



Electronic Correspondence

September 26, 2017

Mr. Mike Bratcher
State of New Mexico
Oil Conservation Division
811 S. 1st Street
Artesia, NM 88210
mike.bratcher@state.nm.us

Ms. Shelly Tucker
Environmental Protection Specialist
O&G Spill/Release Coordinator
Bureau of Land Management
620 E. Greene St
Carlsbad, NM 88220
stucker@blm.gov

Re: Corrective Action Plan – 2RP-4239
Chisolm Energy Operating, LLC, Neptune 31 Federal #1
Legal: Unit L, Sec 31, T18S, R29E, Eddy County, NM
Latitude/Longitude: 32.7019005/ -104.1194229
Etech Proj. Number: 204-8340-000
Depth to Groundwater: 150-175 feet - Chevron/Texaco Eddy County Depth to Groundwater Map
- USGS National Water Information System: Web Interface

Release Type: Water

Contaminants of Concern (COCs)	Threshold Levels
TPH	5000 mg/kg
Benzene	10 mg/kg
BTEX	50 mg/kg
Chloride	600 mg/kg

Dear Mike and Shelly:

Etech Environmental & Safety Solutions, Inc. (Etech) is submitting the following corrective action plan on the aforementioned site for your review and approval.

Background

On May 26, 2017, a release was discovered and reported from the Chisolm Neptune 31 Federal #1. Mewbourne Oil Company was stimulating their Pavo Macho 31 B2L1 Federal 1H well and was on their second to last stage when intercommunication occurred with the Chisolm Neptune 31 Federal #1 well. Water began leaking from the stuffing box of the pumping unit. Mewbourne contacted Chisolm immediately and Chisolm made arrangements to shut in the Chisolm Neptune 31 Federal #1 well that evening. Mewbourne finished stimulating the Pavo Macho 31 B2L1 Federal 1H well. Initial remediation activities on location by a third party

began that day and were finished the following day. There was some fluid that flowed off of the location. Approximately 200 barrels of water were released.

An assessment of the site was conducted on June 2, 2014 by Etech. The assessment determined the release had migrated south into the pasture and then separated into three streams of varying widths that varied in length from 122 to 205 linear feet. The overall impacted area was estimated to be approximately 7,610 square feet of surface area in the pasture.

An initial sampling was conducted of the impacted area in the pasture on June 2, 2017. Soil samples were collected at the surface at four (4) locations of the impacted area and were labeled Sample Point 1 through Sample Point 4 (See Annotated Aerial Imagery). The soil samples were submitted to the laboratory to be analyzed for TPH, benzene, BTEX, and chloride. The laboratory results for the soil samples collected determined that TPH values ranged from 3,921 to 17,923 mg/kg, benzene values were no analytical detection, BTEX values ranged from no analytical detection to 23.8 mg/kg, and chloride values ranged from 416 to 1,090 mg/kg (See Table 1 Summary of Delineation Sampling Analytical Results below).

On July 10, 2017, Etech returned to the site to conduct additional delineation soil sampling. Soil samples were collected utilizing a stainless steel hand auger at eight (8) soil sample locations labeled Auger Hole 1 through Auger Hole 8 (See Annotated Aerial Imagery). Auger Hole 1 through Auger Hole 4 samples were collected at the same locations that Sample Point 1 through Sample Point 4 soil samples were collected on June 2, 2017. Auger Hole 5 through Auger Hole 8 were new soil sample locations intended to better define the horizontal extent of the impacted soil. Soil samples were collected at one (1) foot intervals (12 inches, 24 inches, and 36 inches below ground surface (bgs)) at all soil sample locations. In addition, surface soil samples were collected at Auger Hole 5 through Auger Hole 8 soil sample locations.

The soil samples were submitted to the laboratory to be analyzed for TPH, benzene, BTEX, and chloride. The laboratory results for the soil samples collected determined that TPH, benzene, BTEX, and chloride levels were below regulatory threshold limits, except for the following soil samples and constituents:

Auger Hole 7 Surface	TPH 8,440 mg/kg	Chloride 608 mg/Kg
Auger Hole 3 12"		Chloride 656 mg/kg
Auger Hole 8 Surface		Chloride 1,960 mg/kg

On September 19, 2017, Etech returned to the site to conduct additional delineation soil sampling. Soil samples were collected utilizing a stainless steel hand auger at two (2) soil sample locations labeled Auger Hole 9 and Auger Hole 10 (See Annotated Aerial Imagery). Auger Hole 9 and Auger Hole 10 were new soil sample locations intended to better define the horizontal extent of the impacted soil as requested by the NMOCD. Soil samples were collected at the surface and then at one (1) foot intervals (12 inches, 24 inches, and 36 inches below ground surface (bgs)) at both soil sample locations.

The soil samples were submitted to the laboratory to be analyzed for TPH, benzene, BTEX, and chloride. The laboratory results for the soil samples collected determined that TPH, benzene, BTEX, and chloride levels were below regulatory threshold limits, except for the following soil samples and constituents:

Auger Hole 9 Surface	TPH 8,730 mg/kg	Chloride 1,760 mg/kg
Auger Hole 10 Surface	TPH 15,915.5 mg/kg	Chloride 880 mg/Kg

See Table 1 Summary of Delineation Sampling Analytical Results below.

**Table 1
Summary of Delineation Sampling Analytical Results**

Sample ID	Depth	Date	C6- C12	>C12- C28	>C28- C35	Total TPH (mg/kg)	Benzene (mg/kg)	BTEX (mg/kg)	Chloride (mg/kg)
Sample Point 1	Surface	6/2/17	ND	12,500	2,220	14,720	ND	.156	1,090
Sample Point 2	Surface	6/2/17	ND	11,100	2,000	13,100	ND	.406	640
Sample Point 3	Surface	6/2/17	503	15,000	2,420	17,923	ND	23.8	416
Sample Point 4	Surface	6/2/17	ND	3,160	761	3,921	ND	ND	576
Auger Hole 1	12"	7/10/17	ND	1,000	249	1,249	ND	ND	144
Auger Hole 1	24"	7/10/17	ND	32.8	22.8	55.6	ND	ND	48.0
Auger Hole 1	36"	7/10/17	ND	ND	ND	ND	ND	ND	80.0
Auger Hole 2	12"	7/10/17	ND	ND	ND	ND	ND	ND	48.0
Auger Hole 2	24"	7/10/17	ND	ND	ND	ND	ND	ND	80.0
Auger Hole 2	36"	7/10/17	ND	ND	ND	ND	ND	ND	80.0
Auger Hole 3	12"	7/10/17	ND	235	43.8	278.8	ND	ND	656
Auger Hole 3	24"	7/10/17	ND	ND	ND	ND	ND	ND	256
Auger Hole 3	36"	7/10/17	ND	10.3	ND	10.3	ND	ND	64.0
Auger Hole 4	12"	7/10/17	ND	81.6	28.8	110.4	ND	ND	96.0
Auger Hole 4	24"	7/10/17	ND	ND	ND	ND	ND	ND	48.0
Auger Hole 4	36"	7/10/17	ND	ND	ND	ND	ND	ND	64.0
Auger Hole 5	Surface	7/10/17	ND	1,840	429	2,269	ND	ND	448
Auger Hole 5	12"	7/10/17	ND	114	50.6	164.6	ND	ND	96.0
Auger Hole 5	24"	7/10/17	ND	ND	ND	ND	ND	ND	256
Auger Hole 5	36"	7/10/17	ND	ND	ND	ND	ND	ND	160
Auger Hole 6	Surface	7/10/17	ND	911	315	1,226	ND	ND	736
Auger Hole 6	12"	7/10/17	ND	40.1	33.8	73.9	ND	ND	32.0
Auger Hole 6	24"	7/10/17	ND	ND	ND	ND	ND	ND	48.0
Auger Hole 6	36"	7/10/17	ND	ND	ND	ND	ND	ND	64.0
Auger Hole 7	Surface	7/10/17	ND	6,740	1,700	8,440	ND	ND	608
Auger Hole 7	12"	7/10/17	ND	ND	25.2	25.2	ND	ND	32.0
Auger Hole 7	24"	7/10/17	ND	67.4	23.6	91.0	ND	ND	16.0
Auger Hole 7	36"	7/10/17	ND	ND	ND	ND	ND	ND	32.0
Auger Hole 8	Surface	7/10/17	31.0	2,370	405	2,806	ND	3.16	1,960
Auger Hole 8	12"	7/10/17	ND	32.9	48.3	81.2	ND	ND	208
Auger Hole 8	24"	7/10/17	ND	17.7	11.5	29.2	ND	ND	80.0
Auger Hole 8	36"	7/10/17	ND	ND	27.7	27.7	ND	ND	64.0
Auger Hole 9	Surface	9/19/17	ND	7,080	1,650	8,730	ND	1.89	1,760
Auger Hole 9	12"	9/19/17	ND	ND	ND	ND	ND	ND	64
Auger Hole 9	24"	9/19/17	ND	ND	ND	ND	ND	ND	16
Auger Hole 9	36"	9/19/17	ND	ND	ND	ND	ND	ND	ND
Auger Hole 10	Surface	9/19/17	55.5	13,000	2,860	15,915.5	ND	4.73	880
Auger Hole 10	12"	9/19/17	42.8	472	82.9	597.7	ND	30.1	112
Auger Hole 10	24"	9/19/17	ND	468	86.2	554.2	ND	0.286	80.0

Auger Hole 10	36"	9/19/17	ND	ND	ND	ND	ND	ND	80.0
---------------	-----	---------	----	----	----	----	----	----	------

ND denotes no analytical detection.

Bold denotes analytical results above regulatory guidelines

Depth to Ground Water Data

Depth to groundwater data was obtained from the Chevron/Texaco Eddy County Depth to Groundwater Map and the USGS National Water Information System: Web Interface. The New Mexico Office of the State Engineer (OSE) Hydrology Bureau collaborates with the U. S. Geological Survey (USGS) to collect, store, and make available measurements of water levels in over 2,200 wells across the state of New Mexico. Therefore, OSE groundwater data is part of the USGS National Water Information System database.

The USGS data correlates well with the Chevron/Texaco Eddy County Depth to Groundwater Map data. The data point nearest the Chisolm Neptune 31 Federal #1 indicates that the depth to groundwater is 151.35 feet bgs (USGS 324136104084701 19S.28E.02.23312).

Attachment D contains an image of the pertinent area of the Chevron/ Texaco Eddy County Depth to Groundwater Map with the location of the Chisolm Neptune 31 Federal #1 denoted, a map displaying the location of the Chisolm Neptune 31 Federal #1 and surrounding USGS data points, and the data files for the USGS data points displayed on the map.

Scope of Work

The corrective action for this site is a two-fold approach of reusing the soil via construction material and remediation via biological degradation. Depth to groundwater in the area is greater than 100 feet. Therefore, the corrective action goals for this project are 5,000 mg/kg of TPH, 10 mg/kg of benzene, 50 mg/kg of BTEX, and 600 mg/kg of chloride. The levels of chloride found from the delineation (with the exception of Sample Point 1, Sample Point 2, Auger Hole 3 12", Auger Hole 7 Surface, and Auger Hole 8 Surface) are below action levels for this project. The particulars for remediation will involve the actions summarized as follows:

1. Placement of a one-call for utility location.
2. Impacted soils in the pasture will be excavated to twelve (12) inches and placed on plastic. Confirmation samples will be collected from the excavated area to ensure that TPH, benzene, BTEX, and chloride levels are below regulatory thresholds as anticipated per the levels indicated by delineation soil sample analysis. If levels are above regulatory thresholds then excavation and confirmation sampling will continue until levels are below regulatory thresholds.
3. Impacted material will then be laid out in six (6) inch increments inside the excavated area. A biological amendment will then be added to the material and tilled in to enhance bioremediation of the impacted soil. The material will routinely be tilled until TPH, benzene, BTEX, and chloride levels are below regulatory thresholds. Once chloride levels are observed to be below regulatory thresholds, analysis for chloride will be discontinued. Upon lab confirmation, and depending on original excavation depth, another foot of impacted material will be laid out into the excavated area and the process will be repeated until all impacted material is remediated below regulatory thresholds.
4. The pad will be scraped, the material placed on plastic, and mixed and blended. Confirmation soil sampling will be conducted to ensure that TPH, benzene, BTEX, and chloride levels are below regulatory thresholds. Confirmation soil samples will be collected from the scraped area and will be representative of the entire length of the release flow path including the release point at the wellhead. In addition, the mixed and blended material will be sampled. The pad material scraped from the pad

will be replaced with clean caliche if necessary. The mixed and blended pad material will be reserved for pad repair.

5. Once remediation levels are achieved in the pasture area, the pasture area will be contoured to match the existing grade. The area will then be seeded via broadcast with BLM #2 and fenced to prevent wildlife from entering the reclaimed area.

Thank you for your assistance in this matter. Should you have any questions, require additional information, or have any additional stipulations for this site, please contact me at (432) 563-2200 (office) or via email at geoff@etechnv.com.

Respectfully,

A handwritten signature in black ink that reads "Geoff Leking". The signature is written in a cursive, slightly slanted style.

Geoff Leking
Project Manager
Etech Environmental & Safety Solutions, Inc.

Attachment A
Initial C-141

JUN 01 2017

Form C-141
Revised April 3, 2017

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

State of New Mexico
Energy Minerals and Natural Resources

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

RECEIVED appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

(Nearburg) NAB 1715735749 OPERATOR Initial Report Final Report
 Chisholm Energy Operating, LLC 15742 Contact - Brad Grandstaff
 801 Cherry St Suite 1200 Fort Worth TX 76102 Telephone No. - 972-977-9221
 Neptune 31 Federal #1 Facility Type - Pumping Well
 Surface Owner BLM Mineral Owner BLM API No. 30-015-30340

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
	31	T18S	R29E	1650'	FSL	767'	FWL	Eddy

Latitude 32.7019005 Longitude -104.1194229 NAD83

NATURE OF RELEASE

Type of Release Water	Volume of Release 200 BBLS	Volume Recovered 150 BBLS
Source of Release Via the stuffing box of Pumping Unit	5/26/2017 @ 3:00 pm	5/26/2017 @ 3:00 pm
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? BLM Carlsbad and NMOCD in Artesia	
By Whom? Tim Green - 432-413-9747	5/26/2017 @ 5 PM	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*
 Mewbourne Oil Co was stimulating their Pavo Macho 31 B2LI Fed 1H well and was on their 2nd to last stage when they connected up with the Neptune 31 Federal 1 well. Water began leaking from the stuffing box of the pumping unit. Mewbourne contacted Chisholm immediately and we made arrangements to shut in the well that evening. Mewbourne finished their frac. Cleanup on location began that day and was finished the following day. There was some water that made it off of the location.

