

APPROVED

Trinity Oilfield Services & Rentals, LLC

Environmental Site Summary & Spill Remediation Proposal



Company: Mewbourne Oil Company Address: P.O. Box 5270, Hobbs, NM 88241 Telephone #: (575)393-5905

Site Name: Merit 32 DM St. Com #1H NMOCD Reference#: 1RP-4724

Surface Owner: State of New Mexico Mineral Owner: State of New Mexico

Unit Letter: D Section: 32 Township: 18S Range: 35E County: Lea GPS Coordinates: 32.7105675N -103.487175 W

Depth to Ground Water: 58' - 60' Distance to Surface Water Body: ☐ <200' ☐ 200' - 1,000' ☒ >1,000'

Wellhead Protection Area: <1,000' from Water Source or <200' from Domestic Water Source? ☐ Y ☒ N

NMOCD Ranking Score: 10 Soil Remediation Levels (mg/kg): Benzene: 10 BTEX: 50 TPH: ☐ 100 ☒ 1,000 ☐ 5,000 Chloride: ☐ 100 ☒ 500 ☐ 1,000

Date/Time of Release: 6/9/2017 Type of Release: Produced Water & Crude Oil Approximate Volume of Release: 130 bbls

Background Information:

On June 9, 2017, Mewbourne Oil Company (Mewbourne) discovered a release at the Merit 32 DM St. Com #1H (Merit 32) tank battery. Lightning struck the tank battery, resulting in a fire and the release of a total of approximately 130 barrels (bbls) of crude oil and produced water. During initial response activities, the well was shut-in, and all separation equipment was isolated from the transfer system. Vacuum trucks were utilized to recover approximately 10 bbls of crude oil and 120 bbls of produced water. Heavily impacted, visibly stained soil was scraped up and stockpiled on-site, pending final disposition.

The release impacted approximately 18,500 square feet (ft²) of the tank battery pad and commingled with an existing historical, non-reportable (i.e., <5 bbls) release. Overspray from the release impacted an area of the adjacent pastureland measuring approximately 2,000 ft².

The release was immediately reported to the New Mexico Oil Conservation Division's (NMOCD) Hobbs District Office. The NMOCD "Release Notification & Corrective Action" (Form C-141) is provided as Appendix A. General photographs of the release site are provided in Appendix B. A "Site Location Map" is provided as Figure 1.

Summary of Field Activities:

On June 15, 2017, one (1) hand-augered borehole (AH-1) was advanced at the site to investigate the vertical extent of impacted soil. The auger hole was located in the approximate center of the containment area of the former tank battery and was advanced to the hard rock layer running underneath the site (approximately 2 feet below ground surface). Representative soil samples were field-screened with a chloride test kit, and the results indicated additional vertical delineation was required.

On June 19, 2017, four (4) delineation trenches were advanced to further investigate the vertical extent of impacted soil in the containment area of the former tank battery. Trenches SP-4 and SP-5 were advanced at the western and eastern extents, respectively, of the containment area. Trench SP-6 was advanced along the flow path of the release. A delineation trench was also advanced in the area represented by auger hole AH-1. The trenches were advanced to the hard rock layer running underneath the site: approximately 2 feet below ground surface (bgs). Representative soil samples were field-screened with a chloride test kit, and confirmation samples were submitted to Cardinal Laboratories in Hobbs, New Mexico, for analysis of chloride, total petroleum hydrocarbons (TPH), and/or benzene, toluene, ethylbenzene, and total xylenes (BTEX) concentrations using Environmental Protection Agency (EPA) Methods 300, SW 846-8021b, and SW 846-8015M, respectively. Laboratory analytical results and field tests indicated vertical delineation was achieved in the eastern and western extents of the former containment area, but additional vertical delineation was required in the areas represented by auger hole AH-1 and Trench SP-6. However, further vertical advancement into the hard rock layer was deemed impracticable without specialized equipment.

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Summary of Field Activities (cont.):

On June 21, 2017, a mechanical auger was utilized to advance a borehole (AH-2) in the primary pooling area of the release. The auger hole was advanced to the extent practicable: approximately 5 feet bgs. Representative soil samples were field-screened with a chloride test kit, and a confirmation sample was submitted to the laboratory for analysis of chloride, TPH, and BTEX concentrations. Laboratory analytical results and field screens indicated vertical delineation of the pooling area had been achieved.

On June 27, 2017, a mechanical auger was utilized to advance borehole AH-1 to approximately 2.75 feet bgs. An additional borehole (AH-3) was advanced in the area represented by delineation trench SP-6 to a total depth of approximately 4 feet bgs. Representative soil samples were field-screened with a chloride test kit, and confirmation samples were submitted to the laboratory for analysis of chloride, TPH, and BTEX concentrations. Laboratory analytical results and field screens indicated vertical delineation of the release had been achieved.

Locations of the boreholes and delineation trenches are depicted in Figure 2, "Site & Sample Location Map". Laboratory analytical results are summarized in Table 1, and analytical reports are provided in Appendix C.

Proposed Activities:

- The excavation will be advanced vertically to the hard rock layer running underneath the site, which is commonly encountered between approximately 1.5 and 2 feet bgs.
- The excavation will be advanced horizontally until field test readings and/or visual/olfactory senses suggest contaminants of concern are below the RRALs established for the site by the NMOCD (or to the extent practicable). In affected areas to the east of the former tank battery, excavation may be limited by the presence of a transfer pump and associated pipes, appurtenances, and/or electrical lines.
- Pursuant to NMOCD request, additional vertical delineation will be conducted in the areas represented by auger holes AH-1, AH-2, and AH-3.
- Excavated soil will be stockpiled on-site on 6-mil polyethylene plastic, pending transfer to an NMOCD-permitted facility for disposal.
- A 20-mil, impermeable, polyethylene liner will be installed on the floor of the excavation prior to backfilling. A cushion of sand will be installed approximately 6 inches both above and below the liner to protect it during installation and backfilling activities. This engineered control will serve to inhibit vertical migration of contaminants remaining in-situ. Following liner installation, the excavation will be backfilled with locally acquired, non-impacted material, compacted, and contoured to fit the surrounding topography.
- The overspray area will be treated with a Micro-Blaze® solution to promote biodegradation and attenuation of hydrocarbons.
- Upon completion of the aforementioned corrective actions, a "Remediation Summary" will be submitted to the NMOCD, documenting remediation activities and results of confirmation soil samples.

