

Trinity Oilfield Services & Rentals, LLC

Environmental Site Summary & Spill Remediation Plan



Company: OXY USA, Inc. Address: P.O. Box 4294, Houston, TX 77210 Telephone #: (575) 390-2828

Site Name: Osage 18 Fee B Com 0001H NMOCD Reference#: 2RP-4334

Surface Owner: Private Mineral Owner: US BLM

Unit Letter: "N" (SE/SW) Section: 18 Township: 20S Range: 25E County: Eddy GPS Coordinates: 32.567590 N -104.525800 W

Depth to Ground Water: 225' 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: 0 Soil Remediation Levels (mg/kg): Benzene: 10 BTEX: 50 TPH: ☐ 100 Chloride: ☐ 250
☐ 1,000 ☒ 600
☒ 5,000

Date/Time of Release: 7/31/2017 Type of Release: Crude Oil & Produced Water Approximate Volume of Release: See Below

Background Information:

On July 31, 2017, OXY USA, Inc. (OXY), discovered a release at the Osage 18 Fee B Com 0001H (Osage 18) well. A stuffing box packing failure resulted in the release of approximately 3 barrels (bbls) of produced water and 21 bbls of produced water. The release affected an area of the caliche well pad measuring approximately 22,800 square feet. The release also affected an area of the adjacent pasture measuring approximately 600 square feet. The stuffing box was repaired during initial response activities.

The release was immediately reported to the New Mexico Oil Conservation Division's (NMOCD) Artesia District Office and the United States Department of the Interior - Bureau of Land Management's (BLM) Carlsbad 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 Attachment B. A "Site Location Map" is provided as Figure 1.

Summary of Field Activities:

On August 7, 2017, twelve (12) hand-augered soil borings (SP-1 through SP-12) were collected at the site to investigate the extent of impacted soil. The auger holes were advanced to the extent practicable, and ranged in depth from approximately 6 inches to 1 foot below ground surface (bgs). Soil samples were submitted to Xenco Laboratories in Midland, Texas, for analysis of total petroleum hydrocarbons (TPH), benzene, toluene, ethylbenzene, and total xylenes (BTEX), and/or chloride concentrations using Environmental Protection Agency (EPA) Methods SW 846-8021b, SW 846-8015M, and 300.1, respectively. Laboratory analytical results indicated vertical delineation of TPH and BTEX had been achieved. However, additional delineation to determine the vertical extent of chloride contamination was required.

On September 6, 2017, eight (8) delineation trenches were advanced at the site to further investigate the vertical extent of impacted soil. The trenches were advanced in the areas represented by auger holes SP-2, SP-3, SP-4, SP-5, SP-7, SP-8, SP-10, and SP-11 to total depths ranging from 1.5 feet (SP-11) to 5.5 feet bgs (SP-5). Soil samples collected at 6-inch to 1.5-foot intervals 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 indicated vertical delineation of the release had been achieved.

Immediately upon arrival at the site for the delineation event, a second, non-reportable release (i.e., less than 5 bbls) was discovered on a pressure valve connected to the Osage 18 well. The released fluid impacted an area of the caliche well pad that had been impacted by the July 31 release. The releases were delineated concurrently.

Locations of the soil samples and delineation trenches are depicted in Figure 2, "Sample Location Map". Laboratory analytical results are summarized in Table 1, and analytical reports are provided in Appendix C. Chloride field screen results are summarized in Table 2.

Trinity Oilfield Services & Rentals, LLC

Environmental Site Summary & Spill Remediation Plan



Proposed Activities:

OXY proposes to conduct the following activities to progress the Osage 18 release site to an NMOCD-approved closure:

- The September 6, 2017, non-reportable release will be remediated concurrently with the August 31, 2017, reportable release.
- Heavily impacted, visibly stained soil will be scraped up and stockpiled on-site, pending final disposition.
- The horizontal limits of the excavation will be determined by field-screening using a chloride field test kit. Confirmation soil samples will be collected at approximately 50-foot horizontal increments along the floor(s) and sidewalls of the excavation and submitted to Xenco Laboratories for analysis of chloride, BTEX, and/or TPH concentrations.
- The excavation will be advanced vertically as follows:
 - Maximum depth of 6 inches in the areas represented by auger holes SP-6, SP-9, and SP-12.
 - Maximum depth of 1 foot bgs in the areas represented by auger hole SP-1 and delineation trenches SP-10 and SP-11, as well as immediately adjacent to the on-site pump jack and well.
 - Maximum depth of 1.5 feet bgs in the area represented by delineation trench SP-3.
 - Maximum depth of 2.5 feet bgs in the area represented by delineation trench SP-7.
 - Maximum depth of 3 feet bgs in the area represented by delineation trench SP-4.
 - Maximum depth of 4 feet bgs in the areas represented by delineation trenches SP-2 and SP-8.
 - Maximum depth of 5.5 feet bgs in the area represented by delineation trench SP-5.
- All excavated soil will be stockpiled on-site on 6-mil plastic, pending transfer to Lea Land, Inc. (NMOCD Permit #WM-01-035), for disposal.
- Following remediation activities, the excavation will be backfilled with non-impacted material, compacted, and contoured to fit the surrounding topography.
- Disturbed areas in the pasture adjacent to the Osage 18 well pad will be seeded with a landowner-approved seed mix at a time conducive to germination.
- 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.

Enclosures:

Figure 1: Site Location Map

Figure 2: Sample Location Map

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

Table 2: Chloride Field Tests

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

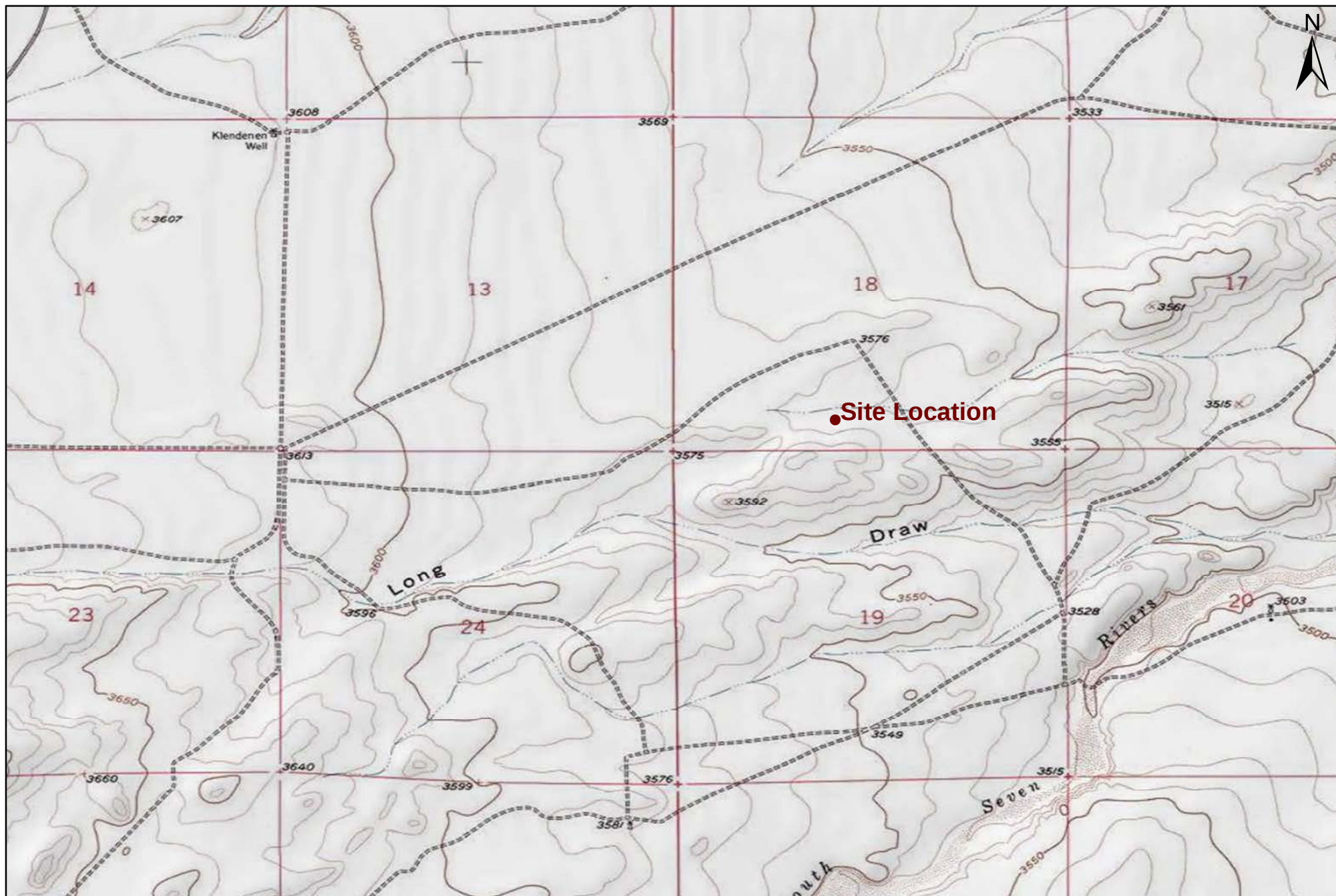
Appendix B: Photographs

Appendix C: Depth-to-Groundwater Data

Appendix D: Laboratory Analytical Results

 11/22/2017
Ben J. Arguijo
Project Manager

Figures



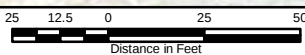
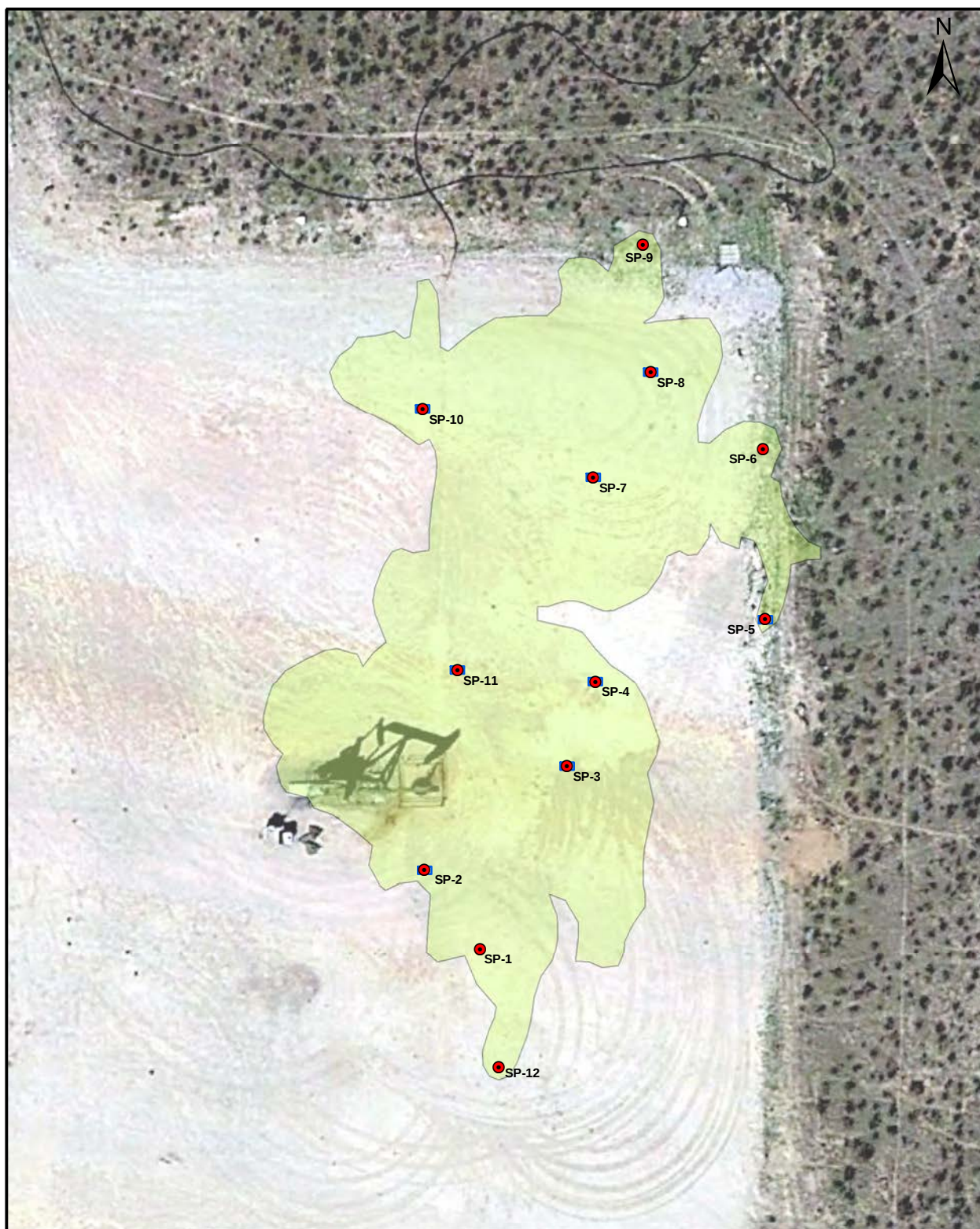
2,000 1,000 0 2,000
 Distance in Feet

Figure 1
Site Location Map
OXY USA, Inc.
Osage 18 Fee B Com 0001H
Eddy County, New Mexico
NMOCD Reference #: 2RP-4334



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

Drawn By: BJA	Checked By: CTR
August 29, 2017	Scale: 1" = 2,000'



Legend:

- Release
- Delineation Trench
- Sample Location

Figure 2
Sample Location Map
OXY USA, Inc.
Osage 18 Fee B Com 0001H
Eddy County, New Mexico
NMOCD Reference #: 2RP-4334



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

Drawn By: BJA	Checked By: CTR
November 22, 2017	Scale: 1" = 50'

Tables

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

OXY USA, INC.
OSAGE 18 FEE B COM 0001H
EDDY COUNTY, NEW MEXICO
NMOCD REF. #: 2RP-4334



SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	SOIL STATUS	METHOD: EPA SW 846-8021B, 5030							METHOD: 8015M				300.1
				BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL-BENZENE (mg/Kg)	M,P-XYLENES (mg/Kg)	O-XYLENE (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	NE	NE	50	NE	NE	NE	5,000	600
SP-1 @ 0.5'	0.5'	8/7/17	In-Situ	-	-	-	-	-	-	-	427	4,930	585	5,940	60.1
SP-1 @ 1'	1'	8/7/17	In-Situ	<0.0034	<0.0034	0.0062	0.0179	0.0306	0.0485	0.0547	18.4	224	21.3	264	49.5
SP-2 @ 0.5'	0.5'	8/7/17	In-Situ	-	-	-	-	-	-	-	981	11,600	1,470	14,100	1,050
SP-2 @ 1'	1'	8/7/17	In-Situ	<0.0100	0.0742	0.3520	0.5910	0.0658	0.6570	1.08	32	456.0	24	512	321
SP-2 @ 1.5'	1.5'	9/6/17	In-Situ	<0.0020	0.0073	0.155	0.198	0.100	0.298	0.460	737	8,860	1,130	10,700	869
SP-2 @ 4.5'	4.5'	9/6/17	In-Situ	<0.0020	<0.0020	<0.0020	<0.0040	<0.0020	<0.0020	<0.0020	<15.0	<15.0	<15.0	<15.0	217
SP-3 @ 0.5'	0.5'	8/7/17	In-Situ	0.0205	0.7330	3.71	5.79	0.5910	6.38	10.8	276	3,100	293	3,670	1,610
SP-3 @ 1'	1'	8/7/17	In-Situ	<0.0020	<0.0020	0.0043	0.0063	0.0092	0.0156	0.0199	<15.0	71.9	<15.0	71.9	2,010
SP-3 @ 1.5'	1.5'	9/6/17	In-Situ	<0.0020	<0.0020	0.0044	0.0074	0.0040	0.0114	0.0158	<15.0	<15.0	<15.0	<15.0	526
SP-3 @ 2.5'	2.5'	9/6/17	In-Situ	<0.0020	<0.0020	<0.0020	<0.0040	0.0078	0.0078	0.0078	<15.0	<15.0	<15.0	<15.0	163
SP-4 @ 0.5'	0.5'	8/7/17	In-Situ	<0.0020	0.0047	0.0153	0.0382	0.0203	0.0585	0.0785	<15.0	325	45.1	370	9,430
SP-4 @ 1'	1'	9/6/17	In-Situ	<0.0020	<0.0020	<0.0020	<0.0040	<0.0020	<0.0020	<0.0020	<15.0	<15.0	<15.0	<15.0	2,250
SP-4 @ 3'	3'	9/6/17	In-Situ	<0.0020	<0.0020	<0.0020	<0.0040	<0.0020	<0.0020	<0.0020	<14.9	<14.9	<14.9	<14.9	127
SP-5 @ 0.5'	0.5'	8/7/17	In-Situ	<0.0020	<0.0020	<0.0020	0.0072	0.0059	0.0131	0.0131	<14.9	63.9	<14.9	63.9	7,480
SP-5 @ 1'	1'	9/6/17	In-Situ	<0.0020	<0.0020	<0.0020	<0.0040	<0.0020	<0.0020	<0.0020	<15.0	<15.0	<15.0	<15.0	858
SP-5 @ 2.5'	2.5'	9/6/17	In-Situ	<0.0020	<0.0020	<0.0020	<0.0040	<0.0020	<0.0020	<0.0020	<15.0	<15.0	<15.0	<15.0	4,990
SP-5 @ 5.5'	5.5'	9/6/17	In-Situ	<0.0020	<0.0020	<0.0020	<0.0040	<0.0020	<0.0020	<0.0020	<15.0	<15.0	<15.0	<15.0	290
SP-6 @ 0.5'	0.5'	8/7/17	In-Situ	<0.0020	<0.0020	<0.0020	0.0065	0.0048	0.0113	0.0113	<15.0	127	<15.0	127	150
SP-7 @ 0.5'	0.5'	8/7/17	In-Situ	<0.0030	<0.0030	0.0051	0.0127	0.0126	0.0253	0.0304	<14.9	662	97.9	760	6,100
SP-7 @ 1'	1'	8/7/17	In-Situ	<0.0020	<0.0020	0.0038	<0.0040	0.0067	0.0067	0.0104	<15.0	67.8	<15.0	67.8	9,360
SP-7 @ 1.5'	1.5'	9/6/17	In-Situ	<0.0020	<0.0020	<0.0020	<0.0040	<0.0020	<0.0020	<0.0020	<15.0	<15.0	<15.0	<15.0	2,670
SP-7 @ 2.5'	2.5'	9/6/17	In-Situ	<0.0020	<0.0020	<0.0020	<0.0040	<0.0020	<0.0020	<0.0020	<15.0	<15.0	<15.0	<15.0	89.9
SP-8 @ 0.5'	0.5'	8/7/17	In-Situ	<0.0033	0.0040	0.0139	0.0345	0.0216	0.0561	0.0740	<15.0	888	113	1,000	7,010
SP-8 @ 1'	1'	8/7/17	In-Situ	<0.0020	0.0023	0.0046	0.0070	0.0083	0.0153	0.0222	<15.0	242	23.8	266	3,430
SP-8 @ 1.5'	1.5'	9/6/17	In-Situ	<0.0020	<0.0020	<0.0020	<0.0040	<0.0020	<0.0020	<0.0020	<14.9	<14.9	<14.9	<14.9	2,420
SP-8 @ 3'	3'	9/6/17	In-Situ	<0.0020	<0.0020	<0.0020	<0.0040	<0.0020	<0.0020	<0.0020	<15.0	<15.0	<15.0	<15.0	3,050
SP-8 @ 4'	4'	9/6/17	In-Situ	<0.0020	<0.0020	<0.0020	<0.0040	<0.0020	<0.0020	<0.0020	<15.0	<15.0	<15.0	<15.0	60.9
SP-9 @ 0.5'	0.5'	8/7/17	In-Situ	<0.0035	0.0049	0.0160	0.0407	0.0246	0.0653	0.0862	<15.0	860	112	972	83.4
SP-10 @ 0.5'	0.5'	8/7/17	In-Situ	<0.0020	<0.0020	0.0021	0.0070	0.0054	0.0124	0.0145	<15.0	<15.0	<15.0	<15.0	789
SP-10 @ 1'	1'	8/7/17	In-Situ	<0.0020	<0.0020	<0.0020	0.0069	0.0060	0.0129	0.0129	<15.0	<15.0	<15.0	<15.0	570
SP-10 @ 1.5'	1.5'	9/6/17	In-Situ	<0.0035	<0.0035	<0.0035	<0.0070	<0.0035	<0.0035	<0.0035	<15.0	<15.0	<15.0	<15.0	227
SP-10 @ 4'	4'	9/6/17	In-Situ	<0.0037	<0.0037	<0.0037	<0.0073	<0.0037	<0.0037	<0.0037	<15.0	<15.0	<15.0	<15.0	60.3