Describe Area Affected and Cleanup Action Taken.*
 Most of the water was contained by the berms. A Vac truck was used to remove that fluid and as much excess as we could get off the rest of the affected area. The surface was bladed and cleaned up further. There was a small stream that made it off location. We have made an appointment with the BLM to come and review this area.

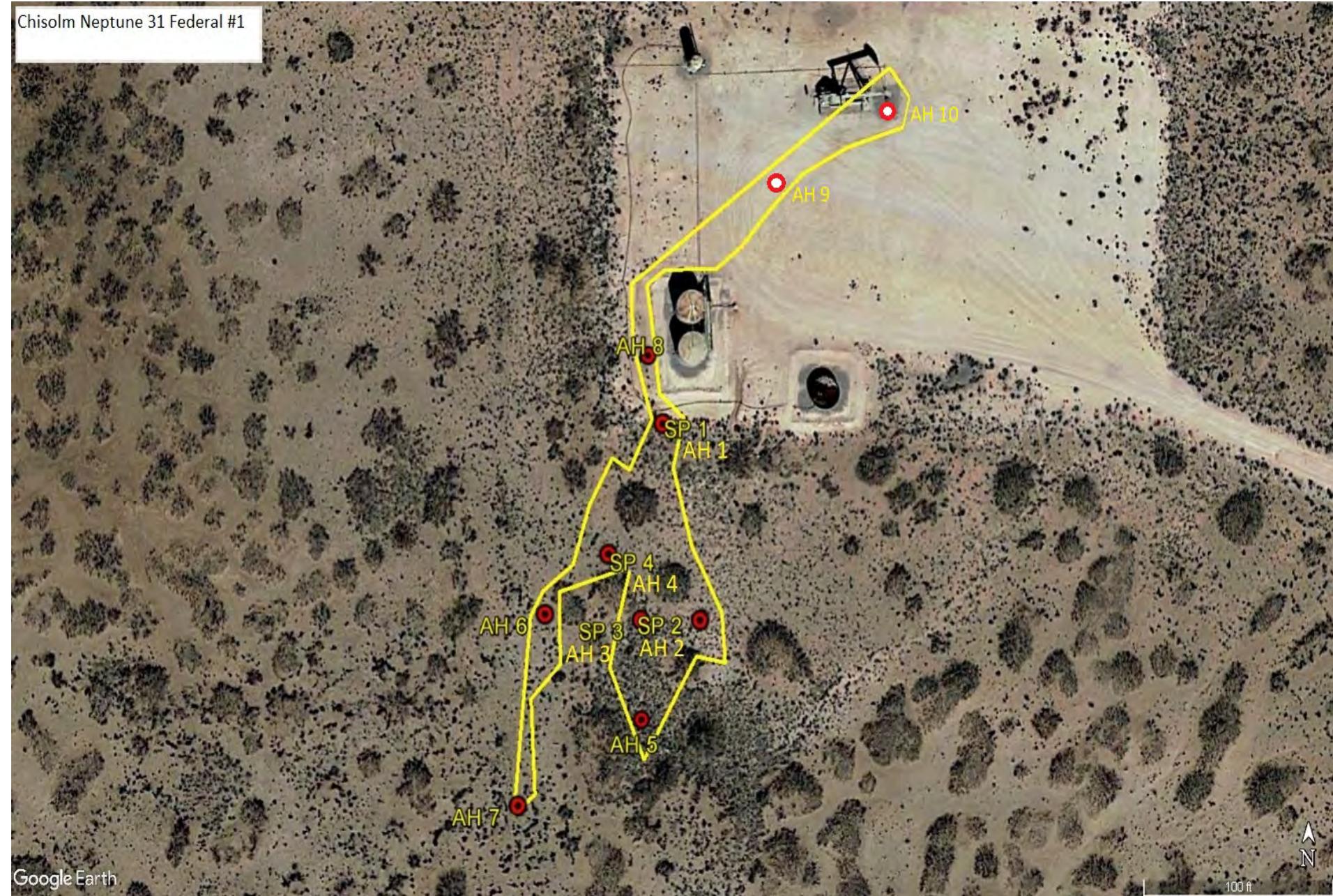
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger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

Signature:	OIL CONSERVATION DIVISION	
Printed Name: BRAD GRANDSTAFF	Signed By Approved by Environmental Specialist.	
Title: VP OPERATIONS	Approval Date: 6/5/17	Expiration Date: N/A
E-mail Address: bgrandstaf@chisholmenergy.com	Conditions of Approval: See attached	Attached <input checked="" type="checkbox"/>
Date: 6/1/17	Phone: 972-977-9221	

ARD-4239

Attachment B
Annotated Aerial Imagery

Chisolm Neptune 31 Federal #1



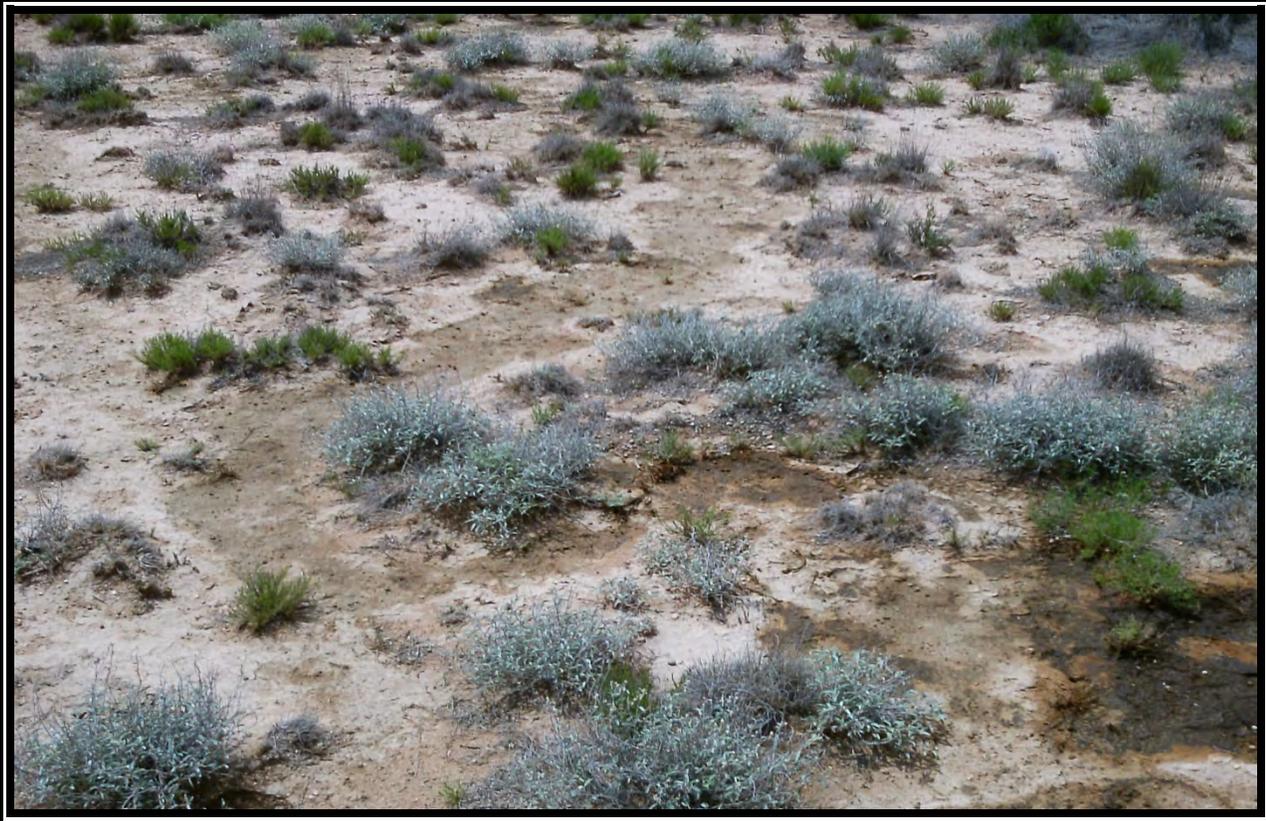
**Attachment C
Photograph Log**



View of impacted area in pasture immediately south of pad looking west.



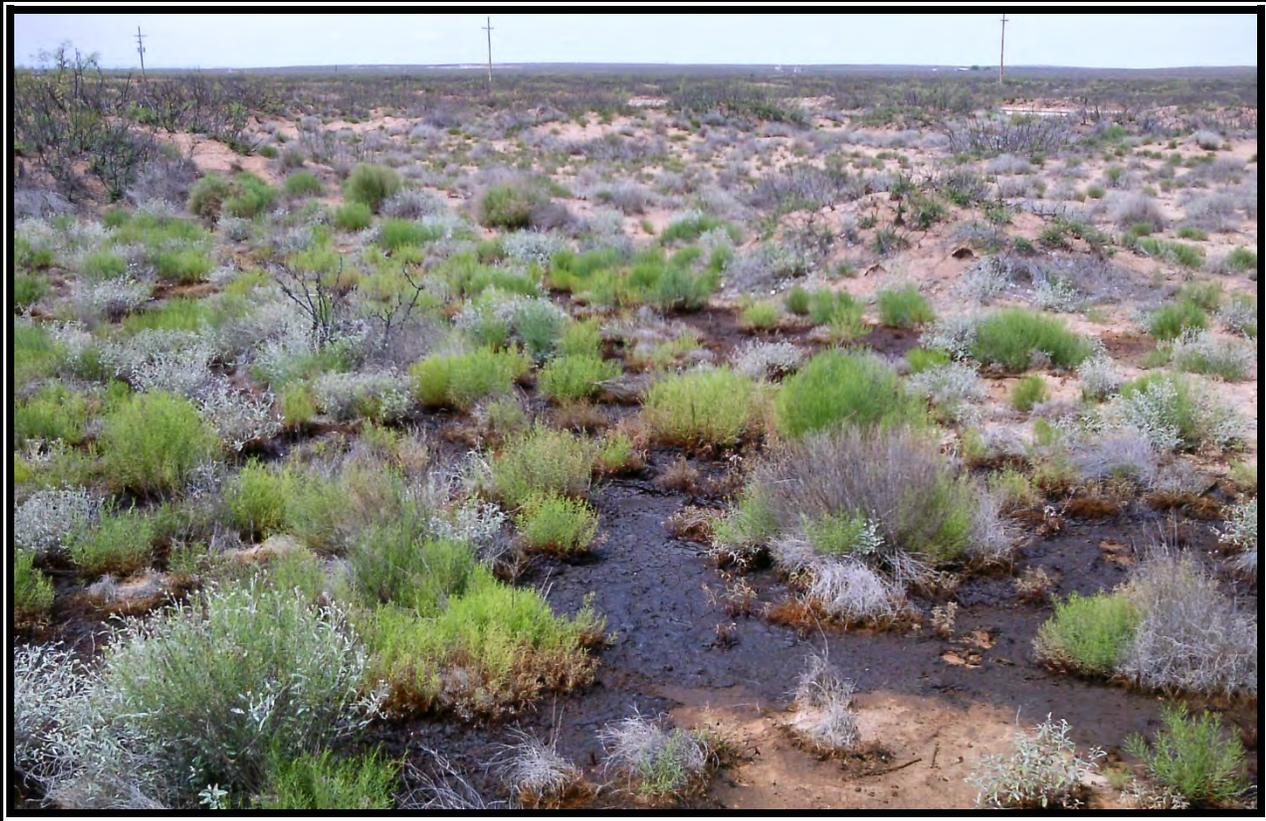
View of impacted area in pasture looking southeast.



View of impacted area in the pasture looking north.



View of impacted area in pasture looking southeast.

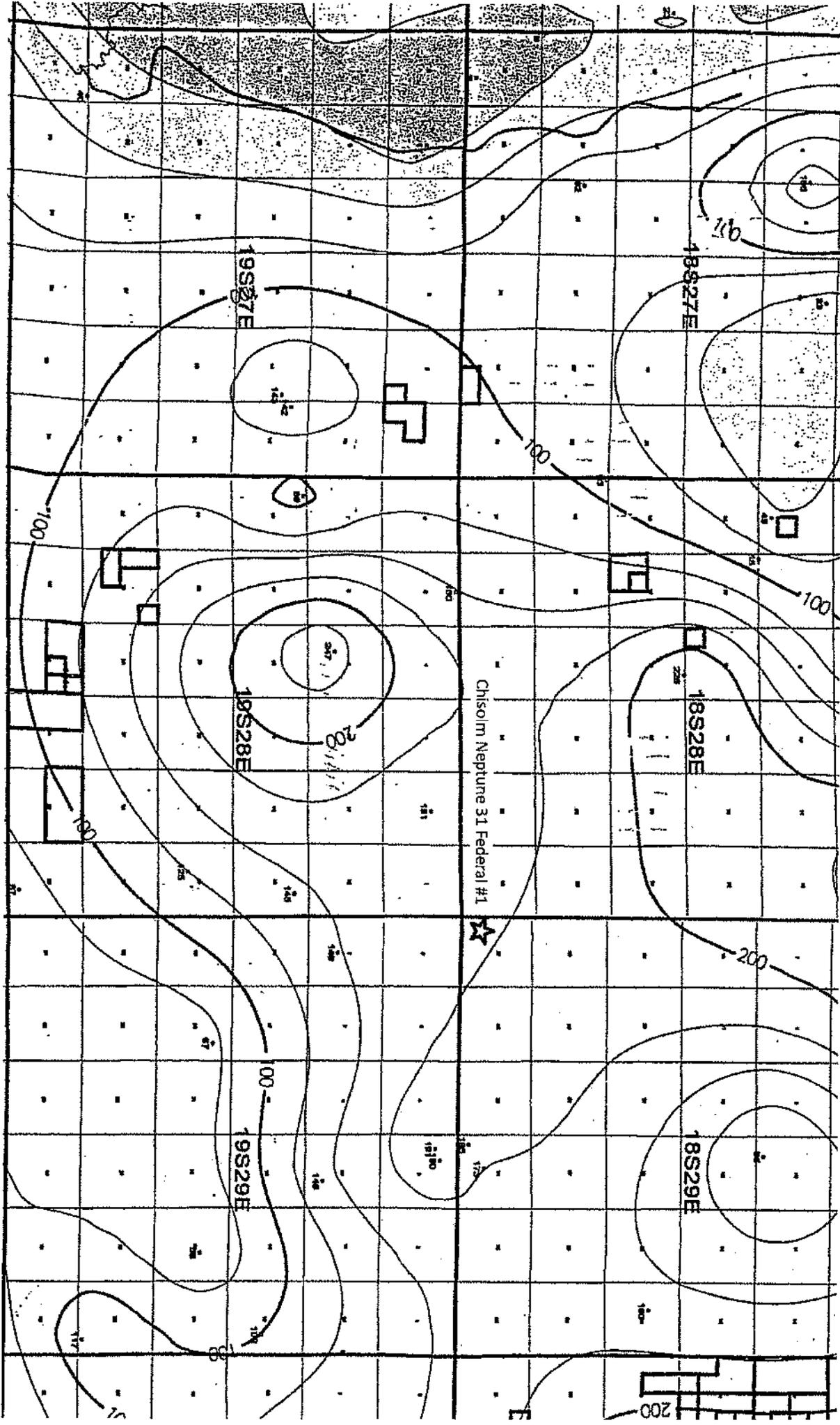


View of impacted area in pasture looking southeast.