Trinity Oilfield Services & Rentals, LLC

Environmental Site Summary & Spill Remediation Proposal



Proposed Soil Boring/Monitor Well Locations:

N/A	N	N/A	W
	N		W
	N		W
	N		W
	N		W

Name/Description:

N/A

Enclosures:

Figure 1: Site Location Map

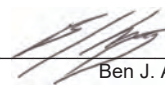
Figure 2: Site & Sample Location Map

Table 1: Concentrations of Benzene, BTEX, TPH & Chloride in Soil

Appendix A: Release Notification & Corrective Action (Form C-141)

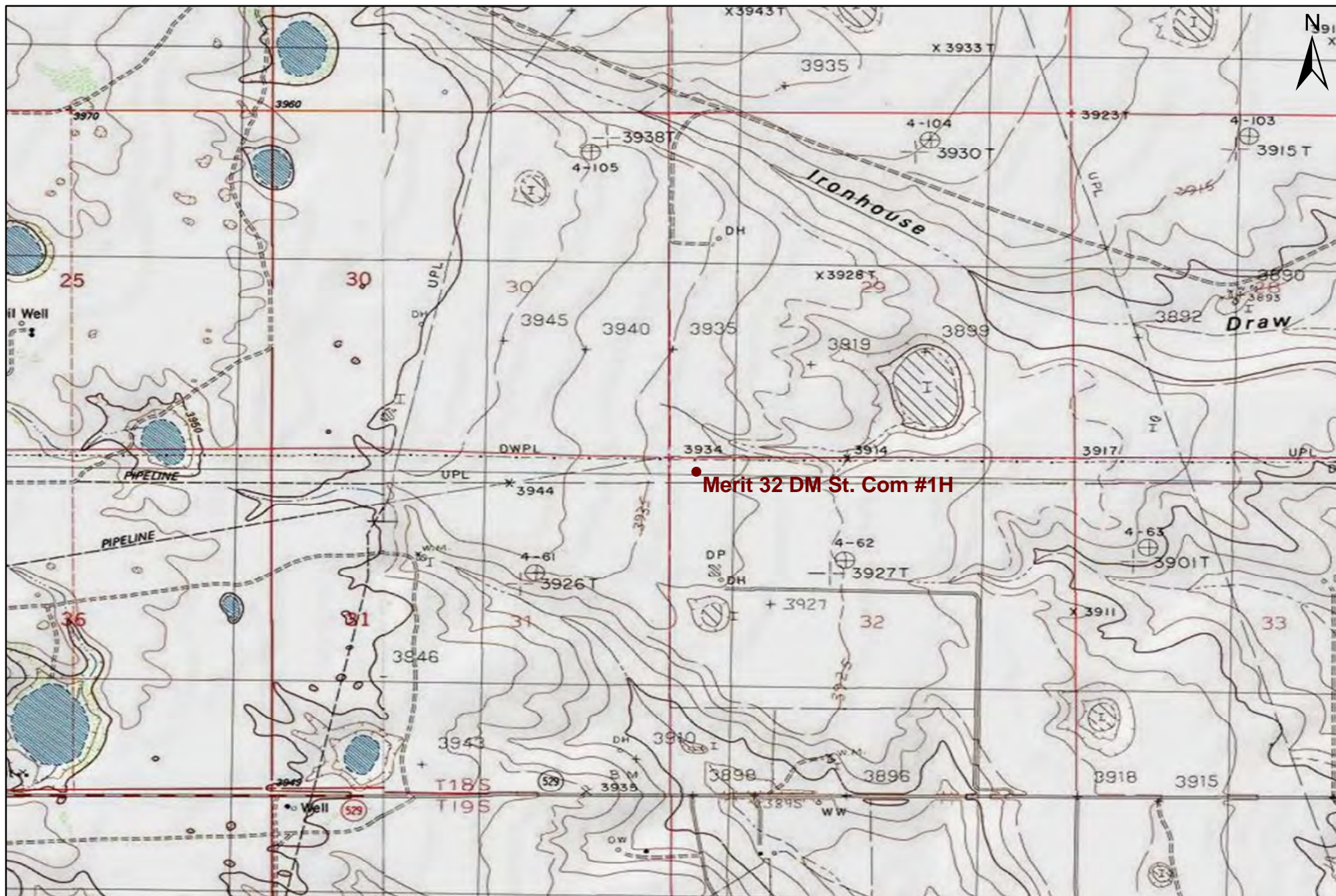
Appendix B: Photographs

Appendix C: Laboratory Analytical Results


Ben J. Arguijo
Project Manager

7/10/2017

Figures



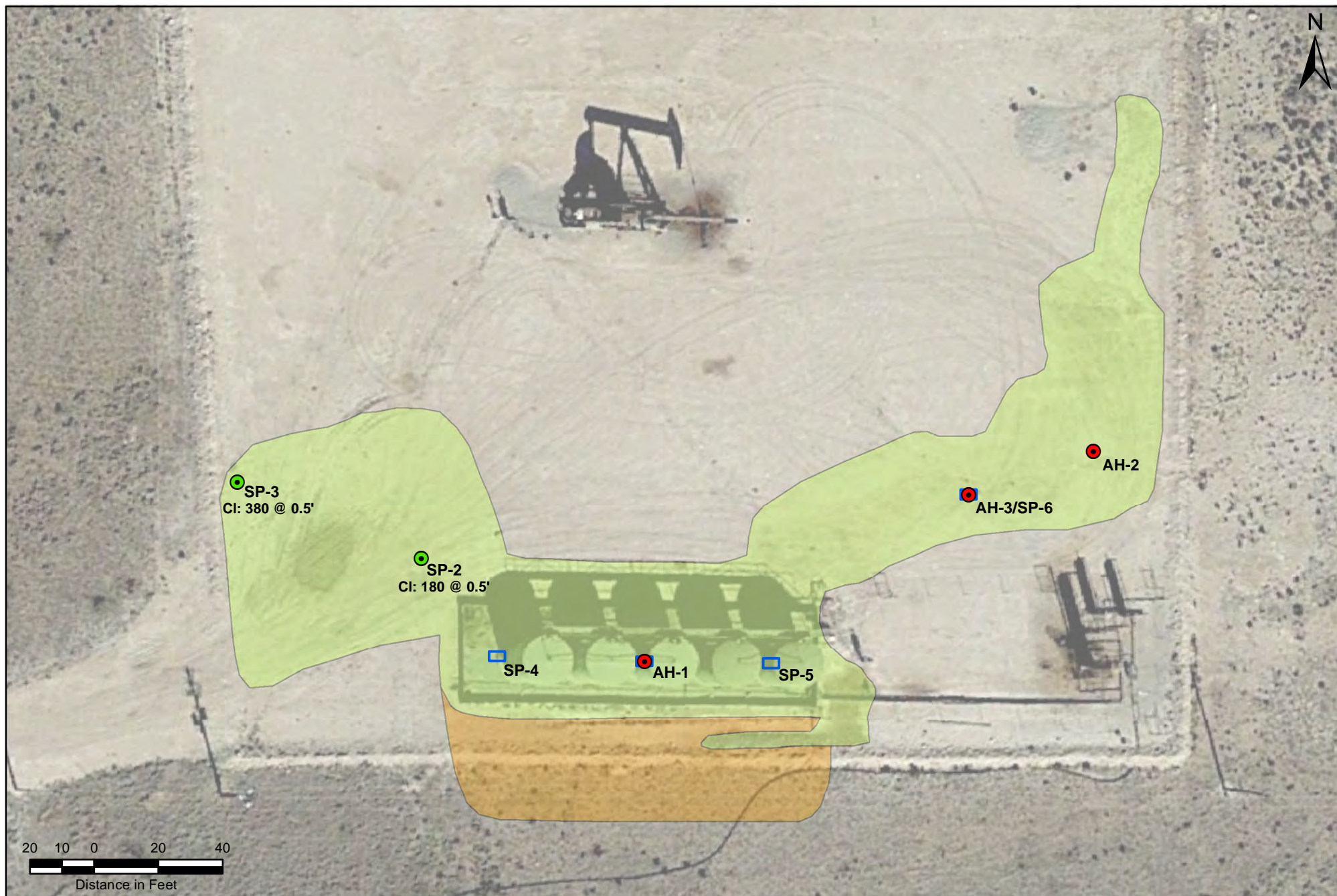
2,000 1,000 0 2,000
Distance in Feet

Figure 1
Site Location Map
Mewbourne Oil Company
Merit 32 DM St. Com #1H
Lea County, New Mexico
NMOCD Reference #: 1RP-4724



Trinity Oilfield Services & Rentals, LLC
P.O. Box 2587
Hobbs, NM 88241

Drawn By: BJA	Checked By: CTR
June 14, 2017	Scale: 1" = 2,000'



Legend

- | | |
|---|--|
| Inferred Impacted Area | Auger Hole |
| Overspray | Chloride Field Screen |
| Delineation Trench | |

Figure 2
Sample Location Map
Mewbourne Oil Company
Merit 32 DM St. Com #1H
Lea County, New Mexico
NMOCD Reference #: 1RP-4724



Trinity Oilfield Services & Rentals, LLC
 P.O. Box 2587
 Hobbs, NM 88241

Drawn By: BJA	Checked By: CTR
July 10, 2017	Scale: 1" = 40'

Tables

TABLE 1
CONCENTRATIONS OF BENZENE, BTEX, TPH & CHLORIDE IN SOIL

MEWBOURNE OIL COMPANY
MERIT 32 DM ST. COM #1H
LEA COUNTY, NEW MEXICO
NMOCD REF. #: 1RP-4724



SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	SOIL STATUS	METHOD: EPA SW 846-8021B, 5030					METHOD: 8015M				300.0
				BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL-BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO C ₆ -C ₁₂ (mg/Kg)	DRO C ₁₂ -C ₂₈ (mg/Kg)	EXT DRO C ₂₈ -C ₃₅ (mg/Kg)	TPH C ₆ -C ₃₅ (mg/Kg)	CHLORIDE (mg/Kg)
NMOCD Recommended Remediation Action Levels (RRALs)				10	NE	NE	NE	50	NE	NE	NE	1,000	500