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

OXY USA, INC.
 OSAGE 18 FEE B COM 0001H
 EDDY COUNTY, NEW MEXICO
 NMOCD REF. #: 2RP-4334



SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	SOIL STATUS	METHOD: EPA SW 846-8021B, 5030							METHOD: 8015M				300.1
				BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL-BENZENE (mg/Kg)	M,P-XYLENES (mg/Kg)	O-XYLENE (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	NE	NE	50	NE	NE	NE	5,000	600
SP-11 @ 0.5'	0.5'	8/7/17	In-Situ	<0.0034	<0.0034	<0.0034	<0.0068	<0.0034	<0.0034	<0.0034	<15.0	518	94.2	612	3,660
SP-11 @ 1.5'	1.5'	9/6/17	In-Situ	<0.0020	<0.0020	<0.0020	<0.0040	<0.0020	<0.0020	<0.0020	<15.0	<15.0	<15.0	<15.0	102
SP-12 @ 0.5'	0.5'	8/7/17	In-Situ	<0.0020	0.0029	0.0068	0.0249	0.0162	0.0411	0.0508	<15.0	907	139	1,050	9.51

NE = Not established

- = Not analyzed

Concentrations in BOLD exceed NMOCD RRALs

**TABLE 2
CHLORIDE FIELD TESTS**

OXY USA, INC.
OSAGE 18 FEE COM 0001H
EDDY COUNTY, NEW MEXICO
NMOCD REF. #: 2RP-4334



SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	SOIL STATUS	HACH QUANTAB
				CHLORIDE (mg/Kg)
NMOCD Recommended Remediation Action Level (RRAL)				600
SP-2 @ 1.5'	1.5'	9/6/2017	In-Situ	776
SP-2 @ 2'	2'	9/6/2017	In-Situ	660
SP-2 @ 4'	4'	9/6/2017	In-Situ	288
SP-2 @ 4.5'	4.5'	9/6/2017	In-Situ	204
SP-3 @ 1.5'	1.5'	9/6/2017	In-Situ	512
SP-3 @ 2'	2'	9/6/2017	In-Situ	320
SP-3 @ 2.5'	2.5'	9/6/2017	In-Situ	176
SP-4 @ 1'	1'	9/6/2017	In-Situ	3,860
SP-4 @ 1.5'	1.5'	9/6/2017	In-Situ	2,552
SP-4 @ 2'	2'	9/6/2017	In-Situ	836
SP-4 @ 2.5'	2.5'	9/6/2017	In-Situ	320
SP-4 @ 3'	3'	9/6/2017	In-Situ	152
SP-5 @ 1'	1'	9/6/2017	In-Situ	1,052
SP-5 @ 1.5'	1.5'	9/6/2017	In-Situ	4,180
SP-5 @ 2'	2'	9/6/2017	In-Situ	4,180
SP-5 @ 2.5'	2.5'	9/6/2017	In-Situ	4,180
SP-5 @ 4'	4'	9/6/2017	In-Situ	4,180
SP-5 @ 5.5'	5.5'	9/6/2017	In-Situ	152
SP-7 @ 1.5'	1.5'	9/6/2017	In-Situ	6,224
SP-7 @ 2'	2'	9/6/2017	In-Situ	3,927
SP-7 @ 2.5'	2.5'	9/6/2017	In-Situ	152
SP-8 @ 1.5'	1.5'	9/6/2017	In-Situ	4,180
SP-8 @ 2'	2'	9/6/2017	In-Situ	3,024
SP-8 @ 2.5'	2.5'	9/6/2017	In-Situ	1,420
SP-8 @ 3'	3'	9/6/2017	In-Situ	3,860
SP-8 @ 3.5'	3.5'	9/6/2017	In-Situ	1,648
SP-8 @ 4'	4'	9/6/2017	In-Situ	<128
SP-10 @ 1.5'	1.5'	9/6/2017	In-Situ	356
SP-10 @ 2'	2'	9/6/2017	In-Situ	320
SP-10 @ 2.5'	2.5'	9/6/2017	In-Situ	260
SP-10 @ 3'	3'	9/6/2017	In-Situ	260
SP-10 @ 4'	4'	9/6/2017	In-Situ	<128
SP-11 @ 1.5'	1.5'	9/6/2017	In-Situ	128

Concentrations in BOLD exceed the NMOCD RRAL

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

NM OIL CONSERVATION

ARTESIA DISTRICT

Form C-141
Revised April 3, 2017

AUG 08 2017

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

RECEIVED

Release Notification and Corrective Action

NA131722628161

Name of Company OXY USA INC 1161916		OPERATOR	☒ Initial Report	☐ Final Report
Address PO BOX 4294; HOUSTON, TX 77210		Contact WADE DITTRICH		
Facility Name OSAGE 18 FEE B COM #1H		Telephone No. 575-390-2828		
		Facility Type WELL		
Surface Owner -STATE SEVEN RIVERS, INC.		Mineral Owner FEDERAL	API No. 30-015-40760	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
N	18	20S	25E	480	SOUTH	2160	WEST	EDDY

Latitude_ 32.567590 _ Longitude_ -104.5258 _ NAD83

NATURE OF RELEASE

Type of Release OIL & PRODUCED WATER	Volume of Release 3 bbls OIL & 21 bbls PRODUCED WATER	Volume Recovered 0 bbls
Source of Release STUFFING BOX PACKING FAILURE	Date and Hour of Occurrence 7-31-2017	Date and Hour of Discovery
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? CRYSTAL WEAVER-NMOCD; MIKE BRATCHER-NMOCD; SHELLEY TUCKER-BLM	
By Whom? WADE DITTRICH	Date and Hour 08/03/2017 @ 11:25 AM * 7/31/17 @ 2:28pm	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. 2-mail	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

Spill caused by a stuffing box packing failure. Leak has been corrected.

Describe Area Affected and Cleanup Action Taken.*

The affected area of the spill is 75x150 FT, Leak has left location (measurements are subject to change with GPS tracking). Remediation will be completed in accordance with a remediation plan approved by the NMOCD and the BLM.

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: Wade Dittrich	OIL CONSERVATION DIVISION	
Printed Name: WADE DITTRICH	Signed By Mike Bratcher	
Title: ENVIROMENTAL COORDINATOR	Approved by Environmental Specialist:	
E-mail Address: wade.dittrich@oxy.com	Approval Date: 8/10/17	Expiration Date: N/A
Date:	Conditions of Approval: See attached	Attached: JRP 4334
Phone: 575-390-2828		

* Attach Additional Sheets If Necessary

011017 AB

Appendix B

Depth-to-Groundwater Data



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

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

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

No records found.

UTMNAD83 Radius Search (in meters):

Easting (X): 544512.82

Northing (Y): 3603450.74

Radius: 1610

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

9/14/17 9:52 AM

WATER COLUMN/ AVERAGE
DEPTH TO WATER



Figure 3
Depth-to-Groundwater Trend Map
 OXY USA, Inc.
 Osage 18 Fee B Com 0001H
 Eddy County, New Mexico
 NMOCD Reference #: 2RP-4334



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

Drawn By: BJA	Checked By: CTR
November 17, 2017	Not To Scale

Appendix C

Photographs



Osage 18 Fee B Com 0001H - Release (Looking North)



Osage 18 Fee B Com 0001H - Release (Looking North-Northeast)



Osage 18 Fee B Com 0001H – Release (Looking North-Northeast)



Osage 18 Fee B Com 0001H – Release (Looking Northeast)



Osage 18 Fee B Com 0001H – Release (Looking Northwest)



Osage 18 Fee B Com 0001H – Release (Looking West)



Osage 18 Fee B Com 0001H – Release (Looking South)



Osage 18 Fee B Com 0001H – Release (Looking West)



Osage 18 Fee B Com 0001H – Release (Looking East)



Osage 18 Fee B Com 0001H – Release (Looking East)



Osage 18 Fee B Com 0001H – Release (Looking Southeast)



Osage 18 Fee B Com 0001H – Release (Looking East-Southeast)



Osage 18 Fee B Com 0001H – Release (Looking East-Northeast)



Osage 18 Fee B Com 0001H – Release (Looking East)



Osage 18 Fee B Com 0001H – Release (Looking Southeast)

Appendix D

Laboratory Analytical Reports



Certificate of Analysis Summary 559992

Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Project Name: Osage 18 Fee B com 0001H



Project Id:

Contact: Ben Arguijo

Project Location: Hobbs

Date Received in Lab: Thu Aug-10-17 04:19 pm

Report Date: 22-AUG-17

Project Manager: Holly Taylor

Analysis Requested	Lab Id:	559992-001	559992-002	559992-003	559992-004	559992-005	559992-006
	Field Id:	SP-1 @ 0.5	SP-1 @ 1'	SP-2 @0.5'	SP-2 @ 1'	SP-3 @ 0.5'	SP-3 @ 1'
	Depth:						
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Aug-07-17 09:38	Aug-07-17 09:40	Aug-07-17 10:00	Aug-07-17 10:08	Aug-07-17 10:16	Aug-07-17 10:17
BTEX by EPA 8021B	Extracted:		Aug-21-17 08:00		Aug-18-17 16:40	Aug-18-17 16:40	Aug-15-17 08:45
	Analyzed:		Aug-21-17 12:44		Aug-19-17 05:16	Aug-19-17 04:58	Aug-18-17 15:27
	Units/RL:		mg/kg RL		mg/kg RL	mg/kg RL	mg/kg RL
	Benzene		<0.00336 0.00336		<0.00998 0.00998	0.0205 0.0201	<0.00200 0.00200
	Toluene		<0.00336 0.00336		0.0742 0.00998	0.733 0.0201	<0.00200 0.00200
Ethylbenzene			0.00621 0.00336		0.352 0.00998	3.71 0.0201	0.00430 0.00200
m,p-Xylenes			0.0179 0.00671		0.591 0.0200	5.79 0.0402	0.00632 0.00400
o-Xylene			0.0306 0.00336		0.0658 0.00998	0.591 0.0201	0.00923 0.00200
Total Xylenes			0.0485 0.00336		0.657 0.00998	6.38 0.0201	0.0156 0.00200
Total BTEX			0.0547 0.00336		1.08 0.00998	10.8 0.0201	0.0199 0.00200
Chloride by EPA 300	Extracted:	Aug-17-17 10:30	Aug-17-17 10:30	Aug-17-17 10:30	Aug-17-17 10:30	Aug-17-17 10:30	Aug-17-17 10:30
	Analyzed:	Aug-17-17 16:02	Aug-17-17 14:22	Aug-17-17 14:29	Aug-17-17 14:37	Aug-17-17 14:45	Aug-17-17 14:53
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
	Chloride	60.1 4.97	49.5 4.92	1050 24.8	321 4.94	1610 24.5	2010 24.6
TPH By SW8015 Mod	Extracted:	Aug-11-17 18:00	Aug-11-17 18:00	Aug-11-17 18:00	Aug-11-17 18:00	Aug-11-17 18:00	Aug-11-17 18:00
	Analyzed:	Aug-14-17 09:22	Aug-14-17 09:22	Aug-14-17 09:22	Aug-14-17 09:22	Aug-14-17 09:22	Aug-14-17 09:22
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
	Gasoline Range Hydrocarbons (GRO)	427 74.8	18.4 15.0	981 74.8	32.1 15.0	276 74.9	<15.0 15.0
	Diesel Range Organics (DRO)	4930 74.8	224 15.0	11600 74.8	456 15.0	3100 74.9	71.9 15.0
Oil Range Hydrocarbons (ORO)		585 74.8	21.3 15.0	1470 74.8	24.3 15.0	293 74.9	<15.0 15.0
Total TPH		5940 74.8	264 15.0	14100 74.8	512 15.0	3670 74.9	71.9 15.0

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Holly Taylor
Project Manager



Certificate of Analysis Summary 559992

Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Project Name: Osage 18 Fee B com 0001H



Project Id:

Contact: Ben Arguijo

Project Location: Hobbs

Date Received in Lab: Thu Aug-10-17 04:19 pm

Report Date: 22-AUG-17

Project Manager: Holly Taylor

Analysis Requested	Lab Id:	559992-007	559992-008	559992-009	559992-010	559992-011	559992-012
	Field Id:	SP-4 @0.5'	SP-S @0.5'	SP-6 @0.5'	SP-7 @0.5'	SP-7 @ 1'	SP-8 @0.5'
	Depth:						
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Aug-07-17 10:23	Aug-07-17 10:35	Aug-07-17 10:49	Aug-07-17 11:01	Aug-07-17 11:02	Aug-07-17 11:20
BTEX by EPA 8021B	Extracted:	Aug-15-17 08:45	Aug-15-17 08:45	Aug-15-17 08:45	Aug-21-17 08:00	Aug-15-17 08:45	Aug-21-17 08:00
	Analyzed:	Aug-18-17 15:27	Aug-18-17 15:27	Aug-18-17 15:27	Aug-21-17 10:32	Aug-18-17 15:27	Aug-21-17 10:51
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00330 0.00330	<0.00200 0.00200	<0.00328 0.00328
Toluene		0.00473 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00330 0.00330	<0.00200 0.00200	0.00402 0.00328
Ethylbenzene		0.0153 0.00200	<0.00200 0.00200	<0.00200 0.00200	0.00507 0.00330	0.00378 0.00200	0.0139 0.00328
m,p-Xylenes		0.0382 0.00400	0.00718 0.00400	0.00651 0.00400	0.0127 0.00660	<0.00400 0.00400	0.0345 0.00656
o-Xylene		0.0203 0.00200	0.00589 0.00200	0.00481 0.00200	0.0126 0.00330	0.00665 0.00200	0.0216 0.00328
Total Xylenes		0.0585 0.00200	0.0131 0.00200	0.0113 0.00200	0.0253 0.00330	0.00665 0.00200	0.0561 0.00328
Total BTEX		0.0785 0.00200	0.0131 0.00200	0.0113 0.00200	0.0304 0.00330	0.0104 0.00200	0.0740 0.00328
Chloride by EPA 300	Extracted:	Aug-17-17 10:30	Aug-17-17 12:00	Aug-17-17 12:00	Aug-17-17 12:00	Aug-17-17 12:00	Aug-17-17 12:00
	Analyzed:	Aug-17-17 15:00	Aug-17-17 17:42	Aug-17-17 17:18	Aug-17-17 17:49	Aug-17-17 17:57	Aug-17-17 18:05
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		9430 98.8	7480 49.3	150 4.90	6100 49.4	9360 49.6	7010 49.2
TPH By SW8015 Mod	Extracted:	Aug-11-17 18:00	Aug-11-17 18:00	Aug-11-17 18:00	Aug-11-17 18:00	Aug-11-17 18:00	Aug-11-17 18:00
	Analyzed:	Aug-12-17 01:20	Aug-12-17 01:42	Aug-12-17 02:03	Aug-12-17 02:24	Aug-12-17 03:26	Aug-12-17 03:47
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<15.0 15.0	<14.9 14.9	<15.0 15.0	<14.9 14.9	<15.0 15.0	<15.0 15.0
Diesel Range Organics (DRO)		325 15.0	63.9 14.9	127 15.0	662 14.9	67.8 15.0	888 15.0
Oil Range Hydrocarbons (ORO)		45.1 15.0	<14.9 14.9	<15.0 15.0	97.9 14.9	<15.0 15.0	113 15.0
Total TPH		370 15.0	63.9 14.9	127 15.0	760 14.9	67.8 15.0	1000 15.0

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Holly Taylor
Project Manager



Certificate of Analysis Summary 559992

Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Project Name: Osage 18 Fee B com 0001H



Project Id:

Contact: Ben Arguijo

Project Location: Hobbs

Date Received in Lab: Thu Aug-10-17 04:19 pm

Report Date: 22-AUG-17

Project Manager: Holly Taylor

Analysis Requested	Lab Id:	559992-013	559992-014	559992-015	559992-016	559992-017	559992-018
	Field Id:	SP-8 @1'	SP-9 @ 0.5	SP-10 @ 0.5'	SP-10 @ 1'	SP-11 @0.5'	SP-12 @ 0.5'
	Depth:						
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Aug-07-17 11:22	Aug-07-17 11:25	Aug-07-17 11:31	Aug-07-17 11:32	Aug-07-17 11:40	Aug-07-17 11:53
BTEX by EPA 8021B	Extracted:	Aug-15-17 08:45	Aug-21-17 08:00	Aug-15-17 08:45	Aug-15-17 08:45	Aug-21-17 08:00	Aug-15-17 08:45
	Analyzed:	Aug-18-17 15:27	Aug-21-17 11:10	Aug-18-17 15:27	Aug-18-17 15:27	Aug-21-17 11:29	Aug-18-17 15:27
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00346 0.00346	<0.00200 0.00200	<0.00200 0.00200	<0.00341 0.00341	<0.00200 0.00200
Toluene		0.00229 0.00200	0.00488 0.00346	<0.00200 0.00200	<0.00200 0.00200	<0.00341 0.00341	0.00293 0.00200
Ethylbenzene		0.00460 0.00200	0.0160 0.00346	0.00208 0.00200	<0.00200 0.00200	<0.00341 0.00341	0.00680 0.00200
m,p-Xylenes		0.00702 0.00400	0.0407 0.00692	0.00703 0.00400	0.00692 0.00400	<0.00683 0.00683	0.0249 0.00400
o-Xylene		0.00832 0.00200	0.0246 0.00346	0.00540 0.00200	0.00601 0.00200	<0.00341 0.00341	0.0162 0.00200
Total Xylenes		0.0153 0.00200	0.0653 0.00346	0.0124 0.00200	0.0129 0.00200	<0.00341 0.00341	0.0411 0.00200
Total BTEX		0.0222 0.00200	0.0862 0.00346	0.0145 0.00200	0.0129 0.00200	<0.00341 0.00341	0.0508 0.00200
Chloride by EPA 300	Extracted:	Aug-17-17 12:00	Aug-17-17 12:00	Aug-17-17 12:00	Aug-17-17 12:00	Aug-17-17 12:00	Aug-17-17 12:00
	Analyzed:	Aug-17-17 18:28	Aug-17-17 18:35	Aug-17-17 18:43	Aug-17-17 18:51	Aug-17-17 18:58	Aug-17-17 19:06
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		3430 24.7	83.4 4.98	789 4.98	570 4.99	3660 25.0	9.51 4.94
TPH By SW8015 Mod	Extracted:	Aug-11-17 18:00	Aug-11-17 18:00	Aug-11-17 18:00	Aug-11-17 18:00	Aug-11-17 18:00	Aug-11-17 18:00
	Analyzed:	Aug-12-17 04:09	Aug-12-17 04:30	Aug-12-17 04:51	Aug-12-17 05:12	Aug-12-17 05:33	Aug-12-17 05:54
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0
Diesel Range Organics (DRO)		242 15.0	860 15.0	<15.0 15.0	<15.0 15.0	518 15.0	907 15.0
Oil Range Hydrocarbons (ORO)		23.8 15.0	112 15.0	<15.0 15.0	<15.0 15.0	94.2 15.0	139 15.0
Total TPH		266 15.0	972 15.0	<15.0 15.0	<15.0 15.0	612 15.0	1050 15.0

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Holly Taylor
Project Manager

Analytical Report 559992
for
Trinity Oilfield Services & Rentals, LLC

Project Manager: Ben Arguijo

Osage 18 Fee B com 0001H

22-AUG-17

Collected By: Client



1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215), Arizona (AZ0765), Florida (E871002), Louisiana (03054)
Oklahoma (9218)

Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400)
Xenco-San Antonio: Texas (T104704534)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)



22-AUG-17

Project Manager: **Ben Arguijo**
Trinity Oilfield Services & Rentals, LLC
PO BOX 2587
Hobbs, NM 88241

Reference: XENCO Report No(s): **559992**
Osage 18 Fee B com 0001H
Project Address: Hobbs

Ben Arguijo:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 559992. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 559992 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Holly Taylor
Project Manager

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Sample Cross Reference 559992



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B com 0001H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SP-1 @ 0.5	S	08-07-17 09:38		559992-001
SP-1 @ 1'	S	08-07-17 09:40		559992-002
SP-2 @0.5'	S	08-07-17 10:00		559992-003
SP-2 @ 1'	S	08-07-17 10:08		559992-004
SP-3 @ 0.5'	S	08-07-17 10:16		559992-005
SP-3 @ 1'	S	08-07-17 10:17		559992-006
SP-4 @0.5'	S	08-07-17 10:23		559992-007
SP-S @0.5'	S	08-07-17 10:35		559992-008
SP-6 @0.5'	S	08-07-17 10:49		559992-009
SP-7 @0.5'	S	08-07-17 11:01		559992-010
SP-7 @ 1'	S	08-07-17 11:02		559992-011
SP-8 @0.5'	S	08-07-17 11:20		559992-012
SP-8 @1'	S	08-07-17 11:22		559992-013
SP-9 @ 0.5	S	08-07-17 11:25		559992-014
SP-10 @ 0.5'	S	08-07-17 11:31		559992-015
SP-10 @ 1'	S	08-07-17 11:32		559992-016
SP-11 @0.5'	S	08-07-17 11:40		559992-017
SP-12 @ 0.5'	S	08-07-17 11:53		559992-018



CASE NARRATIVE

Client Name: *Trinity Oilfield Services & Rentals, LLC*

Project Name: *Osage 18 Fee B com 0001H*

Project ID:
Work Order Number(s): 559992

Report Date: 22-AUG-17
Date Received: 08/10/2017

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3025288 Chloride by EPA 300

Lab Sample ID 559992-018 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered above QC limits in the Matrix Spike. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 559992-008, -009, -010, -011, -012, -013, -014, -015, -016, -017, -018. The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3025365 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3025509 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3025625 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.



