## **Trinity Oilfield Services & Rentals, LLC**

#### **Environmental Site Summary & Delineation Plan**



Company: Cambrian Management	Address:_ P.O. Box 272, Midland, TX 79702	2 <b>Telephone #:</b> (432) 631-4398
Site Name: A N ETZ 001	NMOCD Reference#:	1RP-4968
Surface Owner: Permian Water Service	Mineral Owner: Permian Water S	Service
Unit Letter: P (SE/SE) Section: 26 Towr	ship: <u>19S</u> Range: <u>38E</u> County: <u>Lea</u> GPS C	oordinates: <u>32.625784</u> N <u>-103.112811</u> W
Depth to Ground Water: 60' - 65'	_ Distance to Surface Water Body: ☑ <200'	□ 200' - 1,000'  □ >1,000'
Wellhead Protection Area: <1,000' from	Water Source or <200' from Domestic Water So	urce? 🗹 Y 🗌 N
NMOCD Ranking Score: 50 Soil Remed	liation Levels (mg/kg): Benzene: <u>10</u> BTEX: <u>50</u>	TPH:⊠100 Chloride: ≥250
		<b>1,000</b>
		5,000
Date/Time of Release: 7/15/2017	Type of Release: Produced Water Approvir	nate Volume of Release: 150 bbls

#### Background Information:

On July 15, 2017, Cambrian Management discovered a release at its A N ETZ 001 well. A section of a water line failed, resulting in the release of approximately 150 barrels (bbls) of produced water. During initial response activities, the water line was repaired, and a vacuum truck was utilized to recover approximately 130 bbls of free-standing liquid. Based on a preliminary environmental site assessment, a subsequent delineation event, and review of historic aerial imagery of the location, the release affected a total area of the well pad, access road, and adjacent playa watershed measuring approximately 19,635 square feet.

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

#### Summary of Field Activities:

On July 27, 2017, a hand-auger was utilized to collect a series of soil samples from nine (9) locations (SP-1 through SP-9) throughout the release site to investigate the extent of impacted soil. The auger holes were advanced to total depths of approximately 1.5 feet below ground surface (bgs). Soil samples collected at 6 inches bgs were field-screened with a chloride test kit. Confirmation samples collected at 1.5 feet bgs were submitted to Cardinal Laboratories in Hobbs, New Mexico, for analysis of chloride, total petroleum hydrocarbons (TPH), and benzene, toluene, ethylbenzene, and total xylenes (BTEX) concentrations using Environmental Protection Agency (EPA) Methods 300, SW 846-8015M, and SW 846-8021B, respectively. Laboratory analytical results and field tests indicated vertical delineation of the area represented by auger hole SP-6 had been achieved.

On December 11, 2017, a hand-auger was utilized to collect a series of soil samples from six (6) locations (SP-10 through SP-15) along the visibly stained area on the well pad and access road, as well as in non-impacted areas outside the inferred margins of the release. The hand auger was also utilized to further advance existing auger holes SP-1 through SP-5 and SP-6. The auger holes were advanced to the hard rock layer underlying the site, and total depths ranged from 1 foot bgs (SP-10 through SP-15) to 3 feet bgs (SP-5). Soil samples collected at 1-foot vertical 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 and field screens indicated vertical delineation of the areas represented by auger holes SP-3, SP-11, SP-12, and SP-15 had been achieved.

Locations of the auger holes are depicted in Figure 2, "Proposed Delineation Map". Laboratory analytical results are summarized in Table 1, and analytical reports are provided in Appendix D. Chloride field test results are summarized in Table 2.

## **Trinity Oilfield Services & Rentals, LLC**

**Environmental Site Summary & Delineation Plan** 



#### **Proposed Activities:**

Review of historic aerial imagery and documentation on the NMOCD's online imaging system indicates the release impacted an area which had been affected by at least one reportable release in the past, which was remediated by a previous contractor (see NMOCD remediation permit 1RP-3415), and for which NMOCD approved closure. Per documentation included with the "Closure Report" for the release, a portion of the impacted area was excavated to a depth of 4 feet bgs, and a 20-mil plastic liner was installed in the primary pooling area in the adjacent playa watershed (identified as a "low lying area" in the report). No documentation of the exact location of the liner (i.e., coordinates, scaled map, etc.) is provided in the report. Laboratory analytical results, field screens, GIS data, and observations made on-site suggest that the July 2017 release may have commingled with residual contaminated soil from this release and/or previous historical releases.

Cambrian Management proposes to conduct the following activities to progress the A N ETZ 001 release site to an NMOCD-approved closure:

Trenches will be advanced to determine the extent of the existing liner in the four cardinal directions.

• Delineation trenches will be advanced in the following areas (see Figure 2) to further investigate the horizontal and vertical extent of impacted soil:

- The areas represented by auger holes SP-1, SP-2, SP-4, SP-5, SP-7, SP-8, SP-9, SP-10, SP-13, and SP-14.
- At approximate 50-foot horizontal intervals along the inferred margins of the release on the well pad, access road, and in the adjacent pasture and playa watershed.
- Inside the bermed area around the A N ETZ 001 well and poly storage tanks.

• The trenches will be advanced horizontally in 5- to 10-foot intervals and/or vertically in 1- to 2-foot vertical intervals. Soil samples collected from the floors of the trenches will be field-screened with a chloride test kit. The trenches will be advanced until field test results suggest contaminants of concern are below the NMOCD "Recommended Remediation Action Levels" (RRALs) established for the site (or to the extent practicable).

• Representative soil samples collected from the delineation trenches will be submitted to an NMOCD-approved laboratory for confirmatory analyses of chloride, TPH, and/or BTEX concentrations using the EPA analytical methods listed in the "Summary of Field Activities" above.

 No additional delineation will be conducted in the areas represented by auger holes SP-3. SP-6. SP-11. SP-12, and SP-15. Soil samples collected from the bottoms of these auger holes exhibit chloride, TPH, and BTEX concentrations below the RRALs established for the site. Furthermore, auger hole SP-6 is located inside the inferred footprint of the existing liner, and auger holes SP-11, SP-12, and SP-15 are located outside the inferred margins of the release.

 Upon receipt of laboratory analytical results from the delineation event, an "Environmental Site Summary & Spill Remediation Proposal" (Work Plan) will be developed, outlining an appropriate soil remediation strategy for the site. The Work Plan will be submitted to the NMOCD for review and approval prior to conducting any excavation activities.

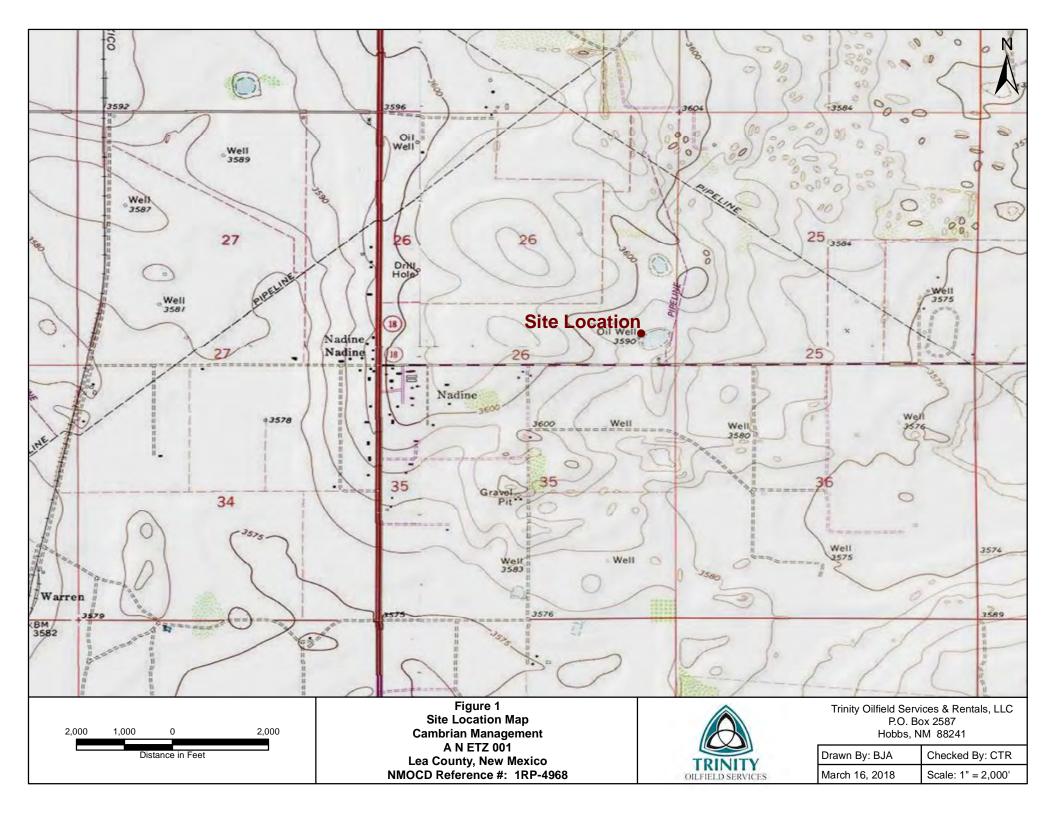
**Enclosures:** 

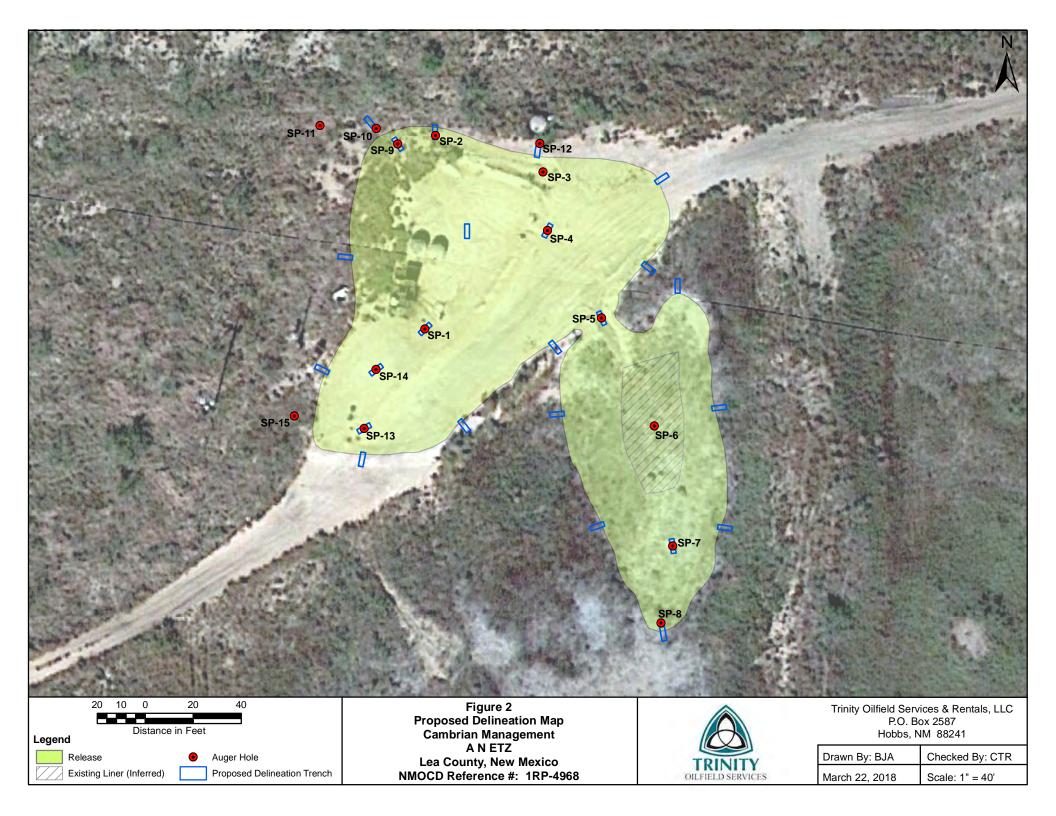
Figure 1: Site Location Map Figure 2: Sample Location Map Table 1: Concentrations of Benzene, BTEX, TPH & Chloride in Soil **Table 2: Chloride Field Tests** Appendix A: Release Notification & Corrective Action (Form C-141) **Appendix B: Photographs** Appendix C: Depth-to-Groundwater Data **Appendix D: Laboratory Analytical Results** 

3/22/2018 Ben J. Arguijo Project Manager

APPROVED By Olivia Yu at 8:19 am, Apr 19, 2018 NMOCD approves of the proposed additional delineation for 1RP-4968. See email correspondence for stipulations.