SP-4 @ 2'	2'	6/19/2017	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	56.5
SP-5 @ 2'	2'	6/19/2017	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	155
AH-2 @ 5'	5'	6/21/2017	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	206
AH-1 @ 2.75'	2.75'	6/27/2017	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	12.0	14.6	26.6	137
AH-3 @ 4'	4'	6/27/2017	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	206

NE = Not established

Appendices

Appendix A

Release Notification &

Corrective Action (Form C-141)

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

Form C-141
Revised August 8, 2011

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

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: Mewbourne Oil Company	Contact: Zack Thomas	
Address: PO Box 5270 Hobbs NM 88241	Telephone No. 575-393-5905	
Facility Name: Merit 32 DM St. com #1H	Facility Type: Producing Oil Well	
Surface Owner: State	Mineral Owner:	API No. 30-025-40836

LOCATION OF RELEASE

Unit Letter D	Section 32	Township 18S	Range 35E	Feet from the 245'	North/South Line North	Feet from the 330'	East/West Line West	County Lea
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Latitude 32.7105675 Longitude -103.487175

NATURE OF RELEASE

Type of Release: Oil/produced water	Volume of Release: estimated 130 bbls	Volume Recovered: 10 bbls oil/ 120 bbls pw
Source of Release: Tank Battery	Date and Hour of Occurrence 6-9-17 5:00 am	Date and Hour of Discovery 6-9-17 5:00 am
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Mark Whitaker; NMOCD	
By Whom? Zack Thomas	Date and Hour 6-9-17 12:40 pm	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*



Describe Cause of Problem and Remedial Action Taken.*

Lightning struck tank battery causing fire. Well was shut-in and all separation equipment isolated. Monument and Hobbs Fire Departments were dispatched to put out fire.