Certificate of Analytical Results 559992



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B com 0001H

Sample Id: **SP-1 @ 0.5**

Matrix: Soil

Date Received: 08.10.17 16.19

Lab Sample Id: 559992-001

Date Collected: 08.07.17 09.38

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MGO

% Moisture:

Analyst: MGO

Date Prep: 08.17.17 10.30

Basis: Wet Weight

Seq Number: 3025280

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	60.1	4.97	mg/kg	08.17.17 16.02		1

Analytical Method: TPH By SW8015 Mod

Prep Method: TX1005P

Tech: ARM

% Moisture:

Analyst: ARM

Date Prep: 08.11.17 18.00

Basis: Wet Weight

Seq Number: 3024776

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	427	74.8	mg/kg	08.14.17 09.22		5
Diesel Range Organics (DRO)	C10C28DRO	4930	74.8	mg/kg	08.14.17 09.22		5
Oil Range Hydrocarbons (ORO)	PHCG2835	585	74.8	mg/kg	08.14.17 09.22		5
Total TPH	PHC635	5940	74.8	mg/kg	08.14.17 09.22		5
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	106	%	70-135	08.14.17 09.22		
o-Terphenyl	84-15-1	84	%	70-135	08.14.17 09.22		



Certificate of Analytical Results 559992



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B com 0001H

Sample Id: **SP-1 @ 1'**
Lab Sample Id: 559992-002

Matrix: Soil
Date Collected: 08.07.17 09.40

Date Received: 08.10.17 16.19

Analytical Method: Chloride by EPA 300
Tech: MGO
Analyst: MGO
Seq Number: 3025280

Prep Method: E300P
% Moisture:
Date Prep: 08.17.17 10.30
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	49.5	4.92	mg/kg	08.17.17 14.22		1

Analytical Method: TPH By SW8015 Mod
Tech: ARM
Analyst: ARM
Seq Number: 3024776

Prep Method: TX1005P
% Moisture:
Date Prep: 08.11.17 18.00
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	18.4	15.0	mg/kg	08.14.17 09.22		1
Diesel Range Organics (DRO)	C10C28DRO	224	15.0	mg/kg	08.14.17 09.22		1
Oil Range Hydrocarbons (ORO)	PHCG2835	21.3	15.0	mg/kg	08.14.17 09.22		1
Total TPH	PHC635	264	15.0	mg/kg	08.14.17 09.22		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	108	%	70-135	08.14.17 09.22		
o-Terphenyl	84-15-1	110	%	70-135	08.14.17 09.22		



Certificate of Analytical Results 559992



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B com 0001H

Sample Id: **SP-1 @ 1'**

Matrix: Soil

Date Received: 08.10.17 16.19

Lab Sample Id: 559992-002

Date Collected: 08.07.17 09.40

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 08.21.17 08.00

Basis: Wet Weight

Seq Number: 3025625

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00336	0.00336	mg/kg	08.21.17 12.44	U	1
Toluene	108-88-3	<0.00336	0.00336	mg/kg	08.21.17 12.44	U	1
Ethylbenzene	100-41-4	0.00621	0.00336	mg/kg	08.21.17 12.44		1
m,p-Xylenes	179601-23-1	0.0179	0.00671	mg/kg	08.21.17 12.44		1
o-Xylene	95-47-6	0.0306	0.00336	mg/kg	08.21.17 12.44		1
Total Xylenes	1330-20-7	0.0485	0.00336	mg/kg	08.21.17 12.44		1
Total BTEX		0.0547	0.00336	mg/kg	08.21.17 12.44		1
Surrogate	Cas Number	% Recovery		Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	94		%	80-120	08.21.17 12.44	
1,4-Difluorobenzene	540-36-3	92		%	80-120	08.21.17 12.44	



Certificate of Analytical Results 559992



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B com 0001H

Sample Id: **SP-2 @0.5'**

Matrix: Soil

Date Received: 08.10.17 16.19

Lab Sample Id: 559992-003

Date Collected: 08.07.17 10.00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MGO

% Moisture:

Analyst: MGO

Date Prep: 08.17.17 10.30

Basis: Wet Weight

Seq Number: 3025280

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1050	24.8	mg/kg	08.17.17 14.29		5

Analytical Method: TPH By SW8015 Mod

Prep Method: TX1005P

Tech: ARM

% Moisture:

Analyst: ARM

Date Prep: 08.11.17 18.00

Basis: Wet Weight

Seq Number: 3024776

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	981	74.8	mg/kg	08.14.17 09.22		5
Diesel Range Organics (DRO)	C10C28DRO	11600	74.8	mg/kg	08.14.17 09.22		5
Oil Range Hydrocarbons (ORO)	PHCG2835	1470	74.8	mg/kg	08.14.17 09.22		5
Total TPH	PHC635	14100	74.8	mg/kg	08.14.17 09.22		5
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	100	%	70-135	08.14.17 09.22		
o-Terphenyl	84-15-1	104	%	70-135	08.14.17 09.22		



Certificate of Analytical Results 559992



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B com 0001H

Sample Id: **SP-2 @ 1'**
Lab Sample Id: 559992-004

Matrix: Soil
Date Collected: 08.07.17 10.08

Date Received: 08.10.17 16.19

Analytical Method: Chloride by EPA 300
Tech: MGO
Analyst: MGO
Seq Number: 3025280

Prep Method: E300P
% Moisture:
Basis: Wet Weight
Date Prep: 08.17.17 10.30

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	321	4.94	mg/kg	08.17.17 14.37		1

Analytical Method: TPH By SW8015 Mod
Tech: ARM
Analyst: ARM
Seq Number: 3024776

Prep Method: TX1005P
% Moisture:
Basis: Wet Weight
Date Prep: 08.11.17 18.00

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	32.1	15.0	mg/kg	08.14.17 09.22		1
Diesel Range Organics (DRO)	C10C28DRO	456	15.0	mg/kg	08.14.17 09.22		1
Oil Range Hydrocarbons (ORO)	PHCG2835	24.3	15.0	mg/kg	08.14.17 09.22		1
Total TPH	PHC635	512	15.0	mg/kg	08.14.17 09.22		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	102	%	70-135	08.14.17 09.22		
o-Terphenyl	84-15-1	106	%	70-135	08.14.17 09.22		



Certificate of Analytical Results 559992



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B com 0001H

Sample Id: **SP-2 @ 1'**

Matrix: Soil

Date Received: 08.10.17 16.19

Lab Sample Id: 559992-004

Date Collected: 08.07.17 10.08

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 08.18.17 16.40

Basis: Wet Weight

Seq Number: 3025509

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00998	0.00998	mg/kg	08.19.17 05.16	U	5
Toluene	108-88-3	0.0742	0.00998	mg/kg	08.19.17 05.16		5
Ethylbenzene	100-41-4	0.352	0.00998	mg/kg	08.19.17 05.16		5
m,p-Xylenes	179601-23-1	0.591	0.0200	mg/kg	08.19.17 05.16		5
o-Xylene	95-47-6	0.0658	0.00998	mg/kg	08.19.17 05.16		5
Total Xylenes	1330-20-7	0.657	0.00998	mg/kg	08.19.17 05.16		5
Total BTEX		1.08	0.00998	mg/kg	08.19.17 05.16		5
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	96	%	80-120	08.19.17 05.16		
1,4-Difluorobenzene	540-36-3	86	%	80-120	08.19.17 05.16		



Certificate of Analytical Results 559992



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B com 0001H

Sample Id: **SP-3 @ 0.5'**

Matrix: Soil

Date Received: 08.10.17 16.19

Lab Sample Id: 559992-005

Date Collected: 08.07.17 10.16

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MGO

% Moisture:

Analyst: MGO

Date Prep: 08.17.17 10.30

Basis: Wet Weight

Seq Number: 3025280

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1610	24.5	mg/kg	08.17.17 14.45		5

Analytical Method: TPH By SW8015 Mod

Prep Method: TX1005P

Tech: ARM

% Moisture:

Analyst: ARM

Date Prep: 08.11.17 18.00

Basis: Wet Weight

Seq Number: 3024776

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	276	74.9	mg/kg	08.14.17 09.22		5
Diesel Range Organics (DRO)	C10C28DRO	3100	74.9	mg/kg	08.14.17 09.22		5
Oil Range Hydrocarbons (ORO)	PHCG2835	293	74.9	mg/kg	08.14.17 09.22		5
Total TPH	PHC635	3670	74.9	mg/kg	08.14.17 09.22		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	08.14.17 09.22	
o-Terphenyl	84-15-1	95	%	70-135	08.14.17 09.22	



Certificate of Analytical Results 559992



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B com 0001H

Sample Id: **SP-3 @ 0.5'**

Matrix: Soil

Date Received: 08.10.17 16.19

Lab Sample Id: 559992-005

Date Collected: 08.07.17 10.16

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 08.18.17 16.40

Basis: Wet Weight

Seq Number: 3025509

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.0205	0.0201	mg/kg	08.19.17 04.58		10
Toluene	108-88-3	0.733	0.0201	mg/kg	08.19.17 04.58		10
Ethylbenzene	100-41-4	3.71	0.0201	mg/kg	08.19.17 04.58		10
m,p-Xylenes	179601-23-1	5.79	0.0402	mg/kg	08.19.17 04.58		10
o-Xylene	95-47-6	0.591	0.0201	mg/kg	08.19.17 04.58		10
Total Xylenes	1330-20-7	6.38	0.0201	mg/kg	08.19.17 04.58		10
Total BTEX		10.8	0.0201	mg/kg	08.19.17 04.58		10
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	89	%	80-120	08.19.17 04.58		
1,4-Difluorobenzene	540-36-3	86	%	80-120	08.19.17 04.58		



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Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B com 0001H

Sample Id: **SP-3 @ 1'**
Lab Sample Id: 559992-006

Matrix: Soil
Date Collected: 08.07.17 10.17

Date Received: 08.10.17 16.19

Analytical Method: Chloride by EPA 300
Tech: MGO
Analyst: MGO
Seq Number: 3025280

Prep Method: E300P
% Moisture:
Date Prep: 08.17.17 10.30
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2010	24.6	mg/kg	08.17.17 14.53		5

Analytical Method: TPH By SW8015 Mod
Tech: ARM
Analyst: ARM
Seq Number: 3024776

Prep Method: TX1005P
% Moisture:
Date Prep: 08.11.17 18.00
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.14.17 09.22	U	1
Diesel Range Organics (DRO)	C10C28DRO	71.9	15.0	mg/kg	08.14.17 09.22		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.14.17 09.22	U	1
Total TPH	PHC635	71.9	15.0	mg/kg	08.14.17 09.22		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	105	%	70-135	08.14.17 09.22		
o-Terphenyl	84-15-1	104	%	70-135	08.14.17 09.22		



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Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B com 0001H

Sample Id: **SP-3 @ 1'**

Matrix: Soil

Date Received: 08.10.17 16.19

Lab Sample Id: 559992-006

Date Collected: 08.07.17 10.17

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 08.15.17 08.45

Basis: Wet Weight

Seq Number: 3025365

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.18.17 15.27	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.18.17 15.27	U	1
Ethylbenzene	100-41-4	0.00430	0.00200	mg/kg	08.18.17 15.27		1
m,p-Xylenes	179601-23-1	0.00632	0.00400	mg/kg	08.18.17 15.27		1
o-Xylene	95-47-6	0.00923	0.00200	mg/kg	08.18.17 15.27		1
Total Xylenes	1330-20-7	0.0156	0.00200	mg/kg	08.18.17 15.27		1
Total BTEX		0.0199	0.00200	mg/kg	08.18.17 15.27		1
Surrogate	Cas Number	% Recovery		Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	90		%	80-120	08.18.17 15.27	
4-Bromofluorobenzene	460-00-4	107		%	80-120	08.18.17 15.27	



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Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B com 0001H

Sample Id: **SP-4 @0.5'**

Matrix: Soil

Date Received: 08.10.17 16.19

Lab Sample Id: 559992-007

Date Collected: 08.07.17 10.23

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MGO

% Moisture:

Analyst: MGO

Date Prep: 08.17.17 10.30

Basis: Wet Weight

Seq Number: 3025280

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	9430	98.8	mg/kg	08.17.17 15.00		20

Analytical Method: TPH By SW8015 Mod

Prep Method: TX1005P

Tech: ARM

% Moisture:

Analyst: ARM

Date Prep: 08.11.17 18.00

Basis: Wet Weight

Seq Number: 3024776

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.12.17 01.20	U	1
Diesel Range Organics (DRO)	C10C28DRO	325	15.0	mg/kg	08.12.17 01.20		1
Oil Range Hydrocarbons (ORO)	PHCG2835	45.1	15.0	mg/kg	08.12.17 01.20		1
Total TPH	PHC635	370	15.0	mg/kg	08.12.17 01.20		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	102	%	70-135	08.12.17 01.20		
o-Terphenyl	84-15-1	104	%	70-135	08.12.17 01.20		



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Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B com 0001H

Sample Id: **SP-4 @0.5'**

Matrix: Soil

Date Received: 08.10.17 16.19

Lab Sample Id: 559992-007

Date Collected: 08.07.17 10.23

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 08.15.17 08.45

Basis: Wet Weight

Seq Number: 3025365

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.18.17 15.27	U	1
Toluene	108-88-3	0.00473	0.00200	mg/kg	08.18.17 15.27		1
Ethylbenzene	100-41-4	0.0153	0.00200	mg/kg	08.18.17 15.27		1
m,p-Xylenes	179601-23-1	0.0382	0.00400	mg/kg	08.18.17 15.27		1
o-Xylene	95-47-6	0.0203	0.00200	mg/kg	08.18.17 15.27		1
Total Xylenes	1330-20-7	0.0585	0.00200	mg/kg	08.18.17 15.27		1
Total BTEX		0.0785	0.00200	mg/kg	08.18.17 15.27		1
Surrogate	Cas Number	% Recovery		Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	92		%	80-120	08.18.17 15.27	
4-Bromofluorobenzene	460-00-4	97		%	80-120	08.18.17 15.27	



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Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B com 0001H

Sample Id: SP-S @0.5'

Matrix: Soil

Date Received: 08.10.17 16.19

Lab Sample Id: 559992-008

Date Collected: 08.07.17 10.35

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MGO

% Moisture:

Analyst: MGO

Date Prep: 08.17.17 12.00

Basis: Wet Weight

Seq Number: 3025288

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7480	49.3	mg/kg	08.17.17 17.42		10

Analytical Method: TPH By SW8015 Mod

Prep Method: TX1005P

Tech: ARM

% Moisture:

Analyst: ARM

Date Prep: 08.11.17 18.00

Basis: Wet Weight

Seq Number: 3024776

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	08.12.17 01.42	U	1
Diesel Range Organics (DRO)	C10C28DRO	63.9	14.9	mg/kg	08.12.17 01.42		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<14.9	14.9	mg/kg	08.12.17 01.42	U	1
Total TPH	PHC635	63.9	14.9	mg/kg	08.12.17 01.42		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	101	%	70-135	08.12.17 01.42		
o-Terphenyl	84-15-1	99	%	70-135	08.12.17 01.42		



Certificate of Analytical Results 559992



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B com 0001H

Sample Id: SP-S @0.5'

Matrix: Soil

Date Received: 08.10.17 16.19

Lab Sample Id: 559992-008

Date Collected: 08.07.17 10.35

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 08.15.17 08.45

Basis: Wet Weight

Seq Number: 3025365

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.18.17 15.27	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.18.17 15.27	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.18.17 15.27	U	1
m,p-Xylenes	179601-23-1	0.00718	0.00400	mg/kg	08.18.17 15.27		1
o-Xylene	95-47-6	0.00589	0.00200	mg/kg	08.18.17 15.27		1
Total Xylenes	1330-20-7	0.0131	0.00200	mg/kg	08.18.17 15.27		1
Total BTEX		0.0131	0.00200	mg/kg	08.18.17 15.27		1
Surrogate	Cas Number	% Recovery		Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99		%	80-120	08.18.17 15.27	
4-Bromofluorobenzene	460-00-4	105		%	80-120	08.18.17 15.27	



Certificate of Analytical Results 559992



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B com 0001H

Sample Id: **SP-6 @0.5'**

Matrix: Soil

Date Received: 08.10.17 16.19

Lab Sample Id: 559992-009

Date Collected: 08.07.17 10.49

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MGO

% Moisture:

Analyst: MGO

Date Prep: 08.17.17 12.00

Basis: Wet Weight

Seq Number: 3025288

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	150	4.90	mg/kg	08.17.17 17.18		1

Analytical Method: TPH By SW8015 Mod

Prep Method: TX1005P

Tech: ARM

% Moisture:

Analyst: ARM

Date Prep: 08.11.17 18.00

Basis: Wet Weight

Seq Number: 3024776

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.12.17 02.03	U	1
Diesel Range Organics (DRO)	C10C28DRO	127	15.0	mg/kg	08.12.17 02.03		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.12.17 02.03	U	1
Total TPH	PHC635	127	15.0	mg/kg	08.12.17 02.03		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	08.12.17 02.03	
o-Terphenyl	84-15-1	104	%	70-135	08.12.17 02.03	



Certificate of Analytical Results 559992



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B com 0001H

Sample Id: **SP-6 @0.5'**

Matrix: Soil

Date Received: 08.10.17 16.19

Lab Sample Id: 559992-009

Date Collected: 08.07.17 10.49

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 08.15.17 08.45

Basis: Wet Weight

Seq Number: 3025365

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.18.17 15.27	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.18.17 15.27	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.18.17 15.27	U	1
m,p-Xylenes	179601-23-1	0.00651	0.00400	mg/kg	08.18.17 15.27		1
o-Xylene	95-47-6	0.00481	0.00200	mg/kg	08.18.17 15.27		1
Total Xylenes	1330-20-7	0.0113	0.00200	mg/kg	08.18.17 15.27		1
Total BTEX		0.0113	0.00200	mg/kg	08.18.17 15.27		1
Surrogate	Cas Number	% Recovery		Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105		%	80-120	08.18.17 15.27	
1,4-Difluorobenzene	540-36-3	95		%	80-120	08.18.17 15.27	



Certificate of Analytical Results 559992



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B com 0001H

Sample Id: **SP-7 @0.5'**

Matrix: Soil

Date Received: 08.10.17 16.19

Lab Sample Id: 559992-010

Date Collected: 08.07.17 11.01

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MGO

% Moisture:

Analyst: MGO

Date Prep: 08.17.17 12.00

Basis: Wet Weight

Seq Number: 3025288

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6100	49.4	mg/kg	08.17.17 17.49		10

Analytical Method: TPH By SW8015 Mod

Prep Method: TX1005P

Tech: ARM

% Moisture:

Analyst: ARM

Date Prep: 08.11.17 18.00

Basis: Wet Weight

Seq Number: 3024776

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	08.12.17 02.24	U	1
Diesel Range Organics (DRO)	C10C28DRO	662	14.9	mg/kg	08.12.17 02.24		1
Oil Range Hydrocarbons (ORO)	PHCG2835	97.9	14.9	mg/kg	08.12.17 02.24		1
Total TPH	PHC635	760	14.9	mg/kg	08.12.17 02.24		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	102	%	70-135	08.12.17 02.24		
o-Terphenyl	84-15-1	110	%	70-135	08.12.17 02.24		



Certificate of Analytical Results 559992



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B com 0001H

Sample Id: **SP-7 @0.5'**

Matrix: Soil

Date Received: 08.10.17 16.19

Lab Sample Id: 559992-010

Date Collected: 08.07.17 11.01

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 08.21.17 08.00

Basis: Wet Weight

Seq Number: 3025625

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00330	0.00330	mg/kg	08.21.17 10.32	U	1
Toluene	108-88-3	<0.00330	0.00330	mg/kg	08.21.17 10.32	U	1
Ethylbenzene	100-41-4	0.00507	0.00330	mg/kg	08.21.17 10.32		1
m,p-Xylenes	179601-23-1	0.0127	0.00660	mg/kg	08.21.17 10.32		1
o-Xylene	95-47-6	0.0126	0.00330	mg/kg	08.21.17 10.32		1
Total Xylenes	1330-20-7	0.0253	0.00330	mg/kg	08.21.17 10.32		1
Total BTEX		0.0304	0.00330	mg/kg	08.21.17 10.32		1
Surrogate	Cas Number	% Recovery		Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	90		%	80-120	08.21.17 10.32	
4-Bromofluorobenzene	460-00-4	88		%	80-120	08.21.17 10.32	



Certificate of Analytical Results 559992



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B com 0001H

Sample Id: **SP-7 @ 1'**
Lab Sample Id: 559992-011

Matrix: Soil
Date Collected: 08.07.17 11.02

Date Received: 08.10.17 16.19

Analytical Method: Chloride by EPA 300
Tech: MGO
Analyst: MGO
Seq Number: 3025288

Prep Method: E300P
% Moisture:
Date Prep: 08.17.17 12.00
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	9360	49.6	mg/kg	08.17.17 17.57		10

Analytical Method: TPH By SW8015 Mod
Tech: ARM
Analyst: ARM
Seq Number: 3024776

Prep Method: TX1005P
% Moisture:
Date Prep: 08.11.17 18.00
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.12.17 03.26	U	1
Diesel Range Organics (DRO)	C10C28DRO	67.8	15.0	mg/kg	08.12.17 03.26		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.12.17 03.26	U	1
Total TPH	PHC635	67.8	15.0	mg/kg	08.12.17 03.26		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	103	%	70-135	08.12.17 03.26		
o-Terphenyl	84-15-1	102	%	70-135	08.12.17 03.26		



Certificate of Analytical Results 559992



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B com 0001H

Sample Id: **SP-7 @ 1'**
Lab Sample Id: 559992-011

Matrix: Soil
Date Collected: 08.07.17 11.02

Date Received: 08.10.17 16.19

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 08.15.17 08.45

Basis: Wet Weight

Seq Number: 3025365

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.18.17 15.27	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.18.17 15.27	U	1
Ethylbenzene	100-41-4	0.00378	0.00200	mg/kg	08.18.17 15.27		1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	08.18.17 15.27	U	1
o-Xylene	95-47-6	0.00665	0.00200	mg/kg	08.18.17 15.27		1
Total Xylenes	1330-20-7	0.00665	0.00200	mg/kg	08.18.17 15.27		1
Total BTEX		0.0104	0.00200	mg/kg	08.18.17 15.27		1
Surrogate	Cas Number	% Recovery		Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	87		%	80-120	08.18.17 15.27	
4-Bromofluorobenzene	460-00-4	96		%	80-120	08.18.17 15.27	



Certificate of Analytical Results 559992



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B com 0001H

Sample Id: **SP-8 @0.5'**

Matrix: Soil

Date Received: 08.10.17 16.19

Lab Sample Id: 559992-012

Date Collected: 08.07.17 11.20

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MGO

% Moisture:

Analyst: MGO

Date Prep: 08.17.17 12.00

Basis: Wet Weight

Seq Number: 3025288

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7010	49.2	mg/kg	08.17.17 18.05		10

Analytical Method: TPH By SW8015 Mod

Prep Method: TX1005P

Tech: ARM

% Moisture:

Analyst: ARM

Date Prep: 08.11.17 18.00

Basis: Wet Weight

Seq Number: 3024776

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.12.17 03.47	U	1
Diesel Range Organics (DRO)	C10C28DRO	888	15.0	mg/kg	08.12.17 03.47		1
Oil Range Hydrocarbons (ORO)	PHCG2835	113	15.0	mg/kg	08.12.17 03.47		1
Total TPH	PHC635	1000	15.0	mg/kg	08.12.17 03.47		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	102	%	70-135	08.12.17 03.47		
o-Terphenyl	84-15-1	114	%	70-135	08.12.17 03.47		



Certificate of Analytical Results 559992



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B com 0001H

Sample Id: **SP-8 @0.5'**

Matrix: Soil

Date Received: 08.10.17 16.19

Lab Sample Id: 559992-012

Date Collected: 08.07.17 11.20

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 08.21.17 08.00

Basis: Wet Weight

Seq Number: 3025625

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00328	0.00328	mg/kg	08.21.17 10.51	U	1
Toluene	108-88-3	0.00402	0.00328	mg/kg	08.21.17 10.51		1
Ethylbenzene	100-41-4	0.0139	0.00328	mg/kg	08.21.17 10.51		1
m,p-Xylenes	179601-23-1	0.0345	0.00656	mg/kg	08.21.17 10.51		1
o-Xylene	95-47-6	0.0216	0.00328	mg/kg	08.21.17 10.51		1
Total Xylenes	1330-20-7	0.0561	0.00328	mg/kg	08.21.17 10.51		1
Total BTEX		0.0740	0.00328	mg/kg	08.21.17 10.51		1
Surrogate	Cas Number	% Recovery		Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	89		%	80-120	08.21.17 10.51	
4-Bromofluorobenzene	460-00-4	88		%	80-120	08.21.17 10.51	



Certificate of Analytical Results 559992



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B com 0001H

Sample Id: **SP-8 @1'**
Lab Sample Id: 559992-013

Matrix: Soil
Date Collected: 08.07.17 11.22

Date Received: 08.10.17 16.19

Analytical Method: Chloride by EPA 300
Tech: MGO
Analyst: MGO
Seq Number: 3025288

Prep Method: E300P
% Moisture:
Date Prep: 08.17.17 12.00
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3430	24.7	mg/kg	08.17.17 18.28		5

Analytical Method: TPH By SW8015 Mod
Tech: ARM
Analyst: ARM
Seq Number: 3024776

Prep Method: TX1005P
% Moisture:
Date Prep: 08.11.17 18.00
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.12.17 04.09	U	1
Diesel Range Organics (DRO)	C10C28DRO	242	15.0	mg/kg	08.12.17 04.09		1
Oil Range Hydrocarbons (ORO)	PHCG2835	23.8	15.0	mg/kg	08.12.17 04.09		1
Total TPH	PHC635	266	15.0	mg/kg	08.12.17 04.09		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	102	%	70-135	08.12.17 04.09		
o-Terphenyl	84-15-1	105	%	70-135	08.12.17 04.09		



Certificate of Analytical Results 559992



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B com 0001H

Sample Id: **SP-8 @1'**
Lab Sample Id: 559992-013

Matrix: Soil
Date Collected: 08.07.17 11.22

Date Received: 08.10.17 16.19

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 08.15.17 08.45

Basis: Wet Weight

Seq Number: 3025365

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.18.17 15.27	U	1
Toluene	108-88-3	0.00229	0.00200	mg/kg	08.18.17 15.27		1
Ethylbenzene	100-41-4	0.00460	0.00200	mg/kg	08.18.17 15.27		1
m,p-Xylenes	179601-23-1	0.00702	0.00400	mg/kg	08.18.17 15.27		1
o-Xylene	95-47-6	0.00832	0.00200	mg/kg	08.18.17 15.27		1
Total Xylenes	1330-20-7	0.0153	0.00200	mg/kg	08.18.17 15.27		1
Total BTEX		0.0222	0.00200	mg/kg	08.18.17 15.27		1
Surrogate	Cas Number	% Recovery		Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	102		%	80-120	08.18.17 15.27	
1,4-Difluorobenzene	540-36-3	92		%	80-120	08.18.17 15.27	



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Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B com 0001H

Sample Id: **SP-9 @ 0.5**

Matrix: Soil

Date Received: 08.10.17 16.19

Lab Sample Id: 559992-014

Date Collected: 08.07.17 11.25

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MGO

% Moisture:

Analyst: MGO

Date Prep: 08.17.17 12.00

Basis: Wet Weight

Seq Number: 3025288

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	83.4	4.98	mg/kg	08.17.17 18.35		1

Analytical Method: TPH By SW8015 Mod

Prep Method: TX1005P

Tech: ARM

% Moisture:

Analyst: ARM

Date Prep: 08.11.17 18.00

Basis: Wet Weight

Seq Number: 3024776

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.12.17 04.30	U	1
Diesel Range Organics (DRO)	C10C28DRO	860	15.0	mg/kg	08.12.17 04.30		1
Oil Range Hydrocarbons (ORO)	PHCG2835	112	15.0	mg/kg	08.12.17 04.30		1
Total TPH	PHC635	972	15.0	mg/kg	08.12.17 04.30		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	101	%	70-135	08.12.17 04.30		
o-Terphenyl	84-15-1	114	%	70-135	08.12.17 04.30		



Certificate of Analytical Results 559992



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B com 0001H

Sample Id: **SP-9 @ 0.5**

Matrix: Soil

Date Received: 08.10.17 16.19

Lab Sample Id: 559992-014

Date Collected: 08.07.17 11.25

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 08.21.17 08.00

Basis: Wet Weight

Seq Number: 3025625

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00346	0.00346	mg/kg	08.21.17 11.10	U	1
Toluene	108-88-3	0.00488	0.00346	mg/kg	08.21.17 11.10		1
Ethylbenzene	100-41-4	0.0160	0.00346	mg/kg	08.21.17 11.10		1
m,p-Xylenes	179601-23-1	0.0407	0.00692	mg/kg	08.21.17 11.10		1
o-Xylene	95-47-6	0.0246	0.00346	mg/kg	08.21.17 11.10		1
Total Xylenes	1330-20-7	0.0653	0.00346	mg/kg	08.21.17 11.10		1
Total BTEX		0.0862	0.00346	mg/kg	08.21.17 11.10		1
Surrogate	Cas Number	% Recovery		Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	89		%	80-120	08.21.17 11.10	
1,4-Difluorobenzene	540-36-3	90		%	80-120	08.21.17 11.10	



Certificate of Analytical Results 559992



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B com 0001H

Sample Id: **SP-10 @ 0.5'**

Matrix: Soil

Date Received: 08.10.17 16.19

Lab Sample Id: 559992-015

Date Collected: 08.07.17 11.31

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MGO

% Moisture:

Analyst: MGO

Date Prep: 08.17.17 12.00

Basis: Wet Weight

Seq Number: 3025288

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	789	4.98	mg/kg	08.17.17 18.43		1

Analytical Method: TPH By SW8015 Mod

Prep Method: TX1005P

Tech: ARM

% Moisture:

Analyst: ARM

Date Prep: 08.11.17 18.00

Basis: Wet Weight

Seq Number: 3024776

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.12.17 04.51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.12.17 04.51	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.12.17 04.51	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.12.17 04.51	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	100	%	70-135	08.12.17 04.51		
o-Terphenyl	84-15-1	97	%	70-135	08.12.17 04.51		



Certificate of Analytical Results 559992



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B com 0001H

Sample Id: **SP-10 @ 0.5'**

Matrix: Soil

Date Received: 08.10.17 16.19

Lab Sample Id: 559992-015

Date Collected: 08.07.17 11.31

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 08.15.17 08.45

Basis: Wet Weight

Seq Number: 3025365

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.18.17 15.27	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.18.17 15.27	U	1
Ethylbenzene	100-41-4	0.00208	0.00200	mg/kg	08.18.17 15.27		1
m,p-Xylenes	179601-23-1	0.00703	0.00400	mg/kg	08.18.17 15.27		1
o-Xylene	95-47-6	0.00540	0.00200	mg/kg	08.18.17 15.27		1
Total Xylenes	1330-20-7	0.0124	0.00200	mg/kg	08.18.17 15.27		1
Total BTEX		0.0145	0.00200	mg/kg	08.18.17 15.27		1
Surrogate	Cas Number	% Recovery		Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	107		%	80-120	08.18.17 15.27	
1,4-Difluorobenzene	540-36-3	96		%	80-120	08.18.17 15.27	



Certificate of Analytical Results 559992



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B com 0001H

Sample Id: **SP-10 @ 1'**

Matrix: Soil

Date Received: 08.10.17 16.19

Lab Sample Id: 559992-016

Date Collected: 08.07.17 11.32

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MGO

% Moisture:

Analyst: MGO

Date Prep: 08.17.17 12.00

Basis: Wet Weight

Seq Number: 3025288

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	570	4.99	mg/kg	08.17.17 18.51		1

Analytical Method: TPH By SW8015 Mod

Prep Method: TX1005P

Tech: ARM

% Moisture:

Analyst: ARM

Date Prep: 08.11.17 18.00

Basis: Wet Weight

Seq Number: 3024776

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.12.17 05.12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.12.17 05.12	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.12.17 05.12	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.12.17 05.12	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	102	%	70-135	08.12.17 05.12		
o-Terphenyl	84-15-1	100	%	70-135	08.12.17 05.12		



Certificate of Analytical Results 559992



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B com 0001H

Sample Id: **SP-10 @ 1'**

Matrix: Soil

Date Received: 08.10.17 16.19

Lab Sample Id: 559992-016

Date Collected: 08.07.17 11.32

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 08.15.17 08.45

Basis: Wet Weight

Seq Number: 3025365

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.18.17 15.27	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.18.17 15.27	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.18.17 15.27	U	1
m,p-Xylenes	179601-23-1	0.00692	0.00400	mg/kg	08.18.17 15.27		1
o-Xylene	95-47-6	0.00601	0.00200	mg/kg	08.18.17 15.27		1
Total Xylenes	1330-20-7	0.0129	0.00200	mg/kg	08.18.17 15.27		1
Total BTEX		0.0129	0.00200	mg/kg	08.18.17 15.27		1
Surrogate	Cas Number	% Recovery		Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	91		%	80-120	08.18.17 15.27	
4-Bromofluorobenzene	460-00-4	100		%	80-120	08.18.17 15.27	



Certificate of Analytical Results 559992



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B com 0001H

Sample Id: **SP-11 @0.5'**

Matrix: Soil

Date Received: 08.10.17 16.19

Lab Sample Id: 559992-017

Date Collected: 08.07.17 11.40

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MGO

% Moisture:

Analyst: MGO

Date Prep: 08.17.17 12.00

Basis: Wet Weight

Seq Number: 3025288

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3660	25.0	mg/kg	08.17.17 18.58		5

Analytical Method: TPH By SW8015 Mod

Prep Method: TX1005P

Tech: ARM

% Moisture:

Analyst: ARM

Date Prep: 08.11.17 18.00

Basis: Wet Weight

Seq Number: 3024776

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.12.17 05.33	U	1
Diesel Range Organics (DRO)	C10C28DRO	518	15.0	mg/kg	08.12.17 05.33		1
Oil Range Hydrocarbons (ORO)	PHCG2835	94.2	15.0	mg/kg	08.12.17 05.33		1
Total TPH	PHC635	612	15.0	mg/kg	08.12.17 05.33		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	129	%	70-135	08.12.17 05.33		
o-Terphenyl	84-15-1	122	%	70-135	08.12.17 05.33		



Certificate of Analytical Results 559992



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B com 0001H

Sample Id: **SP-11 @0.5'**

Matrix: Soil

Date Received: 08.10.17 16.19

Lab Sample Id: 559992-017

Date Collected: 08.07.17 11.40

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 08.21.17 08.00

Basis: Wet Weight

Seq Number: 3025625

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00341	0.00341	mg/kg	08.21.17 11.29	U	1
Toluene	108-88-3	<0.00341	0.00341	mg/kg	08.21.17 11.29	U	1
Ethylbenzene	100-41-4	<0.00341	0.00341	mg/kg	08.21.17 11.29	U	1
m,p-Xylenes	179601-23-1	<0.00683	0.00683	mg/kg	08.21.17 11.29	U	1
o-Xylene	95-47-6	<0.00341	0.00341	mg/kg	08.21.17 11.29	U	1
Total Xylenes	1330-20-7	<0.00341	0.00341	mg/kg	08.21.17 11.29	U	1
Total BTEX		<0.00341	0.00341	mg/kg	08.21.17 11.29	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	91	%	80-120	08.21.17 11.29		
4-Bromofluorobenzene	460-00-4	90	%	80-120	08.21.17 11.29		



Certificate of Analytical Results 559992



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B com 0001H

Sample Id: **SP-12 @ 0.5'**

Matrix: Soil

Date Received: 08.10.17 16.19

Lab Sample Id: 559992-018

Date Collected: 08.07.17 11.53

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MGO

% Moisture:

Analyst: MGO

Date Prep: 08.17.17 12.00

Basis: Wet Weight

Seq Number: 3025288

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	9.51	4.94	mg/kg	08.17.17 19.06		1

Analytical Method: TPH By SW8015 Mod

Prep Method: TX1005P

Tech: ARM

% Moisture:

Analyst: ARM

Date Prep: 08.11.17 18.00

Basis: Wet Weight

Seq Number: 3024776

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.12.17 05.54	U	1
Diesel Range Organics (DRO)	C10C28DRO	907	15.0	mg/kg	08.12.17 05.54		1
Oil Range Hydrocarbons (ORO)	PHCG2835	139	15.0	mg/kg	08.12.17 05.54		1
Total TPH	PHC635	1050	15.0	mg/kg	08.12.17 05.54		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	106	%	70-135	08.12.17 05.54		
o-Terphenyl	84-15-1	117	%	70-135	08.12.17 05.54		



Certificate of Analytical Results 559992



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B com 0001H

Sample Id: **SP-12 @ 0.5'**

Matrix: Soil

Date Received: 08.10.17 16.19

Lab Sample Id: 559992-018

Date Collected: 08.07.17 11.53

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 08.15.17 08.45

Basis: Wet Weight

Seq Number: 3025365

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.18.17 15.27	U	1
Toluene	108-88-3	0.00293	0.00200	mg/kg	08.18.17 15.27		1
Ethylbenzene	100-41-4	0.00680	0.00200	mg/kg	08.18.17 15.27		1
m,p-Xylenes	179601-23-1	0.0249	0.00400	mg/kg	08.18.17 15.27		1
o-Xylene	95-47-6	0.0162	0.00200	mg/kg	08.18.17 15.27		1
Total Xylenes	1330-20-7	0.0411	0.00200	mg/kg	08.18.17 15.27		1
Total BTEX		0.0508	0.00200	mg/kg	08.18.17 15.27		1
Surrogate	Cas Number	% Recovery		Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	91		%	80-120	08.18.17 15.27	
4-Bromofluorobenzene	460-00-4	99		%	80-120	08.18.17 15.27	

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

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(602) 437-0330	



QC Summary 559992

Trinity Oilfield Services & Rentals, LLC

Osage 18 Fee B com 0001H

Analytical Method: Chloride by EPA 300

Seq Number: 3025280

MB Sample Id: 729464-1-BLK

Matrix: Solid

LCS Sample Id: 729464-1-BKS

Prep Method: E300P

Date Prep: 08.17.17

LCSD Sample Id: 729464-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<4.98	249	255	102	257	103	90-110	1	20	mg/kg	08.17.17 10:55	

Analytical Method: Chloride by EPA 300

Seq Number: 3025288

MB Sample Id: 729472-1-BLK

Matrix: Solid

LCS Sample Id: 729472-1-BKS

Prep Method: E300P

Date Prep: 08.17.17

LCSD Sample Id: 729472-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	258	103	261	104	90-110	1	20	mg/kg	08.17.17 17:03	

