

NMOCD approves of the proposed additional delineation for 1RP-4968. See email correspondence for stipulations.

**APPROVED**

By Olivia Yu at 10:22 am, Jul 30, 2018

## *Basin Environmental Service Technologies, LLC*

3100 Plains Highway  
P. O. Box 301  
Lovington, New Mexico 88260  
**Rrunnels@basinenv.com**  
Office: (575) 396-2378 Fax: (575) 396-1429



### **CORRECTIVE ACTION AND SAMPLING PLAN**

**CAMBRIAN MANAGEMENT, LTD**  
**A N ETZ #001**  
**Lea County, New Mexico**  
**Unit Letter "P" (SW/SW), Section 26, Township 19 South, Range 38 East**  
**Latitude 32.625784 North, Longitude -103.112811 West**  
**NMOCD Reference #: 1RP-4968**

Prepared For:

Cambrian Management, Ltd  
P.O. Box 272  
Midland, Texas 79702

Prepared By:

Basin Environmental Service Technologies, LLC  
3100 Plains Highway  
Lovington, New Mexico 88260

**June 2018**



---

Robbie Runnels  
Project Manager

## TABLE OF CONTENTS

1.0 INTRODUCTION & BACKGROUND INFORMATION.....	1
2.0 NMOCD SITE CLASSIFICATION.....	1
3.0 BACKGROUND INFORMATION.....	1
4.0 SAMPLING PLAN.....	2
5.0 CORRECTIVE ACTION PLAN.....	2
6.0 LIMITATIONS.....	3
7.0 DISTRIBUTION.....	4

### FIGURES

Figure 1 – Site Location Map

Figure 2 – Depth to Groundwater Map

Figure 3 – Proposed Sample Points Map

### TABLES

Table 1 – Concentrations of BTEX, TPH & Chloride in Soil

### APPENDICES

Appendix A – Release Notification and Corrective Action (Form C-141)

Appendix B – Laboratory Analytical Reports

## **1.0 INTRODUCTION**

Cambrian Management, Ltd (Cambrian) has retained Basin Environmental Service Technologies (Basin) to address potential environmental concerns at the above-referenced site.

## **2.0 NMOCD SITE CLASSIFICATION**

The site is located approximately nine tenths (0.9) miles east of Nadine, New Mexico at Unit Letter P of Section 26 in Township 19 South of Range 38 East. (See Figure 1) A search of the New Mexico Water Rights Reporting System (NMWRRS) database maintained by the New Mexico Office of the State Engineer (NMOSE) indicated numerous water wells located at Section 26, Township 19 South, Range 38 East. Utilizing the Water Incident Database (WAID), and averaging the information with the NMOSE information, this site is located in an area where groundwater could be encountered at a depth of sixty-five (65) +/- feet below ground surface (bgs) (See Figure 2).

## **3.0 BACKGROUND INFORMATION**

At some point in the past, a release occurred at the same location. An environmental company remediated the release and placed a liner. The current release envelopes the area surrounding the liner. If the integrity of the liner is compromised during sampling or remediation, the entire liner will be replaced.

On July 15<sup>th</sup>, 2017, Permian Water Service (Operator for Cambrian) discovered a release of an estimated one-hundred fifty (150) barrels (bbls) of produced water when a water line failed. The release impacted approximately nineteen-thousand six-hundred and thirty-four square feet (19,634 ft<sup>2</sup>) of the gypsum (caliche) pad and pasture. Approximately one-hundred thirty (130) bbls of the fluids were recovered. The New Mexico Oil Conservation Division (NMOCD) was notified of the release on February 16<sup>th</sup>, 2018. An initial Release Notification and Corrective Action form (C-141) was submitted to NMOCD on February 16<sup>th</sup>, 2018, for approval.

Trinity Oilfield Services & Rentals, LLC (Trinity) were on site beginning July 27<sup>th</sup>, 2017, to begin sampling activities. Nine (9) discrete soil sample locations were established with a soil-boring hand auger. The soil borings were advanced to approximately one and one-half feet (1.5') bgs. Vertical delineation was achieved for the soil sample points "3", "6" and "8" retrieved at a depth of 1.5'. Further advancement of soil borings was required for the delineation of chlorides. All soil samples analyzed in a NMOCD approved laboratory indicated delineation had been achieved for Total Petroleum Hydrocarbons (TPH) as well as Benzene, Toluene, Ethyl-benzene, and Xylenes (BTEX).

On December 11<sup>th</sup>, 2017, six (6) more sample points (SP-10 through SP 15) were established by Trinity utilizing a hand auger. Trinity also advanced the sample point "5" to a depth of three (3) feet bgs. The new sample points were advanced to one-foot bgs. Laboratory analytical indicated sample points in the area of "5", "11", "12", and "15" were delineated for all constituents of interest.

#### **4.0 SAMPLING PLAN**

The perimeter of the impacted area will be sampled utilizing a hand auger/geo probe (when possible) in approximate fifty (50) foot increments to establish the horizontal extent of the impact (See *Proposed Sample Points*). Surface and 1' bgs samples will be retrieved and field screened for chloride concentration. In the instance that the field screens indicate the chloride concentration to be below the recommended remediation action level (RRAL) presumed to be 600 mg/kg, the sample point will be moved inward approximately five (5) feet and reestablished until the field screens indicate a chloride concentration of 600 mg/kg or greater at the 1' bgs level. The sample point will then be delineated to below 600 mg/kg and serve as the horizontal extent wall of the ensuing excavation. Discrete soil samples will be submitted to an NMOCD approved laboratory for confirmatory analysis.

In the event the perimeter samples have a chloride concentration greater than 600 mg/kg, the sample point will be established at the perimeter and delineated. During excavation, the excavated wall will be sampled to determine the horizontal extent of the impact.