View of impacted area in pasture looking northwest.

Attachment D
Depth to Groundwater Data



Chisolm Neptune 31 Federal #1

USGS Ground Water Elevation Data





National Water Information System: Web Interface

USGS Water Resources

Data Category: Geographic Area:

Click to hide News Bulletins

- [Please see news on new formats](#)
- [Full News](#)

Groundwater levels for New Mexico

Click to hide state-specific text

The New Mexico Water Science Center has transitioned to a new data management software package. While you may not have noticed this transition, some sites may have problems or delays in being updated. We are actively monitoring these conditions and are resolving them as quickly as possible. See the Dec 8 news entry for more information at: <https://help.waterdata.usgs.gov/news>

Search Results -- 1 sites found

Agency code = usgs
 site_no list =

- 324424104103901

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 324424104103901 18S.28E.21.21212

Eddy County, New Mexico
 Latitude 32°44'24", Longitude 104°10'39" NAD27
 Land-surface elevation 3,580 feet above NGVD29
 The depth of the well is 250.00 feet below land surface.
 This well is completed in the Artesia Group (313ARTS) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	Water-level accuracy	Status	Method of measurement	Measuring agency	Source of measurement
1986-05-21		D	225.77			2	Z		S	
1990-09-19		D	225.70			2	R		S	
1994-03-09		D	225.98			2	Z		S	
1999-02-19		D	225.24			2			S	

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Status	R	Site had been pumped recently.
Status	Z	Other conditions existed that would affect the measured water level (explain in remarks).
Method of measurement	S	Steel-tape measurement.
Measuring agency		Not determined
Source of measurement	S	Measured by personnel of reporting agency.



National Water Information System: Web Interface

[USGS Water Resources](#)

Data Category: Geographic Area:

Click to hideNews Bulletins

- [Please see news on new formats](#)
- [Full News](#)

Groundwater levels for New Mexico

Click to hide state-specific text

The New Mexico Water Science Center has transitioned to a new data management software package. While you may not have noticed this transition, some sites may have problems or delays in being updated. We are actively monitoring these conditions and are resolving them as quickly as possible. See the Dec 8 news entry for more information at: <https://help.waterdata.usgs.gov/news>

Search Results -- 1 sites found

Agency code = usgs
 site_no list =

- 324339104131901

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 324339104131901 18S.28E.30.111123

Eddy County, New Mexico
 Latitude 32°43'39", Longitude 104°13'19" NAD27
 Land-surface elevation 3,570 feet above NAVD88
 This well is completed in the Artesia Group (313ARTS) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	Water-level accuracy	Status	Method of measurement	Measuring agency	Source of measurement
1948-12-02		D	137.05			2	P	U		
1983-04-13		D	92.65			2		U		
1989-02-22		D	93.25			2		U		

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Status	P	Site was being pumped.
Method of measurement	U	Unknown method.
Measuring agency		Not determined
Source of measurement	U	Source is unknown.
Water-level approval status	A	Approved for publication -- Processing and review completed.



National Water Information System: Web Interface

[USGS Water Resources](#)

Data Category: Geographic Area:

Click to hideNews Bulletins

[Please see news on new formats](#)

- [Full News](#)

Groundwater levels for New Mexico

Click to hide state-specific text

The New Mexico Water Science Center has transitioned to a new data management software package. While you may not have noticed this transition, some sites may have problems or delays in being updated. We are actively monitoring these conditions and are resolving them as quickly as possible. See the Dec 8 news entry for more information at: <https://help.waterdata.usgs.gov/news>

Search Results -- 1 sites found

Agency code = usgs

site_no list =

- 324523104121701

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 324523104121701 18S.28E.17.111211

Eddy County, New Mexico

Latitude 32°45'16.4", Longitude 104°12'17.7" NAD83

Land-surface elevation 3,601 feet above NAVD88

This well is completed in the Artesia Group (313ARTS) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	Water-level accuracy	Status	Method of measurement	Measuring agency	Source of measurement
1983-04-13		D	85.59			2		U		
1989-02-02		D	86.75			2		U		
1994-03-09		D	88.21			2		S		
1999-02-19		D	88.79			2		S		
2015-12-16	12:05 MST	m	99.07			2		S	USGS	

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level date-time accuracy	m	Date is accurate to the Minute
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Method of measurement	S	Steel-tape measurement.
Method of measurement	U	Unknown method.
Measuring agency		Not determined
Measuring agency	USGS	U.S. Geological Survey



National Water Information System: Web Interface

USGS Water Resources

Data Category: Geographic Area:

Click to hide News Bulletins

- [Please see news on new formats](#)
- [Full News](#)

Groundwater levels for New Mexico

Click to hide state-specific text

The New Mexico Water Science Center has transitioned to a new data management software package. While you may not have noticed this transition, some sites may have problems or delays in being updated. We are actively monitoring these conditions and are resolving them as quickly as possible. See the Dec 8 news entry for more information at: <https://help.waterdata.usgs.gov/news>

Search Results -- 1 sites found

Agency code = usgs
 site_no list =

- 324633104105401

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 324633104105401 18S.28E.04.32412

Eddy County, New Mexico

Latitude 32°46'33", Longitude 104°10'54" NAD27

Land-surface elevation 3,665 feet above NAVD88

This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	Water-level accuracy	Status	Method of measurement	Measuring agency	Source of measurement
1985-06-04		D	103.08				2		U	
1989-02-02		D	107.27				2		U	
1994-03-09		D	100.78				2		S	
1999-01-13		D	102.01				2		S	

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Method of measurement	S	Steel-tape measurement.
Method of measurement	U	Unknown method.
Measuring agency		Not determined
Source of measurement	S	Measured by personnel of reporting agency.
Source of measurement	U	Source is unknown.
Water-level approval status	A	Approved for publication -- Processing and review completed.



National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater Geographic Area: New Mexico GO

Click to hideNews Bulletins

[Please see news on new formats](#)

- [Full News](#)

Groundwater levels for New Mexico

Click to hide state-specific text

The New Mexico Water Science Center has transitioned to a new data management software package. While you may not have noticed this transition, some sites may have problems or delays in being updated. We are actively monitoring these conditions and are resolving them as quickly as possible. See the Dec 8 news entry for more information at: <https://help.waterdata.usgs.gov/news>

Search Results -- 1 sites found

Agency code = usgs

site_no list = 324642104111001

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 324642104111001 18S.28E.04.131444

Eddy County, New Mexico

Latitude 32°46'42", Longitude 104°11'10" NAD27

Land-surface elevation 3,640 feet above NGVD29

The depth of the well is 145.00 feet below land surface.

This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	Water-level accuracy	Status	Method of measurement	Measuring agency	Source of measurement
1985-06-04		D	109.39			2	Z	S		
1990-09-19		D	106.60			2	Z	S		
1994-03-09		D	107.65			2	Z	S		

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status	Z	Other conditions existed that would affect the measured water level (explain in remarks).
Method of measurement	S	Steel-tape measurement.
Measuring agency		Not determined
Source of measurement	U	Source is unknown.
Water-level approval status	A	Approved for publication -- Processing and review completed.



National Water Information System: Web Interface

USGS Water Resources

Data Category:	Geographic Area:	GO
Groundwater	New Mexico	

Click to hide News Bulletins

[Please see news on new formats](#)

- [Full News](#)

Groundwater levels for New Mexico

Click to hide state-specific text

The New Mexico Water Science Center has transitioned to a new data management software package. While you may not have noticed this transition, some sites may have problems or delays in being updated. We are actively monitoring these conditions and are resolving them as quickly as possible. See the Dec 8 news entry for more information at: <https://help.waterdata.usgs.gov/news>

Search Results -- 1 sites found

Agency code = usgs

- site_no list =
- 324158104040301

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 324158104040301 18S.29E.34.33233

Eddy County, New Mexico

Latitude 32°41'58", Longitude 104°04'03" NAD27

Land-surface elevation 3,429 feet above NAVD88

The depth of the well is 250 feet below land surface.

This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	Water-level accuracy	Status	Method of measurement	Measuring agency	Source of measurement
1976-05-28		D	194.58			2		U		

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Method of measurement	U	Unknown method.
Measuring agency		Not determined
Source of measurement	U	Source is unknown.
Water-level approval status	A	Approved for publication — Processing and review completed.

[Questions about sites/data?](#)

[Feedback on this web site](#)



National Water Information System: Web Interface

USGS Water Resources

Data Category: Geographic Area:

Click to hide News Bulletins

[Please see news on new formats](#)

- [Full News](#)

Groundwater levels for New Mexico

Click to hide state-specific text

The New Mexico Water Science Center has transitioned to a new data management software package. While you may not have noticed this transition, some sites may have problems or delays in being updated. We are actively monitoring these conditions and are resolving them as quickly as possible. See the Dec 8 news entry for more information at: <https://help.waterdata.usgs.gov/news>

Search Results -- 1 sites found

Agency code = usgs

- site_no list =
- 324208104034101

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 324208104034101 18S.29E.34.32420

Eddy County, New Mexico

Latitude 32°42'08", Longitude 104°03'41" NAD27

Land-surface elevation 3,412 feet above NAVD88

The depth of the well is 240 feet below land surface.

This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	Water-level accuracy	Status	Method of measurement	Measuring agency	Source of measurement
1976-05-28		D	175.41				2		U	
1983-04-12		D	173.40				2		U	

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Method of measurement	U	Unknown method.
Measuring agency		Not determined
Source of measurement	U	Source is unknown.
Water-level approval status	A	Approved for publication -- Processing and review completed.

[Questions about sites/data?](#)

[Feedback on this web site](#)



National Water Information System: Web Interface

USGS Water Resources

Data Category: Geographic Area:

Click to hideNews Bulletins

[Please see news on new formats](#)

- [Full News](#)

Groundwater levels for New Mexico

Click to hide state-specific text

The New Mexico Water Science Center has transitioned to a new data management software package. While you may not have noticed this transition, some sites may have problems or delays in being updated. We are actively monitoring these conditions and are resolving them as quickly as possible. See the Dec 8 news entry for more information at: <https://help.waterdata.usgs.gov/news>

Search Results -- 1 sites found

Agency code = usgs
 site_no list =

- 324403104013301

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 324403104013301 18S.29E.24.23314

Eddy County, New Mexico
 Latitude 32°44'03", Longitude 104°01'33" NAD27
 Land-surface elevation 3,446 feet above NAVD88
 This well is completed in the Santa Rosa Sandstone (231SNRS) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	? Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Water-level accuracy	? Status	? Method of measurement	? Measuring agency	? Source of measurement
1950-04-28		D	158.32			2	P	U		

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status	P	Site was being pumped.
Method of measurement	U	Unknown method.
Measuring agency		Not determined
Source of measurement	U	Source is unknown.
Water-level approval status	A	Approved for publication -- Processing and review completed.



National Water Information System: Web Interface

USGS Water Resources

Data Category: Geographic Area:

Click to hide News Bulletins

[Please see news on new formats](#)

- [Full News](#)

Groundwater levels for New Mexico

Click to hide state-specific text

The New Mexico Water Science Center has transitioned to a new data management software package. While you may not have noticed this transition, some sites may have problems or delays in being updated. We are actively monitoring these conditions and are resolving them as quickly as possible. See the Dec 8 news entry for more information at: <https://help.waterdata.usgs.gov/news>

Search Results -- 1 sites found

Agency code = usgs

site_no list =

- 324402104014701

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 324402104014701 18S.29E.24.14413

Eddy County, New Mexico

Latitude 32°44'01.5", Longitude 104°01'48.9" NAD83

Land-surface elevation 3,441 feet above NAVD88

The depth of the well is 202.00 feet below land surface.

This well is completed in the Santa Rosa Sandstone (231SNRS) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	Water-level accuracy	Status	Method of measurement	Measuring agency	Source of measurement
1994-03-30		D	159.96				Z		S	
2015-12-16	10:30 MST	m	168.63				Z		S	USGS

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level date-time accuracy	m	Date is accurate to the Minute
Water-level accuracy	Z	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Status	Z	Other conditions existed that would affect the measured water level (explain in remarks).
Method of measurement	S	Steel-tape measurement.
Measuring agency		Not determined
Measuring agency	USGS	U.S. Geological Survey
Source of measurement	S	Measured by personnel of reporting agency.
Source of measurement	U	Source is unknown.



National Water Information System: Web Interface

USGS Water Resources

Data Category: Geographic Area:

Click to hide News Bulletins

[Please see news on new formats](#)

- [Full News](#)

Groundwater levels for New Mexico

Click to hide state-specific text

The New Mexico Water Science Center has transitioned to a new data management software package. While you may not have noticed this transition, some sites may have problems or delays in being updated. We are actively monitoring these conditions and are resolving them as quickly as possible. See the Dec 8 news entry for more information at: <https://help.waterdata.usgs.gov/news>

Search Results -- 1 sites found

Agency code = usgs

site_no list =

- 324403104013601

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 324403104013601 18S.29E.24.23313

Eddy County, New Mexico

Latitude 32°44'03", Longitude 104°01'36" NAD27

Land-surface elevation 3,443 feet above NAVD88

This well is completed in the Santa Rosa Sandstone (231SNRS) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	Water-level accuracy	Status	Method of measurement	Measuring agency	Source of measurement
1965-12-20		D	147.54			2	P		U	
1968-03-08		D	160.70			2	P		U	
1971-04-08		D	160.20			2	P		U	
1976-05-28		D	145.98			2			U	
1983-04-12		D	155.85			2			U	
1986-06-03		D	162.09			2			S	
1990-09-19		D	153.24			2			S	
1994-03-11		D	174.41			2			S	
1994-03-30		D	150.16			2			S	

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Status	P	Site was being pumped.