Describe Area Affected and Cleanup Action Taken.*

Affected area- Pad surface Northwest of tank containment. Vacuum truck used to recover all standing fluid.

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.

Signature: 	OIL CONSERVATION DIVISION	
Printed Name: Zack Thomas	Approved by Environmental Specialist: 	
Title: Environmental Rep.	Approval Date: 6/15/2017	Expiration Date:
E-mail Address: zthomas@mewbourne.com	Conditions of Approval: see attached directive	Attached <input checked="" type="checkbox"/>
Date: 6-12-17	Phone: 575-602-2188	

* Attach Additional Sheets If Necessary

1RP-4724

nOY1716634012

pOY1716634836

Appendix B

Photographs



Merit 32 DM St. Com #1H - Release (Looking East)



Merit 32 DM St. Com #1H - Release (Looking East)



Merit 32 DM St. Com #1H – Release (Looking South)



Merit 32 DM St. Com #1H – Release (Looking Southwest)



Merit 32 DM St. Com #1H – Release (Looking South)



Merit 32 DM St. Com #1H – Release (Looking South-Southwest)



Merit 32 DM St. Com #1H – Release (Looking Northwest)



Merit 32 DM St. Com #1H – Release (Looking West)



Merit 32 DM St. Com #1H – Release (Looking Northwest)



Merit 32 DM St. Com #1H – Release (Looking North)



Merit 32 DM St. Com #1H – Overspray Area (Looking Southwest)

Appendix C

Laboratory Analytical Reports

July 05, 2017

BEN ARGUIJO

TRINITY OILFIELD SERVICES & RENTALS, LLC

P. O. BOX 2587

HOBBS, NM 88241

RE: MERIT 32 DM ST. COM #1H

Enclosed are the results of analyses for samples received by the laboratory on 06/20/17 16:25.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-17-9. 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 accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Total Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

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:TRINITY OILFIELD SERVICES & RENTALS, LLC
P. O. BOX 2587
HOBBS NM, 88241Project: MERIT 32 DM ST. COM #1H
Project Number: DM ST. COM #1H
Project Manager: BEN ARGUIJO
Fax To: NONEReported:
05-Jul-17 10:00

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SP-4 @2'	H701600-01	Soil	19-Jun-17 12:10	20-Jun-17 16:25
SP-5 @2'	H701600-02	Soil	19-Jun-17 12:15	20-Jun-17 16:25

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

TRINITY OILFIELD SERVICES & RENTALS, LLC
P. O. BOX 2587
HOBBS NM, 88241

Project: MERIT 32 DM ST. COM #1H
Project Number: DM ST. COM #1H
Project Manager: BEN ARGUIJO
Fax To: NONE

Reported:
05-Jul-17 10:00

SP-4 @2'
H701600-01 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories

Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	7062201	MS	22-Jun-17	8021B	
Toluene*	<0.050		0.050	mg/kg	50	7062201	MS	22-Jun-17	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	7062201	MS	22-Jun-17	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	7062201	MS	22-Jun-17	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	7062201	MS	22-Jun-17	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			107 %	72-148		7062201	MS	22-Jun-17	8021B	

Petroleum Hydrocarbons by GC FID

GRO C6-C10	<10.0		10.0	mg/kg	1	7062104	MS	03-Jul-17	8015B	
DRO >C10-C28	<10.0		10.0	mg/kg	1	7062104	MS	03-Jul-17	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	7062104	MS	03-Jul-17	8015B	
Surrogate: 1-Chlorooctane			101 %	28.3-164		7062104	MS	03-Jul-17	8015B	
Surrogate: 1-Chlorooctadecane			108 %	34.7-157		7062104	MS	03-Jul-17	8015B	

Green Analytical Laboratories

Soluble (DI Water Extraction)

Chloride	56.5		10.0	mg/kg wet	10	B706277	JDA	30-Jun-17	EPA300.0	
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Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

TRINITY OILFIELD SERVICES & RENTALS, LLC
P. O. BOX 2587
HOBBS NM, 88241

Project: MERIT 32 DM ST. COM #1H
Project Number: DM ST. COM #1H
Project Manager: BEN ARGUIJO
Fax To: NONE

Reported:
05-Jul-17 10:00

SP-5 @2' H701600-02 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories

Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	7062201	MS	22-Jun-17	8021B	
Toluene*	<0.050		0.050	mg/kg	50	7062201	MS	22-Jun-17	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	7062201	MS	22-Jun-17	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	7062201	MS	22-Jun-17	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	7062201	MS	22-Jun-17	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			103 %	72-148		7062201	MS	22-Jun-17	8021B	

Petroleum Hydrocarbons by GC FID

GRO C6-C10	<10.0		10.0	mg/kg	1	7062104	MS	22-Jun-17	8015B	
DRO >C10-C28	<10.0		10.0	mg/kg	1	7062104	MS	22-Jun-17	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	7062104	MS	22-Jun-17	8015B	
Surrogate: 1-Chlorooctane			83.1 %	28.3-164		7062104	MS	22-Jun-17	8015B	
Surrogate: 1-Chlorooctadecane			72.6 %	34.7-157		7062104	MS	22-Jun-17	8015B	

Green Analytical Laboratories

Soluble (DI Water Extraction)

Chloride	155		10.0	mg/kg wet	10	B706277	JDA	30-Jun-17	EPA300.0	
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Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

TRINITY OILFIELD SERVICES & RENTALS, LLC
P. O. BOX 2587
HOBBS NM, 88241

Project: MERIT 32 DM ST. COM #1H
Project Number: DM ST. COM #1H
Project Manager: BEN ARGUIJO
Fax To: NONE

Reported:
05-Jul-17 10:00

Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 7062201 - Volatiles

Blank (7062201-BLK1)

Prepared & Analyzed: 22-Jun-17

Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	ND		mg/kg	0.0500		98.6	72-148			

LCS (7062201-BS1)

Prepared & Analyzed: 22-Jun-17

Benzene	2.17	0.050	mg/kg	2.00		109	79.5-124			
Toluene	2.00	0.050	mg/kg	2.00		99.8	75.5-127			
Ethylbenzene	2.03	0.050	mg/kg	2.00		101	77.7-125			
Total Xylenes	5.87	0.150	mg/kg	6.00		97.9	70.9-124			
Surrogate: 4-Bromofluorobenzene (PID)	0.0495		mg/kg	0.0500		98.9	72-148			