# Figures





# Tables

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



#### CAMBRIAN MANAGEMENT A N ETZ 001 LEA COUNTY, NEW MEXICO NMOCD REF. #: 1RP-4968

	METHOD: EPA SW 846-8021B, 5030 METHOD: 8015M						300.1						
SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	SOIL STATUS	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL- BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO C <sub>6</sub> -C <sub>12</sub> (mg/Kg)	DRO C <sub>12</sub> -C <sub>28</sub> (mg/Kg)	EXT DRO C <sub>28</sub> -C <sub>35</sub> (mg/Kg)	TPH C <sub>6</sub> -C <sub>35</sub> (mg/Kg)	CHLORIDE (mg/Kg)
NMOCD Recommended	Remediation	n Action Leve	ls (RRALs)	10	NE	NE	NE	50	NE	NE	NE	100	250
SP-1 @ 1.5'	1.5'	7/27/2017	In-Situ	<0.050	<0.050	<0.050	<0.150	< 0.300	<10.0	<10.0	<10.0	<10.0	4,190
SP-1 @ 2'	2'	12/11/2017	In-Situ	<0.050	<0.050	<0.050	<0.150	< 0.300	<10.0	<10.0	<10.0	<10.0	4,190
01 1 0 2		12/11/2011	in ond	40.000	40.000	40.000	40.100	40.000	410.0	10.0	10.0	410.0	1,000
SP-2 @ 1.5'	1.5'	7/27/2017	In-Situ	<0.050	<0.050	<0.050	<0.150	< 0.300	<10.0	<10.0	<10.0	<10.0	2,040
SP-2 @ 2'	2'	12/11/2017	In-Situ	<0.050	< 0.050	<0.050	<0.150	< 0.300	<10.0	<10.0	<10.0	<10.0	253
SP-3 @ 1.5'	1.5'	7/27/2017	In-Situ	< 0.050	< 0.050	< 0.050	<0.150	< 0.300	<10.0	<10.0	<10.0	<10.0	417
SP-3 @ 2'	2'	12/11/2017	In-Situ	< 0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	39.0
SP-4 @ 1.5'	1.5'	7/27/2017	In-Situ	< 0.050	< 0.050	<0.050	<0.150	< 0.300	<10.0	<10.0	<10.0	<10.0	4,270
SP-4 @ 2'	2'	12/11/2017	In-Situ	<0.050	<0.050	<0.050	<0.150	< 0.300	<10.0	<10.0	<10.0	<10.0	971
01 102		12/11/2011	in ond	40.000	40.000	40.000	40.100	40.000	410.0	410.0	410.0	410.0	011
SP-5 @ 1.5'	1.5'	7/27/2017	In-Situ	<0.050	< 0.050	<0.050	<0.150	< 0.300	<10.0	<10.0	<10.0	<10.0	972
SP-5 @ 2'	2'	12/11/2017	In-Situ	<0.050	< 0.050	<0.050	<0.150	< 0.300	<10.0	<10.0	<10.0	<10.0	565
SP-5 @ 3'	3'	12/11/2017	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	490
	4.51	7/07/0047		0.050	0.050	0.050	0.450	0.000	40.0	40.0	10.0	10.0	47.0
SP-6 @ 1.5'	1.5'	7/27/2017	In-Situ	<0.050	< 0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	17.6
SP-8 @ 1.5'	1.5'	7/27/2017	In-Situ	< 0.050	<0.050	<0.050	<0.150	< 0.300	<10.0	<10.0	<10.0	<10.0	560
	1.0	1/21/2011	III Olta	<0.000	20.000	<b>NO.000</b>	<u> </u>	<u> </u>	\$10.0	\$10.0	\$10.0	<10.0	000
SP-9 @ 1.5'	1.5'	7/27/2017	In-Situ	<0.050	< 0.050	<0.050	<0.150	< 0.300	<10.0	<10.0	<10.0	<10.0	1,550
SP-9 @ 2'	2'	12/11/2017	In-Situ	<0.050	< 0.050	<0.050	<0.150	< 0.300	<10.0	<10.0	<10.0	<10.0	828
SP-10 @ 1'	1'	12/11/2017	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	820
SP-11 @ 1'	1'	12/11/2017	In-Situ	< 0.050	< 0.050	< 0.050	<0.150	< 0.300	<10.0	<10.0	<10.0	<10.0	12.9
<u>3P-11 @ 1</u>	I	12/11/2017	In-Situ	<0.050	<0.050	<0.000	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	12.9
SP-12 @ 1'	1'	12/11/2017	In-Situ	<0.050	< 0.050	< 0.050	<0.150	< 0.300	<10.0	<10.0	<10.0	<10.0	23.7
SP-13 @ 1'	1'	12/11/2017	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	2,380
SP-14 @ 1'	1'	12/11/2017	In-Situ	<0.050	< 0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	1,860
	41	40/44/0047	In Otto	-0.050	-0.050	-0.050	-0.150	.0.200	10.0	10.0	10.0	10.0	-10.0
SP-15 @ 1'	1'	12/11/2017	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0

# TABLE 2CHLORIDE FIELD TESTS

#### CAMBRIAN MANAGEMENT, LTD. A N ETZ 001 LEA COUNTY, NEW MEXICO NMOCD REF. #: 1RP-4968



				HACH QUANTAB
SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	SOIL STATUS	CHLORIDE (mg/Kg)
NMOCD Recommended	Remediation	Action Level	(RRAL)	250
SP-1 @ 6"	6"	7/27/2017	In-Situ	3,868
SP-1 @ 2'	2'	12/11/2017	In-Situ	2,188
	- "			
SP-2 @ 6"	6"	7/27/2017	In-Situ	3,044
SP-2 @ 2'	2'	12/11/2017	In-Situ	196
	6"	7/07/0047	In City	4.400
SP-3 @ 6"	6 2'	7/27/2017 12/11/2017	In-Situ	<b>4,196</b> 148
SP-3 @ 2'	2	12/11/2017	In-Situ	148
SP-4 @ 6"	6"	7/27/2017	In-Situ	8,676
SP-4 @ 2'	2'	12/11/2017	In-Situ	612
SP-4 @ 3'	3'	12/11/2017	In-Situ	148
	0	12/11/2011		110
SP-5 @ 6"	6"	7/27/2017	In-Situ	3,868
SP-5 @ 2'	2'	12/11/2017	In-Situ	612
SP-5 @ 3'	3'	12/11/2017	In-Situ	148
SP-6 @ 6"	6"	7/27/2017	In-Situ	592
SP-7 @ 6"	6"	7/27/2017	In-Situ	4,928
SP-8 @ 6"	6"	7/27/2017	In-Situ	336
	0"	7/07/00/7		4 5 4 9
SP-9 @ 6"	6" 2'	7/27/2017	In-Situ	4,548
SP-9 @ 2'	2	12/11/2017	In-Situ	356
SP-10 @ 1'	1'	12/11/2017	In-Situ	844
	<u> </u>	12/11/2017	in-Situ	044
SP-11 @ 1'	1'	12/11/2017	In-Situ	124
		12/11/2011		127
SP-12 @ 1'	1'	12/11/2017	In-Situ	124
	-			
SP-13 @ 1'	1'	12/11/2017	In-Situ	1,756
SP-14 @ 1'	1'	12/11/2017	In-Situ	1,220
SP-15 @ 1'	1'	12/11/2017	In-Situ	<128

Concentrations in BOLD exceed the NMOCD RRAL

# Appendices

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

State of New Mexico Energy Minerals and Natural Resources

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

Revised April 3, 2017 Submit 1 Copy to appropriate District Office in

Form C-141

fance with 19.15.29 NMAC.