Sample points within the impacted area will be delineated to below 600 mg/kg for chloride concentration. Confirmatory soil samples will be delivered to an NMOCD laboratory for analysis.

Because the initial sampling performed by Trinity showed no presence of any hydrocarbons of interest at any location greater than the method detection limit set by the laboratory, TPH and BTEX will not be further analyzed.

#### **5.0 CORRECTIVE ACTION PLAN**

At the time of remediation and if delineation did not occur at or before the four (4) foot bgs level, the impacted area will be excavated to a depth of 4' and a impermeable 20-mil plastic liner will be installed to prevent the migration of the remaining chlorides from reaching the groundwater below. The liner will also prevent percolation into the vadose zone.

Once fully remediated, the floor of the excavation will be sampled (where a liner is not required) as well as the walls. The wall samples, taken at approximately 50' intervals, will ensure that the horizontal impact of the release is captured in the remediation process.

At the completion of excavation activities, the caliche pad will be restored by placing non-impacted soils and contouring to the surrounding area. The pasture area will be backfilled with clean, non-impacted soils and contoured to the surrounding area. The pasture area will be seeded with a blend of native, non-invasive or noxious species approved by the land owner at time conducive for germination.

## 6.0 LIMITATIONS

Basin Environmental Service Technologies, LLC, has prepared this *Corrective Action and Sampling Plan* to the best of its ability. No other warranty, expressed or implied, is made or intended. Basin Environmental has examined and relied upon documents referenced in the report and on oral statements made by certain individuals. Basin Environmental has not conducted an independent examination of the facts contained in referenced materials and statements. Basin Environmental has presumed the genuineness of these documents and statements and that the information provided therein is true and accurate. Basin Environmental has prepared this report in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Basin Environmental notes that the facts and conditions referenced in this report may change over time, and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This report has been prepared for the benefit of Cambrian Management, Ltd. The information contained in this report, including all exhibits and attachments, may not be used by any other party without the express consent of Basin Environmental Service Technologies, LLC, and/or Cambrian Management, Ltd.

## **7.0 DISTRIBUTION:**

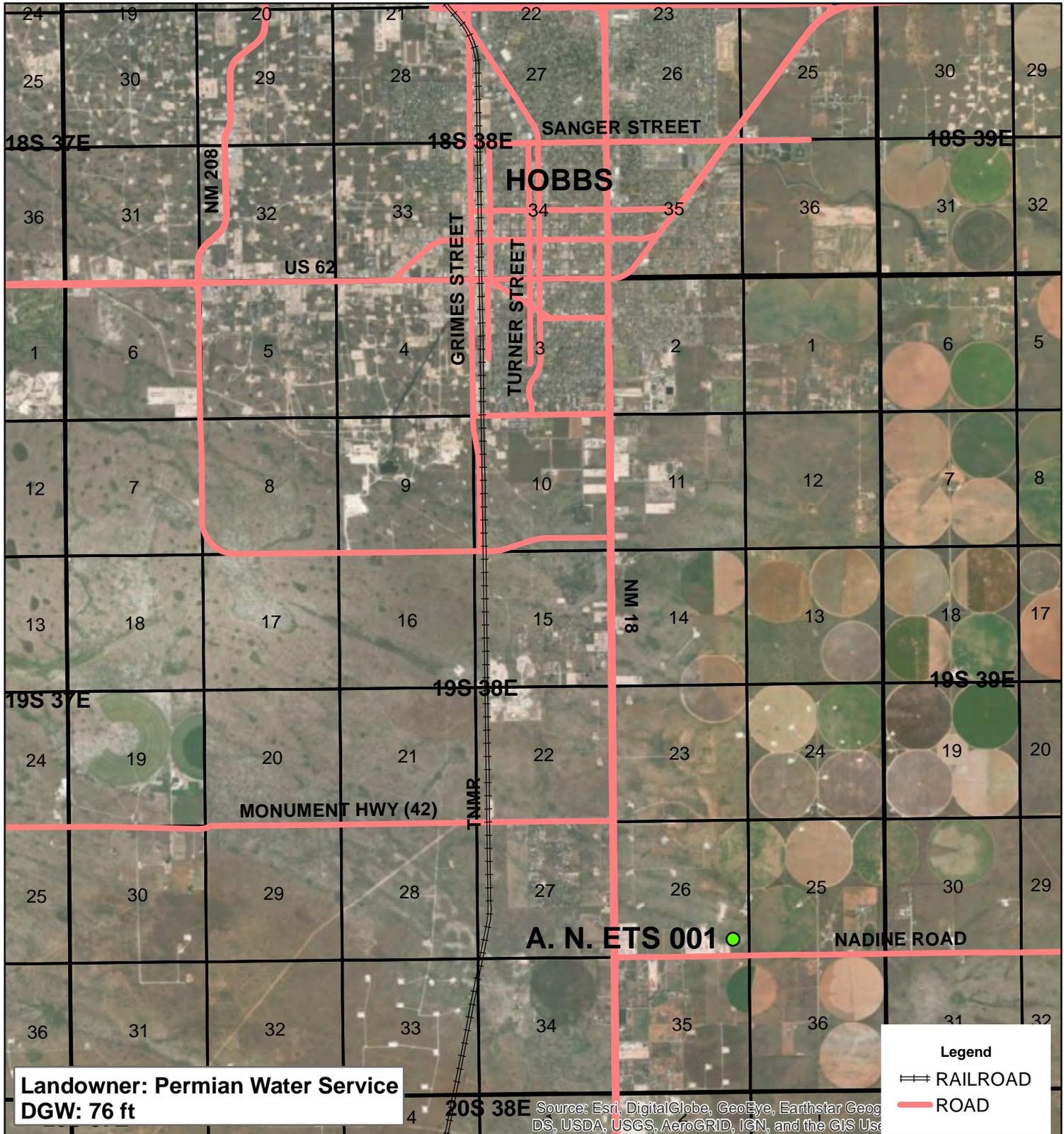
Copy 1: Olivia Yu  
New Mexico Energy, Minerals and Natural Resources Department  
Oil Conservation Division (District 1)  
1625 N French Drive  
Hobbs, NM 88240