LCS Dup (7062201-BSD1)

Prepared & Analyzed: 22-Jun-17

Benzene	2.20	0.050	mg/kg	2.00		110	79.5-124	1.21	6.5	
Toluene	2.03	0.050	mg/kg	2.00		101	75.5-127	1.55	7.02	
Ethylbenzene	2.09	0.050	mg/kg	2.00		105	77.7-125	3.17	7.83	
Total Xylenes	6.06	0.150	mg/kg	6.00		101	70.9-124	3.22	7.78	
Surrogate: 4-Bromofluorobenzene (PID)	0.0498		mg/kg	0.0500		99.6	72-148			

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

TRINITY OILFIELD SERVICES & RENTALS, LLC
P. O. BOX 2587
HOBBS NM, 88241

Project: MERIT 32 DM ST. COM #1H
Project Number: DM ST. COM #1H
Project Manager: BEN ARGUIJO
Fax To: NONE

Reported:
05-Jul-17 10:00

Petroleum Hydrocarbons by GC FID - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 7062104 - General Prep - Organics

Blank (7062104-BLK1)

Prepared & Analyzed: 21-Jun-17

GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C35	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Total TPH C6-C28	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	45.2		mg/kg	50.0		90.4	28.3-164			
Surrogate: 1-Chlorooctadecane	40.0		mg/kg	50.0		80.1	34.7-157			

LCS (7062104-BS1)

Prepared & Analyzed: 21-Jun-17

GRO C6-C10	177	10.0	mg/kg	200		88.6	76.6-119			
DRO >C10-C28	182	10.0	mg/kg	200		90.9	81.4-124			
Total TPH C6-C28	359	10.0	mg/kg	400		89.8	79.4-121			
Surrogate: 1-Chlorooctane	48.8		mg/kg	50.0		97.6	28.3-164			
Surrogate: 1-Chlorooctadecane	43.6		mg/kg	50.0		87.1	34.7-157			

LCS Dup (7062104-BSD1)

Prepared & Analyzed: 21-Jun-17

GRO C6-C10	183	10.0	mg/kg	200		91.4	76.6-119	3.03	7.94	
DRO >C10-C28	186	10.0	mg/kg	200		92.9	81.4-124	2.24	9.83	
Total TPH C6-C28	369	10.0	mg/kg	400		92.1	79.4-121	2.63	8.57	
Surrogate: 1-Chlorooctane	50.7		mg/kg	50.0		101	28.3-164			
Surrogate: 1-Chlorooctadecane	42.0		mg/kg	50.0		84.0	34.7-157			

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

TRINITY OILFIELD SERVICES & RENTALS, LLC
P. O. BOX 2587
HOBBS NM, 88241

Project: MERIT 32 DM ST. COM #1H
Project Number: DM ST. COM #1H
Project Manager: BEN ARGUIJO
Fax To: NONE

Reported:
05-Jul-17 10:00

Soluble (DI Water Extraction) - Quality Control

Green Analytical Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B706277 - General Prep - Wet Chem

Blank (B706277-BLK1)

Prepared & Analyzed: 30-Jun-17

Chloride	ND	1.00	mg/kg wet							
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LCS (B706277-BS1)

Prepared & Analyzed: 30-Jun-17

Chloride	238	10.0	mg/kg wet	250		95.0	85-115			
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LCS Dup (B706277-BSD1)

Prepared & Analyzed: 30-Jun-17

Chloride	239	10.0	mg/kg wet	250		95.4	85-115	0.433	20	
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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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Celey D. Keene, Lab Director/Quality Manager

**CARDINAL LABORATORIES**

101 East Marland, Hobbs, NM 88240

(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 1 of 1

Company Name: Trinity Oilfield Services & Rentals, LLC				BILL TO				ANALYSIS REQUEST																									
Project Manager: Ben J. Arguijo				P.O. #:				<div style="display: flex; flex-direction: column; align-items: center;"> <div>TPH (8015M)</div> <div>BTEX (8021B)</div> <div>Chloride (300)</div> </div>																									
Address: P.O. Box 2587				Company: Mewbourne Oil Co.																													
City: Hobbs		State: NM Zip: 88241		Attn: Zack Thomas																													
Phone #: (575)390-7208		Fax #:		Address: P.O. Box 5270																													
Project #:		Project Owner: Mewbourne Oil Co.		City: Hobbs																													
Project Name: Merit 32 DM St. Com #1H				State: NM Zip: 88241																													
Project Location: Lea Co., NM				Phone #: (575)393-5905																													
Sampler Name: Ben J. Arguijo				Fax #: (575) 397-6252																													
FOR LAB USE ONLY		Lab I.D.		Sample I.D.		G/RAB OR (COMP. #)		MATRIX		PRESERV		SAMPLING																					
								GROUNDWATER		WASTEWATER		SOIL		OIL		SLUDGE		OTHER:		ACID/BASE:		ICE / COOL		OTHER:		DATE		TIME					
		H701600 -				G 1		X										X		6/19/12		1210		X		X		X					
		2		SP-502		K		K										K		↓		1215		X		X		X					

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 the client for the 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 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 services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:		Date: 6/20/12		Received By: Valerie Nunez		Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #:	
		Time: 1625				Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Fax #:	
Relinquished By:		Date:		Received By:		REMARKS: Please e-mail results to zthomas@mewbourne.com & ben@trinityoilfieldservices.com	
		Time:					
Delivered By: (Circle One)				CHECKED BY:			
Sampler - UPS - Bus - Other:		#75 5-90C		Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		(Initials) V.N.	

