/24/2015	ND	174	87.1	200	3.66	
DRO >C10-C28	<10.0	10.0	09/24/2015	ND	192	95.8	200	6.90	
Surrogate: 1-Chlorooctane	66.8	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	74.7	% 52.1-17	6						

Cardinal Laboratories *=Accredited Analyte

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

Fax To: (575) 937-6252

Received: 09/21/2015 Sampling Date: 09/21/2015

Reported: 09/28/2015 Sampling Type: Soil

Project Name: BONE SPRINGS WATERFLOOD CENTRAL Sampling Condition: ** (See Notes) Sample Received By: Project Number: NONE GIVEN Jodi Henson

Project Location: **NOT GIVEN**

Sample ID: SP 2 @ 2' (H502483-02)

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	09/23/2015	ND	1.86	93.1	2.00	11.4	
Toluene*	<0.050	0.050	09/23/2015	ND	1.62	80.9	2.00	11.5	
Ethylbenzene*	<0.050	0.050	09/23/2015	ND	1.52	76.2	2.00	11.8	
Total Xylenes*	<0.150	0.150	09/23/2015	ND	4.77	79.5	6.00	10.8	
Total BTEX	<0.300	0.300	09/23/2015	ND					
Surrogate: 4-Bromofluorobenzene (PID	106	% 85.6-13	7						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	448	16.0	09/23/2015	ND	416	104	400	3.77	
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	09/24/2015	ND	174	87.1	200	3.66	
DRO >C10-C28	<10.0	10.0	09/24/2015	ND	192	95.8	200	6.90	
Surrogate: 1-Chlorooctane	67.9	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	75.7	% 52 1-17	6						

Surrogate: 1-Chlorooctadecane 75.7 % 52.1-176

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Fax To: (575) 937-6252

Received: 09/21/2015 Sampling Date: 09/21/2015

Reported: 09/28/2015 Sampling Type: Soil

Project Name: BONE SPRINGS WATERFLOOD CENTRAL Sampling Condition: ** (See Notes)
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: NOT GIVEN

Sample ID: SP 3 @ 6' (H502483-03)

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	09/23/2015	ND	1.86	93.1	2.00	11.4	
Toluene*	<0.050	0.050	09/23/2015	ND	1.62	80.9	2.00	11.5	
Ethylbenzene*	<0.050	0.050	09/23/2015	ND	1.52	76.2	2.00	11.8	
Total Xylenes*	<0.150	0.150	09/23/2015	ND	4.77	79.5	6.00	10.8	
Total BTEX	<0.300	0.300	09/23/2015	ND					
Surrogate: 4-Bromofluorobenzene (PID	105 9	% 85.6-13	7						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	464	16.0	09/23/2015	ND	416	104	400	3.77	
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	09/24/2015	ND	174	87.1	200	3.66	
DRO >C10-C28	<10.0	10.0	09/24/2015	ND	192	95.8	200	6.90	
Surrogate: 1-Chlorooctane	65.2	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	71.9	% 52.1-17	6						

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Fax To: (575) 937-6252

Received: 09/21/2015 Sampling Date: 09/21/2015

Reported: 09/28/2015 Sampling Type: Soil

Project Name: BONE SPRINGS WATERFLOOD CENTRAL Sampling Condition: ** (See Notes) Sample Received By: Project Number: NONE GIVEN Jodi Henson

Project Location: **NOT GIVEN**

Sample ID: SP 4 @ 2' (H502483-04)

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	09/23/2015	ND	1.86	93.1	2.00	11.4	
Toluene*	<0.050	0.050	09/23/2015	ND	1.62	80.9	2.00	11.5	
Ethylbenzene*	<0.050	0.050	09/23/2015	ND	1.52	76.2	2.00	11.8	
Total Xylenes*	<0.150	0.150	09/23/2015	ND	4.77	79.5	6.00	10.8	
Total BTEX	<0.300	0.300	09/23/2015	ND					
Surrogate: 4-Bromofluorobenzene (PID	107 9	% 85.6-13	7						
Chloride, SM4500CI-B	mg/	'kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	752	16.0	09/23/2015	ND	416	104	400	3.77	
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	09/24/2015	ND	174	87.1	200	3.66	
DRO >C10-C28	<10.0	10.0	09/24/2015	ND	192	95.8	200	6.90	
Surrogate: 1-Chlorooctane	67.3	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	73.4	% 52 1-17	6						