Copy 2: Andrew Rickard  
Cambrian Management, Ltd  
415 W Wall Street  
Midland, TX 79701

Copy 3: Basin Environmental Service Technologies, LLC  
P.O. Box 301  
Lovington, New Mexico 88260

# FIGURES

# Geographic Location



Landowner: Permian Water Service  
 DGW: 76 ft

**Legend**  
 RAILROAD  
 ROAD

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNR AeroGris, USDA, USGS, AeroGRID, IGN, and the GIS User Community



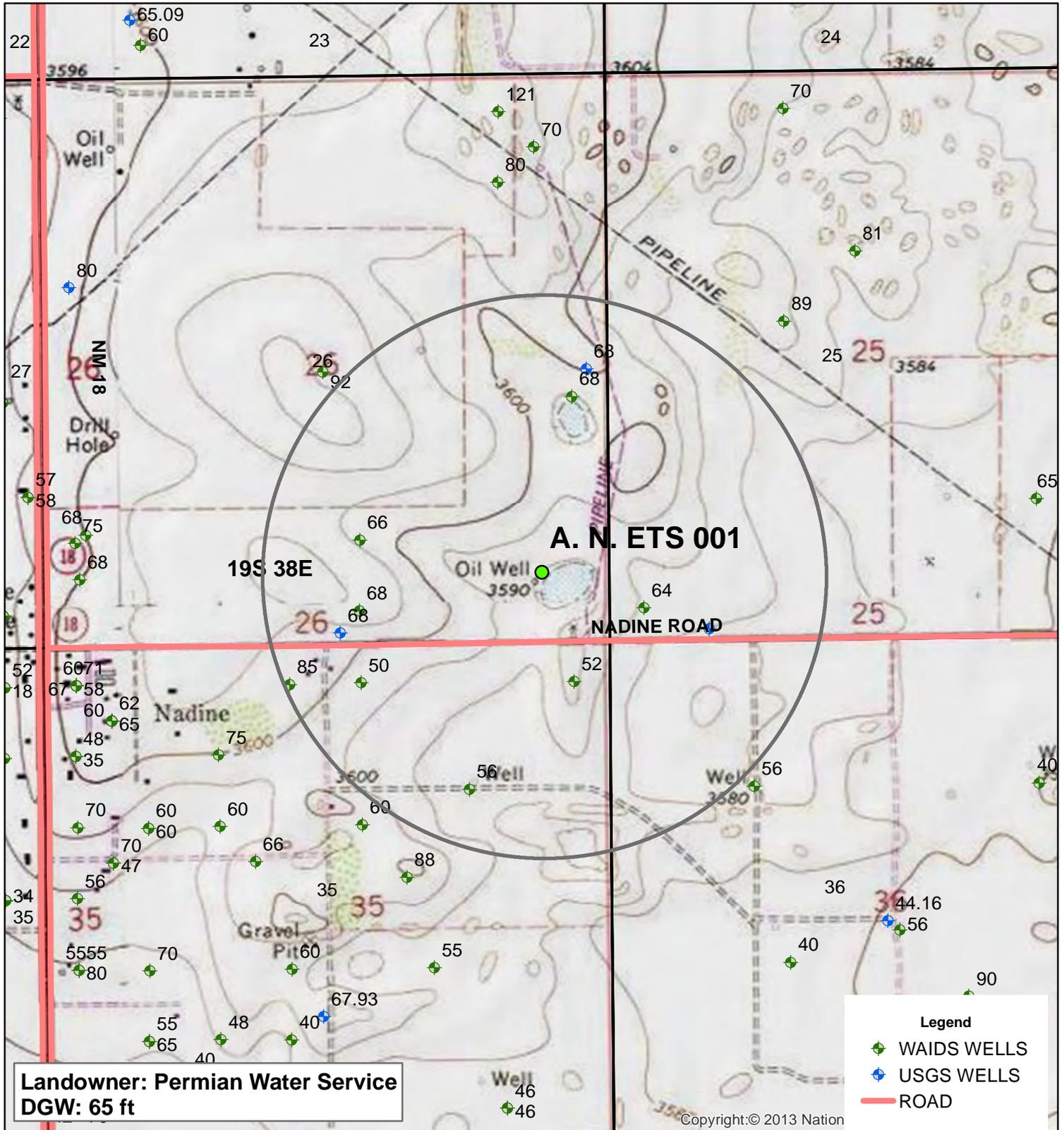
**CAMBRIAN**  
**A N ETS 001**  
 1RP-4968  
 UL P SECTION 26  
 T-19-S R-38-E  
 LEA COUNTY, NM