July 03, 2017

BEN ARGUIJO

TRINITY OILFIELD SERVICES & RENTALS, LLC

P. O. BOX 2587

HOBBS, NM 88241

RE: MERIT 32 DM ST. COM #1H

Enclosed are the results of analyses for samples received by the laboratory on 06/23/17 14:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-17-9. 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 accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Total Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

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:TRINITY OILFIELD SERVICES & RENTALS, LLC
P. O. BOX 2587
HOBBS NM, 88241Project: MERIT 32 DM ST. COM #1H
Project Number: MEWBOURNE
Project Manager: BEN ARGUIJO
Fax To: NONEReported:
03-Jul-17 16:18

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
AH-2 @ 5'	H701652-01	Soil	21-Jun-17 10:30	23-Jun-17 14:05

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

TRINITY OILFIELD SERVICES & RENTALS, LLC
P. O. BOX 2587
HOBBS NM, 88241

Project: MERIT 32 DM ST. COM #1H
Project Number: MEWBOURNE
Project Manager: BEN ARGUIJO
Fax To: NONE

Reported:
03-Jul-17 16:18

AH-2 @ 5' H701652-01 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories

Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050	0.050	mg/kg	50	7062603	MS	27-Jun-17	8021B	
Toluene*	<0.050	0.050	mg/kg	50	7062603	MS	27-Jun-17	8021B	
Ethylbenzene*	<0.050	0.050	mg/kg	50	7062603	MS	27-Jun-17	8021B	
Total Xylenes*	<0.150	0.150	mg/kg	50	7062603	MS	27-Jun-17	8021B	
Total BTEX	<0.300	0.300	mg/kg	50	7062603	MS	27-Jun-17	8021B	
Surrogate: 4-Bromofluorobenzene (PID)		101 %		72-148	7062603	MS	27-Jun-17	8021B	

Petroleum Hydrocarbons by GC FID

GRO C6-C10	<10.0	10.0	mg/kg	1	7062604	MS	26-Jun-17	8015B	
DRO >C10-C28	<10.0	10.0	mg/kg	1	7062604	MS	26-Jun-17	8015B	
EXT DRO >C28-C36	<10.0	10.0	mg/kg	1	7062604	MS	26-Jun-17	8015B	
Surrogate: 1-Chlorooctane		81.4 %		28.3-164	7062604	MS	26-Jun-17	8015B	
Surrogate: 1-Chlorooctadecane		82.4 %		34.7-157	7062604	MS	26-Jun-17	8015B	

Green Analytical Laboratories

Soluble (DI Water Extraction)

Chloride	206	10.0	mg/kg wet	10	B706277	JDA	30-Jun-17	EPA300.0	
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Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

TRINITY OILFIELD SERVICES & RENTALS, LLC
P. O. BOX 2587
HOBBS NM, 88241

Project: MERIT 32 DM ST. COM #1H
Project Number: MEWBOURNE
Project Manager: BEN ARGUIJO
Fax To: NONE

Reported:
03-Jul-17 16:18

Volatile Organic Compounds by EPA Method 8021 - Quality Control
Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 7062603 - Volatiles
Blank (7062603-BLK1)

Prepared & Analyzed: 26-Jun-17

Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	ND		mg/kg	0.0500		98.1	72-148			

LCS (7062603-BS1)

Prepared & Analyzed: 26-Jun-17

Benzene	2.21	0.050	mg/kg	2.00		111	79.5-124			
Toluene	2.00	0.050	mg/kg	2.00		100	75.5-127			
Ethylbenzene	2.09	0.050	mg/kg	2.00		105	77.7-125			
Total Xylenes	6.12	0.150	mg/kg	6.00		102	70.9-124			
Surrogate: 4-Bromofluorobenzene (PID)	0.0494		mg/kg	0.0500		98.8	72-148			

LCS Dup (7062603-BSD1)

Prepared & Analyzed: 26-Jun-17

Benzene	2.22	0.050	mg/kg	2.00		111	79.5-124	0.417	6.5	
Toluene	2.03	0.050	mg/kg	2.00		101	75.5-127	1.29	7.02	
Ethylbenzene	2.12	0.050	mg/kg	2.00		106	77.7-125	1.31	7.83	
Total Xylenes	6.21	0.150	mg/kg	6.00		104	70.9-124	1.46	7.78	
Surrogate: 4-Bromofluorobenzene (PID)	0.0495		mg/kg	0.0500		99.0	72-148			

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

TRINITY OILFIELD SERVICES & RENTALS, LLC
P. O. BOX 2587
HOBBS NM, 88241

Project: MERIT 32 DM ST. COM #1H
Project Number: MEWBOURNE
Project Manager: BEN ARGUIJO
Fax To: NONE

Reported:
03-Jul-17 16:18

Petroleum Hydrocarbons by GC FID - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 7062604 - General Prep - Organics

Blank (7062604-BLK1)

Prepared & Analyzed: 26-Jun-17

GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C35	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Total TPH C6-C28	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	48.3		mg/kg	50.0		96.6	28.3-164			
Surrogate: 1-Chlorooctadecane	48.6		mg/kg	50.0		97.2	34.7-157			

LCS (7062604-BS1)

Prepared & Analyzed: 26-Jun-17

GRO C6-C10	203	10.0	mg/kg	200		101	76.6-119			
DRO >C10-C28	211	10.0	mg/kg	200		106	81.4-124			
Total TPH C6-C28	414	10.0	mg/kg	400		103	79.4-121			
Surrogate: 1-Chlorooctane	53.3		mg/kg	50.0		107	28.3-164			
Surrogate: 1-Chlorooctadecane	53.6		mg/kg	50.0		107	34.7-157			

LCS Dup (7062604-BSD1)

Prepared & Analyzed: 26-Jun-17

GRO C6-C10	211	10.0	mg/kg	200		106	76.6-119	4.16	7.94	
DRO >C10-C28	223	10.0	mg/kg	200		111	81.4-124	5.30	9.83	
Total TPH C6-C28	434	10.0	mg/kg	400		108	79.4-121	4.74	8.57	
Surrogate: 1-Chlorooctane	55.5		mg/kg	50.0		111	28.3-164			
Surrogate: 1-Chlorooctadecane	56.2		mg/kg	50.0		112	34.7-157			

Cardinal Laboratories

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:TRINITY OILFIELD SERVICES & RENTALS, LLC
P. O. BOX 2587
HOBBS NM, 88241Project: MERIT 32 DM ST. COM #1H
Project Number: MEWBOURNE
Project Manager: BEN ARGUIJO
Fax To: NONEReported:
03-Jul-17 16:18**Soluble (DI Water Extraction) - Quality Control****Green Analytical Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B706277 - General Prep - Wet Chem**Blank (B706277-BLK1)**