Surrogate: 1-Chlorooctadecane 73.4 % 52.1-176

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

Fax To: (575) 937-6252

Received: 09/21/2015 Sampling Date: 09/21/2015

Reported: 09/28/2015 Sampling Type: Soil

Project Name: BONE SPRINGS WATERFLOOD CENTRAL Sampling Condition: ** (See Notes)
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: NOT GIVEN

Sample ID: SP 5 @ 3' (H502483-05)

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	09/23/2015	ND	1.86	93.1	2.00	11.4	
Toluene*	<0.050	0.050	09/23/2015	ND	1.62	80.9	2.00	11.5	
Ethylbenzene*	<0.050	0.050	09/23/2015	ND	1.52	76.2	2.00	11.8	
Total Xylenes*	<0.150	0.150	09/23/2015	ND	4.77	79.5	6.00	10.8	
Total BTEX	<0.300	0.300	09/23/2015	ND					
Surrogate: 4-Bromofluorobenzene (PID	107 %	% 85.6-13	7						
Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	960	16.0	09/23/2015	ND	416	104	400	3.77	
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	09/24/2015	ND	174	87.1	200	3.66	
DRO >C10-C28	<10.0	10.0	09/24/2015	ND	192	95.8	200	6.90	
Surrogate: 1-Chlorooctane	74.2 9	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	78.8 9	% 52.1-17	6						

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

Fax To: (575) 937-6252

Received: 09/21/2015 Sampling Date: 09/21/2015

Reported: 09/28/2015 Sampling Type: Soil

Project Name: BONE SPRINGS WATERFLOOD CENTRAL Sampling Condition: ** (See Notes)
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: NOT GIVEN

Sample ID: SP 6 @ 1' (H502483-06)

mg	/kg	Analyze	d By: MS					
Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<2.00	2.00	09/23/2015	ND	1.86	93.1	2.00	11.4	
7.28	2.00	09/23/2015	ND	1.62	80.9	2.00	11.5	
6.73	2.00	09/23/2015	ND	1.52	76.2	2.00	11.8	
47.0	6.00	09/23/2015	ND	4.77	79.5	6.00	10.8	
61.0	12.0	09/23/2015	ND					
127	% 85.6-13	7						
mg,	/kg	Analyze	d By: HM					
Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
96.0	16.0	09/23/2015	ND	416	104	400	3.77	
mg,	/kg	Analyze	d By: MS					S-06
Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
2630	50.0	09/24/2015	ND	174	87.1	200	3.66	
	Result <2.00 7.28 6.73 47.0 61.0 127 mg/	<2.00 2.00 7.28 2.00 6.73 2.00 47.0 6.00 61.0 12.0 127 % 85.6-13 mg/kg Result Reporting Limit 96.0 16.0 mg/kg Result Reporting Limit	Result Reporting Limit Analyzed <2.00	Result Reporting Limit Analyzed Method Blank <2.00	Result Reporting Limit Analyzed Method Blank BS <2.00	Result Reporting Limit Analyzed Method Blank BS % Recovery <2.00	Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC <2.00	Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC RPD <2.00

Surrogate: 1-Chlorooctane 158 % 47.2-157
Surrogate: 1-Chlorooctadecane 214 % 52.1-176

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

Fax To: (575) 937-6252

Received: 09/21/2015 Sampling Date: 09/21/2015

Reported: 09/28/2015 Sampling Type: Soil

Project Name: BONE SPRINGS WATERFLOOD CENTRAL Sampling Condition: ** (See Notes)
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: NOT GIVEN

Sample ID: SP 7 @ 5' (H502483-07)

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	09/23/2015	ND	1.86	93.1	2.00	11.4	
Toluene*	<0.050	0.050	09/23/2015	ND	1.62	80.9	2.00	11.5	
Ethylbenzene*	< 0.050	0.050	09/23/2015	ND	1.52	76.2	2.00	11.8	
Total Xylenes*	<0.150	0.150	09/23/2015	ND	4.77	79.5	6.00	10.8	
Total BTEX	<0.300	0.300	09/23/2015	ND					
Surrogate: 4-Bromofluorobenzene (PID	105 %	6 85.6-13	7						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	09/23/2015	ND	416	104	400	3.77	
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	09/24/2015	ND	174	87.1	200	3.66	
DRO >C10-C28	<10.0	10.0	09/24/2015	ND	192	95.8	200	6.90	
Surrogate: 1-Chlorooctane	67.8 9	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	73.4 9	% 52.1-17	6						