Analytical Method: Chloride by EPA 300

Seq Number: 3025280

Parent Sample Id: 559933-001

Matrix: Soil

MS Sample Id: 559933-001 S

Prep Method: E300P

Date Prep: 08.17.17

MSD Sample Id: 559933-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<4.99	250	269	108	272	109	90-110	1	20	mg/kg	08.17.17 11:26	

Analytical Method: Chloride by EPA 300

Seq Number: 3025280

Parent Sample Id: 559992-001

Matrix: Soil

MS Sample Id: 559992-001 S

Prep Method: E300P

Date Prep: 08.17.17

MSD Sample Id: 559992-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	60.1	249	332	109	329	108	90-110	1	20	mg/kg	08.17.17 16:09	

Analytical Method: Chloride by EPA 300

Seq Number: 3025288

Parent Sample Id: 559992-009

Matrix: Soil

MS Sample Id: 559992-009 S

Prep Method: E300P

Date Prep: 08.17.17

MSD Sample Id: 559992-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	150	245	424	112	418	109	90-110	1	20	mg/kg	08.17.17 17:26	X

Analytical Method: Chloride by EPA 300

Seq Number: 3025288

Parent Sample Id: 559992-018

Matrix: Soil

MS Sample Id: 559992-018 S

Prep Method: E300P

Date Prep: 08.17.17

MSD Sample Id: 559992-018 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	9.51	247	274	107	277	108	90-110	1	20	mg/kg	08.17.17 19:14	



QC Summary 559992

Trinity Oilfield Services & Rentals, LLC

Osage 18 Fee B com 0001H

Analytical Method: TPH By SW8015 Mod

Seq Number: 3024776

MB Sample Id: 729210-1-BLK

Matrix: Solid

LCS Sample Id: 729210-1-BKS

Prep Method: TX1005P

Date Prep: 08.11.17

LCSD Sample Id: 729210-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	893	89	879	88	70-135	2	35	mg/kg	08.14.17 09:22	
Diesel Range Organics (DRO)	<15.0	1000	1010	101	988	99	70-135	2	35	mg/kg	08.14.17 09:22	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date			
1-Chlorooctane	109		108		109		70-135	%	08.14.17 09:22			
o-Terphenyl	110		97		98		70-135	%	08.14.17 09:22			

Analytical Method: TPH By SW8015 Mod

Seq Number: 3024776

Parent Sample Id: 559993-006

Matrix: Soil

MS Sample Id: 559993-006 S

Prep Method: TX1005P

Date Prep: 08.11.17

MSD Sample Id: 559993-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	998	838	84	860	86	70-135	3	35	mg/kg	08.12.17 06:58	
Diesel Range Organics (DRO)	<15.0	998	932	93	938	94	70-135	1	35	mg/kg	08.12.17 06:58	
Surrogate			MS %Rec	MS Flag		MSD %Rec	MSD Flag		Limits	Units	Analysis Date	
1-Chlorooctane			109			111			70-135	%	08.12.17 06:58	
o-Terphenyl			100			100			70-135	%	08.12.17 06:58	

Analytical Method: BTEX by EPA 8021B

Seq Number: 3025365

MB Sample Id: 729496-1-BLK

Matrix: Solid

LCS Sample Id: 729496-1-BKS

Prep Method: SW5030B

Date Prep: 08.15.17

LCSD Sample Id: 729496-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.124	124	0.115	115	70-130	8	35	mg/kg	08.18.17 15:27	
Toluene	<0.00200	0.100	0.119	119	0.113	113	70-130	5	35	mg/kg	08.18.17 15:27	
Ethylbenzene	<0.00200	0.100	0.115	115	0.107	107	71-129	7	35	mg/kg	08.18.17 15:27	
m,p-Xylenes	<0.00400	0.200	0.235	118	0.219	110	70-135	7	35	mg/kg	08.18.17 15:27	
o-Xylene	<0.00200	0.100	0.118	118	0.110	110	71-133	7	35	mg/kg	08.18.17 15:27	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date			
1,4-Difluorobenzene	93		112		112		80-120	%	08.18.17 15:27			
4-Bromofluorobenzene	104		106		101		80-120	%	08.18.17 15:27			



Trinity Oilfield Services & Rentals, LLC

Osage 18 Fee B com 0001H

Analytical Method: BTEX by EPA 8021B

Seq Number: 3025509

MB Sample Id: 729627-1-BLK

Matrix: Solid

LCS Sample Id: 729627-1-BKS

Prep Method: SW5030B

Date Prep: 08.18.17

LCSD Sample Id: 729627-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.123	122	0.115	115	70-130	7	35	mg/kg	08.18.17 20:51	
Toluene	<0.00202	0.101	0.122	121	0.113	113	70-130	8	35	mg/kg	08.18.17 20:51	
Ethylbenzene	<0.00202	0.101	0.124	123	0.115	115	71-129	8	35	mg/kg	08.18.17 20:51	
m,p-Xylenes	<0.00403	0.202	0.243	120	0.223	111	70-135	9	35	mg/kg	08.18.17 20:51	
o-Xylene	<0.00202	0.101	0.120	119	0.110	110	71-133	9	35	mg/kg	08.18.17 20:51	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	96		97		97		80-120	%	08.18.17 20:51
4-Bromofluorobenzene	87		90		89		80-120	%	08.18.17 20:51

Analytical Method: BTEX by EPA 8021B

Seq Number: 3025625

MB Sample Id: 729668-1-BLK

Matrix: Solid

LCS Sample Id: 729668-1-BKS

Prep Method: SW5030B

Date Prep: 08.21.17

LCSD Sample Id: 729668-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.102	102	0.101	101	70-130	1	35	mg/kg	08.21.17 08:04	
Toluene	<0.00200	0.0998	0.101	101	0.0998	100	70-130	1	35	mg/kg	08.21.17 08:04	
Ethylbenzene	<0.00200	0.0998	0.101	101	0.101	101	71-129	0	35	mg/kg	08.21.17 08:04	
m,p-Xylenes	<0.00399	0.200	0.198	99	0.197	99	70-135	1	35	mg/kg	08.21.17 08:04	
o-Xylene	<0.00200	0.0998	0.0965	97	0.0967	97	71-133	0	35	mg/kg	08.21.17 08:04	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	94		97		97		80-120	%	08.21.17 08:04
4-Bromofluorobenzene	84		90		90		80-120	%	08.21.17 08:04

Analytical Method: BTEX by EPA 8021B

Seq Number: 3025365

Parent Sample Id: 559993-001

Matrix: Soil

MS Sample Id: 559993-001 S

Prep Method: SW5030B

Date Prep: 08.15.17

MSD Sample Id: 559993-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.103	103	0.101	101	70-130	2	35	mg/kg	08.18.17 15:27	
Toluene	<0.00200	0.100	0.100	100	0.101	101	70-130	1	35	mg/kg	08.18.17 15:27	
Ethylbenzene	<0.00200	0.100	0.0948	95	0.0928	93	71-129	2	35	mg/kg	08.18.17 15:27	
m,p-Xylenes	<0.00400	0.200	0.191	96	0.186	93	70-135	3	35	mg/kg	08.18.17 15:27	
o-Xylene	<0.00200	0.100	0.101	101	0.0956	96	71-133	5	35	mg/kg	08.18.17 15:27	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	95		110		80-120	%	08.18.17 15:27
4-Bromofluorobenzene	87		109		80-120	%	08.18.17 15:27



Trinity Oilfield Services & Rentals, LLC

Osage 18 Fee B com 0001H

Analytical Method: BTEX by EPA 8021B

Seq Number: 3025509

Parent Sample Id: 560034-002

Matrix: Soil

MS Sample Id: 560034-002 S

Prep Method: SW5030B

Date Prep: 08.18.17

MSD Sample Id: 560034-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	0.0185	0.0992	0.0835	66	0.0729	54	70-130	14	35	mg/kg	08.18.17 21:29	X
Toluene	0.0298	0.0992	0.0822	53	0.0711	41	70-130	14	35	mg/kg	08.18.17 21:29	X
Ethylbenzene	0.00460	0.0992	0.0744	70	0.0658	61	71-129	12	35	mg/kg	08.18.17 21:29	X
m,p-Xylenes	0.0107	0.198	0.144	67	0.127	58	70-135	13	35	mg/kg	08.18.17 21:29	X
o-Xylene	0.00380	0.0992	0.0731	70	0.0653	62	71-133	11	35	mg/kg	08.18.17 21:29	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	107		102		80-120	%	08.18.17 21:29
4-Bromofluorobenzene	101		99		80-120	%	08.18.17 21:29

Analytical Method: BTEX by EPA 8021B

Seq Number: 3025625

Parent Sample Id: 560162-001

Matrix: Soil

MS Sample Id: 560162-001 S

Prep Method: SW5030B

Date Prep: 08.21.17

MSD Sample Id: 560162-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	0.00712	0.101	0.0869	79	0.0733	66	70-130	17	35	mg/kg	08.21.17 08:53	X
Toluene	0.00535	0.101	0.0837	78	0.0769	72	70-130	8	35	mg/kg	08.21.17 08:53	
Ethylbenzene	0.00617	0.101	0.0816	75	0.0886	82	71-129	8	35	mg/kg	08.21.17 08:53	
m,p-Xylenes	0.0309	0.202	0.163	65	0.179	74	70-135	9	35	mg/kg	08.21.17 08:53	X
o-Xylene	0.0235	0.101	0.0812	57	0.0742	51	71-133	9	35	mg/kg	08.21.17 08:53	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	91		85		80-120	%	08.21.17 08:53
4-Bromofluorobenzene	92		83		80-120	%	08.21.17 08:53



Environmental Services Laboratory
70001-0

CHAIN OF CUSTODY RECORD

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Page 2 of 2

LAB W.O.#:

Field billable Hrs:

SS9992

* Container Type Codes

VA Vial Amber ES Encore Sampler
VC Vial Clear TS TerraCore Sampler
VP Vial Pre-pressurized AC Air Canister
GA Glass Amber TB Tedlar Bag
GC Glass Clear ZB Zip Lock Bag
PA Plastic Amber PC Plastic Clear
Other _____

Size(s): 2oz, 4oz, 8oz, 16oz, 32oz, 1Gal
40ml, 125 ml, 250 ml, 500 ml, 1L, Other

** Preservative Type Codes

A. None E. HCL I. Ice C.
B. HNO₃ F. MeOH J. MCAA
H₂SO₄ G. Na₂S₂O₈ K. ZnAc₂/NaOH
D. NaOH H. NaHSO₄ L. Ascorbic Acid/NaOH
O. _____

^ Matrix Type Codes

GW Ground Water S Soil/Sediment/Solid
WW Waste Water W Wipe
DW Drinking Water A Air
SW Surface Water O Oil
CW Ocean/Sea Water T Tissue
PL Product-Liquid U Urine
PS Product-Solid B Blood
SL Sludge

REMARKS

Run BTEX if TPH < 5,000

Company: Trinity Oilfield Services & Rentals, LLC		Phone: (575)390-7208		TAT Work Days = D		Need results by: _____ Time: _____	
Address: P.O. Box 2587		Fax: _____		Std (5-7D) 5Hrs 1D 2D 3D 4D 5D 7D 10D 14D Other			
City: Hobbs		State: NM Zip: 88241		ANALYSES REQUESTED			
PM/ATtn: Ben J. Arguilo		Email: <u>Wade.Dittrich@xenco.com</u>		Cost Type * VC GC GC GC			
Project ID: <u>Usage 18 Fee B Com 0001H</u>		PO#: _____		Pres Type**			
Invoice To: <u>Oxy. Wade Dittrich</u>		Quote #: _____		Example Volatiles by 8260			
Sampler Name: Duskie Bennett		Circle One Event: Daily Weekly Monthly Quarterly		TPH (8015W) TX1005 BTEX Chloride			
		Semi-Annual Annual N/A					
Sample #	Sample ID	Collect Date	Collect Time	Matrix Code *	Field Filtered	Integrity OK (Y/N)	Total # of containers
1	<u>SP-7@1'</u>	<u>8/7/17</u>	<u>1102</u>	<u>S</u>			<u>1</u>
2	<u>SP-8@0.5'</u>		<u>1120</u>				
3	<u>SP-8@1'</u>		<u>1122</u>				
4	<u>SP-9@0.5'</u>		<u>1125</u>				
5	<u>SP-10@0.5'</u>		<u>1131</u>				
6	<u>SP-10@1'</u>		<u>1132</u>				
7	<u>SP-11@0.5'</u>		<u>1140</u>				
8	<u>SP-12@0.5'</u>	<u>↓</u>	<u>1153</u>	<u>↓</u>			<u>↓</u>
9							
0							
Reg. Program / Clean-up Std		STATE for Certs & Regs		QA/QC Level & Certification		EDDs	
CITs TRRP DW NPDES LPST Dry/Cln Other		FL TX GA NC SC NJ PA OK LA AL NM Other		1 2 3 4 CLP AFCEE QAPP NELAC DoD-ELAP Other		ADAPT SEDD ERPIMS XLS Other	
Relinquished by		Affiliation		Date		Time	
1 <u>Wade Dittrich</u>		<u>Trinity</u>		<u>8/7/17</u>		<u>1600</u>	
2 <u>[Signature]</u>		<u>Trinity</u>		<u>8/10/17</u>		<u>1619</u>	
3							
4							
COC & Labels		Coolers Temp °C		Lab Use Only		YES NO N/A	
Match Incomplete Absent Unclear		17.0 2 3		Non-Conformances found?			
				Samples intact upon arrival?			
				Received on Wet Ice?			
				Labelled with proper preservatives?			
				Received within holding time?			
				Custody seals intact?			
				VOCs rec'd w/ headspace?			
				Proper containers used?			
				pH verified acceptable, and VOCs?			
				Received on time to meet HTs?			

B&A Laboratories: Hobbs 575-392-7550 Dallas 214-902-0300 Houston 281-242-4200 Odessa 432-563-1800 San Antonio 210-509-3334 Phoenix 602-437-0330

FTS Service Centers: Atlanta 770-449-8800 Lakeland 863-646-8525 Tampa 803-543-8099 Philadelphia 610-955-5649 South Carolina 803-543-8099

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Revision Date: Nov 12, 2009

C.O.C. Serial #



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70001-C

Page 1 of 2

LAB W.O.#: 559992

Field billable Hrs: _____

* Container Type Codes

VA Vial Amber	ES Encase Sampler
VC Vial Clear	TS TensCore Sampler
YP Vial Pre-preserved	AC Air Canister
GA Glass Amber	TB Tied Bag
GC Glass Clear	ZS Zip Lock Bag
PA Plastic Amber	PC Plastic Clear
PC Plastic Clear	

Size(s): 2oz, 4oz, 8oz, 16oz, 32oz, 1Gal, 40ml, 125 ml, 250 ml, 500 ml, 1L, Other _____

** Preservative Type Codes

A. None	E. HCL	I. Ice	
B. HNO ₃	F. MeOH	J. MCAA	C.
H ₂ SO ₄	G. Na ₂ S ₂ O ₅	K. ZnAc ₂ /NaOH	
D. NaOH	H. NaH ₂ SO ₄	L. Ascorbic Acid/NaOH	
O.			

^ Matrix Type Codes

GW Ground Water	S Soil/Sediment/Solid
WW Waste Water	W Wipe
DW Drinking Water	A Air
SW Surface Water	O Oil
OW Ocean/Sea Water	T Tissue
PL Product-Liquid	U Urine
PS Product-Solid	B Blood
SL Sludge	

REMARKS

Run BTEX: P TPH ≤ 5.000

Temp: 3.2

IR ID: R-8

CF: (0-6: -0.2°C)

(6-23: +0.2°C)

Corrected Temp: 3.0

Company: Trinity Oilfield Services & Rentals, LLC Phone: (575)390-7208
Address: P.O. Box 2587 Fax: _____
City: Hobbs State: NM Zip: 88241
PM/Attn: Ben J. Arguio Email: Wade.Diltrich@xenco.com
ben@trinityoilfieldservices.com

Project ID: Csage 18 Fee B Com 000114 PO#: _____
Invoice To: Oxy - Wade Diltrich Quote #: _____

Sampler Name: Duskie Bennett Circle One Event: Daily Weekly Monthly Quarterly
Semi-Annual Annual N/A

Sample #	Sample ID	Collect Date	Collect Time	Matrix Code ^	Field Filtered	Integrity	OK (Y/N)	Total # of containers
----------	-----------	--------------	--------------	---------------	----------------	-----------	----------	-----------------------

1	SP-1 @ 0.5'	8/7/17	1038	S				1
2	SP-1 @ 1'		1040					
3	SP-2 @ 0.5'		1000					
4	SP-2 @ 1'		1008					
5	SP-3 @ 0.5'		1016					
6	SP-3 @ 1'		1017					
7	SP-4 @ 0.5'		1023					
8	SP-5 @ 0.5'		1035					
9	SP-6 @ 0.5'		1049					
0	SP-7 @ 0.5'		1101					

Reg. Program / Clean-up Std	STATE for Certs & Regs	QA/QC Level & Certification	EDOs	COC & Labels	Coolers Temp	Lab Use Only
-----------------------------	------------------------	-----------------------------	------	--------------	--------------	--------------

Relinquished by	Affiliation	Date	Time	Received by	Affiliation	Date	Time
<u>Wade Diltrich</u>	<u>Trinity</u>	<u>8/7/17</u>	<u>1600</u>	<u>Wade Diltrich</u>	<u>Trinity</u>	<u>8/7/17</u>	<u>1600</u>
<u>Wade Diltrich</u>	<u>Trinity</u>	<u>8/10/17</u>	<u>1619</u>	<u>Wade Diltrich</u>	<u>Trinity</u>	<u>8/10/17</u>	<u>4:19</u>
				<u>Wade Diltrich</u>	<u>Xenco</u>	<u>8-11-17</u>	<u>13:00</u>

B&A Laboratories: Hobbs 575-392-7550 Dallas 214-902-0300 Houston 281-242-4200 Odessa 432-563-1800 San Antonio 210-509-3334 Phoenix 602-437-0330
FTS Service Centers: Atlanta 770-449-8800 Lakeland 863-646-8526 Tampa 803-543-8099 Philadelphia 610-955-5649 South Carolina 803-543-8099

C.O.C. Serial # _____

Execution of this document by client creates a legal and binding agreement between client and Xenco for analytical and testing services provided by Xenco to client under Xenco's standard terms and conditions unless previously agreed in writing. Terms of payment are Net 30 days, and all past due amounts shall accrue interest at 1.5% per month until paid in full. All laboratory analytical data and reports generated by Xenco remain the exclusive property of Xenco until invoices for such data are paid in full. Revision Date: Nov 12, 2009.



CHAIN OF CUSTODY RECORD

Houston: 4143 Greenbriar Dr. Stafford, TX 77477 (281)240-4200 Odessa: 12600 West I-20 East Odessa, TX 79735 (432)563-1800

30001-C

Exclusion: Admin. Responsibility

Page 2 of 2

LAB W.O. #:

Field billable Hrs:

* Container Type Codes

VA Vial Amber	ES Encore Sampler
VC Vial Clear	TS TeraCore Sampler
VP Vial Pre-preserved	AC Air Canister
GA Glass Amber	TB Tedlar Bag
GC Glass Clear	ZB Zip Lock Bag
PA Plastic Amber	PC Plastic Clear
Other	

Size(s): 2oz, 4oz, 8oz, 16oz, 32oz, 1Gal, 40ml, 125 ml, 250 ml, 500 ml, 1L, Other

** Preservative Type Codes

A. None	E. HCL	I. Ice	
B. HNO ₃	F. MeOH	J. MCAA	C.
H ₂ SO ₄	G. Na ₂ S ₂ O ₅	K. ZnAc ₂ /NaOH	
D. NaOH	H. NaHSO ₄	L. Ascorbic Acid/NaOH	
O.			