GPS: 32.625759 -103.112667

0 0.5 1  
 Miles

Drawing date: 6/14/18  
 Drafted by: T. Grieco

# Depth to Groundwater



Landowner: Permian Water Service  
 DGW: 65 ft

**Legend**

- ◆ WAIDS WELLS
- ◆ USGS WELLS
- ROAD

Copyright: © 2013 Nation



**CAMBRIAN**  
**A N ETS 001**  
 1RP-4968

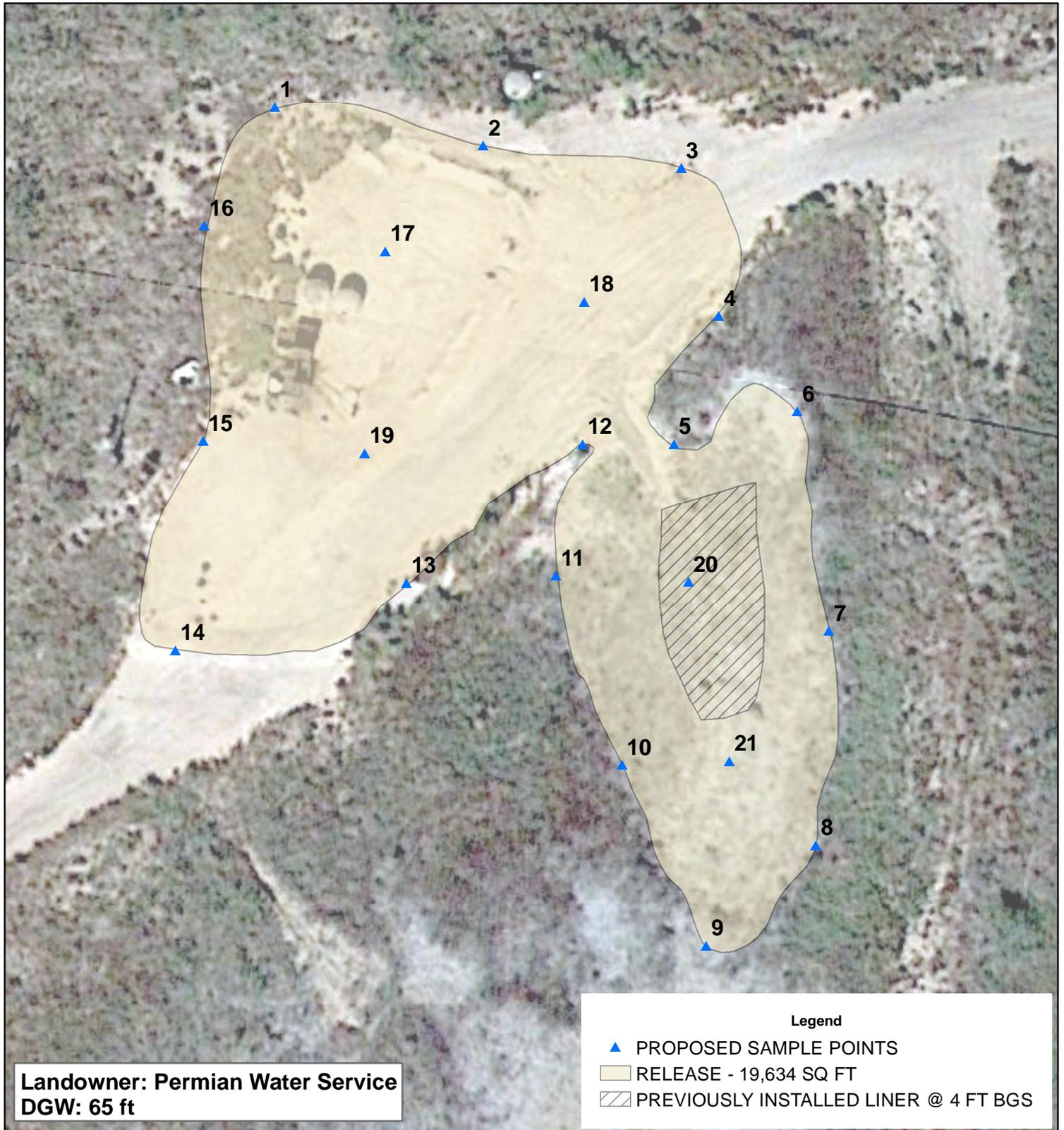
UL P SECTION 26  
 T-19-S R-38-E  
 LEA COUNTY, NM

GPS: 32.625759 -103.112667

0 1,000 2,000 Feet

Drawing date: 6/14/18  
 Drafted by: T. Grieco

# Proposed Sample Points



**CAMBRIAN**  
**A N ETS 001**  
1RP-4968

**UL P SECTION 26**  
**T-19-S R-38-E**  
**LEA COUNTY, NM**

**GPS: 32.625759 -103.112667**



# 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**



SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	SOIL STATUS	METHOD: EPA SW 846-8021B, 5030					METHOD: 8015M			300.1	
				BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL-BENZENE (mg/Kg)	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)
<b>NMOCD Recommended Remediation Action Levels (RRALs)</b>				<b>10</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>50</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>100</b>	<b>250</b>
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	<b>4,190</b>
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	<b>4,300</b>
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	<b>2,040</b>
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	<b>253</b>
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	<b>417</b>
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	<b>4,270</b>
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	<b>971</b>
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	<b>972</b>
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	<b>565</b>
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	<b>490</b>
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	<b>560</b>
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	<b>1,550</b>
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	<b>828</b>
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	<b>820</b>
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
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	<b>2,380</b>
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	<b>1,860</b>
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

NE = Not established  
 - = Not analyzed  
 Concentrations in BOLD exceed NMOCD RRALs

# APPENDICES

# APPENDIX – A

C-141

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Form C-141  
Revised April 3, 2017

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

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

**Release Notification and Corrective Action**

**OPERATOR**

X Initial Report  Final Report

Name of Company Cambrian Management, Ltd	Contact Mike Anthony
Address PO Box 272, Midland, TX 79702	Telephone No. 432-631-4398
Facility Name A N ETZ	Facility Type Salt Water Disposal
Surface Owner Permian Water Service	Mineral Owner Permian Water Service
API No. 30-025-07713	

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
P	26	19S	38E	660	South	660	East	Lea