Cardinal Laboratories *=Accredited Analyte

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

Fax To: (575) 937-6252

Received: 09/21/2015 Sampling Date: 09/21/2015

Reported: 09/28/2015 Sampling Type: Soil

Project Name: BONE SPRINGS WATERFLOOD CENTRAL Sampling Condition: ** (See Notes)
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: NOT GIVEN

Sample ID: SP 9 @ 4' (H502483-09)

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	09/23/2015	ND	1.86	93.1	2.00	11.4	
Toluene*	<0.050	0.050	09/23/2015	ND	1.62	80.9	2.00	11.5	
Ethylbenzene*	<0.050	0.050	09/23/2015	ND	1.52	76.2	2.00	11.8	
Total Xylenes*	<0.150	0.150	09/23/2015	ND	4.77	79.5	6.00	10.8	
Total BTEX	<0.300	0.300	09/23/2015	ND					
Surrogate: 4-Bromofluorobenzene (PID	106 %	% 85.6-13	7						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	560	16.0	09/23/2015	ND	416	104	400	3.77	
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	09/24/2015	ND	174	87.1	200	3.66	
DRO >C10-C28	<10.0	10.0	09/24/2015	ND	192	95.8	200	6.90	
Surrogate: 1-Chlorooctane	64.5	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	70.6	% 52.1-17	6						

Cardinal Laboratories *=Accredited Analyte

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Notes and Definitions

S-06 The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or

matrix interference's.

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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Celeg D. Freene



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Maubausse	91110	BILL TO	ANALYSIS REQUEST
Project Manager: Zach Thomas	.9.	P.O. #: Malbana	
	Q	7	1682
City: State:	Zip:	Attn:	
Phone #: Fax #:	A	Address:	
Project #: Project Owner:		City:	
Project Name: Mewhowwe	S	State: Zip:	
prings Waterflood	Central Facility P	Phone #:	
Flores	,	Fax#:	
- 1	MATRIX	PRESERV. SAMPLING	
	S ER		e
Lab I.D. Sample I.D.		/BASE:	nlovide PH TEX
4502483	# COI	OTHE DATE	Te
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6 SP 6 @ 1	6 1	0.11	15:00 Am X X X
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C SP 90 4	611	3:0	3:00 pm × × ×
P 100 5	6111	3:0	3:00 PM X X X X
: Liability and Damages. Cardinal's liability and client's sims including those for negligence and any other caus went shall Cardinal be liable for incidental or consequent	exclusive remedy for any claim arising whether based in contract or lort, shall be limited to the amount paid by the client for the e whatscever shall be determed valved unless made in writing and received by Cardinal within 30 days after completion of the a tal damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries	ntract or tort, shall be limited to the amount paid by the grand received by Cardinal within 30 days after combines, loss of use, or loss of profits incurred by client,	pplicable
Relinquished By: Date: 9-21-2015	Received By:		Result: Yes N
	when sen	ANY RE	of crenshaw@diversitedtsi.com
Relinquished By: Time:	Seceived By:		malves@
Delivered By: (Circle One)		H2	
Sampler - UPS - Bus - Other:	11.60 Yes Tyes	(initialis)	Chorese
† Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326	se fax written changes to (5	75) 393-2326	samples taken & brought criterius



September 29, 2015

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

RE: BONE SPRINGS WATERFLOOD CENTRAL FACILITY

Enclosed are the results of analyses for samples received by the laboratory on 09/28/15 14:45.

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/ga/lab 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: 09/28/2015 Sampling Date: 09/21/2015

Reported: 09/29/2015 Sampling Type: Soil

Project Name: BONE SPRINGS WATERFLOOD CENTRAL Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: NOT GIVEN

Sample ID: SAMPLE PT. 8 @ 7' (H502565-01)

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	09/29/2015	ND	2.01	100	2.00	1.66	
Toluene*	<0.050	0.050	09/29/2015	ND	1.72	86.0	2.00	1.99	
Ethylbenzene*	<0.050	0.050	09/29/2015	ND	1.67	83.3	2.00	2.07	
Total Xylenes*	<0.150	0.150	09/29/2015	ND	5.21	86.9	6.00	2.16	
Total BTEX	<0.300	0.300	09/29/2015	ND					
Surrogate: 4-Bromofluorobenzene (PID	107 9	85.6-13	7						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	656	16.0	09/29/2015	ND	400	100	400	0.00	
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	09/28/2015	ND	167	83.4	200	12.7	
DRO >C10-C28	<10.0	10.0	09/28/2015	ND	178	88.9	200	20.0	
Surrogate: 1-Chlorooctane	105 %	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	118 9	6 52.1-17	6						