						<b>OPERA</b>	TOR		X Initia	al Report	🗌 Final Re		
Name of Co	ompany Ca	ambrian Ma	nagement.	Ltd	0		ike Anthony						
		Midland, T					No. 432-631-43	398					
	me ANE						e Salt Water D		1				
Surface Ou	uner Dermi	an Water Se	rvice	MineralO	wher D	ermian Wa	ter Service	_	ADING	t Line County Lea blume Recovered 130 bbls ate and Hour of Discovery <b>7- 15-2017</b>			
surface Ow	viter Fernin	all water Se	ivice		10.0.1				98         isposal         API No. 30-025-07713         East/West Line East         County Lea         NAD83         bls       Volume Recovered 130 bbls         Date and Hour of Discovery 7-15-2017         he Watercourse.				
Unit Letter	Section	Township	Range	Feet from the		OF RE	Feet from the	Fact/	West Line	County			
P	26	19S	38E	660		uth	660	and the second sec					
	-		Latitud	le_32.625784	Lo	ongitude	-103.112811	NAD	33				
				NAT	URE	OF REL	EASE						
ype of Rele		uced Water				Volume of							
Source of Re	elease Wat	er Line					Iour of Occurren	ce	Date and	Hour of Dis	scovery		
Was Immed	iate Notice C	Given?				Unknown If YES, To	Whom?		1 1.12	1.2014			
			Yes X	No 🗌 Not Req	uired		24.010.0111						
y Whom?						Date and H	Iour						
	Vas a Watercourse Reached?					If YES, Vo	olume Impacting	the Wat	tercourse.				
			Yes X	No									
		pacted, Descr em and Reme					<b>RECEIVI</b> By Olivia		t 8:54 a	am, Fe	b 16, 2018		
Describe Ca	use of Proble	em and Reme	dial Action		e – appro		By Olivia		t 8:54 a	am, Fe	b 16, 2018		
Describe Ca Water line b	use of Proble	em and Reme	dial Action v picked up	Taken.* all water possible	e – appro		By Olivia		t 8:54 a	am, Fe	b 16, 2018		
Describe Ca Water line b Describe Ar The release	use of Proble ousted and we ea Affected a affected a to	em and Reme e immediately and Cleanup tal area of the	dial Action picked up Action Tak	Taken.* all water possible	d, and a	oximately 13	By Olivia 10 bbls 11re measuring app	Yu a					
Describe Ca Vater line b Describe Ar The release mpacted arc hereby cert egulations a ublic health hould their r the enviro	use of Proble ousted and we ea Affected a affected a to ea will be co tify that the i all operators h or the envi- operations h onment. In a	em and Reme e immediately and Cleanup tal area of the nducted in ac information g are required ronment. The ave failed to iddition, NMG	dial Action picked up Action Tak well pad, of cordance w iven above to report an e acceptanc adequately DCD accept	Taken.* all water possible en.* caliche access roa	d, and a NMSLC lete to th elease no rt by the emediate	oximately 13 djacent pastu D guidelines. ne best of my otifications a e NMOCD m e contaminat	By Olivia 0 bbls re measuring app knowledge and nd perform corre harked as "Final F ion that pose a th	yu a	and that pur tions for rel does not rel ground wate	sq ft. Rem suant to NM leases which lieve the ope er, surface w	ediation of the 10CD rules and 1 may endanger erator of liability rater, human healt		
Describe Ca Vater line b Describe Ar Che release mpacted arc hereby cert egulations a bublic health hould their or the enviro	use of Proble ousted and we ea Affected a affected a to ea will be co tify that the i all operators h or the envi- operations h onment. In a	em and Reme e immediately and Cleanup tal area of the nducted in ac information g are required ronment. The	dial Action picked up Action Tak well pad, of cordance w iven above to report an e acceptanc adequately DCD accept	Taken.* all water possible en.* caliche access roa ith NMOCD and is true and compl d/or file certain ro e of a C-141 repo investigate and ro	d, and a NMSLC lete to th elease no rt by the emediate	oximately 13 djacent pastu D guidelines. ne best of my otifications a e NMOCD m e contaminat	By Olivia 0 bbls re measuring app knowledge and nd perform corre harked as "Final F ion that pose a th	yu a proxima understa ctive ac Report" reat to g respon:	and that pur tions for rel does not rel ground wate sibility for c	sq ft. Rem suant to NM leases which lieve the ope or, surface w compliance v	ediation of the 10CD rules and 1 may endanger erator of liability rater, human healt with any other		
Describe Ca Vater line b Describe Ar The release a mpacted are hereby cert egulations a ublic health hould their or the enviro ederal, state	use of Proble ousted and we ea Affected a affected a to ea will be co tify that the i all operators h or the envi- operations h onment. In a	em and Reme e immediately and Cleanup tal area of the nducted in ac information g are required ronment. The ave failed to iddition, NMG	dial Action picked up Action Tak well pad, of cordance w iven above to report an e acceptanc adequately DCD accept	Taken.* all water possible en.* caliche access roa ith NMOCD and is true and compl d/or file certain ro e of a C-141 repo investigate and ro	d, and a NMSLC lete to the elease no rt by the emediate report do	oximately 13 djacent pastu D guidelines. ne best of my otifications a e NMOCD m e contaminat pes not reliev	By Olivia 0 bbls re measuring app 1 knowledge and parform corre 1 nd perform corre	yu a proxima understa ctive ac Report" reat to g respon: SERV	and that pur tions for rel does not rel ground wate sibility for c	sq ft. Rem suant to NM leases which lieve the ope or, surface w compliance v	ediation of the 10CD rules and 1 may endanger erator of liability rater, human healt with any other		
Describe Ca Vater line b Describe Ar Che release a mpacted are hereby cert egulations a bublic health hould their for the enviro ederal, state Signature:	use of Proble ousted and we ea Affected a affected a to ea will be co tify that the i all operators h or the envii operations h onment. In a e, or local law	em and Reme e immediately and Cleanup tal area of the nducted in ac information g are required ronment. The ave failed to iddition, NMG	dial Action picked up Action Tak well pad, of cordance w iven above to report an e acceptanc adequately DCD accept	Taken.* all water possible en.* caliche access roa ith NMOCD and is true and compl d/or file certain ro e of a C-141 repo investigate and ro	d, and a NMSLC lete to the elease no rt by the emediate report do	oximately 13 djacent pastu D guidelines. ne best of my otifications a e NMOCD m e contaminat pes not reliev	By Olivia 0 bbls 10 bbls 10 bbls 11 re measuring app 1 knowledge and parform correction 12 nd perform correction 13 nd perform correction 14 nd perform correction 15 nd perform correction 16 nd perform correction 17 nd perform correction 18	yu a proxima understa ctive ac Report" reat to g reat to g respon: Speciali	and that pur tions for rel does not rel ground wate sibility for c	sq ft. Rem suant to NM leases which lieve the ope or, surface w compliance v	ediation of the 10CD rules and 1 may endanger erator of liability rater, human healt with any other		
Describe Ca Water line b Describe Ar The release mpacted are hereby cert regulations a public health should their or the enviro	use of Proble ousted and we ea Affected a affected a to ea will be co tify that the i all operators h or the envir operations h onment. In a e, or local law	em and Reme e immediately and Cleanup tal area of the nducted in ac information g are required ronment. The ave failed to iddition, NMG	dial Action picked up Action Tak well pad, of cordance w iven above to report an e acceptanc adequately DCD accept	Taken.* all water possible en.* caliche access roa ith NMOCD and is true and compl d/or file certain ro e of a C-141 repo investigate and ro	d, and a NMSLC lete to the elease no rt by the emediate report do	oximately 13 djacent pastu D guidelines. ne best of my otifications a e NMOCD m e contaminat pes not reliev	By Olivia 10 bbls 10 bbls 11 re measuring app 12 knowledge and 1 13 nd perform correction 14 nd perform correction 15 nd perform correction 16 nd perform correction 17 nd perform correction 18 nd perform correction 19 nd perform correction	yu a proxima understa ctive ac Report" reat to g reat to g respon: Speciali	and that pur tions for rel does not rel ground wate sibility for c	sq ft. Rem suant to NM leases which lieve the ope er, surface w compliance v DIVISIO	ediation of the 10CD rules and 1 may endanger erator of liability rater, human healt with any other		
Describe Ca Water line b Describe Ar Describe Ar The release mpacted are hereby cert regulations a public health should their or the enviro rederal, state Signature: Printed Nam Fitle: Regulation	use of Proble ousted and we ea Affected a affected a to ea will be co tify that the i all operators h or the envir operations h onment. In a e, or local law Denvi ne: Denvir	em and Reme e immediately and Cleanup tal area of the nducted in ac information g are required ronment. The ave failed to iddition, NMG	dial Action picked up Action Tak well pad, a cordance w iven above to report an e acceptanc adequately DCD accep ulations.	Taken.* all water possible en.* caliche access roa ith NMOCD and is true and compl d/or file certain re e of a C-141 repo investigate and re tance of a C-141 n	d, and a NMSLC lete to the elease no rt by the emediate report do	oximately 13 djacent pastu D guidelines. D guidelines e NMOCD m e contaminat bes not reliev Approved by Approval Da Conditions o	By Olivia 10 bbls 10 bbls 11 re measuring app 12 knowledge and 1 13 nd perform correction 14 perform correction 15 nd perform correction 16 nd perform correction 17 nd perform correction 18 nd perform correction 19 nd perform correction 10 nd perform 10 nd perform	Yu a proxima understa ctive ac Report" reat to g respon: Speciali	and that pur tions for rel does not rel ground wate sibility for c VATION st:	sq ft. Rem suant to NM leases which lieve the ope er, surface w compliance v DIVISIO	ediation of the 10CD rules and 1 may endanger erator of liability ater, human healt with any other ON		

|1RP-4968

pOY1804732617

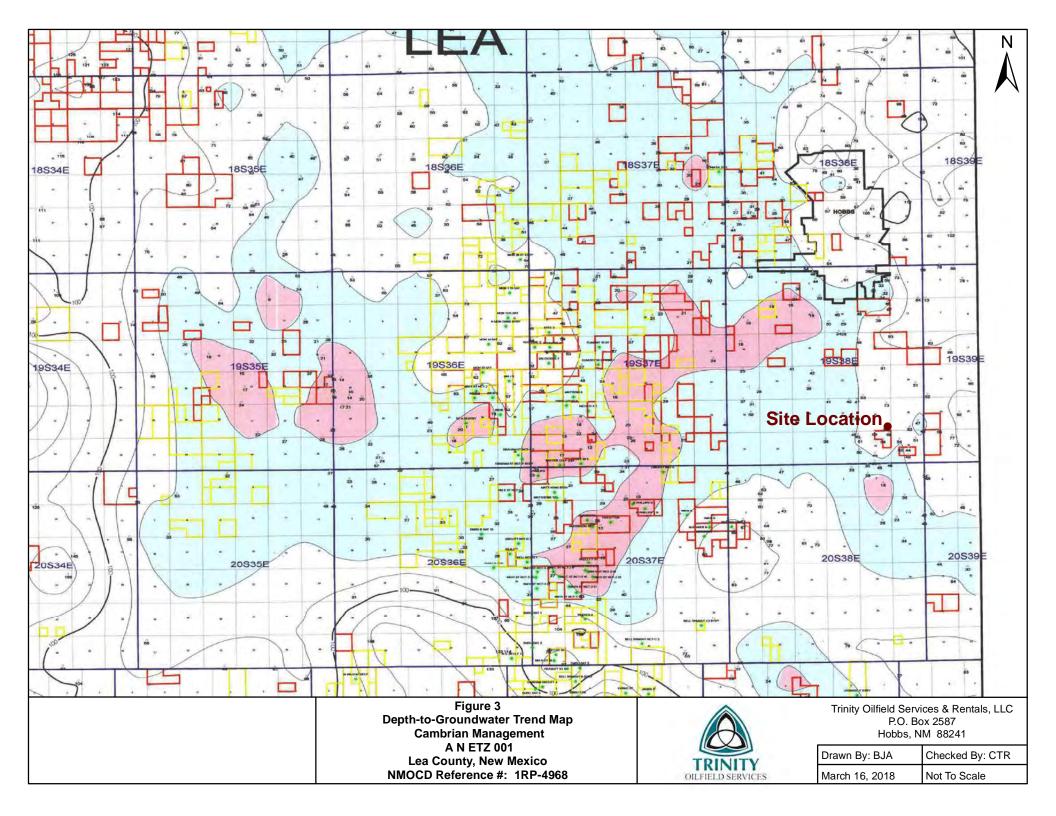
# Appendix B Depth-to-Groundwater Data

	V	Vat								e Engine pth to		ter	
(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)	(R=POD been repl O=orpha C=the fil closed)	laced, ned,		<b>\</b> 1			V 2=NE est to lar	3=SW 4=S egest) (1	E) NAD83 UTM in 1	neters)	(In f	eet)	
		Sub-		QQO	2							Wat	er
POD Number	Code	basin	County	64 16	4 Sec	Tws	Rng	Х	Y	DistanceDep	thWellDept	thWater Colu	mn
L 00298 POD5		L	LE	3 3	3 25	19S	38E	677345	3611275* 🌍	315	112	64	48
									Avera	age Depth to Wate	r:	64 feet	
										Minimum Dep	th:	64 feet	
										Maximum Dep	:h:	64 feet	
Record Count: 1													
UTMNAD83 Radi	us Search (ir	n meters	<u>.):</u>										
Easting (X): 6	77044		North	ning (Y):	361	1369			Radius: 320				
*UTM location was derive	d from PLSS	- see Helj	р										

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.

8/28/17 3:51 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER



# Appendix C Photographs



AN ETZ 001 - Release (Looking Southwest)



AN ETZ 001 - Release (Looking West)



AN ETZ 001 - Release (Looking West-Northwest)



AN ETZ 001 - Release (Looking Northwest)



AN ETZ 001 – Release (Looking North-Northwest)



AN ETZ 001 - Release (Looking Northwest)



AN ETZ 001 – Release (Looking South-Southwest)



AN ETZ 001 - Release (Looking North-Northeast)



AN ETZ 001 – Release (Looking Southwest)



AN ETZ 001 - Release (Looking East-Southeast)



AN ETZ 001 - Release (Looking Southeast)



AN ETZ 001 - Release (Looking Northeast)



AN ETZ 001 - Release (Looking Southwest)



AN ETZ 001 – Release (Looking South-Southwest)



AN ETZ 001 - Release (Looking Southeast)

# Appendix D Laboratory Analytical Reports



August 10, 2017

BEN ARGUIJO

TRINITY OILFIELD SERVICES & RENTALS, LLC

P. O. BOX 2587

HOBBS, NM 88241

RE: A N ETZ 001

Enclosed are the results of analyses for samples received by the laboratory on 07/28/17 9:50.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-17-9. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at <a href="https://www.tceq.texas.gov/field/qa/lab\_accred\_certif.html">www.tceq.texas.gov/field/qa/lab\_accred\_certif.html</a>.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

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

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

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

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

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



TRINITY OILFIELD SERVICES & RENTALS, LLC P. O. BOX 2587 HOBBS NM, 88241	Project: Project Number: Project Manager: Fax To:	BEN ARGUIJO	Reported: 10-Aug-17 14:40
---	--	-------------	------------------------------

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SP-1 @ 1.5'	H701975-01	Soil	27-Jul-17 16:24	28-Jul-17 09:50
SP-2 @ 1.5'	H701975-02	Soil	27-Jul-17 16:28	28-Jul-17 09:50
SP-3 @ 1.5'	H701975-03	Soil	27-Jul-17 16:31	28-Jul-17 09:50
SP-4 @ 1.5'	H701975-04	Soil	27-Jul-17 16:20	28-Jul-17 09:50
SP-5 @ 1.5'	H701975-05	Soil	27-Jul-17 16:39	28-Jul-17 09:50
SP-6 @ 1.5'	H701975-06	Soil	27-Jul-17 16:42	28-Jul-17 09:50
SP-8 @ 1.5'	H701975-07	Soil	27-Jul-17 16:45	28-Jul-17 09:50
SP-9 @ 1.5'	H701975-08	Soil	27-Jul-17 16:34	28-Jul-17 09:50

#### **Cardinal Laboratories**

#### \*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



TRINITY OILFIELD SERVICES P. O. BOX 2587 HOBBS NM, 88241	LC	Project: A N ETZ 001 Project Number: NONE GIVEN Project Manager: BEN ARGUIJO Fax To: NONE						Reported: 10-Aug-17 14:40				
SP-1 @ 1.5' H701975-01 (Soil)												
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes		
			Cardin	al Laborat	ories							
Volatile Organic Compounds by	EPA Method	8021										
Benzene*	< 0.050		0.050	mg/kg	50	7072808	MS	30-Jul-17	8021B			
Toluene*	< 0.050		0.050	mg/kg	50	7072808	MS	30-Jul-17	8021B			
Ethylbenzene*	< 0.050		0.050	mg/kg	50	7072808	MS	30-Jul-17	8021B			
Total Xylenes*	< 0.150		0.150	mg/kg	50	7072808	MS	30-Jul-17	8021B			
Total BTEX	< 0.300		0.300	mg/kg	50	7072808	MS	30-Jul-17	8021B			
Surrogate: 4-Bromofluorobenzene (PID)			102 %	72-1	48	7072808	MS	30-Jul-17	8021B			
Petroleum Hydrocarbons by GC	FID											
GRO C6-C10	<10.0		10.0	mg/kg	1	7072806	MS	29-Jul-17	8015B			
DRO >C10-C28	<10.0		10.0	mg/kg	1	7072806	MS	29-Jul-17	8015B			
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	7072806	MS	29-Jul-17	8015B			
Surrogate: 1-Chlorooctane			96.5 %	28.3-	164	7072806	MS	29-Jul-17	8015B			
Surrogate: 1-Chlorooctadecane			100 %	34.7-	157	7072806	MS	29-Jul-17	8015B			
			Green Anal	ytical Lab	oratories							
Soluble (DI Water Extraction)												
Chloride	4190		200	mg/kg wet	200	B708046	JDA	09-Aug-17	EPA300.0			