National Water Information System: Web Interface

[USGS Water Resources](#)

Data Category: Geographic Area:

Click to hideNews Bulletins

- [Please see news on new formats](#)
- [Full News](#)

Groundwater levels for New Mexico

Click to hide state-specific text

The New Mexico Water Science Center has transitioned to a new data management software package. While you may not have noticed this transition, some sites may have problems or delays in being updated. We are actively monitoring these conditions and are resolving them as quickly as possible. See the Dec 8 news entry for more information at: <https://help.waterdata.usgs.gov/news>

Search Results -- 1 sites found

Agency code = usgs
 site_no list =

- 324520104035201

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 324520104035201 18S.29E.10.34310

Eddy County, New Mexico
 Latitude 32°45'20", Longitude 104°03'52" NAD27
 Land-surface elevation 3,478 feet above NAVD88
 This well is completed in the Chinle Formation (231CHNL) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	Water-level accuracy	Status	Method of measurement	Measuring agency	Source of measurement
1983-04-12		D	138.87			2		U		
1986-06-05		D	153.73			2		S		
1990-09-19		D	140.74			2		S		
1994-03-29		D	94.52			2		S		

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status	-	The reported water-level measurement represents a static level
Method of measurement	S	Steel-tape measurement.
Method of measurement	U	Unknown method.
Measuring agency	-	Not determined
Source of measurement	U	Source is unknown.
Water-level approval status	A	Approved for publication -- Processing and review completed.



National Water Information System: Web Interface

USGS Water Resources

Data Category: Geographic Area:

Click to hide News Bulletins

[Please see news on new formats](#)

- [Full News](#)

Groundwater levels for New Mexico

Click to hide state-specific text

The New Mexico Water Science Center has transitioned to a new data management software package. While you may not have noticed this transition, some sites may have problems or delays in being updated. We are actively monitoring these conditions and are resolving them as quickly as possible. See the Dec 8 news entry for more information at: <https://help.waterdata.usgs.gov/news>

Search Results -- 1 sites found

Agency code = usgs

site_no list =

- 323645104074001

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 323645104074001 19S.28E.36.43233

Eddy County, New Mexico

Latitude 32°36'45", Longitude 104°07'40" NAD27

Land-surface elevation 3,292 feet above NAVD88

The depth of the well is 87 feet below land surface.

This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	? Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Water-level accuracy	? Status	? Method of measurement	? Measuring agency	? Source of measurement
1965-12-07		D	69.03			2		U		
1968-04-02		D	68.51			2		U		
1971-02-01		D	71.75			2		U		
1976-12-09		D	67.29			2		U		
1983-02-16		D	67.18			2		U		
1986-06-03		D	72.85			2		S		
1994-03-04		D	66.68			2		S		
1999-01-19		D	66.65			2		S		

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Method of measurement	S	Steel-tape measurement.



National Water Information System: Web Interface

USGS Water Resources

Data Category: Geographic Area:

Click to hide News Bulletins

[Please see news on new formats](#)

- [Full News](#)

Groundwater levels for New Mexico

Click to hide state-specific text

The New Mexico Water Science Center has transitioned to a new data management software package. While you may not have noticed this transition, some sites may have problems or delays in being updated. We are actively monitoring these conditions and are resolving them as quickly as possible. See the Dec 8 news entry for more information at: <https://help.waterdata.usgs.gov/news>

Search Results -- 1 sites found

Agency code = usgs

site_no list =

- 323724104103901

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 323724104103901 19S.28E.33.21422

Eddy County, New Mexico

Latitude 32°37'24", Longitude 104°10'39" NAD27

Land-surface elevation 3,347 feet above NAVD88

The depth of the well is 170 feet below land surface.

This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	Water-level accuracy	Status	Method of measurement	Measuring agency	Source of measurement
1948-12-21		D	123.41				2		U	
1965-11-04		D	121.56				2		U	
1968-04-02		D	120.88				2		U	
1971-01-28		D	121.07				2		U	

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Method of measurement	U	Unknown method.
Measuring agency		Not determined
Source of measurement	U	Source is unknown.
Water-level approval status	A	Approved for publication – Processing and review completed.



National Water Information System: Web Interface

USGS Water Resources

Data Category: Geographic Area:

Click to hide News Bulletins

[Please see news on new formats](#)

- [Full News](#)

Groundwater levels for New Mexico

Click to hide state-specific text

The New Mexico Water Science Center has transitioned to a new data management software package. While you may not have noticed this transition, some sites may have problems or delays in being updated. We are actively monitoring these conditions and are resolving them as quickly as possible. See the Dec 8 news entry for more information at: <https://help.waterdata.usgs.gov/news>

Search Results -- 1 sites found

Agency code = usgs

site_no list =

- 323731104011801

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 323731104011801 19S.29E.25.44332

Eddy County, New Mexico

Latitude 32°37'31", Longitude 104°01'18" NAD27

Land-surface elevation 3,322 feet above NAVD88

This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	Water-level accuracy	Status	Method of measurement	Measuring agency	Source of measurement
1983-01-12		D	118.93			2		U		
1994-03-04		D	116.96			2		S		

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Method of measurement	S	Steel-tape measurement.
Method of measurement	U	Unknown method.
Measuring agency		Not determined
Source of measurement	U	Source is unknown.
Water-level approval status	A	Approved for publication -- Processing and review completed.



National Water Information System: Web Interface

USGS Water Resources

Data Category: Geographic Area:

Click to hide News Bulletins

- [Please see news on new formats](#)
- [Full News](#)

Groundwater levels for New Mexico

Click to hide state-specific text

The New Mexico Water Science Center has transitioned to a new data management software package. While you may not have noticed this transition, some sites may have problems or delays in being updated. We are actively monitoring these conditions and are resolving them as quickly as possible. See the Dec 8 news entry for more information at: <https://help.waterdata.usgs.gov/news>

Search Results -- 1 sites found

Agency code = usgs
site_no list =

- 323936104012601

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 323936104012601 19S.29E.13.41224A

Eddy County, New Mexico
Latitude 32°39'36", Longitude 104°01'26" NAD27
Land-surface elevation 3,309 feet above NGVD29
The depth of the well is 120.00 feet below land surface.
This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	Water-level accuracy	Status	Method of measurement	Measuring agency	Source of measurement
1990-09-20		D	101.40			2	Z		S	
1994-03-18		D	99.83			2	Z		S	
1999-01-20		D	101.22			2			S	

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Status	Z	Other conditions existed that would affect the measured water level (explain in remarks).
Method of measurement	S	Steel-tape measurement.
Measuring agency		Not determined
Source of measurement	S	Measured by personnel of reporting agency.
Source of measurement	U	Source is unknown.
Water-level approval status	A	Approved for publication -- Processing and review completed.



National Water Information System: Web Interface

[USGS Water Resources](#)

Data Category: Geographic Area:

Click to hide News Bulletins

[Please see news on new formats](#)

- [Full News](#)

Groundwater levels for New Mexico

Click to hide state-specific text

The New Mexico Water Science Center has transitioned to a new data management software package. While you may not have noticed this transition, some sites may have problems or delays in being updated. We are actively monitoring these conditions and are resolving them as quickly as possible. See the Dec 8 news entry for more information at: <https://help.waterdata.usgs.gov/news>

Search Results -- 1 sites found

Agency code = usgs

site_no list =

- 323937104012301

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 323937104012301 19S.29E.13.412243

Eddy County, New Mexico

Latitude 32°39'37", Longitude 104°01'23" NAD27

Land-surface elevation 3,315 feet above NAVD88

The depth of the well is 250 feet below land surface.

This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	Water-level accuracy	Status	Method of measurement	Measuring agency	Source of measurement
1948-12-21		D	123.55				2			U
1968-04-03		D	114.03				2			U
1971-02-01		D	110.64				2			U
1976-12-07		D	108.08				2			U
1983-01-12		D	105.62				2			U

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Method of measurement	U	Unknown method.
Measuring agency		Not determined
Source of measurement	U	Source is unknown.
Water-level approval status	A	Approved for publication — Processing and review completed.



National Water Information System: Web Interface

USGS Water Resources

Data Category: Geographic Area:

Click to hide News Bulletins

[Please see news on new formats](#)

- [Full News](#)

Groundwater levels for New Mexico

Click to hide state-specific text

The New Mexico Water Science Center has transitioned to a new data management software package. While you may not have noticed this transition, some sites may have problems or delays in being updated. We are actively monitoring these conditions and are resolving them as quickly as possible. See the Dec 8 news entry for more information at: <https://help.waterdata.usgs.gov/news>

Search Results -- 1 sites found

Agency code = usgs

site_no list =

- 324000104073601

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 324000104073601 19S.28E.13.214411

Eddy County, New Mexico

Latitude 32°39'56.2", Longitude 104°07'35.9" NAD83

Land-surface elevation 3,372 feet above NAVD88

This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	Water-level accuracy	Status	Method of measurement	Measuring agency	Source of measurement
1983-01-10		D	145.49				2		U	
1986-06-03		D	148.40				2		S	
1994-03-04		D	145.05				2		S	
1999-01-19		D	144.98				2		S	
2015-12-16	13:05 MST	m	145.94				2		S	USGS

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level date-time accuracy	m	Date is accurate to the Minute
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Method of measurement	S	Steel-tape measurement.
Method of measurement	U	Unknown method.
Measuring agency		Not determined
Measuring agency	USGS	U.S. Geological Survey



National Water Information System: Web Interface

USGS Water Resources

Data Category: Geographic Area:

Click to hide News Bulletins

[Please see news on new formats](#)

- [Full News](#)

Groundwater levels for New Mexico

Click to hide state-specific text

The New Mexico Water Science Center has transitioned to a new data management software package. While you may not have noticed this transition, some sites may have problems or delays in being updated. We are actively monitoring these conditions and are resolving them as quickly as possible. See the Dec 8 news entry for more information at: <https://help.waterdata.usgs.gov/news>

Search Results -- 1 sites found

Agency code = usgs

site_no list =
• 324000104073601

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 324000104073601 19S.28E.13.214411

Eddy County, New Mexico

Latitude 32°39'56.2", Longitude 104°07'35.9" NAD83

Land-surface elevation 3,372 feet above NAVD88

This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	Water-level accuracy	Status	Method of measurement	Measuring agency	Source of measurement
1983-01-10		D	145.49			2			U	
1986-06-03		D	148.40			2			S	
1994-03-04		D	145.05			2			S	
1999-01-19		D	144.98			2			S	
2015-12-16	13:05 MST	m	145.94			2			S	USGS

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level date-time accuracy	m	Date is accurate to the Minute
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Method of measurement	S	Steel-tape measurement.
Method of measurement	U	Unknown method.
Measuring agency		Not determined
Measuring agency	USGS	U.S. Geological Survey



National Water Information System: Web Interface

USGS Water Resources

Data Category: Geographic Area:

Click to hideNews Bulletins

[Please see news on new formats](#)

- [Full News](#)

Groundwater levels for New Mexico

Click to hide state-specific text

The New Mexico Water Science Center has transitioned to a new data management software package. While you may not have noticed this transition, some sites may have problems or delays in being updated. We are actively monitoring these conditions and are resolving them as quickly as possible. See the Dec 8 news entry for more information at: <https://help.waterdata.usgs.gov/news>

Search Results -- 1 sites found

Agency code = usgs

site_no list =

- 323958104073401

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 323958104073401 19S.28E.13.21400

Eddy County, New Mexico

Latitude 32°39'58", Longitude 104°07'34" NAD27

Land-surface elevation 3,371 feet above NAVD88

The depth of the well is 160 feet below land surface.

This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	Water-level accuracy	Status	Method of measurement	Measuring agency	Source of measurement
1948-12-03		D	153.28			2	R		U	
1965-11-03		D	152.50			2			U	
1968-04-02		D	149.75			2	P		U	
1971-02-01		D	153.02			2	P		U	

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Status	P	Site was being pumped.
Status	R	Site had been pumped recently.
Method of measurement	U	Unknown method.
Measuring agency		Not determined
Source of measurement	U	Source is unknown.



National Water Information System: Web Interface

[USGS Water Resources](#)

Data Category: Geographic Area:

Click to hideNews Bulletins

[Please see news on new formats](#)

- [Full News](#)

Groundwater levels for New Mexico

Click to hide state-specific text

The New Mexico Water Science Center has transitioned to a new data management software package. While you may not have noticed this transition, some sites may have problems or delays in being updated. We are actively monitoring these conditions and are resolving them as quickly as possible. See the Dec 8 news entry for more information at: <https://help.waterdata.usgs.gov/news>

Search Results -- 1 sites found

Agency code = usgs

site_no list =

- 324008104131201

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 324008104131201 19S.28E.18.12113

Eddy County, New Mexico

Latitude 32°40'08", Longitude 104°13'12" NAD27

Land-surface elevation 3,512 feet above NAVD88

The depth of the well is 100 feet below land surface.

This well is completed in the Artesia Group (313ARTS) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	Water-level accuracy	Status	Method of measurement	Measuring agency	Source of measurement
1948-09-03		D	82.70			2			U	
1965-11-03		D	84.89			2			U	
1968-04-02		D	83.75			2	R		U	
1971-01-28		D	88.31			2			U	
1976-12-09		D	80.95			2			U	
1983-01-11		D	83.95			2			U	
1986-06-04		D	84.48			2			S	
1994-03-09		D	88.60			2			S	
1999-01-13		D	88.46			2			S	
2004-03-02		D	88.69			2			S	USGS

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot



National Water Information System: Web Interface

USGS Water Resources

Data Category: Geographic Area:

Click to hideNews Bulletins

[Please see news on new formats](#)

- [Full News](#)

Groundwater levels for New Mexico

Click to hide state-specific text

The New Mexico Water Science Center has transitioned to a new data management software package. While you may not have noticed this transition, some sites may have problems or delays in being updated. We are actively monitoring these conditions and are resolving them as quickly as possible. See the Dec 8 news entry for more information at: <https://help.waterdata.usgs.gov/news>

Search Results -- 1 sites found

Agency code = usgs

site_no list =

- 324135104035901

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 324135104035901 19S.29E.03.13223

Eddy County, New Mexico

Latitude 32°41'35", Longitude 104°03'59" NAD27

Land-surface elevation 3,421 feet above NAVD88

The depth of the well is 286 feet below land surface.

This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	Water-level accuracy	Status	Method of measurement	Measuring agency	Source of measurement
1984-04-26		D	192.76			2			U	
1990-09-20		D	192.35			2			V	
1994-03-11		D	190.82			2			S	

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Method of measurement	S	Steel-tape measurement.
Method of measurement	U	Unknown method.
Method of measurement	V	Calibrated electric-tape measurement.
Measuring agency		Not determined
Source of measurement	U	Source is unknown.
Water-level approval status	A	Approved for publication -- Processing and review completed.