*=Accredited Analyte

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Celey D. Keine

Cardinal Laboratories



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

Fax To: (575) 937-6252

Received: 09/28/2015 Sampling Date: 09/21/2015

Reported: 09/29/2015 Sampling Type: Soil

Project Name: BONE SPRINGS WATERFLOOD CENTRAL Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: NOT GIVEN

Sample ID: SAMPLE PT. 10 @ 5' (H502565-02)

BTEX 8021B	mg/kg		Analyze	d By: MS		% Recovery		RPD	Qualifier
Analyte	Result Reporting Li		Analyzed	Method Blank	BS		True Value QC		
Benzene*	<0.050	0.050	09/29/2015	ND	2.01	100	2.00	1.66	
Toluene*	<0.050	0.050	09/29/2015	ND	1.72	86.0	2.00	1.99	
Ethylbenzene*	<0.050	0.050	09/29/2015	ND	1.67	83.3	2.00	2.07	
Total Xylenes*	<0.150	0.150	09/29/2015	ND	5.21	86.9	6.00	2.16	
Total BTEX	<0.300	0.300	09/29/2015	ND					
Surrogate: 4-Bromofluorobenzene (PID	108 9	% 85.6-13	7						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	576	16.0	09/29/2015	ND	400	100	400	0.00	
PH 8015M mg/kg		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	09/28/2015	ND	167	83.4	200	12.7	
DRO >C10-C28	<10.0	10.0	09/28/2015	ND	178	88.9	200	20.0	
Surrogate: 1-Chlorooctane	117 % 47.2-15		7						
Surrogate: 1-Chlorooctadecane	127 9	6 52.1-17	6						

Cardinal Laboratories *=Accredited Analyte

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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

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Relinquished By: analyses. All claims including those for reservice. In no event shall Cardinal be life Sampler Name: Myrts Flores Project Location: Bone Springs Waterflood lentral Facility Project Name: Mewbourne Project #: Phone #: Company Name: Mewbourne Project Manager: 29ch Lab I.D. FOR LAB USE ONLY Address: Sample form 10@5 (575) 393-2326 FAX (575) 393-2476 101 East Marland, Hobbs, NM 88240 Jample Yount 8@7 Sample I.D. Inomas Project Owner: State: Received B 9 6 (G)RAB OR (C)OMP Zip: # CONTAINERS GROUNDWATER WASTEWATER MATRIX SOIL writing and received by Cardinal within 30 days after com OIL ms, loss of use, or loss of profits incurred by client, its subsidiaries, SLUDGE OTHER Phone #: Fax #: State: City: Attn: Company: Diversified DFSI Address: P.O. #: ACID/BASE PRESERV ICE / COOL OTHER BILL TO 4 9-21-2015 1:00Pm Zip: DATE SAMPLING 3 3:00Pm pletion of the applicable TIME CHAIN-OF-CUSTODY AND ANALYSIS REQUEST Chloride XX X X ANALYSIS REQUEST

Sampler - UPS - Bus - Other:

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

Cool Intact
Wes Wes Sample Condition

Delivered By: (Circle One)

Relinquished By:

Received By

Phone Result: Fax Result: REMARKS:

☐ Yes ☐ No

Add'l Phone #: Add'l Fax #:

email to ? I crenshaw@divers. Redfsi.com

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+loves

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 District II District III 1000 Rio Brazos Road, Aztec, NM 87410 <u>District IV</u> 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised August 8, 2011