Latitude 32.625784 Longitude -103.112811 NAD83

**NATURE OF RELEASE**

Type of Release Produced Water	Volume of Release 150 bbls	Volume Recovered 130 bbls
Source of Release Water Line	Date and Hour of Occurrence Unknown	Date and Hour of Discovery <u>7-15-2017</u>
Was Immediate Notice Given? <input type="checkbox"/> Yes X No <input type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes X No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

**RECEIVED**  
By Olivia Yu at 8:54 am, Feb 16, 2018

Describe Cause of Problem and Remedial Action Taken.\*

Water line busted and we immediately picked up all water possible – approximately 130 bbls

Describe Area Affected and Cleanup Action Taken.\*

The release affected a total area of the well pad, caliche access road, and adjacent pasture measuring approximately 10,000 sq ft. Remediation of the impacted area will be conducted in accordance with NMOCD and NMSLO guidelines.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: <u>Denise Jones</u>	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: <u>Denise Jones</u>	Approved by Environmental Specialist:	
Title: <u>Regulatory Analyst</u>	Approval Date: <u>2/16/2018</u>	Expiration Date:
E-mail Address: <u>djones@Cambrianmgmt.com</u>	Conditions of Approval:	Attached <input checked="" type="checkbox"/>
Date: <u>2-13-18</u> Phone: <u>432-620-9181</u>	<u>see attached directive</u>	

\* Attach Additional Sheets If Necessary

1RP-4968

nOY1804732368

pOY1804732617

Operator/Responsible Party,

The OCD has received the form C-141 you provided on 2/14/2018 regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number 1RP-4968 has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

*The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC. [emphasis added]*

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District 1 office in Hobbs on or before 3/16/2018. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

- Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C<sub>6</sub> thru C<sub>36</sub>), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.
- Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C<sub>6</sub> thru C<sub>36</sub>), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.
- Nominal detection limits for field and laboratory analyses must be provided.
- Composite sampling is not generally allowed.
- Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

- Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

- If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

- Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

**Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.**

**Jim Griswold**

OCD Environmental Bureau Chief  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505  
505-476-3465  
jim.griswold@state.nm.us

APPENDIX – B  
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 [www.tceq.texas.gov/field/ga/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/ga/lab_accred_certif.html).

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

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

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

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

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

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager

**Analytical Results For:**

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

 Project: A N ETZ 001  
 Project Number: NONE GIVEN  
 Project Manager: BEN ARGUIJO  
 Fax To: NONE

 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

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 or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 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:  
 10-Aug-17 14:40

**SP-1 @ 1.5'**  
**H701975-01 (Soil)**

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

**Cardinal Laboratories**
**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	
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			102 %	72-148		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	
<i>Surrogate: 1-Chlorooctane</i>			96.5 %	28.3-164		7072806	MS	29-Jul-17	8015B	
<i>Surrogate: 1-Chlorooctadecane</i>			100 %	34.7-157		7072806	MS	29-Jul-17	8015B	

**Green Analytical Laboratories**
**Soluble (DI Water Extraction)**

Chloride	4190		200	mg/kg wet	200	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 or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 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:  
 10-Aug-17 14:40

**SP-2 @ 1.5'**  
**H701975-02 (Soil)**

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

**Cardinal Laboratories**
**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	
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			102 %	72-148		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	
<i>Surrogate: 1-Chlorooctane</i>			107 %	28.3-164		7072806	MS	29-Jul-17	8015B	
<i>Surrogate: 1-Chlorooctadecane</i>			110 %	34.7-157		7072806	MS	29-Jul-17	8015B	

**Green Analytical Laboratories**
**Soluble (DI Water Extraction)**

Chloride	2040		100	mg/kg wet	100	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 or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 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:  
 10-Aug-17 14:40

**SP-3 @ 1.5'**  
**H701975-03 (Soil)**

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

**Cardinal Laboratories**
**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	
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			102 %	72-148		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	
<i>Surrogate: 1-Chlorooctane</i>			95.4 %	28.3-164		7072806	MS	29-Jul-17	8015B	
<i>Surrogate: 1-Chlorooctadecane</i>			101 %	34.7-157		7072806	MS	29-Jul-17	8015B	

**Green Analytical Laboratories**
**Soluble (DI Water Extraction)**

Chloride	417		10.0	mg/kg wet	10	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 or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 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:  
 10-Aug-17 14:40

**SP-4 @ 1.5'**  
**H701975-04 (Soil)**

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

**Cardinal Laboratories**
**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	
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			102 %	72-148		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	
<i>Surrogate: 1-Chlorooctane</i>			93.9 %	28.3-164		7072806	MS	29-Jul-17	8015B	
<i>Surrogate: 1-Chlorooctadecane</i>			100 %	34.7-157		7072806	MS	29-Jul-17	8015B	

**Green Analytical Laboratories**
**Soluble (DI Water Extraction)**

Chloride	4270		200	mg/kg wet	200	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 or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 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:  
 10-Aug-17 14:40

**SP-5 @ 1.5'**  
**H701975-05 (Soil)**

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

**Cardinal Laboratories**
**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	
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			102 %	72-148		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	
<i>Surrogate: 1-Chlorooctane</i>			87.4 %	28.3-164		7072806	MS	29-Jul-17	8015B	
<i>Surrogate: 1-Chlorooctadecane</i>			89.6 %	34.7-157		7072806	MS	29-Jul-17	8015B	

**Green Analytical Laboratories**
**Soluble (DI Water Extraction)**

Chloride	972		100	mg/kg wet	100	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 or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 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:  
 10-Aug-17 14:40

**SP-6 @ 1.5'**  
**H701975-06 (Soil)**

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

**Cardinal Laboratories**
**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	
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			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	
<i>Surrogate: 1-Chlorooctane</i>			92.3 %	28.3-164		7073101	MS	31-Jul-17	8015B	
<i>Surrogate: 1-Chlorooctadecane</i>			97.0 %	34.7-157		7073101	MS	31-Jul-17	8015B	