#### **Cardinal Laboratories**

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



TRINITY OILFIELD SERVIC P. O. BOX 2587 HOBBS NM, 88241	LC	Project: A N ETZ 001 Project Number: NONE GIVEN Project Manager: BEN ARGUIJO Fax To: NONE						Reported: 10-Aug-17 14:40			
				-2 @ 1.5'	<b>'</b> D						
			H701	975-02 (Sa	11)						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes	
			Cardina	ıl Laborat	ories						
Volatile Organic Compounds	by EPA Method	8021									
Benzene*	< 0.050		0.050	mg/kg	50	7072808	MS	30-Jul-17	8021B		
Toluene*	< 0.050		0.050	mg/kg	50	7072808	MS	30-Jul-17	8021B		
Ethylbenzene*	< 0.050		0.050	mg/kg	50	7072808	MS	30-Jul-17	8021B		
Total Xylenes*	< 0.150		0.150	mg/kg	50	7072808	MS	30-Jul-17	8021B		
Total BTEX	< 0.300		0.300	mg/kg	50	7072808	MS	30-Jul-17	8021B		
Surrogate: 4-Bromofluorobenzene (PID	)		102 %	72	48	7072808	MS	30-Jul-17	8021B		
Petroleum Hydrocarbons by (	GC FID										
GRO C6-C10	<10.0		10.0	mg/kg	1	7072806	MS	29-Jul-17	8015B		
DRO >C10-C28	<10.0		10.0	mg/kg	1	7072806	MS	29-Jul-17	8015B		
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	7072806	MS	29-Jul-17	8015B		
Surrogate: 1-Chlorooctane			107 %	28.3-	164	7072806	MS	29-Jul-17	8015B		
Surrogate: 1-Chlorooctadecane			110 %	34.7-	157	7072806	MS	29-Jul-17	8015B		
			Green Analy	ytical Lab	oratories						
Soluble (DI Water Extraction)											
Chloride	2040		100	mg/kg wet	100	B708046	JDA	09-Aug-17	EPA300.0		

#### Cardinal Laboratories

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



TRINITY OILFIELD SERVICE P. O. BOX 2587 HOBBS NM, 88241	5 & RENTALS, LLC Project: A N ETZ 001 Project Number: NONE GIVEN Project Manager: BEN ARGUIJO Fax To: NONE						Reported: 10-Aug-17 14:40			
				'-3 @ 1.5' 975-03 (So	vil)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	al Laborat	ories					
Volatile Organic Compounds b	v EPA Method	8021								
Benzene*	< 0.050	0021	0.050	mg/kg	50	7072808	MS	30-Jul-17	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	7072808	MS	30-Jul-17	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	7072808	MS	30-Jul-17	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	7072808	MS	30-Jul-17	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	7072808	MS	30-Jul-17	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			102 %	72	148	7072808	MS	30-Jul-17	8021B	
Petroleum Hydrocarbons by G	C FID									
GRO C6-C10	<10.0		10.0	mg/kg	1	7072806	MS	29-Jul-17	8015B	
DRO >C10-C28	<10.0		10.0	mg/kg	1	7072806	MS	29-Jul-17	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	7072806	MS	29-Jul-17	8015B	
Surrogate: 1-Chlorooctane			95.4 %	28.3-	164	7072806	MS	29-Jul-17	8015B	
Surrogate: 1-Chlorooctadecane			101 %	34.7-	-157	7072806	MS	29-Jul-17	8015B	
			Green Anal	ytical Lab	oratories					
Soluble (DI Water Extraction)										
Chloride	417		10.0	mg/kg wet	10	B708046	JDA	09-Aug-17	EPA300.0	

#### Cardinal Laboratories

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



TRINITY OILFIELD SERVICI P. O. BOX 2587 HOBBS NM, 88241	ES & RENTALS, L	LC	Project Num Project Mana		ie given Arguijo		Reported: 10-Aug-17 14:40			
				-4 @ 1.5'						
			H/01	975-04 (So	11)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	ıl Laborat	ories					
Volatile Organic Compounds	by EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	7072808	MS	30-Jul-17	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	7072808	MS	30-Jul-17	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	7072808	MS	30-Jul-17	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	7072808	MS	30-Jul-17	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	7072808	MS	30-Jul-17	8021B	
Surrogate: 4-Bromofluorobenzene (PID)	)		102 %	72-1	48	7072808	MS	30-Jul-17	8021B	
Petroleum Hydrocarbons by C	GC FID									
GRO C6-C10	<10.0		10.0	mg/kg	1	7072806	MS	29-Jul-17	8015B	
DRO >C10-C28	<10.0		10.0	mg/kg	1	7072806	MS	29-Jul-17	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	7072806	MS	29-Jul-17	8015B	
Surrogate: 1-Chlorooctane			93.9 %	28.3-	164	7072806	MS	29-Jul-17	8015B	
Surrogate: 1-Chlorooctadecane			100 %	34.7-	157	7072806	MS	29-Jul-17	8015B	
			Green Analy	ytical Lab	oratories					
Soluble (DI Water Extraction)										
Chloride	4270		200	mg/kg wet	200	B708046	JDA	09-Aug-17	EPA300.0	

#### Cardinal Laboratories

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



TRINITY OILFIELD SERVIC P. O. BOX 2587 HOBBS NM, 88241	ES & RENTALS, L	LC	Project: A N ETZ 001 Project Number: NONE GIVEN Project Manager: BEN ARGUIJO Fax To: NONE					Reported: 10-Aug-17 14:40			
				-5 @ 1.5' 975-05 (So	i))						
			Reporting								
Analyte	Result	MDL	Ĺimit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes	
			Cardina	ıl Laborat	ories						
Volatile Organic Compounds	ov EPA Method 3	8021									
Benzene*	< 0.050	0021	0.050	mg/kg	50	7072808	MS	30-Jul-17	8021B		
Toluene*	< 0.050		0.050	mg/kg	50	7072808	MS	30-Jul-17	8021B		
Ethylbenzene*	< 0.050		0.050	mg/kg	50	7072808	MS	30-Jul-17	8021B		
Total Xylenes*	< 0.150		0.150	mg/kg	50	7072808	MS	30-Jul-17	8021B		
Total BTEX	< 0.300		0.300	mg/kg	50	7072808	MS	30-Jul-17	8021B		
Surrogate: 4-Bromofluorobenzene (PID,	)		102 %	72	48	7072808	MS	30-Jul-17	8021B		
Petroleum Hydrocarbons by C	GC FID										
GRO C6-C10	<10.0		10.0	mg/kg	1	7072806	MS	29-Jul-17	8015B		
DRO >C10-C28	<10.0		10.0	mg/kg	1	7072806	MS	29-Jul-17	8015B		
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	7072806	MS	29-Jul-17	8015B		
Surrogate: 1-Chlorooctane			87.4 %	28.3-	164	7072806	MS	29-Jul-17	8015B		
Surrogate: 1-Chlorooctadecane			89.6 %	34.7-	157	7072806	MS	29-Jul-17	8015B		
			Green Anal	ytical Lab	oratories						
Soluble (DI Water Extraction)					100	<b>D=</b> 00047					
Chloride	972		100	mg/kg wet	100	B708046	JDA	09-Aug-17	EPA300.0		

#### Cardinal Laboratories

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



TRINITY OILFIELD SERVICES P. O. BOX 2587 HOBBS NM, 88241	& RENTALS, LLC Project: A N ETZ 001 Project Number: NONE GIVEN Project Manager: BEN ARGUIJO Fax To: NONE						EN 10-Au				
				2-6 @ 1.5' 975-06 (So							
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes	
			Cardina	al Laborat	ories						
Volatile Organic Compounds by 1	EPA Method	8021									
Benzene*	< 0.050	0021	0.050	mg/kg	50	7073102	MS	31-Jul-17	8021B		
Toluene*	< 0.050		0.050	mg/kg	50	7073102	MS	31-Jul-17	8021B		
Ethylbenzene*	< 0.050		0.050	mg/kg	50	7073102	MS	31-Jul-17	8021B		
Total Xylenes*	< 0.150		0.150	mg/kg	50	7073102	MS	31-Jul-17	8021B		
Total BTEX	< 0.300		0.300	mg/kg	50	7073102	MS	31-Jul-17	8021B		
Surrogate: 4-Bromofluorobenzene (PID)			102 %	72	148	7073102	MS	31-Jul-17	8021B		
Petroleum Hydrocarbons by GC	FID										
GRO C6-C10	<10.0		10.0	mg/kg	1	7073101	MS	31-Jul-17	8015B		
DRO >C10-C28	<10.0		10.0	mg/kg	1	7073101	MS	31-Jul-17	8015B		
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	7073101	MS	31-Jul-17	8015B		
Surrogate: 1-Chlorooctane			92.3 %	28.3	-164	7073101	MS	31-Jul-17	8015B		
Surrogate: 1-Chlorooctadecane			97.0 %	34.7	-157	7073101	MS	31-Jul-17	8015B		
			Green Anal	ytical Lab	oratories						
Soluble (DI Water Extraction)				<i>a</i> .	10	DECODAS	15.4	00.4 17	ED4 200 0		
Chloride	17.6		10.0	mg/kg wet	10	B708046	JDA	09-Aug-17	EPA300.0		

#### Cardinal Laboratories

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



TRINITY OILFIELD SERVICES P. O. BOX 2587 HOBBS NM, 88241	& RENTALS, L	TC	Project: A N ETZ 001 Project Number: NONE GIVEN Project Manager: BEN ARGUIJO Fax To: NONE					Reported: 10-Aug-17 14:40			
				-8 @ 1.5' 975-07 (So	oil)						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes	
			Cardina	al Laborat	ories						
Volatile Organic Compounds by	EPA Method	8021									
Benzene*	< 0.050		0.050	mg/kg	50	7073102	MS	31-Jul-17	8021B		
Toluene*	< 0.050		0.050	mg/kg	50	7073102	MS	31-Jul-17	8021B		
Ethylbenzene*	< 0.050		0.050	mg/kg	50	7073102	MS	31-Jul-17	8021B		
Total Xylenes*	< 0.150		0.150	mg/kg	50	7073102	MS	31-Jul-17	8021B		
Total BTEX	< 0.300		0.300	mg/kg	50	7073102	MS	31-Jul-17	8021B		
Surrogate: 4-Bromofluorobenzene (PID)			102 %	72-	148	7073102	MS	31-Jul-17	8021B		
Petroleum Hydrocarbons by GC	FID										
GRO C6-C10	<10.0		10.0	mg/kg	1	7073101	MS	31-Jul-17	8015B		
DRO >C10-C28	<10.0		10.0	mg/kg	1	7073101	MS	31-Jul-17	8015B		
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	7073101	MS	31-Jul-17	8015B		
Surrogate: 1-Chlorooctane			88.9 %	28.3	164	7073101	MS	31-Jul-17	8015B		
Surrogate: 1-Chlorooctadecane			94.5 %	34.7	-157	7073101	MS	31-Jul-17	8015B		
S-lable (DI Weter Frates (* )			Green Anal	ytical Lab	oratories						
Soluble (DI Water Extraction) Chloride	560		50.0	mg/kg wet	50	B708046	JDA	09-Aug-17	EPA300.0		

#### **Cardinal Laboratories**

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence ar any other cause whitstoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether su claim is based to reproduced except in full with written approval of Cardinal Loaratories.