Oil Conservation Division 1220 South St. Francis Dr. Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Santa Fe, NM 87505															
Release Notification and Corrective Action															
						OPERA	TOR .		☐ Initial Report ☐ Final Report						
Name of Company: Mewbourne Oil Company							Contact: Zack Thomas								
							Telephone No. 575-393-5905								
Facility Name: Bone Springs Central Water Flood Facility															
Surface Owner: BLM Mineral Owner: I									API No						
				LOCA	TIO	N OF RELEASE									
Unit Letter							Feet from the	East/W	/West Line County						
N	23	18S	32E	660'	South	1 1 7									
Latitude_32.7275472 Longitude103.7389861 NATURE OF RELEASE															
Type of Relea	se: Produc	ed water				Volume of bbls	Release: estimate	d 297	Volume Recovered: 275 bbls PW						
Source of Rel			nks				lour of Occurrence	e	Date and Hour of Discovery 7-20-15 4:00 pm						
Was Immediate Notice Given? ☐ Yes ☐ No ☐ Not Required							If YES, To Whom?								
By Whom? Zack Thomas							Date and Hour 7-21-15 10:00 am								
Was a Watercourse Reached? ☐ Yes ☒ No							If YES, Volume Impacting the Watercourse.								
If a Watercourse was Impacted, Describe Fully.*															
Describe Cause of Problem and Remedial Action Taken.* The water flood facility was struck by lightning. Upon being struck, the facility caught fire. Maljimar VFD was immediately contacted to extinguish the fire and vacuum trucks were used to recover all standing fluid as soon as the location was deemed safe.															
Describe Area Affected and Cleanup Action Taken.*															
Affected area- The produced water leaked over the secondary containment behind location toward the North (100 ft by 40 ft) and Northwest (18 ft by 125 ft). Vacuum trucks recovered 225 bbls from the secondary containment and 50 bbls from pasture area. Final remediation will be conducted in a accordance with the NMOCD's Guidelines for Remediation of Spills, Leaks and Releases.															
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.															
OIL CONSERVATION DIVISION															
Signature: 2. Thomas															
Printed Name	: Zack Tho	mas				Approved by	Environmental Sp	pecialist:	xt:						
Title: Enviror	ımental Rej	р.	Approval Date:			Expiration Date:									
E-mail Addre	ss: zthomas	s@mewbourn	Conditions of	Approval:		Attached									

Phone: 575-602-2188

Date: 7-22-15

^{*} Attach Additional Sheets If Necessary



New Mexico Office of the State Engineer Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.) (R=POD has been replaced, O=orphaned,

es a C=the file is

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

	0.0000,	(1		-		3 7	,	- ,		(/
	POD									
	Sub-	Q	QQ	!					Depth	Depth Water
POD Number	Code basin C	ounty 64	16 4	Sec	Tws	Rng	X	Υ	Well	Water Column
CP 00677		LE	1 1	26	18S	32E	617750	3621373* 🎒	700	
CP 00808		LE	4 4	26	18S	32E	618973	3620178* 🌍	400	

Average Depth to Water: -

Minimum Depth: --

Maximum Depth: --

Record Count: 2

Basin/County Search:

County: Lea

PLSS Search:

Section(s): 23, 22, 24, 14, **To**v

Township: 18S

Range: 32E

*UTM location was derived from PLSS - see Help

From: <u>Tucker, Shelly</u>
To: <u>Zack Thomas</u>

Cc: Jones, Kellie, EMNRD; Michael Burton

Subject: Re: Bone springs Water flood facility

Date: Monday, October 19, 2015 9:44:10 AM

Attachments: <u>image001.png</u>

Upon review of your submitted work plan, BLM accepts/approves with the following stipulations:

- 1. SP#3 will need to be excavated to a depth of 4'.
- 2. Confirmation samples will be required on all bottom hole depths.

The BLM approval/acceptance does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that may pose a threat to groundwater, surface water, human health or the environment or if the location fails to reclaim properly. In such an event that the location does not revegetate, or future issues with contaminants are encountered, the operator will be asked to address the issues until the contaminant issues are fully mitigated and the location is successfully reclaimed. In addition, BLM approval does not relieve the operator of responsibility for compliance with any other federal, state or local laws/regulations.

If you have any questions or concerns, please do not hesitate to contact me.

Sincerely,

Shelly J Tucker

Environmental Protection Specialist Bureau of Land Management

620 E. Greene St Carlsbad, NM 88220

575.234.5905 - Direct 575.361.0084 - Cellular

stucker@blm.gov



On Mon, Oct 19, 2015 at 7:38 AM, Zack Thomas < zthomas@mewbourne.com> wrote:

If there are any questions or concerns let me know. Thank you

Zack Thomas

Environmental Rep.

Mewbourne Oil Company PO Box 5270 Hobbs, NM 88241 US

Phone: (575) 393-5905 | Fax: (575) 397-6252

(575) 602-2188 Email: <u>zthomas@Mewbourne.com</u>