**Green Analytical Laboratories**
**Soluble (DI Water Extraction)**

Chloride	17.6		10.0	mg/kg wet	10	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 or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 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:  
 10-Aug-17 14:40

**SP-8 @ 1.5'**  
**H701975-07 (Soil)**

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

**Cardinal Laboratories**
**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	
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			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	
<i>Surrogate: 1-Chlorooctane</i>			88.9 %	28.3-164		7073101	MS	31-Jul-17	8015B	
<i>Surrogate: 1-Chlorooctadecane</i>			94.5 %	34.7-157		7073101	MS	31-Jul-17	8015B	

**Green Analytical Laboratories**
**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 or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 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:  
 10-Aug-17 14:40

**SP-9 @ 1.5'**  
**H701975-08 (Soil)**

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

**Cardinal Laboratories**
**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	
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			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	
<i>Surrogate: 1-Chlorooctane</i>			88.2 %	28.3-164		7073101	MS	31-Jul-17	8015B	
<i>Surrogate: 1-Chlorooctadecane</i>			92.8 %	34.7-157		7073101	MS	31-Jul-17	8015B	

**Green Analytical Laboratories**
**Soluble (DI Water Extraction)**

Chloride	1550		100	mg/kg wet	100	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 or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 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:  
 10-Aug-17 14:40

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limit	RPD RPD	Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	-----------	-------	---------	-------	-------

**Batch 7072808 - Volatiles**
**Blank (7072808-BLK1)**

Prepared: 28-Jul-17 Analyzed: 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							
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>	<i>0.0501</i>		<i>mg/kg</i>	<i>0.0500</i>		<i>100</i>	<i>72-148</i>			

**LCS (7072808-BS1)**

Prepared: 28-Jul-17 Analyzed: 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			
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>	<i>0.0498</i>		<i>mg/kg</i>	<i>0.0500</i>		<i>99.7</i>	<i>72-148</i>			

**LCS Dup (7072808-BSD1)**

Prepared: 28-Jul-17 Analyzed: 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	
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>	<i>0.0502</i>		<i>mg/kg</i>	<i>0.0500</i>		<i>100</i>	<i>72-148</i>			

**Batch 7073102 - Volatiles**
**Blank (7073102-BLK1)**

Prepared &amp; Analyzed: 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							
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>	<i>0.0522</i>		<i>mg/kg</i>	<i>0.0500</i>		<i>104</i>	<i>72-148</i>			

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 or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 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:  
 10-Aug-17 14:40

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

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

**Batch 7073102 - Volatiles**
**LCS (7073102-BS1)**

Prepared &amp; 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			
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>	<i>0.0502</i>		mg/kg	<i>0.0500</i>		<i>100</i>	<i>72-148</i>			

**LCS Dup (7073102-BSD1)**

Prepared &amp; 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	
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>	<i>0.0507</i>		mg/kg	<i>0.0500</i>		<i>101</i>	<i>72-148</i>			

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 or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 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:  
 10-Aug-17 14:40

**Petroleum Hydrocarbons by GC FID - Quality Control**
**Cardinal Laboratories**

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

**Batch 7072806 - General Prep - Organics**
**Blank (7072806-BLK1)**

Prepared &amp; 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 &amp; 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 &amp; 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			
Surrogate: 1-Chlorooctadecane	65.8		mg/kg	50.0		132	34.7-157			

**Batch 7073101 - General Prep - Organics**
**Blank (7073101-BLK1)**

Prepared &amp; Analyzed: 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

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 or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 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:  
 10-Aug-17 14:40

**Petroleum Hydrocarbons by GC FID - Quality Control**
**Cardinal Laboratories**

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

**Batch 7073101 - General Prep - Organics**
**LCS (7073101-BS1)**

Prepared &amp; 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			
<i>Surrogate: 1-Chlorooctane</i>	57.2		mg/kg	50.0		114	28.3-164			
<i>Surrogate: 1-Chlorooctadecane</i>	58.1		mg/kg	50.0		116	34.7-157			

**LCS Dup (7073101-BSD1)**

Prepared &amp; 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	
<i>Surrogate: 1-Chlorooctane</i>	53.8		mg/kg	50.0		108	28.3-164			
<i>Surrogate: 1-Chlorooctadecane</i>	56.9		mg/kg	50.0		114	34.7-157			

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 or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 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:  
 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: 07-Aug-17 Analyzed: 09-Aug-17

Chloride	ND	1.00	mg/kg wet							
----------	----	------	-----------	--	--	--	--	--	--	--

**LCS (B708046-BS1)**

Prepared: 07-Aug-17 Analyzed: 09-Aug-17

Chloride	239	10.0	mg/kg wet	250		95.7	85-115			
----------	-----	------	-----------	-----	--	------	--------	--	--	--

**LCS Dup (B708046-BSD1)**

Prepared: 07-Aug-17 Analyzed: 09-Aug-17

Chloride	242	10.0	mg/kg wet	250		96.6	85-115	0.915	20	
----------	-----	------	-----------	-----	--	------	--------	-------	----	--

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 or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



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 or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



---

Celey D. Keene, Lab Director/Quality Manager



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 [www.tceq.texas.gov/field/ga/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/ga/lab_accred_certif.html).