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



TRINITY OILFIELD SERVICES ( P. O. BOX 2587 HOBBS NM, 88241				Project: A N ETZ 001 Project Number: NONE GIVEN Project Manager: BEN ARGUIJO Fax To: NONE					Reported: 10-Aug-17 14:40				
				-9 @ 1.5' 975-08 (So									
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes			
			Cardina	al Laborat	ories								
Volatile Organic Compounds by 1	EPA Method	8021											
Benzene*	< 0.050		0.050	mg/kg	50	7073102	MS	31-Jul-17	8021B				
Toluene*	< 0.050		0.050	mg/kg	50	7073102	MS	31-Jul-17	8021B				
Ethylbenzene*	< 0.050		0.050	mg/kg	50	7073102	MS	31-Jul-17	8021B				
Total Xylenes*	< 0.150		0.150	mg/kg	50	7073102	MS	31-Jul-17	8021B				
Total BTEX	< 0.300		0.300	mg/kg	50	7073102	MS	31-Jul-17	8021B				
Surrogate: 4-Bromofluorobenzene (PID)			101 %	72-	148	7073102	MS	31-Jul-17	8021B				
Petroleum Hydrocarbons by GC	FID												
GRO C6-C10	<10.0		10.0	mg/kg	1	7073101	MS	31-Jul-17	8015B				
DRO >C10-C28	<10.0		10.0	mg/kg	1	7073101	MS	31-Jul-17	8015B				
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	7073101	MS	31-Jul-17	8015B				
Surrogate: 1-Chlorooctane			88.2 %	28.3	-164	7073101	MS	31-Jul-17	8015B				
Surrogate: 1-Chlorooctadecane			92.8 %	34.7	-157	7073101	MS	31-Jul-17	8015B				
			Green Anal	ytical Lab	oratories								
Soluble (DI Water Extraction)	1550		100		100	D708046	IDA	00 4 17	EDA 200.0				
Chloride	1550		100	mg/kg wet	100	B708046	JDA	09-Aug-17	EPA300.0				

#### **Cardinal Laboratories**

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



TRINITY OILFIELD SERVICES & RENTALS, LLC P. O. BOX 2587 HOBBS NM, 88241	Project: Project Number: Project Manager: Fax To:	BEN ARGUIJO	Reported: 10-Aug-17 14:40
---	--	-------------	------------------------------

#### Volatile Organic Compounds by EPA Method 8021 - Quality Control

		Cardir	1al Lab	oratories						
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7072808 - Volatiles										
Blank (7072808-BLK1)				Prepared: 2	28-Jul-17 A	nalyzed: 29	Jul-17			
Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	0.0501		mg/kg	0.0500		100	72-148			
LCS (7072808-BS1)				Prepared: 2	28-Jul-17 A	nalyzed: 29	Jul-17			
Benzene	1.93	0.050	mg/kg	2.00		96.6	79.5-124			
Toluene	1.80	0.050	mg/kg	2.00		89.9	75.5-127			
Ethylbenzene	1.88	0.050	mg/kg	2.00		93.9	77.7-125			
Total Xylenes	5.68	0.150	mg/kg	6.00		94.6	70.9-124			
Surrogate: 4-Bromofluorobenzene (PID)	0.0498		mg/kg	0.0500		99.7	72-148			
LCS Dup (7072808-BSD1)				Prepared: 2	28-Jul-17 A	nalyzed: 29	Jul-17			
Benzene	1.94	0.050	mg/kg	2.00		96.9	79.5-124	0.304	6.5	
Toluene	1.81	0.050	mg/kg	2.00		90.6	75.5-127	0.754	7.02	
Ethylbenzene	1.87	0.050	mg/kg	2.00		93.5	77.7-125	0.466	7.83	
Total Xylenes	5.65	0.150	mg/kg	6.00		94.2	70.9-124	0.464	7.78	
Surrogate: 4-Bromofluorobenzene (PID)	0.0502		mg/kg	0.0500		100	72-148			

#### Batch 7073102 - Volatiles

Blank (7073102-BLK1)				Prepared & Analy	zed: 31-Jul-17		
Benzene	ND	0.050	mg/kg				
Toluene	ND	0.050	mg/kg				
Ethylbenzene	ND	0.050	mg/kg				
Total Xylenes	ND	0.150	mg/kg				
Total BTEX	ND	0.300	mg/kg				
Surrogate: 4-Bromofluorobenzene (PID)	0.0522		mg/kg	0.0500	104	72-148	

#### **Cardinal Laboratories**

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence ar any other cause whitstoewer shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether su claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Labotaries.

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



TRINITY OILFIELD SERVICES & RENTALS, LLC P. O. BOX 2587 HOBBS NM, 88241	Project: Project Number: Project Manager: Fax To:	BEN ARGUIJO	Reported: 10-Aug-17 14:40
---	--	-------------	------------------------------

#### Volatile Organic Compounds by EPA Method 8021 - Quality Control

#### **Cardinal Laboratories**

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 7073102 - Volatiles										
LCS (7073102-BS1)				Prepared &	Analyzed:	31-Jul-17				
Benzene	2.13	0.050	mg/kg	2.00		107	79.5-124			
Toluene	1.98	0.050	mg/kg	2.00		99.1	75.5-127			
Ethylbenzene	2.07	0.050	mg/kg	2.00		104	77.7-125			
Total Xylenes	6.23	0.150	mg/kg	6.00		104	70.9-124			
Surrogate: 4-Bromofluorobenzene (PID)	0.0502		mg/kg	0.0500		100	72-148			
LCS Dup (7073102-BSD1)				Prepared &	Analyzed:	31-Jul-17				
Benzene	2.12	0.050	mg/kg	2.00		106	79.5-124	0.340	6.5	
Toluene	2.00	0.050	mg/kg	2.00		99.9	75.5-127	0.837	7.02	
Ethylbenzene	2.07	0.050	mg/kg	2.00		104	77.7-125	0.0768	7.83	
Total Xylenes	6.27	0.150	mg/kg	6.00		104	70.9-124	0.614	7.78	
Surrogate: 4-Bromofluorobenzene (PID)	0.0507		mg/kg	0.0500		101	72-148			

#### **Cardinal Laboratories**

#### \*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any daim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence ar any other cause whitstoewer shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether su claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



TRINITY OILFIELD SERVICES & RENTALS, LLC P. O. BOX 2587 HOBBS NM, 88241	Project: Project Number: Project Manager: Fax To:	BEN ARGUIJO	Reported: 10-Aug-17 14:40
---	--	-------------	------------------------------

#### Petroleum Hydrocarbons by GC FID - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7072806 - General Prep - Organics										
Blank (7072806-BLK1)				Prepared &	analyzed:	28-Jul-17				
GRO C6-C10	ND	10.0	mg/kg		-					
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C35	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Total TPH C6-C28	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	55.1		mg/kg	50.0		110	28.3-164			
Surrogate: 1-Chlorooctadecane	59.3		mg/kg	50.0		119	34.7-157			
LCS (7072806-BS1)				Prepared &	analyzed:	28-Jul-17				
GRO C6-C10	216	10.0	mg/kg	200		108	76.6-119			
DRO >C10-C28	227	10.0	mg/kg	200		114	81.4-124			
Total TPH C6-C28	443	10.0	mg/kg	400		111	79.4-121			
Surrogate: 1-Chlorooctane	62.1		mg/kg	50.0		124	28.3-164			
Surrogate: 1-Chlorooctadecane	65.6		mg/kg	50.0		131	34.7-157			
LCS Dup (7072806-BSD1)				Prepared &	a Analyzed:	28-Jul-17				
GRO C6-C10	210	10.0	mg/kg	200		105	76.6-119	2.77	7.94	
DRO >C10-C28	222	10.0	mg/kg	200		111	81.4-124	2.33	9.83	
Total TPH C6-C28	432	10.0	mg/kg	400		108	79.4-121	2.54	8.57	
Surrogate: 1-Chlorooctane	60.5		mg/kg	50.0		121	28.3-164			
	65.8		mg/kg	50.0		132	34.7-157			

Blank (7073101-BLK1)				Prepared & Analy	/zed: 31-Jul-17		
GRO C6-C10	ND	10.0	mg/kg				
DRO >C10-C28	ND	10.0	mg/kg				
EXT DRO >C28-C35	ND	10.0	mg/kg				
EXT DRO >C28-C36	ND	10.0	mg/kg				
Total TPH C6-C28	ND	10.0	mg/kg				
Surrogate: 1-Chlorooctane	49.5		mg/kg	50.0	99.0	28.3-164	
Surrogate: 1-Chlorooctadecane	53.2		mg/kg	50.0	106	34.7-157	

#### Cardinal Laboratories

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



TRINITY OILFIELD SERVICES & RENTALS, LLC P. O. BOX 2587 HOBBS NM, 88241	Project: Project Number: Project Manager: Fax To:	BEN ARGUIJO	Reported: 10-Aug-17 14:40
---	--	-------------	------------------------------

## Petroleum Hydrocarbons by GC FID - Quality Control

## **Cardinal Laboratories**

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 7073101 - General Prep - Organics										
LCS (7073101-BS1)				Prepared &	Analyzed:	31-Jul-17				
GRO C6-C10	200	10.0	mg/kg	200		99.8	76.6-119			
DRO >C10-C28	207	10.0	mg/kg	200		103	81.4-124			
Total TPH C6-C28	406	10.0	mg/kg	400		102	79.4-121			
Surrogate: 1-Chlorooctane	57.2		mg/kg	50.0		114	28.3-164			
Surrogate: 1-Chlorooctadecane	58.1		mg/kg	50.0		116	34.7-157			
LCS Dup (7073101-BSD1)				Prepared &	Analyzed:	31-Jul-17				
GRO C6-C10	195	10.0	mg/kg	200		97.5	76.6-119	2.36	7.94	
DRO >C10-C28	201	10.0	mg/kg	200		101	81.4-124	2.64	9.83	
Total TPH C6-C28	396	10.0	mg/kg	400		99.1	79.4-121	2.50	8.57	
Surrogate: 1-Chlorooctane	53.8		mg/kg	50.0		108	28.3-164			
Surrogate: 1-Chlorooctadecane	56.9		mg/kg	50.0		114	34.7-157			

#### **Cardinal Laboratories**

#### \*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



TRINITY OILFIELD SERVICES & RENTALS, LLCProject:A N ETZ 001P. O. BOX 2587Project Number:NONE GIVENHOBBS NM, 88241Project Manager:BEN ARGUIJOFax To:NONE	Reported: 10-Aug-17 14:40
---	------------------------------

## Soluble (DI Water Extraction) - Quality Control

## **Green Analytical Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B708046 - General Prep - Wet Chem										
Blank (B708046-BLK1)				Prepared: (	)7-Aug-17 /	Analyzed: 0	9-Aug-17			
Chloride	ND	1.00	mg/kg wet							
LCS (B708046-BS1)				Prepared: (	)7-Aug-17 /	Analyzed: 0	9-Aug-17			
Chloride	239	10.0	mg/kg wet	250		95.7	85-115			
LCS Dup (B708046-BSD1)				Prepared: (	)7-Aug-17 A	Analyzed: 0	9-Aug-17			
Chloride	242	10.0	mg/kg wet	250		96.6	85-115	0.915	20	

#### **Cardinal Laboratories**

#### \*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



## **Notes and Definitions**

- ND
   Analyte NOT DETECTED at or above the reporting limit

   RPD
   Relative Percent Difference

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

   \*\*\*
   Insufficient time to reach temperature.
  - Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

#### Cardinal Laboratories

#### \*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence ar any other cause whitstoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether su claim is based to reproduced except in full with written approval of Cardinal Loaratories.