^ Matrix Type Codes

GW Ground Water	S. Soil/Sediment/Solid
WW Waste Water	W. Wipe
DW Drinking Water	A. Air
SW Surface Water	O. Oil
OW Ocean/Sea Water	T. Tissue
PL Product-Liquid	U. Urine
PS Product-Solid	S. Blood
SL Sludge	

REMARKS

Run BTEX i: TPH < 5,000

Temp: 3.2 IR ID: R-8
 CF: (0-6: -0.2°C)
 (6-23: +0.2°C)
 Corrected Temp: 3.0

Company: Trinity Oilfield Services & Rentals, LLC		Phone: (575)390-7208		TAT Work Days = D Need results by: _____ Time: _____	
Address: P.O. Box 2587		Fax: _____		Std (5-7D) 5Hrs 1D 2D 3D 4D 5D 7D 10D 14D Other	
City: Hobbs		State: NM Zip: 88241		ANALYSES REQUESTED	
PM/Attn: Ben J. Arguljo		Email: Wade.Dittrich@xenco.com		Cont Type * VC GC GC GC	
Project ID: Usage 18 Fee B Com 0001H		PO#: _____		Pres Type ** I I I	
Invoice To: Org - Wade Dittrich		Quote #: _____		Example Volatiles by 8260 TPH 8015M/TX1005 BTEX Chloride	
Sampler Name: Duskie Bennett		Circle One Event: Daily Weekly Monthly Quarterly		Semi-Annual Annual N/A	
Sample #	Sample ID	Collect Date	Collect Time	Matrix Code ^	Field Filtered Integrity OK (Y/N) Total # of containers
1	SP-7@1'	8/7/17	1102	S	1
2	SP-8@0.5'		1120		
3	SP-8@1'		1122		
4	SP-9@0.5'		1125		
5	SP-10@0.5'		1131		
6	SP-10@1'		1132		
7	SP-11@0.5'		1140		
8	SP-12@0.5'		1153		
9					
0					
Reg. Program / Clean-up Std		STATE for Certs & Regs		QA/QC Level & Certification	
CTLs TRRP DW NPDES LPST DryCh Other		FL TX GA NC SC NJ PA OK LA AL NM Other		1 2 3 4 CLP AFCEE QAPP NELAC DoD-ELAP Other	
Refringished by		Affiliation		Date Time	
1. [Signature]		Trinity		8/7/17 1600	
2. [Signature]		Trinity		8/10/17 1619	
3. [Signature]					
4. [Signature]					
EDDs		COC & Labels		Coolers Temp °C	
ADA PT SEDD ERPIMS		Match Incomplete Absent Unclear		17.0 2 3	
Received by		Affiliation		Date Time	
[Signature]		Trinity		8/7/17 1600	
[Signature]		MS		8/10/17 9:19	
[Signature]		Xenco		8-11-17 13:00	
Lab Use Only		YES NO N/A			
Non-Confidential found?					
Samples intact upon arrival?					
Received on Wet Ice?					
Labeled with proper preservation?					
Received within holding time?					
Custody seals intact?					
VOCs rec'd w/ headspace?					
Proper containers used?					
pH verified acceptable, and VOCs?					
Received on time to meet HTs?					

B&A Laboratories: Hobbs 575-392-7550 Dallas 214-902-0300 Houston 281-242-4200 Odessa 432-563-1800 San Antonio 210-509-3334 Phoenix 602-437-0330

FTS Service Centers: Atlanta 770-449-8800 Lakeland 863-646-8526 Tampa 803-543-8099 Philadelphia 610-955-5649 South Carolina 803-543-8099

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Revision Date: Nov 12, 2009



XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In



Client: Trinity Oilfield Services & Rentals, LLC

Date/ Time Received: 08/10/2017 04:19:00 PM

Work Order #: 559992

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	3
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seal present on shipping container/ cooler?	N/A
#5 *Custody Seals intact on shipping container/ cooler?	N/A
#6 Custody Seals intact on sample bottles?	N/A
#7 *Custody Seals Signed and dated?	N/A
#8 *Chain of Custody present?	Yes
#9 Sample instructions complete on Chain of Custody?	Yes
#10 Any missing/extra samples?	No
#11 Chain of Custody signed when relinquished/ received?	Yes
#12 Chain of Custody agrees with sample label(s)?	Yes
#13 Container label(s) legible and intact?	Yes
#14 Sample matrix/ properties agree with Chain of Custody?	Yes
#15 Samples in proper container/ bottle?	Yes
#16 Samples properly preserved?	Yes
#17 Sample container(s) intact?	Yes
#18 Sufficient sample amount for indicated test(s)?	Yes
#19 All samples received within hold time?	Yes
#20 Subcontract of sample(s)?	No
#21 VOC samples have zero headspace?	N/A

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst:

PH Device/Lot#:

Checklist completed by:

Shawnee Smith

Date: 08/11/2017

Checklist reviewed by:

Holly Taylor

Date: 08/14/2017



Certificate of Analysis Summary 562530

Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Project Name: Osage 18 Fee B Com 0001H



Project Id:

Contact: Ben Arguijo

Project Location: NM

Date Received in Lab: Mon Sep-11-17 09:23 am

Report Date: 22-SEP-17

Project Manager: Holly Taylor

Analysis Requested	Lab Id:	562530-001	562530-002	562530-003	562530-004	562530-005	562530-006
	Field Id:	SP-2 @ 1.5'	SP-2 @ 4.5'	SP-3 @ 1.5'	SP-3 @ 2.5'	SP-4 @ 1'	SP-4 @ 3'
	Depth:						
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Sep-06-17 10:35	Sep-06-17 11:03	Sep-06-17 11:20	Sep-06-17 11:44	Sep-06-17 12:05	Sep-06-17 12:42
BTEX by EPA 8021B	Extracted:	Sep-13-17 13:00	Sep-14-17 08:37	Sep-13-17 13:00	Sep-13-17 13:00	Sep-13-17 13:00	Sep-13-17 13:00
	Analyzed:	Sep-14-17 01:37	Sep-14-17 10:50	Sep-14-17 01:54	Sep-14-17 02:13	Sep-14-17 02:32	Sep-14-17 02:51
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00198 0.00198	<0.00199 0.00199	<0.00201 0.00201	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
Toluene		0.00727 0.00198	<0.00199 0.00199	<0.00201 0.00201	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
Ethylbenzene		0.155 0.00198	<0.00199 0.00199	0.00437 0.00201	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
m,p-Xylenes		0.198 0.00397	<0.00398 0.00398	0.00737 0.00402	<0.00403 0.00403	<0.00401 0.00401	<0.00399 0.00399
o-Xylene		0.100 0.00198	<0.00199 0.00199	0.00403 0.00201	0.00782 0.00202	<0.00200 0.00200	<0.00200 0.00200
Total Xylenes		0.298 0.00198	<0.00199 0.00199	0.0114 0.00201	0.00782 0.00202	<0.00200 0.00200	<0.00200 0.00200
Total BTEX		0.460 0.00198	<0.00199 0.00199	0.0158 0.00201	0.00782 0.00202	<0.00200 0.00200	<0.00200 0.00200
Chloride by EPA 300	Extracted:	Sep-19-17 10:05	Sep-19-17 10:05	Sep-19-17 10:05	Sep-19-17 10:05	Sep-19-17 10:05	Sep-19-17 10:05
	Analyzed:	Sep-19-17 14:54	Sep-19-17 15:01	Sep-19-17 15:22	Sep-19-17 15:29	Sep-19-17 15:50	Sep-19-17 15:57
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		869 5.00	217 5.00	526 4.99	163 4.96	2250 25.0	127 4.95
TPH By SW8015 Mod	Extracted:	Sep-13-17 08:00	Sep-13-17 08:00	Sep-13-17 08:00	Sep-13-17 08:00	Sep-13-17 08:00	Sep-13-17 08:00
	Analyzed:	Sep-13-17 10:14	Sep-13-17 10:34	Sep-13-17 11:35	Sep-13-17 11:55	Sep-13-17 12:15	Sep-13-17 12:36
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		737 74.9	<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0	<14.9 14.9
Diesel Range Organics (DRO)		8860 74.9	<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0	<14.9 14.9
Oil Range Hydrocarbons (ORO)		1130 74.9	<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0	<14.9 14.9
Total TPH		10700 74.9	<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0	<14.9 14.9

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Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Holly Taylor
Project Manager



Certificate of Analysis Summary 562530

Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Project Name: Osage 18 Fee B Com 0001H



Project Id:

Contact: Ben Arguijo

Project Location: NM

Date Received in Lab: Mon Sep-11-17 09:23 am

Report Date: 22-SEP-17

Project Manager: Holly Taylor

Analysis Requested	Lab Id:	562530-007	562530-008	562530-009	562530-010	562530-011	562530-012
	Field Id:	SP-5 @ 1'	SP-5 @ 2.5'	SP-5 @ 5.5'	SP-7 @ 1.5'	SP-7 @ 2.5'	SP-8 @ 1.5'
	Depth:						
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Sep-06-17 13:01	Sep-06-17 13:12	Sep-06-17 13:22	Sep-06-17 13:50	Sep-06-17 14:00	Sep-06-17 14:23
BTEX by EPA 8021B	Extracted:	Sep-14-17 08:37	Sep-14-17 08:37	Sep-14-17 08:37	Sep-14-17 08:37	Sep-14-17 08:37	Sep-14-17 08:37
	Analyzed:	Sep-14-17 13:01	Sep-14-17 13:20	Sep-14-17 14:55	Sep-14-17 15:13	Sep-14-17 15:52	Sep-14-17 16:11
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00201 0.00201	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Toluene		<0.00201 0.00201	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Ethylbenzene		<0.00201 0.00201	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
m,p-Xylenes		<0.00402 0.00402	<0.00403 0.00403	<0.00399 0.00399	<0.00398 0.00398	<0.00401 0.00401	<0.00399 0.00399
o-Xylene		<0.00201 0.00201	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Total Xylenes		<0.00201 0.00201	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Total BTEX		<0.00201 0.00201	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Chloride by EPA 300	Extracted:	Sep-19-17 10:05	Sep-19-17 10:05	Sep-19-17 10:05	Sep-19-17 10:05	Sep-19-17 10:05	Sep-20-17 14:50
	Analyzed:	Sep-19-17 16:04	Sep-19-17 16:11	Sep-19-17 16:18	Sep-19-17 16:25	Sep-19-17 16:32	Sep-20-17 17:11
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		858 5.00	4990 24.8	290 5.00	2670 24.9	89.9 5.00	2420 24.9
TPH By SW8015 Mod	Extracted:	Sep-13-17 08:00	Sep-13-17 08:00	Sep-13-17 08:00	Sep-13-17 08:00	Sep-13-17 08:00	Sep-13-17 08:00
	Analyzed:	Sep-13-17 12:56	Sep-13-17 13:17	Sep-13-17 13:37	Sep-13-17 13:58	Sep-13-17 15:00	Sep-13-17 15:20
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0	<14.9 14.9
Diesel Range Organics (DRO)		<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0	<14.9 14.9
Oil Range Hydrocarbons (ORO)		<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0	<14.9 14.9
Total TPH		<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0	<14.9 14.9

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Holly Taylor
Project Manager



Certificate of Analysis Summary 562530

Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Project Name: Osage 18 Fee B Com 0001H



Project Id:

Contact: Ben Arguijo

Project Location: NM

Date Received in Lab: Mon Sep-11-17 09:23 am

Report Date: 22-SEP-17

Project Manager: Holly Taylor

<i>Analysis Requested</i>	<i>Lab Id:</i>	562530-013	562530-014	562530-015	562530-016	562530-017	
	<i>Field Id:</i>	SP-8 @ 3'	SP-8 @ 4'	SP-10 @ 1.5'	SP-10 @ 4'	SP-11 @ 1.5'	
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	
	<i>Sampled:</i>	Sep-06-17 14:35	Sep-06-17 14:53	Sep-06-17 15:10	Sep-06-17 15:37	Sep-06-17 15:54	
BTEX by EPA 8021B	<i>Extracted:</i>	Sep-14-17 08:37	Sep-14-17 08:37	Sep-14-17 16:00	Sep-14-17 16:00	Sep-14-17 08:37	
	<i>Analyzed:</i>	Sep-14-17 15:33	Sep-14-17 16:30	Sep-15-17 09:17	Sep-15-17 09:34	Sep-14-17 17:07	
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Benzene		<0.00201 0.00201	<0.00202 0.00202	<0.00351 0.00351	<0.00366 0.00366	<0.00200 0.00200	
Toluene		<0.00201 0.00201	<0.00202 0.00202	<0.00351 0.00351	<0.00366 0.00366	<0.00200 0.00200	
Ethylbenzene		<0.00201 0.00201	<0.00202 0.00202	<0.00351 0.00351	<0.00366 0.00366	<0.00200 0.00200	
m,p-Xylenes		<0.00402 0.00402	<0.00404 0.00404	<0.00702 0.00702	<0.00733 0.00733	<0.00401 0.00401	
o-Xylene		<0.00201 0.00201	<0.00202 0.00202	<0.00351 0.00351	<0.00366 0.00366	<0.00200 0.00200	
Total Xylenes		<0.00201 0.00201	<0.00202 0.00202	<0.00351 0.00351	<0.00366 0.00366	<0.00200 0.00200	
Total BTEX		<0.00201 0.00201	<0.00202 0.00202	<0.00351 0.00351	<0.00366 0.00366	<0.00200 0.00200	
Chloride by EPA 300	<i>Extracted:</i>	Sep-20-17 14:50	Sep-20-17 14:50	Sep-20-17 14:50	Sep-20-17 14:50	Sep-20-17 14:50	
	<i>Analyzed:</i>	Sep-20-17 17:32	Sep-20-17 17:39	Sep-20-17 17:46	Sep-20-17 17:52	Sep-20-17 18:13	
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Chloride		3050 24.9	60.9 4.97	227 4.95	60.3 4.94	102 4.99	
TPH By SW8015 Mod	<i>Extracted:</i>	Sep-13-17 08:00	Sep-13-17 08:00	Sep-13-17 08:00	Sep-13-17 08:00	Sep-13-17 08:00	
	<i>Analyzed:</i>	Sep-13-17 15:40	Sep-13-17 16:01	Sep-13-17 16:22	Sep-13-17 16:42	Sep-13-17 17:03	
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Gasoline Range Hydrocarbons (GRO)		<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0	
Diesel Range Organics (DRO)		<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0	
Oil Range Hydrocarbons (ORO)		<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0	
Total TPH		<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0	

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Holly Taylor
Project Manager

Analytical Report 562530
for
Trinity Oilfield Services & Rentals, LLC

Project Manager: Ben Arguijo

Osage 18 Fee B Com 0001H

22-SEP-17

Collected By: Client



1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215), Arizona (AZ0765), Florida (E871002), Louisiana (03054)
Oklahoma (9218)

Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400)
Xenco-San Antonio: Texas (T104704534)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)



22-SEP-17

Project Manager: **Ben Arguijo**
Trinity Oilfield Services & Rentals, LLC
PO BOX 2587
Hobbs, NM 88241

Reference: XENCO Report No(s): **562530**
Osage 18 Fee B Com 0001H
Project Address: NM

Ben Arguijo:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 562530. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 562530 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Holly Taylor
Project Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America



Sample Cross Reference 562530



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B Com 0001H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SP-2 @ 1.5'	S	09-06-17 10:35		562530-001
SP-2 @ 4.5'	S	09-06-17 11:03		562530-002
SP-3 @ 1.5'	S	09-06-17 11:20		562530-003
SP-3 @ 2.5'	S	09-06-17 11:44		562530-004
SP-4 @ 1'	S	09-06-17 12:05		562530-005
SP-4 @ 3'	S	09-06-17 12:42		562530-006
SP-5 @ 1'	S	09-06-17 13:01		562530-007
SP-5 @ 2.5'	S	09-06-17 13:12		562530-008
SP-5 @ 5.5'	S	09-06-17 13:22		562530-009
SP-7 @ 1.5'	S	09-06-17 13:50		562530-010
SP-7 @ 2.5'	S	09-06-17 14:00		562530-011
SP-8 @ 1.5'	S	09-06-17 14:23		562530-012
SP-8 @ 3'	S	09-06-17 14:35		562530-013
SP-8 @ 4'	S	09-06-17 14:53		562530-014
SP-10 @ 1.5'	S	09-06-17 15:10		562530-015
SP-10 @ 4'	S	09-06-17 15:37		562530-016
SP-11 @ 1.5'	S	09-06-17 15:54		562530-017



CASE NARRATIVE

Client Name: *Trinity Oilfield Services & Rentals, LLC*

Project Name: *Osage 18 Fee B Com 0001H*

Project ID:
Work Order Number(s): 562530

Report Date: 22-SEP-17
Date Received: 09/11/2017

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3027595 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3027682 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Surrogate 4-Bromofluorobenzene recovered below QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 562530-015.

Batch: LBA-3027739 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Surrogate 4-Bromofluorobenzene recovered below QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 562530-010.



Certificate of Analytical Results 562530



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B Com 0001H

Sample Id: SP-2 @ 1.5'

Matrix: Soil

Date Received: 09.11.17 09.23

Lab Sample Id: 562530-001

Date Collected: 09.06.17 10.35

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MNV

% Moisture:

Analyst: MNV

Date Prep: 09.19.17 10.05

Basis: Wet Weight

Seq Number: 3028137

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	869	5.00	mg/kg	09.19.17 14.54		1

Analytical Method: TPH By SW8015 Mod

Prep Method: TX1005P

Tech: ARM

% Moisture:

Analyst: ARM

Date Prep: 09.13.17 08.00

Basis: Wet Weight

Seq Number: 3027618

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	737	74.9	mg/kg	09.13.17 10.14		5
Diesel Range Organics (DRO)	C10C28DRO	8860	74.9	mg/kg	09.13.17 10.14		5
Oil Range Hydrocarbons (ORO)	PHCG2835	1130	74.9	mg/kg	09.13.17 10.14		5
Total TPH	PHC635	10700	74.9	mg/kg	09.13.17 10.14		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	09.13.17 10.14	
o-Terphenyl	84-15-1	121	%	70-135	09.13.17 10.14	



Certificate of Analytical Results 562530



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B Com 0001H

Sample Id: **SP-2 @ 1.5'**

Matrix: Soil

Date Received: 09.11.17 09.23

Lab Sample Id: 562530-001

Date Collected: 09.06.17 10.35

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 09.13.17 13.00

Basis: Wet Weight

Seq Number: 3027595

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	09.14.17 01.37	U	1
Toluene	108-88-3	0.00727	0.00198	mg/kg	09.14.17 01.37		1
Ethylbenzene	100-41-4	0.155	0.00198	mg/kg	09.14.17 01.37		1
m,p-Xylenes	179601-23-1	0.198	0.00397	mg/kg	09.14.17 01.37		1
o-Xylene	95-47-6	0.100	0.00198	mg/kg	09.14.17 01.37		1
Total Xylenes	1330-20-7	0.298	0.00198	mg/kg	09.14.17 01.37		1
Total BTEX		0.460	0.00198	mg/kg	09.14.17 01.37		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	86	%	80-120	09.14.17 01.37		
4-Bromofluorobenzene	460-00-4	117	%	80-120	09.14.17 01.37		



Certificate of Analytical Results 562530



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B Com 0001H

Sample Id: SP-2 @ 4.5'

Matrix: Soil

Date Received: 09.11.17 09.23

Lab Sample Id: 562530-002

Date Collected: 09.06.17 11.03

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MNV

% Moisture:

Analyst: MNV

Date Prep: 09.19.17 10.05

Basis: Wet Weight

Seq Number: 3028137

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	217	5.00	mg/kg	09.19.17 15.01		1

Analytical Method: TPH By SW8015 Mod

Prep Method: TX1005P

Tech: ARM

% Moisture:

Analyst: ARM

Date Prep: 09.13.17 08.00

Basis: Wet Weight

Seq Number: 3027618

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	09.13.17 10.34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	09.13.17 10.34	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	09.13.17 10.34	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	09.13.17 10.34	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	104	%	70-135	09.13.17 10.34		
o-Terphenyl	84-15-1	103	%	70-135	09.13.17 10.34		



Certificate of Analytical Results 562530



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B Com 0001H

Sample Id: SP-2 @ 4.5'

Matrix: Soil

Date Received: 09.11.17 09.23

Lab Sample Id: 562530-002

Date Collected: 09.06.17 11.03

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 09.14.17 08.37

Basis: Wet Weight

Seq Number: 3027739

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.14.17 10.50	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.14.17 10.50	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.14.17 10.50	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.14.17 10.50	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.14.17 10.50	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.14.17 10.50	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.14.17 10.50	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	86	%	80-120	09.14.17 10.50		
1,4-Difluorobenzene	540-36-3	94	%	80-120	09.14.17 10.50		



Certificate of Analytical Results 562530



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B Com 0001H

Sample Id: **SP-3 @ 1.5'**

Matrix: Soil

Date Received: 09.11.17 09.23

Lab Sample Id: 562530-003

Date Collected: 09.06.17 11.20

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MNV

% Moisture:

Analyst: MNV

Date Prep: 09.19.17 10.05

Basis: Wet Weight

Seq Number: 3028137

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	526	4.99	mg/kg	09.19.17 15.22		1

Analytical Method: TPH By SW8015 Mod

Prep Method: TX1005P

Tech: ARM

% Moisture:

Analyst: ARM

Date Prep: 09.13.17 08.00

Basis: Wet Weight

Seq Number: 3027618

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	09.13.17 11.35	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	09.13.17 11.35	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	09.13.17 11.35	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	09.13.17 11.35	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	105	%	70-135	09.13.17 11.35		
o-Terphenyl	84-15-1	104	%	70-135	09.13.17 11.35		



Certificate of Analytical Results 562530



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B Com 0001H

Sample Id: **SP-3 @ 1.5'**

Matrix: Soil

Date Received: 09.11.17 09.23

Lab Sample Id: 562530-003

Date Collected: 09.06.17 11.20

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 09.13.17 13.00

Basis: Wet Weight

Seq Number: 3027595

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.14.17 01.54	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.14.17 01.54	U	1
Ethylbenzene	100-41-4	0.00437	0.00201	mg/kg	09.14.17 01.54		1
m,p-Xylenes	179601-23-1	0.00737	0.00402	mg/kg	09.14.17 01.54		1
o-Xylene	95-47-6	0.00403	0.00201	mg/kg	09.14.17 01.54		1
Total Xylenes	1330-20-7	0.0114	0.00201	mg/kg	09.14.17 01.54		1
Total BTEX		0.0158	0.00201	mg/kg	09.14.17 01.54		1
Surrogate	Cas Number	% Recovery		Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	90		%	80-120	09.14.17 01.54	
1,4-Difluorobenzene	540-36-3	89		%	80-120	09.14.17 01.54	



Certificate of Analytical Results 562530



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B Com 0001H

Sample Id: **SP-3 @ 2.5'**

Matrix: Soil

Date Received: 09.11.17 09.23

Lab Sample Id: 562530-004

Date Collected: 09.06.17 11.44

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MNV

% Moisture:

Analyst: MNV

Date Prep: 09.19.17 10.05

Basis: Wet Weight

Seq Number: 3028137

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	163	4.96	mg/kg	09.19.17 15.29		1

Analytical Method: TPH By SW8015 Mod

Prep Method: TX1005P

Tech: ARM

% Moisture:

Analyst: ARM

Date Prep: 09.13.17 08.00

Basis: Wet Weight

Seq Number: 3027618

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	09.13.17 11.55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	09.13.17 11.55	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	09.13.17 11.55	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	09.13.17 11.55	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	105	%	70-135	09.13.17 11.55		
o-Terphenyl	84-15-1	104	%	70-135	09.13.17 11.55		



Certificate of Analytical Results 562530



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B Com 0001H

Sample Id: **SP-3 @ 2.5'**

Matrix: Soil

Date Received: 09.11.17 09.23

Lab Sample Id: 562530-004

Date Collected: 09.06.17 11.44

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 09.13.17 13.00

Basis: Wet Weight

Seq Number: 3027595

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	09.14.17 02.13	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	09.14.17 02.13	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	09.14.17 02.13	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	09.14.17 02.13	U	1
o-Xylene	95-47-6	0.00782	0.00202	mg/kg	09.14.17 02.13		1
Total Xylenes	1330-20-7	0.00782	0.00202	mg/kg	09.14.17 02.13		1
Total BTEX		0.00782	0.00202	mg/kg	09.14.17 02.13		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	94	%	80-120	09.14.17 02.13		
1,4-Difluorobenzene	540-36-3	92	%	80-120	09.14.17 02.13		



Certificate of Analytical Results 562530



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B Com 0001H

Sample Id: **SP-4 @ 1'**
Lab Sample Id: 562530-005

Matrix: Soil
Date Collected: 09.06.17 12.05

Date Received: 09.11.17 09.23

Analytical Method: Chloride by EPA 300

Tech: MNV

Analyst: MNV

Seq Number: 3028137

Prep Method: E300P

% Moisture:

Date Prep: 09.19.17 10.05

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2250	25.0	mg/kg	09.19.17 15.50		5

Analytical Method: TPH By SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3027618

Prep Method: TX1005P

% Moisture:

Date Prep: 09.13.17 08.00

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	09.13.17 12.15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	09.13.17 12.15	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	09.13.17 12.15	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	09.13.17 12.15	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	102	%	70-135	09.13.17 12.15		
o-Terphenyl	84-15-1	101	%	70-135	09.13.17 12.15		



Certificate of Analytical Results 562530



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B Com 0001H

Sample Id: **SP-4 @ 1'**
Lab Sample Id: 562530-005

Matrix: Soil
Date Collected: 09.06.17 12.05

Date Received: 09.11.17 09.23

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 09.13.17 13.00

Basis: Wet Weight

Seq Number: 3027595

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.14.17 02.32	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.14.17 02.32	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.14.17 02.32	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	09.14.17 02.32	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.14.17 02.32	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.14.17 02.32	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.14.17 02.32	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	83	%	80-120	09.14.17 02.32		
1,4-Difluorobenzene	540-36-3	95	%	80-120	09.14.17 02.32		



Certificate of Analytical Results 562530



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B Com 0001H

Sample Id: SP-4 @ 3'

Matrix: Soil

Date Received: 09.11.17 09.23

Lab Sample Id: 562530-006

Date Collected: 09.06.17 12.42

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MNV

% Moisture:

Analyst: MNV

Date Prep: 09.19.17 10.05

Basis: Wet Weight

Seq Number: 3028137

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	127	4.95	mg/kg	09.19.17 15.57		1

Analytical Method: TPH By SW8015 Mod

Prep Method: TX1005P

Tech: ARM

% Moisture:

Analyst: ARM

Date Prep: 09.13.17 08.00

Basis: Wet Weight

Seq Number: 3027618

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	09.13.17 12.36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	09.13.17 12.36	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<14.9	14.9	mg/kg	09.13.17 12.36	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	09.13.17 12.36	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	110	%	70-135	09.13.17 12.36		
o-Terphenyl	84-15-1	109	%	70-135	09.13.17 12.36		



Certificate of Analytical Results 562530



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B Com 0001H

Sample Id: **SP-4 @ 3'**

Matrix: Soil

Date Received: 09.11.17 09.23

Lab Sample Id: 562530-006

Date Collected: 09.06.17 12.42

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 09.13.17 13.00

Basis: Wet Weight

Seq Number: 3027595

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.14.17 02.51	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.14.17 02.51	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.14.17 02.51	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	09.14.17 02.51	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.14.17 02.51	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.14.17 02.51	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.14.17 02.51	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	83	%	80-120	09.14.17 02.51		
1,4-Difluorobenzene	540-36-3	93	%	80-120	09.14.17 02.51		



Certificate of Analytical Results 562530



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B Com 0001H

Sample Id: SP-5 @ 1'
Lab Sample Id: 562530-007

Matrix: Soil
Date Collected: 09.06.17 13.01

Date Received: 09.11.17 09.23

Analytical Method: Chloride by EPA 300

Tech: MNV

Analyst: MNV

Seq Number: 3028137

Prep Method: E300P

% Moisture:

Date Prep: 09.19.17 10.05

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	858	5.00	mg/kg	09.19.17 16.04		1

Analytical Method: TPH By SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3027618

Prep Method: TX1005P

% Moisture:

Date Prep: 09.13.17 08.00

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	09.13.17 12.56	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	09.13.17 12.56	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	09.13.17 12.56	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	09.13.17 12.56	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	103	%	70-135	09.13.17 12.56		
o-Terphenyl	84-15-1	102	%	70-135	09.13.17 12.56		



Certificate of Analytical Results 562530



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B Com 0001H

Sample Id: SP-5 @ 1'

Matrix: Soil

Date Received: 09.11.17 09.23

Lab Sample Id: 562530-007

Date Collected: 09.06.17 13.01

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 09.14.17 08.37

Basis: Wet Weight

Seq Number: 3027739

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.14.17 13.01	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.14.17 13.01	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	09.14.17 13.01	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	09.14.17 13.01	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	09.14.17 13.01	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	09.14.17 13.01	U	1
Total BTEX		<0.00201	0.00201	mg/kg	09.14.17 13.01	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	82	%	80-120	09.14.17 13.01		
1,4-Difluorobenzene	540-36-3	100	%	80-120	09.14.17 13.01		



Certificate of Analytical Results 562530



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B Com 0001H

Sample Id: SP-5 @ 2.5'

Matrix: Soil

Date Received: 09.11.17 09.23

Lab Sample Id: 562530-008

Date Collected: 09.06.17 13.12

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MNV

% Moisture:

Analyst: MNV

Date Prep: 09.19.17 10.05

Basis: Wet Weight

Seq Number: 3028137

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4990	24.8	mg/kg	09.19.17 16.11		5

Analytical Method: TPH By SW8015 Mod

Prep Method: TX1005P

Tech: ARM

% Moisture:

Analyst: ARM

Date Prep: 09.13.17 08.00

Basis: Wet Weight

Seq Number: 3027618

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	09.13.17 13.17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	09.13.17 13.17	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	09.13.17 13.17	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	09.13.17 13.17	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	104	%	70-135	09.13.17 13.17		
o-Terphenyl	84-15-1	103	%	70-135	09.13.17 13.17		



Certificate of Analytical Results 562530



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B Com 0001H

Sample Id: SP-5 @ 2.5'

Matrix: Soil

Date Received: 09.11.17 09.23

Lab Sample Id: 562530-008

Date Collected: 09.06.17 13.12

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 09.14.17 08.37

Basis: Wet Weight

Seq Number: 3027739

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	09.14.17 13.20	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	09.14.17 13.20	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	09.14.17 13.20	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	09.14.17 13.20	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	09.14.17 13.20	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	09.14.17 13.20	U	1
Total BTEX		<0.00202	0.00202	mg/kg	09.14.17 13.20	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	83	%	80-120	09.14.17 13.20		
1,4-Difluorobenzene	540-36-3	97	%	80-120	09.14.17 13.20		



Certificate of Analytical Results 562530



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B Com 0001H

Sample Id: SP-5 @ 5.5'

Matrix: Soil

Date Received: 09.11.17 09.23

Lab Sample Id: 562530-009

Date Collected: 09.06.17 13.22

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MNV

% Moisture:

Analyst: MNV

Date Prep: 09.19.17 10.05

Basis: Wet Weight

Seq Number: 3028137

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	290	5.00	mg/kg	09.19.17 16.18		1

Analytical Method: TPH By SW8015 Mod

Prep Method: TX1005P

Tech: ARM

% Moisture:

Analyst: ARM

Date Prep: 09.13.17 08.00

Basis: Wet Weight

Seq Number: 3027618

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	09.13.17 13.37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	09.13.17 13.37	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	09.13.17 13.37	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	09.13.17 13.37	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	102	%	70-135	09.13.17 13.37		
o-Terphenyl	84-15-1	101	%	70-135	09.13.17 13.37		



Certificate of Analytical Results 562530



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B Com 0001H

Sample Id: SP-5 @ 5.5'

Matrix: Soil

Date Received: 09.11.17 09.23

Lab Sample Id: 562530-009

Date Collected: 09.06.17 13.22

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 09.14.17 08.37

Basis: Wet Weight

Seq Number: 3027739

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.14.17 14.55	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.14.17 14.55	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.14.17 14.55	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	09.14.17 14.55	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.14.17 14.55	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.14.17 14.55	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.14.17 14.55	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	80	%	80-120	09.14.17 14.55		
1,4-Difluorobenzene	540-36-3	93	%	80-120	09.14.17 14.55		



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Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B Com 0001H

Sample Id: SP-7 @ 1.5'

Matrix: Soil

Date Received: 09.11.17 09.23

Lab Sample Id: 562530-010

Date Collected: 09.06.17 13.50

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MNV

% Moisture:

Analyst: MNV

Date Prep: 09.19.17 10.05

Basis: Wet Weight

Seq Number: 3028137

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2670	24.9	mg/kg	09.19.17 16.25		5

Analytical Method: TPH By SW8015 Mod

Prep Method: TX1005P

Tech: ARM

% Moisture:

Analyst: ARM

Date Prep: 09.13.17 08.00

Basis: Wet Weight

Seq Number: 3027618

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	09.13.17 13.58	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	09.13.17 13.58	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	09.13.17 13.58	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	09.13.17 13.58	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	104	%	70-135	09.13.17 13.58		
o-Terphenyl	84-15-1	103	%	70-135	09.13.17 13.58		



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Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B Com 0001H

Sample Id: SP-7 @ 1.5'

Matrix: Soil

Date Received: 09.11.17 09.23

Lab Sample Id: 562530-010

Date Collected: 09.06.17 13.50

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 09.14.17 08.37

Basis: Wet Weight

Seq Number: 3027739

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.14.17 15.13	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.14.17 15.13	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.14.17 15.13	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.14.17 15.13	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.14.17 15.13	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.14.17 15.13	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.14.17 15.13	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	30	%	80-120	09.14.17 15.13	**	
1,4-Difluorobenzene	540-36-3	99	%	80-120	09.14.17 15.13		



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Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B Com 0001H

Sample Id: SP-7 @ 2.5'

Matrix: Soil

Date Received: 09.11.17 09.23

Lab Sample Id: 562530-011

Date Collected: 09.06.17 14.00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MNV

% Moisture:

Analyst: MNV

Date Prep: 09.19.17 10.05

Basis: Wet Weight

Seq Number: 3028137

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	89.9	5.00	mg/kg	09.19.17 16.32		1

Analytical Method: TPH By SW8015 Mod

Prep Method: TX1005P

Tech: ARM

% Moisture:

Analyst: ARM

Date Prep: 09.13.17 08.00

Basis: Wet Weight

Seq Number: 3027618

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	09.13.17 15.00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	09.13.17 15.00	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	09.13.17 15.00	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	09.13.17 15.00	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	103	%	70-135	09.13.17 15.00		
o-Terphenyl	84-15-1	103	%	70-135	09.13.17 15.00		



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Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B Com 0001H

Sample Id: **SP-7 @ 2.5'**

Matrix: Soil

Date Received: 09.11.17 09.23

Lab Sample Id: 562530-011

Date Collected: 09.06.17 14.00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 09.14.17 08.37

Basis: Wet Weight

Seq Number: 3027739

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.14.17 15.52	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.14.17 15.52	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.14.17 15.52	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	09.14.17 15.52	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.14.17 15.52	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.14.17 15.52	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.14.17 15.52	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	82	%	80-120	09.14.17 15.52		
1,4-Difluorobenzene	540-36-3	100	%	80-120	09.14.17 15.52		



Certificate of Analytical Results 562530



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B Com 0001H

Sample Id: **SP-8 @ 1.5'**

Matrix: Soil

Date Received: 09.11.17 09.23

Lab Sample Id: 562530-012

Date Collected: 09.06.17 14.23

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MNV

% Moisture:

Analyst: MNV

Date Prep: 09.20.17 14.50

Basis: Wet Weight

Seq Number: 3028327

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2420	24.9	mg/kg	09.20.17 17.11		5

Analytical Method: TPH By SW8015 Mod

Prep Method: TX1005P

Tech: ARM

% Moisture:

Analyst: ARM

Date Prep: 09.13.17 08.00

Basis: Wet Weight

Seq Number: 3027618

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	09.13.17 15.20	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	09.13.17 15.20	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<14.9	14.9	mg/kg	09.13.17 15.20	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	09.13.17 15.20	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	121	%	70-135	09.13.17 15.20		
o-Terphenyl	84-15-1	122	%	70-135	09.13.17 15.20		



Certificate of Analytical Results 562530



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B Com 0001H

Sample Id: **SP-8 @ 1.5'**

Matrix: Soil

Date Received: 09.11.17 09.23

Lab Sample Id: 562530-012

Date Collected: 09.06.17 14.23

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 09.14.17 08.37

Basis: Wet Weight

Seq Number: 3027739

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.14.17 16.11	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.14.17 16.11	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.14.17 16.11	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	09.14.17 16.11	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.14.17 16.11	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.14.17 16.11	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.14.17 16.11	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	96	%	80-120	09.14.17 16.11		
4-Bromofluorobenzene	460-00-4	82	%	80-120	09.14.17 16.11		



Certificate of Analytical Results 562530



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B Com 0001H

Sample Id: **SP-8 @ 3'**

Matrix: Soil

Date Received: 09.11.17 09.23

Lab Sample Id: 562530-013

Date Collected: 09.06.17 14.35

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MNV

% Moisture:

Analyst: MNV

Date Prep: 09.20.17 14.50

Basis: Wet Weight

Seq Number: 3028327

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3050	24.9	mg/kg	09.20.17 17.32		5

Analytical Method: TPH By SW8015 Mod

Prep Method: TX1005P

Tech: ARM

% Moisture:

Analyst: ARM

Date Prep: 09.13.17 08.00

Basis: Wet Weight

Seq Number: 3027618

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	09.13.17 15.40	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	09.13.17 15.40	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	09.13.17 15.40	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	09.13.17 15.40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	09.13.17 15.40	
o-Terphenyl	84-15-1	104	%	70-135	09.13.17 15.40	



Certificate of Analytical Results 562530



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B Com 0001H

Sample Id: **SP-8 @ 3'**

Matrix: Soil

Date Received: 09.11.17 09.23

Lab Sample Id: 562530-013

Date Collected: 09.06.17 14.35

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 09.14.17 08.37

Basis: Wet Weight

Seq Number: 3027739

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.14.17 15.33	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.14.17 15.33	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	09.14.17 15.33	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	09.14.17 15.33	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	09.14.17 15.33	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	09.14.17 15.33	U	1
Total BTEX		<0.00201	0.00201	mg/kg	09.14.17 15.33	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	100	%	80-120	09.14.17 15.33		
4-Bromofluorobenzene	460-00-4	86	%	80-120	09.14.17 15.33		



Certificate of Analytical Results 562530



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B Com 0001H

Sample Id: **SP-8 @ 4'**

Matrix: Soil

Date Received: 09.11.17 09.23

Lab Sample Id: 562530-014

Date Collected: 09.06.17 14.53

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MNV

% Moisture:

Analyst: MNV

Date Prep: 09.20.17 14.50

Basis: Wet Weight

Seq Number: 3028327

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	60.9	4.97	mg/kg	09.20.17 17.39		1

Analytical Method: TPH By SW8015 Mod

Prep Method: TX1005P

Tech: ARM

% Moisture:

Analyst: ARM

Date Prep: 09.13.17 08.00

Basis: Wet Weight

Seq Number: 3027618

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	09.13.17 16.01	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	09.13.17 16.01	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	09.13.17 16.01	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	09.13.17 16.01	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	101	%	70-135	09.13.17 16.01		
o-Terphenyl	84-15-1	101	%	70-135	09.13.17 16.01		



Certificate of Analytical Results 562530



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B Com 0001H

Sample Id: **SP-8 @ 4'**

Matrix: Soil

Date Received: 09.11.17 09.23

Lab Sample Id: 562530-014

Date Collected: 09.06.17 14.53

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 09.14.17 08.37

Basis: Wet Weight

Seq Number: 3027739

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	09.14.17 16.30	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	09.14.17 16.30	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	09.14.17 16.30	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	09.14.17 16.30	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	09.14.17 16.30	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	09.14.17 16.30	U	1
Total BTEX		<0.00202	0.00202	mg/kg	09.14.17 16.30	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	82	%	80-120	09.14.17 16.30		
1,4-Difluorobenzene	540-36-3	98	%	80-120	09.14.17 16.30		



Certificate of Analytical Results 562530



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B Com 0001H

Sample Id: **SP-10 @ 1.5'**

Matrix: Soil

Date Received: 09.11.17 09.23

Lab Sample Id: 562530-015

Date Collected: 09.06.17 15.10

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MNV

% Moisture:

Analyst: MNV

Date Prep: 09.20.17 14.50

Basis: Wet Weight

Seq Number: 3028327

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	227	4.95	mg/kg	09.20.17 17.46		1

Analytical Method: TPH By SW8015 Mod

Prep Method: TX1005P

Tech: ARM

% Moisture:

Analyst: ARM

Date Prep: 09.13.17 08.00

Basis: Wet Weight

Seq Number: 3027618

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	09.13.17 16.22	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	09.13.17 16.22	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	09.13.17 16.22	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	09.13.17 16.22	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	104	%	70-135	09.13.17 16.22		
o-Terphenyl	84-15-1	103	%	70-135	09.13.17 16.22		