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

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

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

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

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

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

Sincerely,



Celey D. Keene

Lab Director/Quality Manager

**Analytical Results For:**

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

 Project: A N ETZ 001  
 Project Number: NONE GIVEN  
 Project Manager: BEN ARGUIJO  
 Fax To: NONE

 Reported:  
 27-Dec-17 13:37

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
S.P. -1 @ 2'	H703440-01	Soil	11-Dec-17 11:15	12-Dec-17 14:58
S.P. -2 @ 2'	H703440-02	Soil	11-Dec-17 11:23	12-Dec-17 14:58
S.P. -3 @ 2'	H703440-03	Soil	11-Dec-17 11:30	12-Dec-17 14:58
S.P. -4 @ 2'	H703440-04	Soil	11-Dec-17 11:45	12-Dec-17 14:58
S.P. -5 @ 2'	H703440-05	Soil	11-Dec-17 12:04	12-Dec-17 14:58
S.P. -5 @ 3'	H703440-06	Soil	11-Dec-17 12:40	12-Dec-17 14:58
S.P. -9 @ 2'	H703440-07	Soil	11-Dec-17 12:55	12-Dec-17 14:58
S.P. -10 @ 1'	H703440-08	Soil	11-Dec-17 13:05	12-Dec-17 14:58
S.P. -11 @ 1'	H703440-09	Soil	11-Dec-17 13:15	12-Dec-17 14:58
S.P. -12 @ 1'	H703440-10	Soil	11-Dec-17 13:25	12-Dec-17 14:58
S.P. -13 @ 1'	H703440-11	Soil	11-Dec-17 13:35	12-Dec-17 14:58
S.P. -14 @ 1'	H703440-12	Soil	11-Dec-17 13:45	12-Dec-17 14:58
S.P. -15 @ 1'	H703440-13	Soil	11-Dec-17 14:00	12-Dec-17 14:58

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 or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 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

**S.P. -1 @ 2'**  
**H703440-01 (Soil)**

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

**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		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	
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			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	
<i>Surrogate: 1-Chlorooctane</i>			99.0 %	28.3-164		7121506	MS	16-Dec-17	8015B	
<i>Surrogate: 1-Chlorooctadecane</i>			101 %	34.7-157		7121506	MS	16-Dec-17	8015B	

**Green Analytical Laboratories**
**Soluble (DI Water Extraction)**

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 or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 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

**S.P. -2 @ 2'**  
**H703440-02 (Soil)**

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

**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		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	
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			95.4 %	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	
<i>Surrogate: 1-Chlorooctane</i>			89.7 %	28.3-164		7121506	MS	16-Dec-17	8015B	
<i>Surrogate: 1-Chlorooctadecane</i>			89.1 %	34.7-157		7121506	MS	16-Dec-17	8015B	

**Green Analytical Laboratories**
**Soluble (DI Water Extraction)**

Chloride	253		10.0	mg/kg wet	10	B712139	JDA	20-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 or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 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

**S.P. -3 @ 2'**  
**H703440-03 (Soil)**

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

**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		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	
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			96.9 %	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	
<i>Surrogate: 1-Chlorooctane</i>			90.1 %	28.3-164		7121506	MS	16-Dec-17	8015B	
<i>Surrogate: 1-Chlorooctadecane</i>			91.1 %	34.7-157		7121506	MS	16-Dec-17	8015B	

**Green Analytical Laboratories**
**Soluble (DI Water Extraction)**

Chloride	39.0		10.0	mg/kg wet	10	B712139	JDA	20-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 or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 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

**S.P. -4 @ 2'**  
**H703440-04 (Soil)**

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

**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		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	
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			97.2 %	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	
<i>Surrogate: 1-Chlorooctane</i>			101 %	28.3-164		7121506	MS	16-Dec-17	8015B	
<i>Surrogate: 1-Chlorooctadecane</i>			102 %	34.7-157		7121506	MS	16-Dec-17	8015B	

**Green Analytical Laboratories**
**Soluble (DI Water Extraction)**

Chloride	971		50.0	mg/kg wet	50	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 or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 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

**S.P. -5 @ 2'**  
**H703440-05 (Soil)**

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

**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		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	
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			97.0 %	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	
<i>Surrogate: 1-Chlorooctane</i>			95.0 %	28.3-164		7121506	MS	16-Dec-17	8015B	
<i>Surrogate: 1-Chlorooctadecane</i>			96.3 %	34.7-157		7121506	MS	16-Dec-17	8015B	

**Green Analytical Laboratories**
**Soluble (DI Water Extraction)**

Chloride	565		20.0	mg/kg wet	20	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 or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 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

**S.P. -5 @ 3'**  
**H703440-06 (Soil)**

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

**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		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	
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			96.8 %	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	
<i>Surrogate: 1-Chlorooctane</i>			83.7 %	28.3-164		7121506	MS	16-Dec-17	8015B	
<i>Surrogate: 1-Chlorooctadecane</i>			83.3 %	34.7-157		7121506	MS	16-Dec-17	8015B	

**Green Analytical Laboratories**
**Soluble (DI Water Extraction)**

Chloride	490		20.0	mg/kg wet	20	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 or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 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

**S.P. -9 @ 2'**  
**H703440-07 (Soil)**

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

**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		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	
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			97.3 %	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	
<i>Surrogate: 1-Chlorooctane</i>			93.5 %	28.3-164		7121506	MS	16-Dec-17	8015B	
<i>Surrogate: 1-Chlorooctadecane</i>			92.3 %	34.7-157		7121506	MS	16-Dec-17	8015B	

**Green Analytical Laboratories**
**Soluble (DI Water Extraction)**

Chloride	828		20.0	mg/kg wet	20	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 or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 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

**S.P. -10 @ 1'**  
**H703440-08 (Soil)**

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

**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		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	
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			97.6 %	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	
<i>Surrogate: 1-Chlorooctane</i>			99.9 %	28.3-164		7121506	MS	16-Dec-17	8015B	
<i>Surrogate: 1-Chlorooctadecane</i>			100 %	34.7-157		7121506	MS	16-Dec-17	8015B	