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager

Page 17 of 17

RDINAL LABORATORIES

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 1 of 1

101 East Marland, Hobbs, NM 88240

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

Company Name: Trinity Oilfield Services & Rentals, LLC			LC					BILL TO ANALYSIS REQUEST																																																
Project Manager:	Ben J. Arguijo						Ρ.	0.	#:				2					T																																						
Address: P.O. Bo	ox 2587						c	Compan <sup>, Trinity</sup>																																																
City: Hobbs	State: N	A Zip	: 8	88241				88241			88241			88241				88241				88241				88241				88241				88241				Attn:		Attn:		ttn:		******************************												
Phone #: (575)39	0-7208 Fax #:																																									*******	ess	******					1.1							
Project #:	Project Ov	ner:	IR	Oil				City:				ŝ	(00)																																											
Project Name: Al														8																																										
Project Name: A N ETZ 001 Cambrian Management Project Location: Lea Co., NM									(8015M)	05	3	- 1																																												
Sampler Name: Duskie Bennett				Phone #:					X (B	ride																																														
	iskie bennett	-	_	-	M	ATRIX	_	DD	ESERV	SAMPL	INC	TPH	BTEX (8021B)	Chloride (300)																																										
FOR LAB USE ONLY		a.		T	- NLA		T	I	LOEKV	SAMPL	ING	<b>_</b>	•	0	-1-																																									
Lab I.D.	Sample I.D.	(G)RAB OR (C)ON	# CONTAINERS	GROUNDWATER	WASTEWATER	OIL	SLUDGE OTHER :	ACID/BASE:	ICE / COOL OTHER :	DATE	TIME																																													
	001010															1 1																																								
(	SP-1 @ 1.5'	G	1		>				X	7/27/17	1624	X	X	X				1																																						
2	SP-1 @ 1.5' SP-2 @ 1.5'	G			×	and a subscription	+		X X	7/27/17 7/27/17	1624 1628	X X	x x	x x				$\pm$																																						
2 3			1		>	and a subscription			grandered								-	+	-	$\square$																																				
	SP-2 @ 1.5'	G	1		×				x	7/27/17	1628		x	х	+		-																																							
	SP-2 @ 1.5' SP-3 @ 1.5'	G G	1 1 1		×	( (			x x	7/27/17 7/27/17	1628 1631	x x	x x	x x																																										
	SP-2 @ 1.5' SP-3 @ 1.5' SP-4 @ 1.5'	G G G	1 1 1		× × ×	( (			x x x	7/27/17 7/27/17 7/27/17	1628 1631 1620	x x x	x x x	x x x																																										
	SP-2 @ 1.5' SP-3 @ 1.5' SP-4 @ 1.5' SP-5 @ 1.5'	G G G G	1 1 1 1		> > > > >				X X X X	7/27/17 7/27/17 7/27/17 7/27/17	1628 1631 1620 1639	x x x x	x x x x	x x x x																																										

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the

analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries,

Relinquished By:	Date: 7-28-17	Received By:	Phone Result:
In listere Bernett	19.50	Mulara delande	REMARKS: 1103. Dwner name changed as per
Relinquished By:	Date:	Received By:	Ben. 8/1/17 44
	Time:		Please e-mail results to ben@trinityoilfieldservices.com
Delivered By: (Circle One) 5.	12	Sample Condition CHECKED BY: Cool Intact (Initials)	
Sampler - UPS - Bus - Other:	orrection	S3C No No TO. AN	T

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476



December 27, 2017

BEN ARGUIJO

TRINITY OILFIELD SERVICES & RENTALS, LLC

P. O. BOX 2587

HOBBS, NM 88241

RE: A N ETZ 001

Enclosed are the results of analyses for samples received by the laboratory on 12/12/17 14:58.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-17-10. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at <a href="http://www.tceq.texas.gov/field/ga/lab\_accred\_certif.html">www.tceq.texas.gov/field/ga/lab\_accred\_certif.html</a>.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

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

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

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

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

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



TRINITY OILFIELD SERVICES & RENTALS, LLC P. O. BOX 2587 HOBBS NM, 88241	Project: Project Number: Project Manager: Fax To:	BEN ARGUIJO	Reported: 27-Dec-17 13:37
---	--	-------------	------------------------------

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
S.P1 @ 2'	H703440-01	Soil	11-Dec-17 11:15	12-Dec-17 14:58
S.P2 @ 2'	H703440-02	Soil	11-Dec-17 11:23	12-Dec-17 14:58
S.P3 @ 2'	H703440-03	Soil	11-Dec-17 11:30	12-Dec-17 14:58
S.P4 @ 2'	H703440-04	Soil	11-Dec-17 11:45	12-Dec-17 14:58
S.P5 @ 2'	H703440-05	Soil	11-Dec-17 12:04	12-Dec-17 14:58
S.P5 @ 3'	H703440-06	Soil	11-Dec-17 12:40	12-Dec-17 14:58
S.P9 @ 2'	H703440-07	Soil	11-Dec-17 12:55	12-Dec-17 14:58
S.P10 @ 1'	H703440-08	Soil	11-Dec-17 13:05	12-Dec-17 14:58
S.P11 @ 1'	H703440-09	Soil	11-Dec-17 13:15	12-Dec-17 14:58
S.P12 @ 1'	H703440-10	Soil	11-Dec-17 13:25	12-Dec-17 14:58
S.P13 @ 1'	H703440-11	Soil	11-Dec-17 13:35	12-Dec-17 14:58
S.P14 @ 1'	H703440-12	Soil	11-Dec-17 13:45	12-Dec-17 14:58
S.P15 @ 1'	H703440-13	Soil	11-Dec-17 14:00	12-Dec-17 14:58

#### **Cardinal Laboratories**

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



TRINITY OILFIELD SERVICES P. O. BOX 2587 HOBBS NM, 88241	& RENTALS, L	TC	Project Nur Project Man		Reported: 27-Dec-17 13:37					
				P1 @ 2' 6440-01 (So	il)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardin	al Laborat	ories					
Volatile Organic Compounds by	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			96.3 %	72-	148	7122008	MS	21-Dec-17	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	7121506	MS	16-Dec-17	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	7121506	MS	16-Dec-17	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	7121506	MS	16-Dec-17	8015B	
Surrogate: 1-Chlorooctane			99.0 %	28.3	164	7121506	MS	16-Dec-17	8015B	
Surrogate: 1-Chlorooctadecane			101 %	34.7-	-157	7121506	MS	16-Dec-17	8015B	
			Green Anal	ytical Lab	oratories					
Soluble (DI Water Extraction)	1200		100		100	D712120	IDA	21 Dec 17	EDA 200.0	
Chloride	4300		100	mg/kg wet	100	B712139	JDA	21-Dec-17	EPA300.0	

#### **Cardinal Laboratories**

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence ar any other cause whitstoewer shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether su claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reprodued except in full with written approval of Cardinal Laboratories.

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Cardinal Laboratories         Cardinal Laboratories         Volatile Organic Compounds by EPA Method 8021         Benzene*        0.050       mg/kg       50       7122008       MS       21-Dec-17       8021B         Toluene*         0.050       mg/kg       50       7122008       MS       21-Dec-17       8021B         Ethylbenzene*         0.050       mg/kg       50       7122008       MS       21-Dec-17       8021B         Total Xylenes*           0.150       mg/kg       50       7122008       MS       21-Dec-17       8021B         Total Xylenes*           8021B        8021B         Surogate: 4-Bromofluorobenzene (PID)        95.4 %       72-148       7122008       MS       21-Dec-17       8021B         Surogate: 4-Bromofluorobenzene (PID)        95.4 %       72-148       7122008       MS       21-Dec-17       8021B         BRO C6-C10*           712106       MS       16-Dec-17       8015B         Surogate: 1-Chlorooctane         <	TRINITY OILFIELD SERVICES P. O. BOX 2587 HOBBS NM, 88241	& RENTALS, I	TC	Project Num Project Mana		Reported: 27-Dec-17 13:37					
Analyte         Result         MDL         Limit         Units         Dilution         Batch         Analyst         Analyzed         Method         No           Cardinal Laboratories           Volatile Organic Compounds by EPA Method 8021           Benzene*         <0,050         0,050         mg/kg         50         7122008         MS         21-Dec-17         8021B           Toluene*         <0,050         0,050         mg/kg         50         7122008         MS         21-Dec-17         8021B           Ethylbenzene*         <0,050         0,050         mg/kg         50         7122008         MS         21-Dec-17         8021B           Total Xylenes*         <0,150         mg/kg         50         7122008         MS         21-Dec-17         8021B           Total Xylenes*         <0,150         mg/kg         50         7122008         MS         21-Dec-17         8021B           Surrogate: 4-Bromofluorobenzene (PID)         95.4 %         72-148         7122008         MS         21-Dec-17         8021B           Petroleum Hydrocarbons by GC FID					0	il)					
Volatile Organic Compounds by EPA Method 8021         Benzene*       <0.050       0.050       mg/kg       50       7122008       MS       21-Dec-17       8021B         Toluene*       <0.050       0.050       mg/kg       50       7122008       MS       21-Dec-17       8021B         Ethylbenzene*       <0.050       0.050       mg/kg       50       7122008       MS       21-Dec-17       8021B         Total Xylenes*       <0.050       0.150       mg/kg       50       7122008       MS       21-Dec-17       8021B         Total Xylenes*       <0.150       0.150       mg/kg       50       7122008       MS       21-Dec-17       8021B         Total Xylenes*       <0.300       mg/kg       50       7122008       MS       21-Dec-17       8021B         Surrogate: 4-Bromofluorobenzene (PID)       95.4 %       72-148       7122008       MS       21-Dec-17       8021B         GRO C6-C10*       <10.0       10.0       mg/kg       1       7121506       MS       16-Dec-17       8015B         DRO >C10-C28*       <10.0       10.0       mg/kg       1       7121506       MS       16-Dec-17       8015B         Surrogate: 1-Chloroo	Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Benzene*       < 0.050       mg/kg       50       712208       MS       21-Dec-17       8021B         Toluene*       < 0.050				Cardina	l Laborat	ories					
Benzene*       < 0.050       mg/kg       50       712208       MS       21-Dec-17       8021B         Toluene*       < 0.050	Volatile Organic Compounds by	EPA Method	8021								
Ethylbenzene*       <0.050				0.050	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Total Xylenes*       <0.150       mg/kg       50       7122008       MS       21-Dec-17       8021B         Total BTEX       <0.300	Toluene*	< 0.050		0.050	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Total BTEX <td>Ethylbenzene*</td> <td>&lt; 0.050</td> <td></td> <td>0.050</td> <td>mg/kg</td> <td>50</td> <td>7122008</td> <td>MS</td> <td>21-Dec-17</td> <td>8021B</td> <td></td>	Ethylbenzene*	< 0.050		0.050	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Surrogate:       4-Bromofluorobenzene (PID)       95.4 %       72-148       7122008       MS       21-Dec-17       8021B         Petroleum Hydrocarbons by GC FID	Total Xylenes*	< 0.150		0.150	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Petroleum Hydrocarbons by GC FID         GRO C6-C10*       <10.0	Total BTEX	< 0.300		0.300	mg/kg	50	7122008	MS	21-Dec-17	8021B	
GRO C6-C10*       <10.0	Surrogate: 4-Bromofluorobenzene (PID)			95.4 %	72-1	48	7122008	MS	21-Dec-17	8021B	
DRO >C10-C28*       <10.0	Petroleum Hydrocarbons by GC	FID									
EXT DRO >C28-C36       <10.0       10.0       mg/kg       1       7121506       MS       16-Dec-17       8015B         Surrogate: 1-Chlorooctane       89.7 %       28.3-164       7121506       MS       16-Dec-17       8015B         Surrogate: 1-Chlorooctadecane       89.1 %       34.7-157       7121506       MS       16-Dec-17       8015B         Green Analytical Laboratories         Soluble (DI Water Extraction)	GRO C6-C10*	<10.0		10.0	mg/kg	1	7121506	MS	16-Dec-17	8015B	
Surrogate: 1-Chlorooctane 89.7 % 28.3-164 7121506 MS 16-Dec-17 8015B Surrogate: 1-Chlorooctadecane 89.1 % 34.7-157 7121506 MS 16-Dec-17 8015B Green Analytical Laboratories Soluble (DI Water Extraction)	DRO >C10-C28*	<10.0		10.0	mg/kg	1	7121506	MS	16-Dec-17	8015B	
Surrogate: 1-Chlorooctadecane 89.1 % 34.7-157 7121506 MS 16-Dec-17 8015B Green Analytical Laboratories Soluble (DI Water Extraction)	EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	7121506	MS	16-Dec-17	8015B	
Green Analytical Laboratories Soluble (DI Water Extraction)	Surrogate: 1-Chlorooctane			89.7 %	28.3-	164	7121506	MS	16-Dec-17	8015B	
Soluble (DI Water Extraction)	Surrogate: 1-Chlorooctadecane			89.1 %	34.7-	157	7121506	MS	16-Dec-17	8015B	
				Green Analy	ytical Labo	oratories					
Chloride 253 10.0 mg/kg wet 10 B712139 JDA 20-Dec-17 EPA300.0	Soluble (DI Water Extraction)										
	Chloride	253		10.0	mg/kg wet	10	B712139	JDA	20-Dec-17	EPA300.0	