Certificate of Analytical Results 562530



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B Com 0001H

Sample Id: **SP-10 @ 1.5'**

Matrix: Soil

Date Received: 09.11.17 09.23

Lab Sample Id: 562530-015

Date Collected: 09.06.17 15.10

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 09.14.17 16.00

Basis: Wet Weight

Seq Number: 3027682

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00351	0.00351	mg/kg	09.15.17 09.17	U	1
Toluene	108-88-3	<0.00351	0.00351	mg/kg	09.15.17 09.17	U	1
Ethylbenzene	100-41-4	<0.00351	0.00351	mg/kg	09.15.17 09.17	U	1
m,p-Xylenes	179601-23-1	<0.00702	0.00702	mg/kg	09.15.17 09.17	U	1
o-Xylene	95-47-6	<0.00351	0.00351	mg/kg	09.15.17 09.17	U	1
Total Xylenes	1330-20-7	<0.00351	0.00351	mg/kg	09.15.17 09.17	U	1
Total BTEX		<0.00351	0.00351	mg/kg	09.15.17 09.17	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	51	%	80-120	09.15.17 09.17	**	
1,4-Difluorobenzene	540-36-3	107	%	80-120	09.15.17 09.17		



Certificate of Analytical Results 562530



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B Com 0001H

Sample Id: **SP-10 @ 4'**

Matrix: Soil

Date Received: 09.11.17 09.23

Lab Sample Id: 562530-016

Date Collected: 09.06.17 15.37

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MNV

% Moisture:

Analyst: MNV

Date Prep: 09.20.17 14.50

Basis: Wet Weight

Seq Number: 3028327

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	60.3	4.94	mg/kg	09.20.17 17.52		1

Analytical Method: TPH By SW8015 Mod

Prep Method: TX1005P

Tech: ARM

% Moisture:

Analyst: ARM

Date Prep: 09.13.17 08.00

Basis: Wet Weight

Seq Number: 3027618

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	09.13.17 16.42	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	09.13.17 16.42	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	09.13.17 16.42	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	09.13.17 16.42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	09.13.17 16.42	
o-Terphenyl	84-15-1	103	%	70-135	09.13.17 16.42	



Certificate of Analytical Results 562530



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B Com 0001H

Sample Id: **SP-10 @ 4'**

Matrix: Soil

Date Received: 09.11.17 09.23

Lab Sample Id: 562530-016

Date Collected: 09.06.17 15.37

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 09.14.17 16.00

Basis: Wet Weight

Seq Number: 3027682

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00366	0.00366	mg/kg	09.15.17 09.34	U	1
Toluene	108-88-3	<0.00366	0.00366	mg/kg	09.15.17 09.34	U	1
Ethylbenzene	100-41-4	<0.00366	0.00366	mg/kg	09.15.17 09.34	U	1
m,p-Xylenes	179601-23-1	<0.00733	0.00733	mg/kg	09.15.17 09.34	U	1
o-Xylene	95-47-6	<0.00366	0.00366	mg/kg	09.15.17 09.34	U	1
Total Xylenes	1330-20-7	<0.00366	0.00366	mg/kg	09.15.17 09.34	U	1
Total BTEX		<0.00366	0.00366	mg/kg	09.15.17 09.34	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	85	%	80-120	09.15.17 09.34		
1,4-Difluorobenzene	540-36-3	97	%	80-120	09.15.17 09.34		



Certificate of Analytical Results 562530



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B Com 0001H

Sample Id: **SP-11 @ 1.5'**

Matrix: Soil

Date Received: 09.11.17 09.23

Lab Sample Id: 562530-017

Date Collected: 09.06.17 15.54

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MNV

% Moisture:

Analyst: MNV

Date Prep: 09.20.17 14.50

Basis: Wet Weight

Seq Number: 3028327

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	102	4.99	mg/kg	09.20.17 18.13		1

Analytical Method: TPH By SW8015 Mod

Prep Method: TX1005P

Tech: ARM

% Moisture:

Analyst: ARM

Date Prep: 09.13.17 08.00

Basis: Wet Weight

Seq Number: 3027618

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	09.13.17 17.03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	09.13.17 17.03	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	09.13.17 17.03	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	09.13.17 17.03	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	102	%	70-135	09.13.17 17.03		
o-Terphenyl	84-15-1	102	%	70-135	09.13.17 17.03		



Certificate of Analytical Results 562530



Trinity Oilfield Services & Rentals, LLC, Hobbs, NM

Osage 18 Fee B Com 0001H

Sample Id: **SP-11 @ 1.5'**

Matrix: Soil

Date Received: 09.11.17 09.23

Lab Sample Id: 562530-017

Date Collected: 09.06.17 15.54

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 09.14.17 08.37

Basis: Wet Weight

Seq Number: 3027739

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.14.17 17.07	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.14.17 17.07	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.14.17 17.07	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	09.14.17 17.07	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.14.17 17.07	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.14.17 17.07	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.14.17 17.07	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	97	%	80-120	09.14.17 17.07		
4-Bromofluorobenzene	460-00-4	85	%	80-120	09.14.17 17.07		

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

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Trinity Oilfield Services & Rentals, LLC
Osage 18 Fee B Com 0001H**Analytical Method: Chloride by EPA 300**

Seq Number: 3028137

MB Sample Id: 731178-1-BLK

Matrix: Solid

LCS Sample Id: 731178-1-BKS

Prep Method: E300P

Date Prep: 09.19.17

LCSD Sample Id: 731178-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	260	104	259	104	90-110	0	20	mg/kg	09.19.17 13:10	

Analytical Method: Chloride by EPA 300

Seq Number: 3028327

MB Sample Id: 731284-1-BLK

Matrix: Solid

LCS Sample Id: 731284-1-BKS

Prep Method: E300P

Date Prep: 09.20.17

LCSD Sample Id: 731284-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	268	107	268	107	90-110	0	20	mg/kg	09.20.17 16:57	

Analytical Method: Chloride by EPA 300

Seq Number: 3028137

Parent Sample Id: 562530-002

Matrix: Soil

MS Sample Id: 562530-002 S

Prep Method: E300P

Date Prep: 09.19.17

MSD Sample Id: 562530-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	217	250	461	98	466	100	90-110	1	20	mg/kg	09.19.17 15:08	

Analytical Method: Chloride by EPA 300

Seq Number: 3028137

Parent Sample Id: 563055-001

Matrix: Soil

MS Sample Id: 563055-001 S

Prep Method: E300P

Date Prep: 09.19.17

MSD Sample Id: 563055-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	11000	248	11200	81	11200	81	90-110	0	20	mg/kg	09.19.17 13:31	X

Analytical Method: Chloride by EPA 300

Seq Number: 3028327

Parent Sample Id: 562530-012

Matrix: Soil

MS Sample Id: 562530-012 S

Prep Method: E300P

Date Prep: 09.20.17

MSD Sample Id: 562530-012 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	2420	249	2660	96	2650	92	90-110	0	20	mg/kg	09.20.17 17:18	

Analytical Method: Chloride by EPA 300

Seq Number: 3028327

Parent Sample Id: 562800-018

Matrix: Soil

MS Sample Id: 562800-018 S

Prep Method: E300P

Date Prep: 09.20.17

MSD Sample Id: 562800-018 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<4.99	250	266	106	266	106	90-110	0	20	mg/kg	09.20.17 18:55	



QC Summary 562530

Trinity Oilfield Services & Rentals, LLC

Osage 18 Fee B Com 0001H

Analytical Method: TPH By SW8015 Mod

Seq Number: 3027618

MB Sample Id: 730908-1-BLK

Matrix: Solid

LCS Sample Id: 730908-1-BKS

Prep Method: TX1005P

Date Prep: 09.13.17

LCSD Sample Id: 730908-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	1040	104	970	97	70-135	7	35	mg/kg	09.13.17 09:34	
Diesel Range Organics (DRO)	<15.0	1000	1130	113	1060	106	70-135	6	35	mg/kg	09.13.17 09:34	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date			
1-Chlorooctane	114		118		107		70-135	%	09.13.17 09:34			
o-Terphenyl	115		117		103		70-135	%	09.13.17 09:34			

Analytical Method: TPH By SW8015 Mod

Seq Number: 3027618

Parent Sample Id: 562530-002

Matrix: Soil

MS Sample Id: 562530-002 S

Prep Method: TX1005P

Date Prep: 09.13.17

MSD Sample Id: 562530-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	998	985	99	948	95	70-135	4	35	mg/kg	09.13.17 10:54	
Diesel Range Organics (DRO)	<15.0	998	1120	112	1050	105	70-135	6	35	mg/kg	09.13.17 10:54	
Surrogate			MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date			
1-Chlorooctane			106		103		70-135	%	09.13.17 10:54			
o-Terphenyl			105		100		70-135	%	09.13.17 10:54			

Analytical Method: BTEX by EPA 8021B

Seq Number: 3027595

MB Sample Id: 730911-1-BLK

Matrix: Solid

LCS Sample Id: 730911-1-BKS

Prep Method: SW5030B

Date Prep: 09.13.17

LCSD Sample Id: 730911-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.104	103	0.100	100	70-130	4	35	mg/kg	09.13.17 19:40	
Toluene	<0.00202	0.101	0.0996	99	0.0952	95	70-130	5	35	mg/kg	09.13.17 19:40	
Ethylbenzene	<0.00202	0.101	0.0994	98	0.0948	95	71-129	5	35	mg/kg	09.13.17 19:40	
m,p-Xylenes	<0.00403	0.202	0.194	96	0.184	92	70-135	5	35	mg/kg	09.13.17 19:40	
o-Xylene	<0.00202	0.101	0.0938	93	0.0890	89	71-133	5	35	mg/kg	09.13.17 19:40	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date			
1,4-Difluorobenzene	91		90		92		80-120	%	09.13.17 19:40			
4-Bromofluorobenzene	82		86		86		80-120	%	09.13.17 19:40			

Trinity Oilfield Services & Rentals, LLC
Osage 18 Fee B Com 0001H

Analytical Method: BTEX by EPA 8021B

Seq Number: 3027739

MB Sample Id: 730960-1-BLK

Matrix: Solid

LCS Sample Id: 730960-1-BKS

Prep Method: SW5030B

Date Prep: 09.14.17

LCSD Sample Id: 730960-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.103	103	0.102	103	70-130	1	35	mg/kg	09.14.17 08:56	
Toluene	<0.00200	0.0998	0.0975	98	0.0965	97	70-130	1	35	mg/kg	09.14.17 08:56	
Ethylbenzene	<0.00200	0.0998	0.0963	96	0.0961	97	71-129	0	35	mg/kg	09.14.17 08:56	
m,p-Xylenes	<0.00399	0.200	0.187	94	0.186	93	70-135	1	35	mg/kg	09.14.17 08:56	
o-Xylene	<0.00200	0.0998	0.0902	90	0.0904	91	71-133	0	35	mg/kg	09.14.17 08:56	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	96		99		97		80-120	%	09.14.17 08:56
4-Bromofluorobenzene	81		90		90		80-120	%	09.14.17 08:56

Analytical Method: BTEX by EPA 8021B

Seq Number: 3027682

MB Sample Id: 730962-1-BLK

Matrix: Solid

LCS Sample Id: 730962-1-BKS

Prep Method: SW5030B

Date Prep: 09.14.17

LCSD Sample Id: 730962-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.0991	99	0.0987	99	70-130	0	35	mg/kg	09.14.17 18:04	
Toluene	<0.00200	0.0998	0.0976	98	0.0976	98	70-130	0	35	mg/kg	09.14.17 18:04	
Ethylbenzene	<0.00200	0.0998	0.0958	96	0.0958	96	71-129	0	35	mg/kg	09.14.17 18:04	
m,p-Xylenes	<0.00399	0.200	0.186	93	0.186	93	70-135	0	35	mg/kg	09.14.17 18:04	
o-Xylene	<0.00200	0.0998	0.0901	90	0.0906	91	71-133	1	35	mg/kg	09.14.17 18:04	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	93		96		96		80-120	%	09.14.17 18:04
4-Bromofluorobenzene	94		93		92		80-120	%	09.14.17 18:04

Analytical Method: BTEX by EPA 8021B

Seq Number: 3027595

Parent Sample Id: 562531-004

Matrix: Soil

MS Sample Id: 562531-004 S

Prep Method: SW5030B

Date Prep: 09.13.17

MSD Sample Id: 562531-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.100	0.0756	76	0.0806	81	70-130	6	35	mg/kg	09.13.17 20:16	
Toluene	<0.00201	0.100	0.0705	71	0.0675	68	70-130	4	35	mg/kg	09.13.17 20:16	X
Ethylbenzene	<0.00201	0.100	0.0680	68	0.0617	62	71-129	10	35	mg/kg	09.13.17 20:16	X
m,p-Xylenes	<0.00402	0.201	0.131	65	0.114	57	70-135	14	35	mg/kg	09.13.17 20:16	X
o-Xylene	<0.00201	0.100	0.0675	68	0.0569	57	71-133	17	35	mg/kg	09.13.17 20:16	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	95		103		80-120	%	09.13.17 20:16
4-Bromofluorobenzene	89		85		80-120	%	09.13.17 20:16



QC Summary 562530

Trinity Oilfield Services & Rentals, LLC Osage 18 Fee B Com 0001H

Analytical Method: BTEX by EPA 8021B

Seq Number: 3027739

Parent Sample Id: 562530-002

Matrix: Soil

MS Sample Id: 562530-002 S

Prep Method: SW5030B

Date Prep: 09.14.17

MSD Sample Id: 562530-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.0891	88	0.0853	85	70-130	4	35	mg/kg	09.14.17 09:34	
Toluene	<0.00202	0.101	0.0828	82	0.0786	79	70-130	5	35	mg/kg	09.14.17 09:34	
Ethylbenzene	<0.00202	0.101	0.0805	80	0.0745	75	71-129	8	35	mg/kg	09.14.17 09:34	
m,p-Xylenes	<0.00403	0.202	0.155	77	0.143	72	70-135	8	35	mg/kg	09.14.17 09:34	
o-Xylene	<0.00202	0.101	0.0776	77	0.0712	71	71-133	9	35	mg/kg	09.14.17 09:34	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		105		80-120	%	09.14.17 09:34
4-Bromofluorobenzene	95		96		80-120	%	09.14.17 09:34

Analytical Method: BTEX by EPA 8021B

Seq Number: 3027682

Parent Sample Id: 562531-003

Matrix: Soil

MS Sample Id: 562531-003 S

Prep Method: SW5030B

Date Prep: 09.14.17

MSD Sample Id: 562531-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.0909	90	0.0848	85	70-130	7	35	mg/kg	09.14.17 18:42	
Toluene	<0.00202	0.101	0.0882	87	0.0823	82	70-130	7	35	mg/kg	09.14.17 18:42	
Ethylbenzene	<0.00202	0.101	0.0859	85	0.0805	81	71-129	6	35	mg/kg	09.14.17 18:42	
m,p-Xylenes	<0.00404	0.202	0.167	83	0.156	78	70-135	7	35	mg/kg	09.14.17 18:42	
o-Xylene	0.00251	0.101	0.0822	79	0.0774	75	71-133	6	35	mg/kg	09.14.17 18:42	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	98		101		80-120	%	09.14.17 18:42
4-Bromofluorobenzene	97		100		80-120	%	09.14.17 18:42



CHAIN OF CUSTODY RECORD

Houston: 4143 Greenbriar Dr. Stafford, TX 77477 (281)240-4200 Odessa: 12600 West I-20 East Odessa, TX 79765 (432)563-1800
70001-C

Page 2 of 2

LAB W.O #:

Field billable Hrs :

562530

* Container Type Codes

VA Vial Amber ES Encore Sampler
VC Vial Clear TS TerraCore Sampler
VP Vial Pre-preserved AC Air Canister
GA Glass Amber TB Tedlar Bag
GC Glass Clear ZB Zip Lock Bag
PA Plastic Amber PC Plastic Clear
Other _____

Size(s): 2oz, 4oz, 8oz, 16oz, 32oz, 1Gal
40ml, 125 ml, 250 ml, 500 ml, 1L, Other _____

** Preservative Type Codes

A. None E. HCL I. Ice
B. HNO₃ F. MeOH J. MCAA C.
H₂SO₄ G. Na₂SiO₃ K. ZnAc&NaOH
D. NaOH H. NaHSO₄ L. Asbc Acid&NaOH
O. _____

^ Matrix Type Codes

GW Ground Water S. Soil/Sediment/Solid
WW Waste Water W. Wipe
DW Drinking Water A. Air
SW Surface Water O. Oil
OW Ocean/Sea Water T. Tissue
PL Product-Liquid U. Urine
PS Product-Solid B. Blood
SL Sludge
Other _____

Company:	Trinity Oilfield Services & Rentals, LLC	Phone:	(575)390-7208
Address:	P.O. Box 2587	Fax:	
City:	Hobbs	State:	NM
PM/Attn:	Ben J. Arguijo	Email:	wade.ditrich@oxy.com & ben@trinityoilfieldservices.com
Project ID:	Osage 18 Fee B Com 0001H	POS:	
Invoice To:	Oxy - Wade Ditrich (575)390-2828	Quote #:	

Sampler Name:	Duskie Bennett	Circle One Event:	Daily Weekly Monthly Quarterly
		Semi-Annual Annual N/A	

Sample #	Sample ID	Collect Date	Collect Time	Matrix Code ^	Field Filtered	Integrity OK (Y/N)	Total # of Containers	Example Volatiles by 826C	TPH	BTEX	Chloride	Hold Sample (CALL) on Highest TPH Only
1	SP-7 @2.5'	9/6/17	1400	S			1		X	X	X	
2	SP-8 @1.5'	9/6/17	1423	S			1		X	X	X	
3	SP-8 @3'	9/6/17	1435	S			1		X	X	X	
4	SP-8 @4'	9/6/17	1453	S			1		X	X	X	
5	SP-10 @1.5'	9/6/17	1510	S			1		X	X	X	
6	SP-10 @4'	9/6/17	1537	S			1		X	X	X	
7	SP-11 @1.5'	9/6/17	1554	S			1		X	X	X	
8												
9												
0												

Reg. Program / Clean-up Std	STATE for Certs & Regs	QA/QC Level & Certification	EDDs	COC & Labels	Coolers Temp °C
CTLs TRRP DW NPDES LPST DryCln Other:	FL TX GA NC SC NJ PA OK LA AL NM Other:	1 2 3 4 CLP AFCEE QAPP NELAC DoD-ELAP Other:	ADAPT SEDD ERPIMS XLS Other:	Match Incomplete Absent Unclear	1 2 3 2.0
Relinquished by	Affiliation	Date	Time	Received by	Affiliation
1 Duskie Bennett	Trinity	9/11/17	0921	EG	MS
2				Shannelmsh	XERO
3					
4					

REMARKS

Non-Contaminates found? _____
Samples kept open/air-dried? _____
Received on Wet Ice? _____
Labeled with proper preservatives? _____
Received within holding time? _____
Custody seals intact? _____
VOCs rec'd w/o headspace? _____
Proper containers used? _____
pH verified-acceptable, and VOCs? _____
Remarks _____

B&A Laboratories: Hobbs 575-392-7550 Dallas 214-902-0300 Houston 281-242-4200 Odessa 432-563-1800 San Antonio 210-509-3334 Phoenix 602-437-0330
FTS Service Centers: Atlanta 770-449-8800 Lakeland 863-646-8526 Tampa 803-543-8099 Philadelphia 610-955-5649 South Carolina 803-543-8099

Execution of this document by client creates a legal and binding agreement between client and Xenco for analytical and testing services provided by Xenco to client under Xenco's standard terms and conditions unless previously agreed. All laboratory analytical data and reports generated by Xenco remain the exclusive property of Xenco until invoices for such data are paid in full.

Revision Date: Nov

Temp: -0.4 IR ID: R-8
CF: (0-6: -0.2°C)
(6-23: +0.2°C)
Corrected Temp: -0.2



XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In



Client: Trinity Oilfield Services & Rentals, LLC

Date/ Time Received: 09/11/2017 09:23:00 AM

Work Order #: 562530

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	2
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	No
#18 Water VOC samples have zero headspace?	N/A

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst:

PH Device/Lot#:

Checklist completed by:

Shawnee Smith

Date: 09/12/2017

Checklist reviewed by:

Holly Taylor

Date: 09/13/2017