Prepared & Analyzed: 30-Jun-17

Chloride ND 1.00 mg/kg wet

LCS (B706277-BS1)

Prepared & Analyzed: 30-Jun-17

Chloride 238 10.0 mg/kg wet 250 95.0 85-115

LCS Dup (B706277-BSD1)

Prepared & Analyzed: 30-Jun-17

Chloride 239 10.0 mg/kg wet 250 95.4 85-115 0.433 20

Cardinal Laboratories

*=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

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



101 East Marland, Hobbs, NM 88240

(575) 393-2326 FAX (575) 393-2476

↓

Page 1 of 1

Page 8 of 8

Relinquished By:		Date: 6/23/12	Received By:	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
		Time: 1405		Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #:
Relinquished By:		Date: 6-23-12	Received By:	REMARKS:	
		Time: 2:05			
Delivered By: (Circle One)		Sample Condition	CHECKED BY:		
Sampler - UPS - Bus - Other:		Cool <input type="checkbox"/> Intact <input type="checkbox"/>	(Initials)		
		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2.32		
		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	10-#8		

Please e-mail results to zthomas@mewbourne.com & ben@trinityoilfieldservices.com



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

July 06, 2017

BEN ARGUIJO

TRINITY OILFIELD SERVICES & RENTALS, LLC

P. O. BOX 2587

HOBBS, NM 88241

RE: MERIT 32 DM ST. COM #1H

Enclosed are the results of analyses for samples received by the laboratory on 06/29/17 11:46.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-17-9. 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 accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Total Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

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:TRINITY OILFIELD SERVICES & RENTALS, LLC
P. O. BOX 2587
HOBBS NM, 88241Project: MERIT 32 DM ST. COM #1H
Project Number: MEWBOURNE
Project Manager: BEN ARGUIJO
Fax To: NONEReported:
06-Jul-17 11:46

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
AH-1 @ 2.75'	H701713-01	Soil	27-Jun-17 10:45	29-Jun-17 11:46
AH-3 @ 4'	H701713-02	Soil	27-Jun-17 13:35	29-Jun-17 11:46

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

TRINITY OILFIELD SERVICES & RENTALS, LLC
P. O. BOX 2587
HOBBS NM, 88241

Project: MERIT 32 DM ST. COM #1H
Project Number: MEWBOURNE
Project Manager: BEN ARGUIJO
Fax To: NONE

Reported:
06-Jul-17 11:46

AH-1 @ 2.75' H701713-01 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories

Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050	0.050	mg/kg	50	7062903	MS	29-Jun-17	8021B
Toluene*	<0.050	0.050	mg/kg	50	7062903	MS	29-Jun-17	8021B
Ethylbenzene*	<0.050	0.050	mg/kg	50	7062903	MS	29-Jun-17	8021B
Total Xylenes*	<0.150	0.150	mg/kg	50	7062903	MS	29-Jun-17	8021B
Total BTEX	<0.300	0.300	mg/kg	50	7062903	MS	29-Jun-17	8021B
Surrogate: 4-Bromofluorobenzene (PID)		102 %		72-148	7062903	MS	29-Jun-17	8021B

Petroleum Hydrocarbons by GC FID

GRO C6-C10	<10.0	10.0	mg/kg	1	7062906	MS	30-Jun-17	8015B
DRO >C10-C28	12.0	10.0	mg/kg	1	7062906	MS	30-Jun-17	8015B
EXT DRO >C28-C36	14.6	10.0	mg/kg	1	7062906	MS	30-Jun-17	8015B
Surrogate: 1-Chlorooctane		80.1 %		28.3-164	7062906	MS	30-Jun-17	8015B
Surrogate: 1-Chlorooctadecane		84.1 %		34.7-157	7062906	MS	30-Jun-17	8015B

Green Analytical Laboratories

Soluble (DI Water Extraction)

Chloride	137	10.0	mg/kg wet	10	B706277	JDA	30-Jun-17	EPA300.0
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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

TRINITY OILFIELD SERVICES & RENTALS, LLC
P. O. BOX 2587
HOBBS NM, 88241

Project: MERIT 32 DM ST. COM #1H
Project Number: MEWBOURNE
Project Manager: BEN ARGUIJO
Fax To: NONE

Reported:
06-Jul-17 11:46

AH-3 @ 4' H701713-02 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories

Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	7062903	MS	29-Jun-17	8021B	
Toluene*	<0.050		0.050	mg/kg	50	7062903	MS	29-Jun-17	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	7062903	MS	29-Jun-17	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	7062903	MS	29-Jun-17	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	7062903	MS	29-Jun-17	8021B	
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			102 %	72-148		7062903	MS	29-Jun-17	8021B	

Petroleum Hydrocarbons by GC FID

GRO C6-C10	<10.0		10.0	mg/kg	1	7062906	MS	30-Jun-17	8015B	
DRO >C10-C28	<10.0		10.0	mg/kg	1	7062906	MS	30-Jun-17	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	7062906	MS	30-Jun-17	8015B	
<i>Surrogate: 1-Chlorooctane</i>			96.8 %	28.3-164		7062906	MS	30-Jun-17	8015B	
<i>Surrogate: 1-Chlorooctadecane</i>			101 %	34.7-157		7062906	MS	30-Jun-17	8015B	

Green Analytical Laboratories

Soluble (DI Water Extraction)

Chloride	206		10.0	mg/kg wet	10	B706277	JDA	30-Jun-17	EPA300.0	
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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

TRINITY OILFIELD SERVICES & RENTALS, LLC
P. O. BOX 2587
HOBBS NM, 88241

Project: MERIT 32 DM ST. COM #1H
Project Number: MEWBOURNE
Project Manager: BEN ARGUIJO
Fax To: NONE

Reported:
06-Jul-17 11:46

Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 7062903 - Volatiles

Blank (7062903-BLK1)

Prepared & Analyzed: 29-Jun-17

Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	ND		mg/kg	0.0500		99.0	72-148			

LCS (7062903-BS1)