#### Cardinal Laboratories

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



TRINITY OILFIELD SERVICES P. O. BOX 2587 HOBBS NM, 88241	& RENTALS, I	LC	Project Nun Project Mana		Reported: 27-Dec-17 13:37					
				P3 @ 2' 440-03 (So	il)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			c i							
			Cardina	al Laborate	ories					
Volatile Organic Compounds by	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			96.9 %	72-1	48	7122008	MS	21-Dec-17	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	7121506	MS	16-Dec-17	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	7121506	MS	16-Dec-17	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	7121506	MS	16-Dec-17	8015B	
Surrogate: 1-Chlorooctane			90.1 %	28.3-	164	7121506	MS	16-Dec-17	8015B	
Surrogate: 1-Chlorooctadecane			91.1 %	34.7-	157	7121506	MS	16-Dec-17	8015B	
			Green Anal	ytical Labo	oratories					
Soluble (DI Water Extraction)										
Chloride	39.0		10.0	mg/kg wet	10	B712139	JDA	20-Dec-17	EPA300.0	

#### Cardinal Laboratories

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



TRINITY OILFIELD SERVICES 8 P. O. BOX 2587 HOBBS NM, 88241	& RENTALS, L	LC	Project Num Project Mana		Reported: 27-Dec-17 13:37					
				P4 @ 2' 440-04 (So	il)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Volatile Organic Compounds by 1	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			97.2 %	72-1	48	7122008	MS	21-Dec-17	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	7121506	MS	16-Dec-17	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	7121506	MS	16-Dec-17	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	7121506	MS	16-Dec-17	8015B	
Surrogate: 1-Chlorooctane			101 %	28.3-	164	7121506	MS	16-Dec-17	8015B	
Surrogate: 1-Chlorooctadecane			102 %	34.7-	157	7121506	MS	16-Dec-17	8015B	
			Green Analy	ytical Lab	oratories					
Soluble (DI Water Extraction)										
Chloride	971		50.0	mg/kg wet	50	B712139	JDA	21-Dec-17	EPA300.0	

#### Cardinal Laboratories

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



TRINITY OILFIELD SERVICES & P. O. BOX 2587 HOBBS NM, 88241	& RENTALS, L	LC	Project Num Project Mana		Reported: 27-Dec-17 13:37					
				25 @ 2' 440-05 (So	il)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Volatile Organic Compounds by 1	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			97.0 %	72-1	148	7122008	MS	21-Dec-17	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	7121506	MS	16-Dec-17	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	7121506	MS	16-Dec-17	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	7121506	MS	16-Dec-17	8015B	
Surrogate: 1-Chlorooctane			95.0 %	28.3-	164	7121506	MS	16-Dec-17	8015B	
Surrogate: 1-Chlorooctadecane			96.3 %	34.7-	157	7121506	MS	16-Dec-17	8015B	
			Green Analy	ytical Lab	oratories					
Soluble (DI Water Extraction)										
Chloride	565		20.0	mg/kg wet	20	B712139	JDA	21-Dec-17	EPA300.0	

#### Cardinal Laboratories

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



TRINITY OILFIELD SERVICES P. O. BOX 2587 HOBBS NM, 88241	& RENTALS, L	LC	Project Nun Project Mana		Reported: 27-Dec-17 13:37					
				P5 @ 3' 440-06 (So	:1\					
				440-00 (50	u)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	al Laborato	ories					
Volatile Organic Compounds by	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			96.8 %	72-1	48	7122008	MS	21-Dec-17	8021B	
Petroleum Hydrocarbons by GC	C FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	7121506	MS	16-Dec-17	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	7121506	MS	16-Dec-17	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	7121506	MS	16-Dec-17	8015B	
Surrogate: 1-Chlorooctane			83.7 %	28.3-	164	7121506	MS	16-Dec-17	8015B	
Surrogate: 1-Chlorooctadecane			83.3 %	34.7-	157	7121506	MS	16-Dec-17	8015B	
			Green Anal	ytical Labo	oratories					
Soluble (DI Water Extraction)										
Chloride	490		20.0	mg/kg wet	20	B712139	JDA	21-Dec-17	EPA300.0	

#### **Cardinal Laboratories**

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



TRINITY OILFIELD SERVICES & P. O. BOX 2587 HOBBS NM, 88241	& RENTALS, I	LC	Project Num Project Mana		Reported: 27-Dec-17 13:37					
				P9 @ 2' 440-07 (So	il)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Volatile Organic Compounds by 1	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			97.3 %	72-1	48	7122008	MS	21-Dec-17	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	7121506	MS	16-Dec-17	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	7121506	MS	16-Dec-17	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	7121506	MS	16-Dec-17	8015B	
Surrogate: 1-Chlorooctane			93.5 %	28.3-	164	7121506	MS	16-Dec-17	8015B	
Surrogate: 1-Chlorooctadecane			92.3 %	34.7-	157	7121506	MS	16-Dec-17	8015B	
			Green Analy	vtical Labo	oratories					
Soluble (DI Water Extraction)										
Chloride	828		20.0	mg/kg wet	20	B712139	JDA	21-Dec-17	EPA300.0	

#### Cardinal Laboratories

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



TRINITY OILFIELD SERVICES P. O. BOX 2587 HOBBS NM, 88241	& RENTALS, I	LC	Project Num Project Mana		Reported: 27-Dec-17 13:37					
				10 @ 1 440-08 (So						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Volatile Organic Compounds by 1	EPA Method	8021								
Benzene*	< 0.050	0021	0.050	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			97.6 %	72-1	48	7122008	MS	21-Dec-17	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	7121506	MS	16-Dec-17	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	7121506	MS	16-Dec-17	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	7121506	MS	16-Dec-17	8015B	
Surrogate: 1-Chlorooctane			99.9 %	28.3-	164	7121506	MS	16-Dec-17	8015B	
Surrogate: 1-Chlorooctadecane			100 %	34.7-	157	7121506	MS	16-Dec-17	8015B	
			Green Analy	ytical Lab	oratories					
Soluble (DI Water Extraction)										
Chloride	820		20.0	mg/kg wet	20	B712139	JDA	21-Dec-17	EPA300.0	

#### Cardinal Laboratories

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



			Project Mana	nber: NON ager: BEN k To: NON	Reported: 27-Dec-17 13:37					
				?11 @ 1' 440-09 (So						
				440-09 (30	-ii)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	al Laborat	ories					
Volatile Organic Compounds by I	EPA Method 8	8021								
Benzene*	< 0.050		0.050	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			95.1 %	72-1	48	7122008	MS	21-Dec-17	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	7121506	MS	16-Dec-17	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	7121506	MS	16-Dec-17	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	7121506	MS	16-Dec-17	8015B	
Surrogate: 1-Chlorooctane			101 %	28.3-	164	7121506	MS	16-Dec-17	8015B	
Surrogate: 1-Chlorooctadecane			101 %	34.7-	157	7121506	MS	16-Dec-17	8015B	
			Green Analy	ytical Labo	oratories					
<u>Soluble (DI Water Extraction)</u> Chloride	12.9		10.0	mg/kg wet	10	B712139	JDA	21-Dec-17	EPA300.0	
Chiving	12,7		10.0			_,,		21 200 11		

#### Cardinal Laboratories

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



TRINITY OILFIELD SERVICES P. O. BOX 2587 HOBBS NM, 88241	& RENTALS, L	LC	Project Num Project Mana		Reported: 27-Dec-17 13:37					
				212 @ 1						
			H/03	440-10 (So	II)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	al Laborat	ories					
Volatile Organic Compounds by 1	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	7122008	MS	21-Dec-17	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			96.4 %	72	48	7122008	MS	21-Dec-17	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	7121506	MS	16-Dec-17	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	7121506	MS	16-Dec-17	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	7121506	MS	16-Dec-17	8015B	
Surrogate: 1-Chlorooctane			93.8 %	28.3-	164	7121506	MS	16-Dec-17	8015B	
Surrogate: 1-Chlorooctadecane			95.9 %	34.7-	157	7121506	MS	16-Dec-17	8015B	
			Green Anal	ytical Lab	oratories					
Soluble (DI Water Extraction)			10.0		10	D712120	ID 4	21 D 17	EDA 200 0	
Chloride	23.7		10.0	mg/kg wet	10	B712139	JDA	21-Dec-17	EPA300.0	

#### Cardinal Laboratories

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



TRINITY OILFIELD SERVICES 8 P. O. BOX 2587 HOBBS NM, 88241										Reported: 27-Dec-17 13:37		
				2 -13 @ 1 440-11 (So								
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes		
			Cardina	ıl Laborat	ories							
Volatile Organic Compounds by 1	EPA Method	8021										
Benzene*	< 0.050		0.050	mg/kg	50	7122008	MS	21-Dec-17	8021B			
Toluene*	< 0.050		0.050	mg/kg	50	7122008	MS	21-Dec-17	8021B			
Ethylbenzene*	< 0.050		0.050	mg/kg	50	7122008	MS	21-Dec-17	8021B			
Total Xylenes*	< 0.150		0.150	mg/kg	50	7122008	MS	21-Dec-17	8021B			
Total BTEX	< 0.300		0.300	mg/kg	50	7122008	MS	21-Dec-17	8021B			
Surrogate: 4-Bromofluorobenzene (PID)			96.4 %	72-	148	7122008	MS	21-Dec-17	8021B			
Petroleum Hydrocarbons by GC	FID											
GRO C6-C10*	<10.0		10.0	mg/kg	1	7121506	MS	16-Dec-17	8015B			
DRO >C10-C28*	<10.0		10.0	mg/kg	1	7121506	MS	16-Dec-17	8015B			
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	7121506	MS	16-Dec-17	8015B			
Surrogate: 1-Chlorooctane			84.9 %	28.3	164	7121506	MS	16-Dec-17	8015B			
Surrogate: 1-Chlorooctadecane			85.2 %	34.7	-157	7121506	MS	16-Dec-17	8015B			
			Green Anal	ytical Lab	oratories							
<u>Soluble (DI Water Extraction)</u> Chloride	2380		50.0	mg/kg wet	50	B712139	JDA	21-Dec-17	EPA300.0			

#### **Cardinal Laboratories**

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



TRINITY OILFIELD SERVICES & RENTALS, LLCProject:A N ETZ 001P. O. BOX 2587Project Number:NONE GIVENHOBBS NM, 88241Project Manager:BEN ARGUIJOFax To:NONE									Reported: 27-Dec-17 13:37		
				214 @ 1							
			H/03	440-12 (So	) ()						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes	
			Cardina	al Laborat	ories						
Volatile Organic Compounds b	v EPA Method	8021									
Benzene*	< 0.050		0.050	mg/kg	50	7122008	MS	22-Dec-17	8021B		
Toluene*	< 0.050		0.050	mg/kg	50	7122008	MS	22-Dec-17	8021B		
Ethylbenzene*	< 0.050		0.050	mg/kg	50	7122008	MS	22-Dec-17	8021B		
Total Xylenes*	< 0.150		0.150	mg/kg	50	7122008	MS	22-Dec-17	8021B		
Total BTEX	< 0.300		0.300	mg/kg	50	7122008	MS	22-Dec-17	8021B		
Surrogate: 4-Bromofluorobenzene (PID)			96.4 %	72-	148	7122008	MS	22-Dec-17	8021B		
Petroleum Hydrocarbons by G	C FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	7121506	MS	16-Dec-17	8015B		
DRO >C10-C28*	<10.0		10.0	mg/kg	1	7121506	MS	16-Dec-17	8015B		
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	7121506	MS	16-Dec-17	8015B		
Surrogate: 1-Chlorooctane			97.8 %	28.3	164	7121506	MS	16-Dec-17	8015B		
Surrogate: 1-Chlorooctadecane			97.8 %	34.7	-157	7121506	MS	16-Dec-17	8015B		
			Green Anal	ytical Lab	oratories						
Soluble (DI Water Extraction)	1860		50.0	mg/kg wet	50	B712139	JDA	21-Dec-17	EPA300.0		
Chloride	1800		50.0	mg/kg wet	50	B/12139	JDA	21-Dec-1/	EFA500.0		