**Green Analytical Laboratories**
**Soluble (DI Water Extraction)**

Chloride	820		20.0	mg/kg wet	20	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 or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 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

**S.P. -11 @ 1'**  
**H703440-09 (Soil)**

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

**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		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	
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			95.1 %	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	
<i>Surrogate: 1-Chlorooctane</i>			101 %	28.3-164		7121506	MS	16-Dec-17	8015B	
<i>Surrogate: 1-Chlorooctadecane</i>			101 %	34.7-157		7121506	MS	16-Dec-17	8015B	

**Green Analytical Laboratories**
**Soluble (DI Water Extraction)**

Chloride	12.9		10.0	mg/kg wet	10	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 or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 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

**S.P. -12 @ 1'**  
**H703440-10 (Soil)**

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

**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		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	
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			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	
<i>Surrogate: 1-Chlorooctane</i>			93.8 %	28.3-164		7121506	MS	16-Dec-17	8015B	
<i>Surrogate: 1-Chlorooctadecane</i>			95.9 %	34.7-157		7121506	MS	16-Dec-17	8015B	

**Green Analytical Laboratories**
**Soluble (DI Water Extraction)**

Chloride	23.7		10.0	mg/kg wet	10	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 or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 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

**S.P. -13 @ 1'**  
**H703440-11 (Soil)**

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

**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		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	
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			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	
<i>Surrogate: 1-Chlorooctane</i>			84.9 %	28.3-164		7121506	MS	16-Dec-17	8015B	
<i>Surrogate: 1-Chlorooctadecane</i>			85.2 %	34.7-157		7121506	MS	16-Dec-17	8015B	

**Green Analytical Laboratories**
**Soluble (DI Water Extraction)**

Chloride	2380		50.0	mg/kg wet	50	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 or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 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

**S.P. -14 @ 1'**  
**H703440-12 (Soil)**

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

**Cardinal Laboratories**
**Volatile Organic Compounds by 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	
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			96.4 %	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	
<i>Surrogate: 1-Chlorooctane</i>			97.8 %	28.3-164		7121506	MS	16-Dec-17	8015B	
<i>Surrogate: 1-Chlorooctadecane</i>			97.8 %	34.7-157		7121506	MS	16-Dec-17	8015B	

**Green Analytical Laboratories**
**Soluble (DI Water Extraction)**

Chloride	1860		50.0	mg/kg wet	50	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 or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 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

**S.P. -15 @ 1'**  
**H703440-13 (Soil)**

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

**Cardinal Laboratories**
**Volatile Organic Compounds by 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	
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			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	
<i>Surrogate: 1-Chlorooctane</i>			100 %	28.3-164		7121506	MS	16-Dec-17	8015B	
<i>Surrogate: 1-Chlorooctadecane</i>			98.8 %	34.7-157		7121506	MS	16-Dec-17	8015B	

**Green Analytical Laboratories**
**Soluble (DI Water Extraction)**

Chloride	<10.0		10.0	mg/kg wet	10	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 or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 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**

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

**Batch 7122008 - Volatiles**
**Blank (7122008-BLK1)**

Prepared: 20-Dec-17 Analyzed: 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							
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>	<i>0.0946</i>		mg/kg	<i>0.100</i>		<i>94.6</i>	<i>72-148</i>			

**LCS (7122008-BS1)**

Prepared: 20-Dec-17 Analyzed: 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			
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>	<i>0.0942</i>		mg/kg	<i>0.100</i>		<i>94.2</i>	<i>72-148</i>			

**LCS Dup (7122008-BSD1)**

Prepared: 20-Dec-17 Analyzed: 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	
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>	<i>0.0927</i>		mg/kg	<i>0.100</i>		<i>92.7</i>	<i>72-148</i>			

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 or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 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

**Petroleum Hydrocarbons by GC FID - Quality Control**
**Cardinal Laboratories**

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

**Batch 7121506 - General Prep - Organics**
**Blank (7121506-BLK1)**

Prepared: 15-Dec-17 Analyzed: 16-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							
<i>Surrogate: 1-Chlorooctane</i>	56.2		mg/kg	50.0		112	28.3-164			
<i>Surrogate: 1-Chlorooctadecane</i>	59.9		mg/kg	50.0		120	34.7-157			

**LCS (7121506-BS1)**

Prepared: 15-Dec-17 Analyzed: 16-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			
<i>Surrogate: 1-Chlorooctane</i>	49.8		mg/kg	50.0		99.5	28.3-164			
<i>Surrogate: 1-Chlorooctadecane</i>	49.6		mg/kg	50.0		99.1	34.7-157			

**LCS Dup (7121506-BSD1)**

Prepared: 15-Dec-17 Analyzed: 16-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	
<i>Surrogate: 1-Chlorooctane</i>	48.4		mg/kg	50.0		96.8	28.3-164			
<i>Surrogate: 1-Chlorooctadecane</i>	49.6		mg/kg	50.0		99.2	34.7-157			

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 or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 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

**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: 18-Dec-17 Analyzed: 20-Dec-17

Chloride	ND	10.0	mg/kg wet							
----------	----	------	-----------	--	--	--	--	--	--	--

**LCS (B712139-BS1)**

Prepared: 18-Dec-17 Analyzed: 20-Dec-17

Chloride	246	10.0	mg/kg wet	250		98.4	85-115			
----------	-----	------	-----------	-----	--	------	--------	--	--	--

**LCS Dup (B712139-BSD1)**

Prepared: 18-Dec-17 Analyzed: 20-Dec-17

Chloride	245	10.0	mg/kg wet	250		97.9	85-115	0.456	20	
----------	-----	------	-----------	-----	--	------	--------	-------	----	--

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 or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



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 or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



---

Celey D. Keene, Lab Director/Quality Manager