Prepared & Analyzed: 29-Jun-17

Benzene	2.16	0.050	mg/kg	2.00		108	79.5-124			
Toluene	1.96	0.050	mg/kg	2.00		98.2	75.5-127			
Ethylbenzene	2.04	0.050	mg/kg	2.00		102	77.7-125			
Total Xylenes	6.08	0.150	mg/kg	6.00		101	70.9-124			
Surrogate: 4-Bromofluorobenzene (PID)	0.0501		mg/kg	0.0500		100	72-148			

LCS Dup (7062903-BSD1)

Prepared & Analyzed: 29-Jun-17

Benzene	2.13	0.050	mg/kg	2.00		106	79.5-124	1.42	6.5	
Toluene	1.93	0.050	mg/kg	2.00		96.3	75.5-127	1.95	7.02	
Ethylbenzene	2.00	0.050	mg/kg	2.00		99.9	77.7-125	1.92	7.83	
Total Xylenes	6.00	0.150	mg/kg	6.00		100	70.9-124	1.31	7.78	
Surrogate: 4-Bromofluorobenzene (PID)	0.0502		mg/kg	0.0500		100	72-148			

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

TRINITY OILFIELD SERVICES & RENTALS, LLC
P. O. BOX 2587
HOBBS NM, 88241

Project: MERIT 32 DM ST. COM #1H
Project Number: MEWBOURNE
Project Manager: BEN ARGUIJO
Fax To: NONE

Reported:
06-Jul-17 11:46

Petroleum Hydrocarbons by GC FID - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 7062906 - General Prep - Organics

Blank (7062906-BLK1)

Prepared & Analyzed: 29-Jun-17

GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C35	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Total TPH C6-C28	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	49.0		mg/kg	50.0		98.0	28.3-164			
Surrogate: 1-Chlorooctadecane	51.1		mg/kg	50.0		102	34.7-157			

LCS (7062906-BS1)

Prepared & Analyzed: 29-Jun-17

GRO C6-C10	205	10.0	mg/kg	200		103	76.6-119			
DRO >C10-C28	222	10.0	mg/kg	200		111	81.4-124			
Total TPH C6-C28	427	10.0	mg/kg	400		107	79.4-121			
Surrogate: 1-Chlorooctane	56.7		mg/kg	50.0		113	28.3-164			
Surrogate: 1-Chlorooctadecane	59.7		mg/kg	50.0		119	34.7-157			

LCS Dup (7062906-BSD1)

Prepared & Analyzed: 29-Jun-17

GRO C6-C10	210	10.0	mg/kg	200		105	76.6-119	2.25	7.94	
DRO >C10-C28	228	10.0	mg/kg	200		114	81.4-124	2.84	9.83	
Total TPH C6-C28	438	10.0	mg/kg	400		110	79.4-121	2.56	8.57	
Surrogate: 1-Chlorooctane	58.0		mg/kg	50.0		116	28.3-164			
Surrogate: 1-Chlorooctadecane	62.8		mg/kg	50.0		126	34.7-157			

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:TRINITY OILFIELD SERVICES & RENTALS, LLC
P. O. BOX 2587
HOBBS NM, 88241Project: MERIT 32 DM ST. COM #1H
Project Number: MEWBOURNE
Project Manager: BEN ARGUIJO
Fax To: NONEReported:
06-Jul-17 11:46**Soluble (DI Water Extraction) - Quality Control****Green Analytical Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B706277 - General Prep - Wet Chem**Blank (B706277-BLK1)**

Prepared & Analyzed: 30-Jun-17

Chloride ND 1.00 mg/kg wet

LCS (B706277-BS1)

Prepared & Analyzed: 30-Jun-17

Chloride 238 10.0 mg/kg wet 250 95.0 85-115

LCS Dup (B706277-BSD1)

Prepared & Analyzed: 30-Jun-17

Chloride 239 10.0 mg/kg wet 250 95.4 85-115 0.433 20

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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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Celey D. Keene, Lab Director/Quality Manager

**CARDINAL LABORATORIES**

101 East Marland, Hobbs, NM 88240

(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 1 of 1

Company Name: Trinity Oilfield Services & Rentals, LLC				BILL TO				ANALYSIS REQUEST																																	
Project Manager: Ben J. Arguijo				P.O. #:				<div style="display: flex; flex-direction: column; align-items: center;"> <div>TPH (8015M)</div> <div>BTEX (8021B)</div> <div>Chloride (300)</div> </div>																																	
Address: P.O. Box 2587				Company: Mewbourne Oil Co.																																					
City: Hobbs		State: NM		Zip: 88241		Attn: Zack Thomas																																			
Phone #: (575)390-7208		Fax #:		Address: P.O. Box 5270																																					
Project #:		Project Owner: Mewbourne Oil Co.		City: Hobbs																																					
Project Name: Merit 32 DM St. Com #1H				State: NM		Zip: 88241																																			
Project Location: Lea Co., NM				Phone #: (575)393-5905																																					
Sampler Name: Todd Roberson				Fax #: (575) 397-6252																																					
FOR LAB USE ONLY				MATRIX		PRESERV		SAMPLING																																	
Lab I.D.		Sample I.D.		(G)RAB OR (C)OMP.		# CONTAINERS		GROUNDWATER		WASTEWATER		SOIL		OIL		SLUDGE		OTHER :		ACID/BASE:		ICE / COOL		OTHER :		DATE		TIME													
H701713		AH-1 @ 2.75'		G		1						X								X						6/27/17		1045		X X X											
		AH-3 @ 4'		G		1						X								X						6/27/17		1235		X X X											

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Relinquished By:		Date: 6/28/17		Received By:		Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No		Add'l Phone #:	
		Time: 10:20				Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No		Add'l Fax #:	
Relinquished By:		Date: 6/29/17		Received By:		REMARKS: <div style="font-size: 2em; font-family: cursive;">Rush!!</div> <p>Please e-mail results to zthomas@mewbourne.com & ben@trinityoilfieldservices.com</p>			
		Time: 11:46							
Delivered By: (Circle One)									
Sampler - UPS - Bus - Other:		4.30		Sample Condition		CHECKED BY:			
				Cool Intact		(Initials)			
				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		TP-#15			