#### Cardinal Laboratories

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



TRINITY OILFIELD SERVICES P. O. BOX 2587 HOBBS NM, 88241										Reported: 27-Dec-17 13:37		
				215 @ 1								
			H703	440-13 (So	oil)							
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes		
			Cardina	al Laborat	ories							
Volatile Organic Compounds by 1	EPA Method	8021										
Benzene*	< 0.050		0.050	mg/kg	50	7122008	MS	22-Dec-17	8021B			
Toluene*	< 0.050		0.050	mg/kg	50	7122008	MS	22-Dec-17	8021B			
Ethylbenzene*	< 0.050		0.050	mg/kg	50	7122008	MS	22-Dec-17	8021B			
Total Xylenes*	< 0.150		0.150	mg/kg	50	7122008	MS	22-Dec-17	8021B			
Total BTEX	< 0.300		0.300	mg/kg	50	7122008	MS	22-Dec-17	8021B			
Surrogate: 4-Bromofluorobenzene (PID)			95.7 %	72-	148	7122008	MS	22-Dec-17	8021B			
Petroleum Hydrocarbons by GC	FID											
GRO C6-C10*	<10.0		10.0	mg/kg	1	7121506	MS	16-Dec-17	8015B			
DRO >C10-C28*	<10.0		10.0	mg/kg	1	7121506	MS	16-Dec-17	8015B			
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	7121506	MS	16-Dec-17	8015B			
Surrogate: 1-Chlorooctane			100 %	28.3	-164	7121506	MS	16-Dec-17	8015B			
Surrogate: 1-Chlorooctadecane			98.8 %	34.7	-157	7121506	MS	16-Dec-17	8015B			
			Green Anal	ytical Lab	oratories							
Soluble (DI Water Extraction)												
Chloride	<10.0		10.0	mg/kg wet	10	B712139	JDA	21-Dec-17	EPA300.0			

#### **Cardinal Laboratories**

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



TRINITY OILFIELD SERVICES & RENTALS, LLC P. O. BOX 2587 HOBBS NM, 88241	Project: A N ETZ 001 Project Number: NONE GIVEN Project Manager: BEN ARGUIJO Fax To: NONE	Reported: 27-Dec-17 13:37
---	--	------------------------------

## Volatile Organic Compounds by EPA Method 8021 - Quality Control

## **Cardinal Laboratories**

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 7122008 - Volatiles										
Blank (7122008-BLK1)				Prepared: 2	20-Dec-17 A	Analyzed: 2	21-Dec-17			
Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	0.0946		mg/kg	0.100		94.6	72-148			
LCS (7122008-BS1)				Prepared: 2	20-Dec-17 A	Analyzed: 2	21-Dec-17			
Benzene	1.87	0.050	mg/kg	2.00		93.4	79.5-124			
Toluene	1.88	0.050	mg/kg	2.00		94.1	75.5-127			
Ethylbenzene	1.91	0.050	mg/kg	2.00		95.3	77.7-125			
Total Xylenes	5.86	0.150	mg/kg	6.00		97.7	70.9-124			
Surrogate: 4-Bromofluorobenzene (PID)	0.0942		mg/kg	0.100		94.2	72-148			
LCS Dup (7122008-BSD1)				Prepared: 2	20-Dec-17 A	Analyzed: 2	21-Dec-17			
Benzene	1.85	0.050	mg/kg	2.00		92.4	79.5-124	1.01	6.5	
Toluene	1.88	0.050	mg/kg	2.00		94.1	75.5-127	0.0129	7.02	
Ethylbenzene	1.89	0.050	mg/kg	2.00		94.4	77.7-125	0.971	7.83	
Total Xylenes	5.80	0.150	mg/kg	6.00		96.6	70.9-124	1.14	7.78	
Surrogate: 4-Bromofluorobenzene (PID)	0.0927		mg/kg	0.100		92.7	72-148			

#### **Cardinal Laboratories**

#### \*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any daim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence ar any other cause whitsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether su claim is based upon any of the above stated reasons or otherwise. Results relate only to the sample sidentified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



TRINITY OILFIELD SERVICES & RENTALS, LLC P. O. BOX 2587 HOBBS NM, 88241	Project: A N ETZ ( Project Number: NONE GI Project Manager: BEN ARG Fax To: NONE	VEN 27-Dec-17 13:37
---	---	---------------------

#### Petroleum Hydrocarbons by GC FID - Quality Control

		Reporting		Spike	Source	1/DDC	%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 7121506 - General Prep - Organics										
Blank (7121506-BLK1)				Prepared: 1	5-Dec-17 A	Analyzed: 1	6-Dec-17			
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C35	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Total TPH C6-C28	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	56.2		mg/kg	50.0		112	28.3-164			
Surrogate: 1-Chlorooctadecane	59.9		mg/kg	50.0		120	34.7-157			
LCS (7121506-BS1)				Prepared: 1	5-Dec-17 A	Analyzed: 1	6-Dec-17			
GRO C6-C10	205	10.0	mg/kg	200		103	76.6-119			
DRO >C10-C28	183	10.0	mg/kg	200		91.6	81.4-124			
Total TPH C6-C28	388	10.0	mg/kg	400		97.0	79.4-121			
Surrogate: 1-Chlorooctane	49.8		mg/kg	50.0		99.5	28.3-164			
Surrogate: 1-Chlorooctadecane	49.6		mg/kg	50.0		99.1	34.7-157			
LCS Dup (7121506-BSD1)				Prepared: 1	5-Dec-17 A	Analyzed: 1	6-Dec-17			
GRO C6-C10	197	10.0	mg/kg	200		98.4	76.6-119	4.11	7.94	
DRO >C10-C28	188	10.0	mg/kg	200		94.2	81.4-124	2.86	9.83	
Total TPH C6-C28	385	10.0	mg/kg	400		96.3	79.4-121	0.758	8.57	
Surrogate: 1-Chlorooctane	48.4		mg/kg	50.0		96.8	28.3-164			
Surrogate: 1-Chlorooctadecane	49.6		mg/kg	50.0		<i>99.2</i>	34.7-157			

#### **Cardinal Laboratories**

#### \*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



TRINITY OILFIELD SERVICES & RENTALS, LLC P. O. BOX 2587 HOBBS NM, 88241	Project: / Project Number:   Project Manager:   Fax To:	BEN ARGUIJO	Reported: 27-Dec-17 13:37
---	--	-------------	------------------------------

## Soluble (DI Water Extraction) - Quality Control

## **Green Analytical Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B712139 - General Prep - Wet Chem										
Blank (B712139-BLK1)				Prepared: 1	8-Dec-17 A	Analyzed: 2	0-Dec-17			
Chloride	ND	10.0	mg/kg wet							
LCS (B712139-BS1)				Prepared: 1	8-Dec-17 A	Analyzed: 2	0-Dec-17			
Chloride	246	10.0	mg/kg wet	250		98.4	85-115			
LCS Dup (B712139-BSD1)				Prepared: 1	8-Dec-17 A	Analyzed: 2	0-Dec-17			
Chloride	245	10.0	mg/kg wet	250		97.9	85-115	0.456	20	

#### **Cardinal Laboratories**

#### \*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



## **Notes and Definitions**

- ND
   Analyte NOT DETECTED at or above the reporting limit

   RPD
   Relative Percent Difference

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

   \*\*\*
   Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
   Samples reported on an as received basis (wet) unless otherwise noted on report

#### Cardinal Laboratories

#### \*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence ar any other cause whitstoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether su claim is based to reproduced except in full with written approval of Cardinal Loaratories.

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager

RDINAL LABORATORIES

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240

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

Page 1 of 2

Company Name:	Trinity Oilfield Services & Rei	ntals, Ll	C.					BILL TO						_	ANALYSIS REQUEST
Project Manager:	Ben J. Arguijo						P.	0. #	ŧ						
Address: P.O. Bo	ox 2587						Co	Compan <sup>, Trinity</sup>							
City: Hobbs	State: N	M Zip	8	3241			At	Attn:							
Phone #: (575)39	0-7208 Fax #:						-	ddre			*********				
Project #:	Project O	wner:	Can	brian )	Mana	geme	-	ty:							2
Project Name: Al							1			7					3
Project Location:							-	ate:		Zip:		(8015M)	302	6 3	
							-	none				1 (8)	BTEX (8021B)	Chloride (300)	
Sampler Name: Tri	istan Payne	-		1.0	MAT	RIX		DDS	ESERV	SAMPLI	NG	H	STE	P	3
Lab I.D. H703440	Sample I.D.	(G)RAB OR (C)OMP	# CONTAINERS	GROUNDWATER WASTEWATER	SOIL	OIL	OTHER :	ACID/BASE:	ICE / COOL OTHER :	DATE	TIME				BTEX a
	S.P 1 @ 2'	G	1		X		_		X	12/11/17	1115	Х		X	
2	S.P 2 @ 2'	G	1	_	X		_	_	X	12/11/17	1123	Х	1,000	X	
3	S.P 3 @ 2'	G	1		X		1		X	12/11/17	1130	Х	=1,0	X	
4	S.P 4 @ 2'	G	1		X		1		X	12/11/17	1145	Х	L V	X	
5	S.P 5 @ 2'	G	1		X		_		X	12/11/17	1204	X	HdT	X	
6	S.P 5 @ 3'	G	1	_	X		_	_	X	12/11/17	1240	Х	BTEX If	X	
-	S.P 9 @ 2'	G	1		X				x	12/11/17	1255	Х		X	X
8	S.P 10 @ 1'	G	1		X				x	12/11/17	1305	X	Run	X	X
9	S.P 11 @ 1'	G	1		X				X	12/11/17	1315	х	E.	X	
10	S.P 12 @ 1'	G	1		X		1		X	12/11/17	1325	X	1	X	X

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tert, shall be limited to the amount paid by the client for the

analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable

service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries,

Relinquished By:	Date: -12-1	Received By:	01111	Phone Result:  Yes  No Bax Result: Yes No	Add'l Phone #: Add'l Fax #:
Irufan augh	Time: :58	Jamara	Magai	REMARKS:	
Relinquished By:	Date:	Received By:			
	Time:			Please e-mail results	s to ben@trinityoilfieldservices.com
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	2.32	Sample Con Cool Intact			
Sampler - 0-5 - Bus - Other.	orlille	-2.SSCI NOT N	No 19.475		

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476

Page 21 of 21

# ARDINAL LABORATORIES 101 East Marland, Hobbs, NM 88240

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 2 of 2

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

Company Name: Trinity Oilfield Services & Rentals, LLC					88	BILL TO ANALYSIS REQUEST																
Project Manager: Ben J. Arguijo					P.O. #:						T		T		<u> </u>	Ť	T	-				
Address: P.O. Box 2587						Compan <sup>, Trinity</sup>				1			N									
City: Hobbs State: NM Zip: 88241					Attn:								2									
Phone #: (575)390-7208 Fax #:						Address								20								
Project #: Project Owner: Cambrian Management																		11				
Project Name: A N ETZ 001						cny.				ŝ	â	Chloride (300)	4						- 3			
Project Location: Lea Co., NM						State: Zip:				(8015M)	BTEX (8021B)		3									
Sampler Name: Tristan Payne					Phone #:				8	8	Z											
FOR LAB USE ONLY	iisidii Fayile	-	-	-	м	ATR	IV	-	X #	SERV	SAMPLI	10	H	P	P	ad						
TOK END USE UNET		d.				T	T	T	FRE	SERV	SAMPLI	NG	-	100	0							
Lab I.D.	Sample I.D.	(G)RAB OR (C)OM	# CONTAINERS	GROUNDWATER	WASTEWATER	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL OTHER :	DATE	TIME				ATEX						
11	S.P 13 @ 1'	G	1			(	-			x	12/11/17	1335	x		X	X				1		
12	S.P 14 @ 1'	G			)	(	1			x	12/11/17	1345	X	18	X	X						
13	S.P 15 @ 1'	G	1		)	(	1			x	12/11/17	1400	х	<=1,000	X	X	1.1					
		-				1	1															
		-	L.			1	ļ		_	_	1			TPH								
	***************************************	-	-			+	1		-+	-				XII			-					
·····	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	-			_	+	4	4			-			BTEX			-					
		-	-			-	-			-	-			Ru								-
						-	-		-	_			-	1			-					
BI PACE NOTE TANK		_			1	1	1															

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the

analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable

service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal repardless of whether such client is based upon out of the base whether such client is based upon out of the base whether such client is based upon out of the based upon

Relinquished By:	Date: D-D-Received By:	Phone Result:  Yes  No Add'l Phone #: Fax Result: Yes No Add'l Fax #: REMARKS:
Relinquished By:	Date: Received By:	4
Delivered By: (Circle One) - Sampler - UPS - Bus - Other:	2.3c Sample Condition CHECKED BY: Cool Intact (Initials) Corrented - 3.5t No No	Please e-mail results to ben@trinityoilfieldservices.com

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476