National Water Information System: Web Interface

[USGS Water Resources](#)

Data Category: Geographic Area:

Click to hideNews Bulletins

[Please see news on new formats](#)

- [Full News](#)

Groundwater levels for New Mexico

Click to hide state-specific text

The New Mexico Water Science Center has transitioned to a new data management software package. While you may not have noticed this transition, some sites may have problems or delays in being updated. We are actively monitoring these conditions and are resolving them as quickly as possible. See the Dec 8 news entry for more information at: <https://help.waterdata.usgs.gov/news>

Search Results -- 1 sites found

Agency code = usgs

site_no list =

- 324136104084701

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 324136104084701 19S.28E.02.23312

Eddy County, New Mexico

Latitude 32°41'36", Longitude 104°08'47" NAD27

Land-surface elevation 3,452 feet above NAVD88

The depth of the well is 160 feet below land surface.

This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	? Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Water-level accuracy	? Status	? Method of measurement	? Measuring agency	? Source of measurement
1948-12-13		D	128.27			2	P			
1968-04-02		D	153.84			2			U	
1976-12-09		D	154.14			2			U	
1983-01-11		D	151.35			2			U	

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Status	P	Site was being pumped.
Method of measurement	U	Unknown method.
Measuring agency		Not determined
Source of measurement	U	Source is unknown.
Water-level approval status	A	Approved for publication -- Processing and review completed.



National Water Information System: Web Interface

USGS Water Resources

Data Category: Geographic Area:

Click to hideNews Bulletins

[Please see news on new formats](#)

- [Full News](#)

Groundwater levels for New Mexico

Click to hide state-specific text

The New Mexico Water Science Center has transitioned to a new data management software package. While you may not have noticed this transition, some sites may have problems or delays in being updated. We are actively monitoring these conditions and are resolving them as quickly as possible. See the Dec 8 news entry for more information at: <https://help.waterdata.usgs.gov/news>

Search Results -- 1 sites found

Agency code = usgs

site_no list =
 • 324139104034901

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 324139104034901 19S.29E.03.12344

Eddy County, New Mexico

Latitude 32°41'38.8", Longitude 104°03'52.2" NAD83

Land-surface elevation 3,421 feet above NAVD88

The depth of the well is 240 feet below land surface.

This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	Water-level accuracy	Status	Method of measurement	Measuring agency	Source of measurement
1984-07-20		D	192.26			2		U		
1994-03-11		D	189.96			2		S		
1999-01-15		D	188.86			2		S		
2015-12-16	11:20 MST	m	205.42			2	R	S	USGS	

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level date-time accuracy	m	Date is accurate to the Minute
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Status	R	Site had been pumped recently.
Method of measurement	S	Steel-tape measurement.
Method of measurement	U	Unknown method.
Measuring agency		Not determined

Attachment E
Analytical Results



June 08, 2017

BRIAN ASHBURN

ETECH Environmental & Safety Solutions, Inc.

P. O. BOX 8469

MIDLAND, TX 79708

RE: NEPTUNE FED 31 #1

Enclosed are the results of analyses for samples received by the laboratory on 06/02/17 14:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. 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/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

 ETECH Environmental & Safety Solutions, Inc.
 BRIAN ASHBURN
 P. O. BOX 8469
 MIDLAND TX, 79708
 Fax To: (432) 563-2213

Received:	06/02/2017	Sampling Date:	06/02/2017
Reported:	06/08/2017	Sampling Type:	Soil
Project Name:	NEPTUNE FED 31 #1	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

Sample ID: SAMPLE POINT 1 (H701458-01)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/02/2017	ND	1.90	94.8	2.00	0.513	
Toluene*	<0.050	0.050	06/02/2017	ND	1.84	91.9	2.00	0.172	
Ethylbenzene*	<0.050	0.050	06/02/2017	ND	1.91	95.4	2.00	0.178	
Total Xylenes*	0.156	0.150	06/02/2017	ND	5.23	87.2	6.00	0.788	
Total BTEX	<0.300	0.300	06/02/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.8 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1090	16.0	06/05/2017	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<50.0	50.0	06/02/2017	ND	202	101	200	5.04		
DRO >C10-C28	12500	50.0	06/02/2017	ND	191	95.6	200	6.88		
EXT DRO >C28-C36	2220	50.0	06/02/2017	ND						

Surrogate: 1-Chlorooctane 108 % 28.3-164

Surrogate: 1-Chlorooctadecane 417 % 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 and 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 damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of 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:

 ETECH Environmental & Safety Solutions, Inc.
 BRIAN ASHBURN
 P. O. BOX 8469
 MIDLAND TX, 79708
 Fax To: (432) 563-2213

Received:	06/02/2017	Sampling Date:	06/02/2017
Reported:	06/08/2017	Sampling Type:	Soil
Project Name:	NEPTUNE FED 31 #1	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

Sample ID: SAMPLE POINT 2 (H701458-02)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/02/2017	ND	1.90	94.8	2.00	0.513	
Toluene*	<0.050	0.050	06/02/2017	ND	1.84	91.9	2.00	0.172	
Ethylbenzene*	<0.050	0.050	06/02/2017	ND	1.91	95.4	2.00	0.178	
Total Xylenes*	0.406	0.150	06/02/2017	ND	5.23	87.2	6.00	0.788	
Total BTEX	0.406	0.300	06/02/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	640	16.0	06/05/2017	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<50.0	50.0	06/02/2017	ND	202	101	200	5.04		
DRO >C10-C28	11100	50.0	06/02/2017	ND	191	95.6	200	6.88		
EXT DRO >C28-C36	2000	50.0	06/02/2017	ND						

Surrogate: 1-Chlorooctane 116 % 28.3-164

Surrogate: 1-Chlorooctadecane 365 % 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 and 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 damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of 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:

 ETECH Environmental & Safety Solutions, Inc.
 BRIAN ASHBURN
 P. O. BOX 8469
 MIDLAND TX, 79708
 Fax To: (432) 563-2213

Received:	06/02/2017	Sampling Date:	06/02/2017
Reported:	06/08/2017	Sampling Type:	Soil
Project Name:	NEPTUNE FED 31 #1	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

Sample ID: SAMPLE POINT 3 (H701458-03)

BTEX 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/02/2017	ND	1.90	94.8	2.00	0.513	
Toluene*	1.40	0.050	06/02/2017	ND	1.84	91.9	2.00	0.172	
Ethylbenzene*	4.10	0.050	06/02/2017	ND	1.91	95.4	2.00	0.178	
Total Xylenes*	18.3	0.150	06/02/2017	ND	5.23	87.2	6.00	0.788	
Total BTEX	23.8	0.300	06/02/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 166 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	416	16.0	06/05/2017	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	503	50.0	06/02/2017	ND	202	101	200	5.04	
DRO >C10-C28	15200	50.0	06/02/2017	ND	191	95.6	200	6.88	
EXT DRO >C28-C36	2420	50.0	06/02/2017	ND					

Surrogate: 1-Chlorooctane 137 % 28.3-164

Surrogate: 1-Chlorooctadecane 471 % 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 and 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 damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of 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:

 ETECH Environmental & Safety Solutions, Inc.
 BRIAN ASHBURN
 P. O. BOX 8469
 MIDLAND TX, 79708
 Fax To: (432) 563-2213

Received:	06/02/2017	Sampling Date:	06/02/2017
Reported:	06/08/2017	Sampling Type:	Soil
Project Name:	NEPTUNE FED 31 #1	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

Sample ID: SAMPLE POINT 4 (H701458-04)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/05/2017	ND	1.90	94.8	2.00	0.513	
Toluene*	<0.050	0.050	06/05/2017	ND	1.84	91.9	2.00	0.172	
Ethylbenzene*	<0.050	0.050	06/05/2017	ND	1.91	95.4	2.00	0.178	
Total Xylenes*	<0.150	0.150	06/05/2017	ND	5.23	87.2	6.00	0.788	
Total BTEX	<0.300	0.300	06/05/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	576	16.0	06/05/2017	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/02/2017	ND	202	101	200	5.04	
DRO >C10-C28	3160	10.0	06/02/2017	ND	191	95.6	200	6.88	
EXT DRO >C28-C36	761	10.0	06/02/2017	ND					

Surrogate: 1-Chlorooctane 91.4 % 28.3-164

Surrogate: 1-Chlorooctadecane 147 % 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 and 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 damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of 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

- S-06 The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
- S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- 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





CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

BILL TO

ANALYSIS REQUEST

Company Name: ETECH / NEARBURG P.O. #: _____
 Project Manager: BRIAN ASHBURN Company: ETECH
 Address: 13000 W COUNTY RD 100 Attn: BRIAN ASHBURN
 City: ODESSA State: TX Zip: _____ Address: PO BOX 62228
 Phone #: 432-563-2200 Fax #: _____ City: MIDLAND TX
 Project #: _____ Project Owner: _____ State: TX Zip: 79711
 Project Name: NEPTUNE FED 31 # 1 Phone #: 432-563-2200
 Project Location: EDDY CO. NM Fax #: _____
 Sampler Name: GEORGE LERINA

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	TPH	BTEX	CHLORIDES	
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :						ACID/BASE:
<u>H 701458</u>	<u>Sample Point 1</u>	<u>X</u>	<u>1</u>			<u>X</u>					<u>6.2.17</u>	<u>1215</u>	<u>X</u>	<u>X</u>	<u>X</u>
	<u>Sample Point 2</u>											<u>1220</u>	<u>X</u>	<u>X</u>	<u>X</u>
	<u>Sample Point 3</u>											<u>1225</u>	<u>X</u>	<u>X</u>	<u>X</u>
	<u>Sample Point 4</u>														

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort shall be limited to the amount paid by the client for the analysis. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruption, loss of use, or loss of profits, incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: _____ Date: 6.2.17 Received By: _____ Date: 6.2.17
 Time: 14:00 Time: 14:00
 Relinquished By: George LERINA Received By: Brian Ashburn
 Date: 6-2-17 Date: 6-2-17
 Time: 14:00 Time: 14:00

Delivered By: (Circle One) UPS Bus Other: _____
 Sampler - UPS - Bus - Other: -0.9%
 Sample Condition: Intact Cool Yes No
 Checked By: 70-#15

REMARKS: brian@etechnv.com
575 393 2326
geoff@etechnv.com



July 19, 2017

BRIAN ASHBURN

ETECH Environmental & Safety Solutions, Inc.

P. O. BOX 8469

MIDLAND, TX 79708

RE: NEPTUNE FED 31 #1

Enclosed are the results of analyses for samples received by the laboratory on 07/10/17 16:45.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. 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/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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,

A handwritten signature in black ink that reads "Mike Snyder". The signature is fluid and cursive.

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

 ETECH Environmental & Safety Solutions, Inc.
 BRIAN ASHBURN
 P. O. BOX 8469
 MIDLAND TX, 79708
 Fax To: (432) 563-2213

Received:	07/10/2017	Sampling Date:	07/10/2017
Reported:	07/19/2017	Sampling Type:	Soil
Project Name:	NEPTUNE FED 31 #1	Sampling Condition:	Cool & Intact
Project Number:	NEARBURG	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

Sample ID: AH - 8 SURFACE (H701774-01)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/12/2017	ND	2.24	112	2.00	1.38	
Toluene*	0.168	0.050	07/12/2017	ND	2.09	105	2.00	2.43	
Ethylbenzene*	<0.050	0.050	07/12/2017	ND	2.19	110	2.00	1.92	
Total Xylenes*	3.00	0.150	07/12/2017	ND	6.50	108	6.00	2.22	
Total BTEX	3.16	0.300	07/12/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 126 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1960	16.0	07/11/2017	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	31.0	10.0	07/11/2017	ND	223	112	200	3.41	
DRO >C10-C28	2370	10.0	07/11/2017	ND	222	111	200	0.319	
EXT DRO >C28-C36	405	10.0	07/11/2017	ND					

Surrogate: 1-Chlorooctane 118 % 28.3-164

Surrogate: 1-Chlorooctadecane 149 % 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 and 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 damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of 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.



Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 ETECH Environmental & Safety Solutions, Inc.
 BRIAN ASHBURN
 P. O. BOX 8469
 MIDLAND TX, 79708
 Fax To: (432) 563-2213

Received:	07/10/2017	Sampling Date:	07/10/2017
Reported:	07/19/2017	Sampling Type:	Soil
Project Name:	NEPTUNE FED 31 #1	Sampling Condition:	Cool & Intact
Project Number:	NEARBURG	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

Sample ID: AH - 8 12" (H701774-02)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/12/2017	ND	2.24	112	2.00	1.38	
Toluene*	<0.050	0.050	07/12/2017	ND	2.09	105	2.00	2.43	
Ethylbenzene*	<0.050	0.050	07/12/2017	ND	2.19	110	2.00	1.92	
Total Xylenes*	<0.150	0.150	07/12/2017	ND	6.50	108	6.00	2.22	
Total BTEX	<0.300	0.300	07/12/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	07/11/2017	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/11/2017	ND	223	112	200	3.41	
DRO >C10-C28	32.9	10.0	07/11/2017	ND	222	111	200	0.319	
EXT DRO >C28-C36	48.3	10.0	07/11/2017	ND					

Surrogate: 1-Chlorooctane 120 % 28.3-164

Surrogate: 1-Chlorooctadecane 127 % 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 and 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 damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of 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.



Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 ETECH Environmental & Safety Solutions, Inc.
 BRIAN ASHBURN
 P. O. BOX 8469
 MIDLAND TX, 79708
 Fax To: (432) 563-2213

Received:	07/10/2017	Sampling Date:	07/10/2017
Reported:	07/19/2017	Sampling Type:	Soil
Project Name:	NEPTUNE FED 31 #1	Sampling Condition:	Cool & Intact
Project Number:	NEARBURG	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

Sample ID: AH - 8 24" (H701774-03)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/12/2017	ND	2.24	112	2.00	1.38		
Toluene*	<0.050	0.050	07/12/2017	ND	2.09	105	2.00	2.43		
Ethylbenzene*	<0.050	0.050	07/12/2017	ND	2.19	110	2.00	1.92		
Total Xylenes*	<0.150	0.150	07/12/2017	ND	6.50	108	6.00	2.22		
Total BTEX	<0.300	0.300	07/12/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	07/11/2017	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	07/11/2017	ND	223	112	200	3.41		
DRO >C10-C28	17.7	10.0	07/11/2017	ND	222	111	200	0.319		
EXT DRO >C28-C36	11.5	10.0	07/11/2017	ND						

Surrogate: 1-Chlorooctane 118 % 28.3-164

Surrogate: 1-Chlorooctadecane 123 % 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 and 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 damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of 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.



Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 ETECH Environmental & Safety Solutions, Inc.
 BRIAN ASHBURN
 P. O. BOX 8469
 MIDLAND TX, 79708
 Fax To: (432) 563-2213

Received:	07/10/2017	Sampling Date:	07/10/2017
Reported:	07/19/2017	Sampling Type:	Soil
Project Name:	NEPTUNE FED 31 #1	Sampling Condition:	Cool & Intact
Project Number:	NEARBURG	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

Sample ID: AH - 8 36" (H701774-04)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/12/2017	ND	2.06	103	2.00	5.35	
Toluene*	<0.050	0.050	07/12/2017	ND	1.95	97.6	2.00	5.61	
Ethylbenzene*	<0.050	0.050	07/12/2017	ND	2.04	102	2.00	5.74	
Total Xylenes*	<0.150	0.150	07/12/2017	ND	6.07	101	6.00	4.76	
Total BTEX	<0.300	0.300	07/12/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	07/11/2017	ND	448	112	400	3.51	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/11/2017	ND	223	112	200	3.41	
DRO >C10-C28	<10.0	10.0	07/11/2017	ND	222	111	200	0.319	
EXT DRO >C28-C36	27.7	10.0	07/11/2017	ND					

Surrogate: 1-Chlorooctane 112 % 28.3-164

Surrogate: 1-Chlorooctadecane 121 % 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 and 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 damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of 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.



Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 ETECH Environmental & Safety Solutions, Inc.
 BRIAN ASHBURN
 P. O. BOX 8469
 MIDLAND TX, 79708
 Fax To: (432) 563-2213

Received:	07/10/2017	Sampling Date:	07/10/2017
Reported:	07/19/2017	Sampling Type:	Soil
Project Name:	NEPTUNE FED 31 #1	Sampling Condition:	Cool & Intact
Project Number:	NEARBURG	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

Sample ID: AH - 7 SURFACE (H701774-05)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/12/2017	ND	2.06	103	2.00	5.35		
Toluene*	<0.050	0.050	07/12/2017	ND	1.95	97.6	2.00	5.61		
Ethylbenzene*	<0.050	0.050	07/12/2017	ND	2.04	102	2.00	5.74		
Total Xylenes*	<0.150	0.150	07/12/2017	ND	6.07	101	6.00	4.76		
Total BTEX	<0.300	0.300	07/12/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	608	16.0	07/11/2017	ND	448	112	400	3.51		

TPH 8015M		mg/kg		Analyzed By: MS							S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
GRO C6-C10	<50.0	50.0	07/11/2017	ND	223	112	200	3.41			
DRO >C10-C28	6740	50.0	07/11/2017	ND	222	111	200	0.319			
EXT DRO >C28-C36	1700	50.0	07/11/2017	ND							

Surrogate: 1-Chlorooctane 118 % 28.3-164

Surrogate: 1-Chlorooctadecane 298 % 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 and 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 damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of 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.



Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 ETECH Environmental & Safety Solutions, Inc.
 BRIAN ASHBURN
 P. O. BOX 8469
 MIDLAND TX, 79708
 Fax To: (432) 563-2213

Received:	07/10/2017	Sampling Date:	07/10/2017
Reported:	07/19/2017	Sampling Type:	Soil
Project Name:	NEPTUNE FED 31 #1	Sampling Condition:	Cool & Intact
Project Number:	NEARBURG	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

Sample ID: AH - 7 12" (H701774-06)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/12/2017	ND	2.06	103	2.00	5.35		
Toluene*	<0.050	0.050	07/12/2017	ND	1.95	97.6	2.00	5.61		
Ethylbenzene*	<0.050	0.050	07/12/2017	ND	2.04	102	2.00	5.74		
Total Xylenes*	<0.150	0.150	07/12/2017	ND	6.07	101	6.00	4.76		
Total BTEX	<0.300	0.300	07/12/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	07/11/2017	ND	448	112	400	3.51		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	07/11/2017	ND	223	112	200	3.41		
DRO >C10-C28	<10.0	10.0	07/11/2017	ND	222	111	200	0.319		
EXT DRO >C28-C36	25.2	10.0	07/11/2017	ND						

Surrogate: 1-Chlorooctane 114 % 28.3-164

Surrogate: 1-Chlorooctadecane 120 % 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 and 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 damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of 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.



Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 ETECH Environmental & Safety Solutions, Inc.
 BRIAN ASHBURN
 P. O. BOX 8469
 MIDLAND TX, 79708
 Fax To: (432) 563-2213

Received:	07/10/2017	Sampling Date:	07/10/2017
Reported:	07/19/2017	Sampling Type:	Soil
Project Name:	NEPTUNE FED 31 #1	Sampling Condition:	Cool & Intact
Project Number:	NEARBURG	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

Sample ID: AH - 7 24" (H701774-07)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/12/2017	ND	2.06	103	2.00	5.35		
Toluene*	<0.050	0.050	07/12/2017	ND	1.95	97.6	2.00	5.61		
Ethylbenzene*	<0.050	0.050	07/12/2017	ND	2.04	102	2.00	5.74		
Total Xylenes*	<0.150	0.150	07/12/2017	ND	6.07	101	6.00	4.76		
Total BTEX	<0.300	0.300	07/12/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	07/11/2017	ND	448	112	400	3.51		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	07/11/2017	ND	223	112	200	3.41		
DRO >C10-C28	67.4	10.0	07/11/2017	ND	222	111	200	0.319		
EXT DRO >C28-C36	23.6	10.0	07/11/2017	ND						

Surrogate: 1-Chlorooctane 124 % 28.3-164

Surrogate: 1-Chlorooctadecane 140 % 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 and 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 damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of 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.



Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 ETECH Environmental & Safety Solutions, Inc.
 BRIAN ASHBURN
 P. O. BOX 8469
 MIDLAND TX, 79708
 Fax To: (432) 563-2213

Received:	07/10/2017	Sampling Date:	07/10/2017
Reported:	07/19/2017	Sampling Type:	Soil
Project Name:	NEPTUNE FED 31 #1	Sampling Condition:	Cool & Intact
Project Number:	NEARBURG	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

Sample ID: AH - 7 36" (H701774-08)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/12/2017	ND	2.06	103	2.00	5.35		
Toluene*	<0.050	0.050	07/12/2017	ND	1.95	97.6	2.00	5.61		
Ethylbenzene*	<0.050	0.050	07/12/2017	ND	2.04	102	2.00	5.74		
Total Xylenes*	<0.150	0.150	07/12/2017	ND	6.07	101	6.00	4.76		
Total BTEX	<0.300	0.300	07/12/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	07/11/2017	ND	448	112	400	3.51		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	07/11/2017	ND	223	112	200	3.41		
DRO >C10-C28	<10.0	10.0	07/11/2017	ND	222	111	200	0.319		
EXT DRO >C28-C36	<10.0	10.0	07/11/2017	ND						

Surrogate: 1-Chlorooctane 116 % 28.3-164

Surrogate: 1-Chlorooctadecane 121 % 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 and 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 damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of 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.



Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 ETECH Environmental & Safety Solutions, Inc.
 BRIAN ASHBURN
 P. O. BOX 8469
 MIDLAND TX, 79708
 Fax To: (432) 563-2213

Received:	07/10/2017	Sampling Date:	07/10/2017
Reported:	07/19/2017	Sampling Type:	Soil
Project Name:	NEPTUNE FED 31 #1	Sampling Condition:	Cool & Intact
Project Number:	NEARBURG	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

Sample ID: AH - 6 SURFACE (H701774-09)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/12/2017	ND	2.06	103	2.00	5.35	
Toluene*	<0.050	0.050	07/12/2017	ND	1.95	97.6	2.00	5.61	
Ethylbenzene*	<0.050	0.050	07/12/2017	ND	2.04	102	2.00	5.74	
Total Xylenes*	<0.150	0.150	07/12/2017	ND	6.07	101	6.00	4.76	
Total BTEX	<0.300	0.300	07/12/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	736	16.0	07/11/2017	ND	448	112	400	3.51	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/11/2017	ND	223	112	200	3.41	
DRO >C10-C28	911	10.0	07/11/2017	ND	222	111	200	0.319	
EXT DRO >C28-C36	315	10.0	07/11/2017	ND					

Surrogate: 1-Chlorooctane 112 % 28.3-164

Surrogate: 1-Chlorooctadecane 133 % 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 and 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 damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of 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.



Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 ETECH Environmental & Safety Solutions, Inc.
 BRIAN ASHBURN
 P. O. BOX 8469
 MIDLAND TX, 79708
 Fax To: (432) 563-2213

Received:	07/10/2017	Sampling Date:	07/10/2017
Reported:	07/19/2017	Sampling Type:	Soil
Project Name:	NEPTUNE FED 31 #1	Sampling Condition:	Cool & Intact
Project Number:	NEARBURG	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

Sample ID: AH - 6 12" (H701774-10)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/12/2017	ND	2.06	103	2.00	5.35	
Toluene*	<0.050	0.050	07/12/2017	ND	1.95	97.6	2.00	5.61	
Ethylbenzene*	<0.050	0.050	07/12/2017	ND	2.04	102	2.00	5.74	
Total Xylenes*	<0.150	0.150	07/12/2017	ND	6.07	101	6.00	4.76	
Total BTEX	<0.300	0.300	07/12/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	07/11/2017	ND	448	112	400	3.51	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/11/2017	ND	223	112	200	3.41	
DRO >C10-C28	40.1	10.0	07/11/2017	ND	222	111	200	0.319	
EXT DRO >C28-C36	33.8	10.0	07/11/2017	ND					

Surrogate: 1-Chlorooctane 120 % 28.3-164

Surrogate: 1-Chlorooctadecane 133 % 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 and 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 damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of 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.



Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 ETECH Environmental & Safety Solutions, Inc.
 BRIAN ASHBURN
 P. O. BOX 8469
 MIDLAND TX, 79708
 Fax To: (432) 563-2213

Received:	07/10/2017	Sampling Date:	07/10/2017
Reported:	07/19/2017	Sampling Type:	Soil
Project Name:	NEPTUNE FED 31 #1	Sampling Condition:	Cool & Intact
Project Number:	NEARBURG	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

Sample ID: AH - 6 24" (H701774-11)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/12/2017	ND	2.06	103	2.00	5.35		
Toluene*	<0.050	0.050	07/12/2017	ND	1.95	97.6	2.00	5.61		
Ethylbenzene*	<0.050	0.050	07/12/2017	ND	2.04	102	2.00	5.74		
Total Xylenes*	<0.150	0.150	07/12/2017	ND	6.07	101	6.00	4.76		
Total BTEX	<0.300	0.300	07/12/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	07/11/2017	ND	448	112	400	3.51		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	07/11/2017	ND	223	112	200	3.41		
DRO >C10-C28	<10.0	10.0	07/11/2017	ND	222	111	200	0.319		
EXT DRO >C28-C36	<10.0	10.0	07/11/2017	ND						

Surrogate: 1-Chlorooctane 124 % 28.3-164
Surrogate: 1-Chlorooctadecane 132 % 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 and 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 damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of 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.



Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 ETECH Environmental & Safety Solutions, Inc.
 BRIAN ASHBURN
 P. O. BOX 8469
 MIDLAND TX, 79708
 Fax To: (432) 563-2213

Received:	07/10/2017	Sampling Date:	07/10/2017
Reported:	07/19/2017	Sampling Type:	Soil
Project Name:	NEPTUNE FED 31 #1	Sampling Condition:	Cool & Intact
Project Number:	NEARBURG	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

Sample ID: AH - 6 36" (H701774-12)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/12/2017	ND	2.06	103	2.00	5.35		
Toluene*	<0.050	0.050	07/12/2017	ND	1.95	97.6	2.00	5.61		
Ethylbenzene*	<0.050	0.050	07/12/2017	ND	2.04	102	2.00	5.74		
Total Xylenes*	<0.150	0.150	07/12/2017	ND	6.07	101	6.00	4.76		
Total BTEX	<0.300	0.300	07/12/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	07/12/2017	ND	448	112	400	3.51		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	07/11/2017	ND	223	112	200	3.41		
DRO >C10-C28	<10.0	10.0	07/11/2017	ND	222	111	200	0.319		
EXT DRO >C28-C36	<10.0	10.0	07/11/2017	ND						

Surrogate: 1-Chlorooctane 128 % 28.3-164
Surrogate: 1-Chlorooctadecane 135 % 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 and 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 damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of 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.



Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 ETECH Environmental & Safety Solutions, Inc.
 BRIAN ASHBURN
 P. O. BOX 8469
 MIDLAND TX, 79708
 Fax To: (432) 563-2213

Received:	07/10/2017	Sampling Date:	07/10/2017
Reported:	07/19/2017	Sampling Type:	Soil
Project Name:	NEPTUNE FED 31 #1	Sampling Condition:	Cool & Intact
Project Number:	NEARBURG	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

Sample ID: AH - 5 SURFACE (H701774-13)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/12/2017	ND	2.06	103	2.00	5.35	
Toluene*	<0.050	0.050	07/12/2017	ND	1.95	97.6	2.00	5.61	
Ethylbenzene*	<0.050	0.050	07/12/2017	ND	2.04	102	2.00	5.74	
Total Xylenes*	<0.150	0.150	07/12/2017	ND	6.07	101	6.00	4.76	
Total BTEX	<0.300	0.300	07/12/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	448	16.0	07/12/2017	ND	448	112	400	3.51	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/11/2017	ND	223	112	200	3.41	
DRO >C10-C28	1840	10.0	07/11/2017	ND	222	111	200	0.319	
EXT DRO >C28-C36	429	10.0	07/11/2017	ND					

Surrogate: 1-Chlorooctane 115 % 28.3-164

Surrogate: 1-Chlorooctadecane 145 % 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 and 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 damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of 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.



Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 ETECH Environmental & Safety Solutions, Inc.
 BRIAN ASHBURN
 P. O. BOX 8469
 MIDLAND TX, 79708
 Fax To: (432) 563-2213

 Received: 07/10/2017
 Reported: 07/19/2017
 Project Name: NEPTUNE FED 31 #1
 Project Number: NEARBURG
 Project Location: EDDY CO NM

 Sampling Date: 07/10/2017
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: AH - 5 12" (H701774-14)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/12/2017	ND	2.06	103	2.00	5.35	
Toluene*	<0.050	0.050	07/12/2017	ND	1.95	97.6	2.00	5.61	
Ethylbenzene*	<0.050	0.050	07/12/2017	ND	2.04	102	2.00	5.74	
Total Xylenes*	<0.150	0.150	07/12/2017	ND	6.07	101	6.00	4.76	
Total BTEX	<0.300	0.300	07/12/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	07/12/2017	ND	448	112	400	3.51	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/11/2017	ND	223	112	200	3.41	
DRO >C10-C28	114	10.0	07/11/2017	ND	222	111	200	0.319	
EXT DRO >C28-C36	50.6	10.0	07/11/2017	ND					

Surrogate: 1-Chlorooctane 109 % 28.3-164

Surrogate: 1-Chlorooctadecane 128 % 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 and 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 damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of 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.



Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 ETECH Environmental & Safety Solutions, Inc.
 BRIAN ASHBURN
 P. O. BOX 8469
 MIDLAND TX, 79708
 Fax To: (432) 563-2213

Received:	07/10/2017	Sampling Date:	07/10/2017
Reported:	07/19/2017	Sampling Type:	Soil
Project Name:	NEPTUNE FED 31 #1	Sampling Condition:	Cool & Intact
Project Number:	NEARBURG	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

Sample ID: AH - 5 24" (H701774-15)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/12/2017	ND	2.06	103	2.00	5.35		
Toluene*	<0.050	0.050	07/12/2017	ND	1.95	97.6	2.00	5.61		
Ethylbenzene*	<0.050	0.050	07/12/2017	ND	2.04	102	2.00	5.74		
Total Xylenes*	<0.150	0.150	07/12/2017	ND	6.07	101	6.00	4.76		
Total BTEX	<0.300	0.300	07/12/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	256	16.0	07/12/2017	ND	448	112	400	3.51		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	07/11/2017	ND	223	112	200	3.41		
DRO >C10-C28	<10.0	10.0	07/11/2017	ND	222	111	200	0.319		
EXT DRO >C28-C36	<10.0	10.0	07/11/2017	ND						

Surrogate: 1-Chlorooctane 112 % 28.3-164

Surrogate: 1-Chlorooctadecane 118 % 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 and 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 damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of 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.



Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 ETECH Environmental & Safety Solutions, Inc.
 BRIAN ASHBURN
 P. O. BOX 8469
 MIDLAND TX, 79708
 Fax To: (432) 563-2213

Received:	07/10/2017	Sampling Date:	07/10/2017
Reported:	07/19/2017	Sampling Type:	Soil
Project Name:	NEPTUNE FED 31 #1	Sampling Condition:	Cool & Intact
Project Number:	NEARBURG	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

Sample ID: AH - 5 36" (H701774-16)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/12/2017	ND	2.06	103	2.00	5.35	
Toluene*	<0.050	0.050	07/12/2017	ND	1.95	97.6	2.00	5.61	
Ethylbenzene*	<0.050	0.050	07/12/2017	ND	2.04	102	2.00	5.74	
Total Xylenes*	<0.150	0.150	07/12/2017	ND	6.07	101	6.00	4.76	
Total BTEX	<0.300	0.300	07/12/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	07/12/2017	ND	448	112	400	3.51	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/11/2017	ND	207	104	200	1.50	
DRO >C10-C28	<10.0	10.0	07/11/2017	ND	216	108	200	2.77	
EXT DRO >C28-C36	<10.0	10.0	07/11/2017	ND					

Surrogate: 1-Chlorooctane 113 % 28.3-164

Surrogate: 1-Chlorooctadecane 123 % 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 and 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 damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of 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.



Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 ETECH Environmental & Safety Solutions, Inc.
 BRIAN ASHBURN
 P. O. BOX 8469
 MIDLAND TX, 79708
 Fax To: (432) 563-2213

Received:	07/10/2017	Sampling Date:	07/10/2017
Reported:	07/19/2017	Sampling Type:	Soil
Project Name:	NEPTUNE FED 31 #1	Sampling Condition:	Cool & Intact
Project Number:	NEARBURG	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

Sample ID: AH - 1 12" (H701774-17)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/12/2017	ND	2.06	103	2.00	5.35		
Toluene*	<0.050	0.050	07/12/2017	ND	1.95	97.6	2.00	5.61		
Ethylbenzene*	<0.050	0.050	07/12/2017	ND	2.04	102	2.00	5.74		
Total Xylenes*	<0.150	0.150	07/12/2017	ND	6.07	101	6.00	4.76		
Total BTEX	<0.300	0.300	07/12/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 109 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	144	16.0	07/12/2017	ND	448	112	400	3.51		

TPH 8015M		mg/kg		Analyzed By: MS							S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
GRO C6-C10	<10.0	10.0	07/11/2017	ND	207	104	200	1.50			
DRO >C10-C28	1000	10.0	07/11/2017	ND	216	108	200	2.77			
EXT DRO >C28-C36	249	10.0	07/11/2017	ND							

Surrogate: 1-Chlorooctane 130 % 28.3-164

Surrogate: 1-Chlorooctadecane 158 % 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 and 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 damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of 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.



Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 ETECH Environmental & Safety Solutions, Inc.
 BRIAN ASHBURN
 P. O. BOX 8469
 MIDLAND TX, 79708
 Fax To: (432) 563-2213

Received:	07/10/2017	Sampling Date:	07/10/2017
Reported:	07/19/2017	Sampling Type:	Soil
Project Name:	NEPTUNE FED 31 #1	Sampling Condition:	Cool & Intact
Project Number:	NEARBURG	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

Sample ID: AH - 1 24" (H701774-18)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/12/2017	ND	2.06	103	2.00	5.35		
Toluene*	<0.050	0.050	07/12/2017	ND	1.95	97.6	2.00	5.61		
Ethylbenzene*	<0.050	0.050	07/12/2017	ND	2.04	102	2.00	5.74		
Total Xylenes*	<0.150	0.150	07/12/2017	ND	6.07	101	6.00	4.76		
Total BTEX	<0.300	0.300	07/12/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	07/12/2017	ND	448	112	400	3.51		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	07/11/2017	ND	207	104	200	1.50		
DRO >C10-C28	32.8	10.0	07/11/2017	ND	216	108	200	2.77		
EXT DRO >C28-C36	22.8	10.0	07/11/2017	ND						

Surrogate: 1-Chlorooctane 136 % 28.3-164

Surrogate: 1-Chlorooctadecane 152 % 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 and 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 damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of 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.



Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 ETECH Environmental & Safety Solutions, Inc.
 BRIAN ASHBURN
 P. O. BOX 8469
 MIDLAND TX, 79708
 Fax To: (432) 563-2213

Received:	07/10/2017	Sampling Date:	07/10/2017
Reported:	07/19/2017	Sampling Type:	Soil
Project Name:	NEPTUNE FED 31 #1	Sampling Condition:	Cool & Intact
Project Number:	NEARBURG	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

Sample ID: AH - 1 36" (H701774-19)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/13/2017	ND	2.04	102	2.00	4.12		
Toluene*	<0.050	0.050	07/13/2017	ND	1.91	95.5	2.00	5.05		
Ethylbenzene*	<0.050	0.050	07/13/2017	ND	2.03	101	2.00	4.75		
Total Xylenes*	<0.150	0.150	07/13/2017	ND	5.98	99.6	6.00	4.44		
Total BTEX	<0.300	0.300	07/13/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	07/12/2017	ND	448	112	400	3.51		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	07/11/2017	ND	207	104	200	1.50		
DRO >C10-C28	<10.0	10.0	07/11/2017	ND	216	108	200	2.77		
EXT DRO >C28-C36	<10.0	10.0	07/11/2017	ND						

Surrogate: 1-Chlorooctane 102 % 28.3-164
Surrogate: 1-Chlorooctadecane 107 % 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 and 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 damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of 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.



Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 ETECH Environmental & Safety Solutions, Inc.
 BRIAN ASHBURN
 P. O. BOX 8469
 MIDLAND TX, 79708
 Fax To: (432) 563-2213

Received:	07/10/2017	Sampling Date:	07/10/2017
Reported:	07/19/2017	Sampling Type:	Soil
Project Name:	NEPTUNE FED 31 #1	Sampling Condition:	Cool & Intact
Project Number:	NEARBURG	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

Sample ID: AH - 2 12" (H701774-20)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/13/2017	ND	2.04	102	2.00	4.12		
Toluene*	<0.050	0.050	07/13/2017	ND	1.91	95.5	2.00	5.05		
Ethylbenzene*	<0.050	0.050	07/13/2017	ND	2.03	101	2.00	4.75		
Total Xylenes*	<0.150	0.150	07/13/2017	ND	5.98	99.6	6.00	4.44		
Total BTEX	<0.300	0.300	07/13/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	07/12/2017	ND	448	112	400	3.51		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	07/11/2017	ND	207	104	200	1.50		
DRO >C10-C28	<10.0	10.0	07/11/2017	ND	216	108	200	2.77		
EXT DRO >C28-C36	<10.0	10.0	07/11/2017	ND						

Surrogate: 1-Chlorooctane 100 % 28.3-164

Surrogate: 1-Chlorooctadecane 107 % 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 and 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 damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of 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.



Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 ETECH Environmental & Safety Solutions, Inc.
 BRIAN ASHBURN
 P. O. BOX 8469
 MIDLAND TX, 79708
 Fax To: (432) 563-2213

Received:	07/10/2017	Sampling Date:	07/10/2017
Reported:	07/19/2017	Sampling Type:	Soil
Project Name:	NEPTUNE FED 31 #1	Sampling Condition:	Cool & Intact
Project Number:	NEARBURG	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

Sample ID: AH - 2 24" (H701774-21)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/13/2017	ND	2.04	102	2.00	4.12		
Toluene*	<0.050	0.050	07/13/2017	ND	1.91	95.5	2.00	5.05		
Ethylbenzene*	<0.050	0.050	07/13/2017	ND	2.03	101	2.00	4.75		
Total Xylenes*	<0.150	0.150	07/13/2017	ND	5.98	99.6	6.00	4.44		
Total BTEX	<0.300	0.300	07/13/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	07/12/2017	ND	448	112	400	3.51		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	07/12/2017	ND	207	104	200	1.50		
DRO >C10-C28	<10.0	10.0	07/12/2017	ND	216	108	200	2.77		
EXT DRO >C28-C36	<10.0	10.0	07/12/2017	ND						

Surrogate: 1-Chlorooctane 97.0 % 28.3-164
Surrogate: 1-Chlorooctadecane 103 % 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 and 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 damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of 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.



Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 ETECH Environmental & Safety Solutions, Inc.
 BRIAN ASHBURN
 P. O. BOX 8469
 MIDLAND TX, 79708
 Fax To: (432) 563-2213

 Received: 07/10/2017
 Reported: 07/19/2017
 Project Name: NEPTUNE FED 31 #1
 Project Number: NEARBURG
 Project Location: EDDY CO NM

 Sampling Date: 07/10/2017
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: AH - 2 36" (H701774-22)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/13/2017	ND	2.04	102	2.00	4.12	
Toluene*	<0.050	0.050	07/13/2017	ND	1.91	95.5	2.00	5.05	
Ethylbenzene*	<0.050	0.050	07/13/2017	ND	2.03	101	2.00	4.75	
Total Xylenes*	<0.150	0.150	07/13/2017	ND	5.98	99.6	6.00	4.44	
Total BTEX	<0.300	0.300	07/13/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	07/12/2017	ND	448	112	400	3.51	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/12/2017	ND	207	104	200	1.50	
DRO >C10-C28	<10.0	10.0	07/12/2017	ND	216	108	200	2.77	
EXT DRO >C28-C36	<10.0	10.0	07/12/2017	ND					

Surrogate: 1-Chlorooctane 121 % 28.3-164

Surrogate: 1-Chlorooctadecane 126 % 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 and 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 damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of 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.



Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 ETECH Environmental & Safety Solutions, Inc.
 BRIAN ASHBURN
 P. O. BOX 8469
 MIDLAND TX, 79708
 Fax To: (432) 563-2213

Received:	07/10/2017	Sampling Date:	07/10/2017
Reported:	07/19/2017	Sampling Type:	Soil
Project Name:	NEPTUNE FED 31 #1	Sampling Condition:	Cool & Intact
Project Number:	NEARBURG	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

Sample ID: AH - 3 12" (H701774-23)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/13/2017	ND	2.04	102	2.00	4.12		
Toluene*	<0.050	0.050	07/13/2017	ND	1.91	95.5	2.00	5.05		
Ethylbenzene*	<0.050	0.050	07/13/2017	ND	2.03	101	2.00	4.75		
Total Xylenes*	<0.150	0.150	07/13/2017	ND	5.98	99.6	6.00	4.44		
Total BTEX	<0.300	0.300	07/13/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	656	16.0	07/12/2017	ND	448	112	400	3.51		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	07/12/2017	ND	207	104	200	1.50		
DRO >C10-C28	235	10.0	07/12/2017	ND	216	108	200	2.77		
EXT DRO >C28-C36	43.8	10.0	07/12/2017	ND						

Surrogate: 1-Chlorooctane 96.5 % 28.3-164

Surrogate: 1-Chlorooctadecane 121 % 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 and 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 damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of 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.



Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 ETECH Environmental & Safety Solutions, Inc.
 BRIAN ASHBURN
 P. O. BOX 8469
 MIDLAND TX, 79708
 Fax To: (432) 563-2213

Received:	07/10/2017	Sampling Date:	07/10/2017
Reported:	07/19/2017	Sampling Type:	Soil
Project Name:	NEPTUNE FED 31 #1	Sampling Condition:	Cool & Intact
Project Number:	NEARBURG	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

Sample ID: AH - 3 24" (H701774-24)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/13/2017	ND	2.04	102	2.00	4.12		
Toluene*	<0.050	0.050	07/13/2017	ND	1.91	95.5	2.00	5.05		
Ethylbenzene*	<0.050	0.050	07/13/2017	ND	2.03	101	2.00	4.75		
Total Xylenes*	<0.150	0.150	07/13/2017	ND	5.98	99.6	6.00	4.44		
Total BTEX	<0.300	0.300	07/13/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	256	16.0	07/12/2017	ND	448	112	400	0.00	QM-07	

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	07/12/2017	ND	207	104	200	1.50		
DRO >C10-C28	<10.0	10.0	07/12/2017	ND	216	108	200	2.77		
EXT DRO >C28-C36	<10.0	10.0	07/12/2017	ND						

Surrogate: 1-Chlorooctane 87.0 % 28.3-164
Surrogate: 1-Chlorooctadecane 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 and 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 damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of 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.



Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 ETECH Environmental & Safety Solutions, Inc.
 BRIAN ASHBURN
 P. O. BOX 8469
 MIDLAND TX, 79708
 Fax To: (432) 563-2213

Received:	07/10/2017	Sampling Date:	07/10/2017
Reported:	07/19/2017	Sampling Type:	Soil
Project Name:	NEPTUNE FED 31 #1	Sampling Condition:	Cool & Intact
Project Number:	NEARBURG	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

Sample ID: AH - 3 36" (H701774-25)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/13/2017	ND	2.04	102	2.00	4.12		
Toluene*	<0.050	0.050	07/13/2017	ND	1.91	95.5	2.00	5.05		
Ethylbenzene*	<0.050	0.050	07/13/2017	ND	2.03	101	2.00	4.75		
Total Xylenes*	<0.150	0.150	07/13/2017	ND	5.98	99.6	6.00	4.44		
Total BTEX	<0.300	0.300	07/13/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	07/12/2017	ND	448	112	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	07/12/2017	ND	207	104	200	1.50		
DRO >C10-C28	10.3	10.0	07/12/2017	ND	216	108	200	2.77		
EXT DRO >C28-C36	<10.0	10.0	07/12/2017	ND						

Surrogate: 1-Chlorooctane 120 % 28.3-164

Surrogate: 1-Chlorooctadecane 131 % 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 and 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 damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of 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.



Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 ETECH Environmental & Safety Solutions, Inc.
 BRIAN ASHBURN
 P. O. BOX 8469
 MIDLAND TX, 79708
 Fax To: (432) 563-2213

Received:	07/10/2017	Sampling Date:	07/10/2017
Reported:	07/19/2017	Sampling Type:	Soil
Project Name:	NEPTUNE FED 31 #1	Sampling Condition:	Cool & Intact
Project Number:	NEARBURG	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

Sample ID: AH - 4 12" (H701774-26)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/13/2017	ND	2.04	102	2.00	4.12		
Toluene*	<0.050	0.050	07/13/2017	ND	1.91	95.5	2.00	5.05		
Ethylbenzene*	<0.050	0.050	07/13/2017	ND	2.03	101	2.00	4.75		
Total Xylenes*	<0.150	0.150	07/13/2017	ND	5.98	99.6	6.00	4.44		
Total BTEX	<0.300	0.300	07/13/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	07/12/2017	ND	448	112	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	07/12/2017	ND	207	104	200	1.50		
DRO >C10-C28	81.6	10.0	07/12/2017	ND	216	108	200	2.77		
EXT DRO >C28-C36	28.8	10.0	07/12/2017	ND						

Surrogate: 1-Chlorooctane 117 % 28.3-164

Surrogate: 1-Chlorooctadecane 137 % 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 and 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 damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of 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.



Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 ETECH Environmental & Safety Solutions, Inc.
 BRIAN ASHBURN
 P. O. BOX 8469
 MIDLAND TX, 79708
 Fax To: (432) 563-2213

Received:	07/10/2017	Sampling Date:	07/10/2017
Reported:	07/19/2017	Sampling Type:	Soil
Project Name:	NEPTUNE FED 31 #1	Sampling Condition:	Cool & Intact
Project Number:	NEARBURG	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

Sample ID: AH - 4 24" (H701774-27)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/13/2017	ND	2.04	102	2.00	4.12		
Toluene*	<0.050	0.050	07/13/2017	ND	1.91	95.5	2.00	5.05		
Ethylbenzene*	<0.050	0.050	07/13/2017	ND	2.03	101	2.00	4.75		
Total Xylenes*	<0.150	0.150	07/13/2017	ND	5.98	99.6	6.00	4.44		
Total BTEX	<0.300	0.300	07/13/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	07/12/2017	ND	448	112	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	07/12/2017	ND	207	104	200	1.50		
DRO >C10-C28	<10.0	10.0	07/12/2017	ND	216	108	200	2.77		
EXT DRO >C28-C36	<10.0	10.0	07/12/2017	ND						

Surrogate: 1-Chlorooctane 143 % 28.3-164

Surrogate: 1-Chlorooctadecane 149 % 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 and 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 damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of 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.



Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 ETECH Environmental & Safety Solutions, Inc.
 BRIAN ASHBURN
 P. O. BOX 8469
 MIDLAND TX, 79708
 Fax To: (432) 563-2213

Received:	07/10/2017	Sampling Date:	07/10/2017
Reported:	07/19/2017	Sampling Type:	Soil
Project Name:	NEPTUNE FED 31 #1	Sampling Condition:	Cool & Intact
Project Number:	NEARBURG	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

Sample ID: AH - 4 36" (H701774-28)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/13/2017	ND	2.04	102	2.00	4.12	
Toluene*	<0.050	0.050	07/13/2017	ND	1.91	95.5	2.00	5.05	
Ethylbenzene*	<0.050	0.050	07/13/2017	ND	2.03	101	2.00	4.75	
Total Xylenes*	<0.150	0.150	07/13/2017	ND	5.98	99.6	6.00	4.44	
Total BTEX	<0.300	0.300	07/13/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	07/12/2017	ND	448	112	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/12/2017	ND	207	104	200	1.50	
DRO >C10-C28	<10.0	10.0	07/12/2017	ND	216	108	200	2.77	
EXT DRO >C28-C36	<10.0	10.0	07/12/2017	ND					

Surrogate: 1-Chlorooctane 108 % 28.3-164
Surrogate: 1-Chlorooctadecane 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 and 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 damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of 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.



Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
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



Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

1073

Company Name: **ETECH/NARRABURR**
 Project Manager: **BRIAN ASHBURN**
 Address: **13000 W CR 100**
 City: **ODESSA** State: **TX** zip: **79765**
 Phone #: **432-563-2200** Fax #: _____
 Project #: **204-8340-000** Project Owner: _____
 Project Name: **NARRABURR NEPTUNE FLD 31 #1**
 Project Location: **ARTESIA, NM (LEDDY CO, NM)**
 Sampler Name: **GROFF LEKINA**

FOR LAB USE ONLY

BILL TO

P.O. #: _____
 Company: **ETECH**
 Attn: **KRISTI CRISWELL**
 Address: **13000 W CR 100**
 City: **ODESSA**
 State: **TX** zip: **79765**
 Phone #: **432-563-2200**
 Fax #: _____

ANALYSIS REQUEST

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	PH	BTEX	CHLORIDES
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :					
H30177-1	AH 8 SURFACE	<input checked="" type="checkbox"/>	91			<input checked="" type="checkbox"/>				7.10.17	1315	X	X	X
2	AH 8 12"										1320			
3	AH 8 24"										1330			
4	AH 8 36"										1335			
5	AH 7 SURFACE										1340			
6	AH 7 12"										1345			
7	AH 7 24"										1350			
8	AH 7 36"										1355			
9	AH 6 SURFACE										1400			
10	AH 6 12"										1403			

PLEASE NOTE: Liability and Damages: Cardinal's liability and client's retention (except for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors, arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: **Jeff Shaw** Date: **7.10.17** Received By: **Juanita Black**
 Time: **16:45**
 Relinquished By: _____ Date: _____ Received By: _____
 Time: _____

Delivered By: (Circle One) **-0.78** Received By: **Juanita Black**
 Sampler - UPS - Bus - Other: **Counted -0.952**
 Sample Condition: Cool Intact
 Yes No Yes No
 CHECKED BY: **T.D.#75**

REMARKS: **7/19/17 Geoff changed Sample IDs on #17-28. JAA**

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

2083

Company Name: **ETECH/NARRBURG** P.O. #: **BILL TO**
 Project Manager: **BRIAN ASHBURN** Company: **ETECH**
 Address: **13000 W CR 100** Attn: **KRISTY CRISWELL**
 City: **ODESSA TX** State: **TX** zip: **79765** Address: **13000 W CR 100**
 Phone #: **432-563-2200** Fax #: **432-563-2200** City: **ODESSA TX**
 Project #: **264-8340-000** Project Owner: **City: ODESSA TX**
 Project Name: **NARRBURG WETPUNE FSD 31 #1** State: **TX** zip: **79765**
 Project Location: **ARTERIA JNM CEDDY CO. NM** Phone #: **432-563-2200**
 Sampler Name: **GEOFF LEKING** Fax #:

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	TPH	BTEX	CHLORIDES
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :					
#10174-	AH 6	X	1			X				7/10/14	1406	X	X	X
	AH 6										1409			
	AH 5										1416			
	AH 5										1419			
	AH 5										1422			
	AH 5										1425			
	AH 5										1505			
	AH 1A										1508			
	AH 1A										1511			
	AH 2A										1515			

PLEASE NOTE: Liability and Damages: Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analysis. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits, incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: **Geoff LeKing** Date: **7/10/17** Received By: **Shawna Decker**
 Time: **16:45** Date: **7/10/17** Time: **16:45**
 Relinquished By: **Geoff LeKing** Received By: **Shawna Decker**

Delivered By: (Circle One) **-0.78** Sample Condition: **Checked**
 Sampler - UPS - Bus - Other: **Consolidated - 0.95** Cool Yes No Intact Yes No
 CHECKED BY: **TS #15**

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



CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

mgs

BILL TO

ANALYSIS REQUEST

Company Name: ETECH/NITARBURG		P.O. #:									
Project Manager: BRIAN ASHBURN		Company: ETECH									
Address: 13000 W CR 100		Attn: KRISTI KRAWEL									
City: ODESSA State: TX zip: 79765		Address: 13000 W CR 100									
Phone #: 432-563-2200 Fax #: _____		City: ODESSA TX									
Project #: 204-8340-000 Project Owner: _____		State: TX zip: 79765									
Project Name: NERARBURG NPTUWV FED 31 #1		Phone #: 432-563-2200									
Project Location: ARKESIK, NM (EDDY CO. NM)		Fax #: _____									
Sampler Name: GEORGE LEKING											
FOR LAB USE ONLY											
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX	PRESERV.	SAMPLING	DATE	TIME	TPH	BTEX	CHLORIDES
H301774-											
21	AH 2A 2411	X	1	SOIL	X	7.0.7	1518		X	X	X
22	AH 2A 3611	X	1	SOIL	X		1521		X	X	X
23	AH 3A 1211	X	1	SOIL	X		1525		X	X	X
24	AH 3A 2411	X	1	SOIL	X		1528		X	X	X
25	AH 3A 3611	X	1	SOIL	X		1531		X	X	X
26	AH 4A 1211	X	1	SOIL	X		1535		X	X	X
27	AH 4A 2411	X	1	SOIL	X		1538		X	X	X
28	AH 4A 3611	X	1	SOIL	X		1541		X	X	X

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analysis. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: **BOBBE SPAIN** Date: **1.10.17** Received By: **Jamara Black** Date: **7-10-17**

Relinquished By: _____ Date: _____ Received By: _____ Date: _____

Delivered By: (Circle One) **- 0.72** Sample Condition: Intact Cool Yes No

Sampler - UPS - Bus - Other: **Corrected - 0.952** CHECKED BY: **TE: #TS**

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



September 25, 2017

FRED HOLMES

ETECH Environmental & Safety Solutions, Inc.

P. O. BOX 8469

MIDLAND, TX 79708

RE: CHISOLM NEPTUNE 31 FEDERAL #1

Enclosed are the results of analyses for samples received by the laboratory on 09/19/17 14:45.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. 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/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style.

Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

 ETECH Environmental & Safety Solutions, Inc.
 FRED HOLMES
 P. O. BOX 8469
 MIDLAND TX, 79708
 Fax To: (432) 563-2213

Received:	09/19/2017	Sampling Date:	09/19/2017
Reported:	09/25/2017	Sampling Type:	Soil
Project Name:	CHISOLM NEPTUNE 31 FEDERAL #1	Sampling Condition:	Cool & Intact
Project Number:	894-8340	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

Sample ID: AUGER HOLE 9 SURFACE (H702531-01)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/22/2017	ND	2.00	100	2.00	1.00	
Toluene*	0.113	0.050	09/22/2017	ND	1.86	93.1	2.00	0.535	
Ethylbenzene*	0.314	0.050	09/22/2017	ND	1.94	96.9	2.00	0.366	
Total Xylenes*	1.46	0.150	09/22/2017	ND	5.84	97.3	6.00	0.325	
Total BTEX	1.89	0.300	09/22/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1760	16.0	09/21/2017	ND	432	108	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	09/22/2017	ND	197	98.4	200	0.202	
DRO >C10-C28	7080	50.0	09/22/2017	ND	208	104	200	0.537	
EXT DRO >C28-C36	1650	50.0	09/22/2017	ND					

Surrogate: 1-Chlorooctane 79.6 % 28.3-164

Surrogate: 1-Chlorooctadecane 72.2 % 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 and 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 damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of 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:

 ETECH Environmental & Safety Solutions, Inc.
 FRED HOLMES
 P. O. BOX 8469
 MIDLAND TX, 79708
 Fax To: (432) 563-2213

Received:	09/19/2017	Sampling Date:	09/19/2017
Reported:	09/25/2017	Sampling Type:	Soil
Project Name:	CHISOLM NEPTUNE 31 FEDERAL #1	Sampling Condition:	Cool & Intact
Project Number:	894-8340	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

Sample ID: AUGER HOLE 9 1' (H702531-02)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/22/2017	ND	2.00	100	2.00	1.00		
Toluene*	<0.050	0.050	09/22/2017	ND	1.86	93.1	2.00	0.535		
Ethylbenzene*	<0.050	0.050	09/22/2017	ND	1.94	96.9	2.00	0.366		
Total Xylenes*	<0.150	0.150	09/22/2017	ND	5.84	97.3	6.00	0.325		
Total BTEX	<0.300	0.300	09/22/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	09/21/2017	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	09/22/2017	ND	197	98.4	200	0.202		
DRO >C10-C28	<10.0	10.0	09/22/2017	ND	208	104	200	0.537		
EXT DRO >C28-C36	<10.0	10.0	09/22/2017	ND						

Surrogate: 1-Chlorooctane 74.1 % 28.3-164

Surrogate: 1-Chlorooctadecane 76.8 % 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 and 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 damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of 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:

 ETECH Environmental & Safety Solutions, Inc.
 FRED HOLMES
 P. O. BOX 8469
 MIDLAND TX, 79708
 Fax To: (432) 563-2213

Received:	09/19/2017	Sampling Date:	09/19/2017
Reported:	09/25/2017	Sampling Type:	Soil
Project Name:	CHISOLM NEPTUNE 31 FEDERAL #1	Sampling Condition:	Cool & Intact
Project Number:	894-8340	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

Sample ID: AUGER HOLE 9 2' (H702531-03)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/22/2017	ND	2.00	100	2.00	1.00	
Toluene*	<0.050	0.050	09/22/2017	ND	1.86	93.1	2.00	0.535	
Ethylbenzene*	<0.050	0.050	09/22/2017	ND	1.94	96.9	2.00	0.366	
Total Xylenes*	<0.150	0.150	09/22/2017	ND	5.84	97.3	6.00	0.325	
Total BTEX	<0.300	0.300	09/22/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	09/21/2017	ND	432	108	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/22/2017	ND	197	98.4	200	0.202	
DRO >C10-C28	<10.0	10.0	09/22/2017	ND	208	104	200	0.537	
EXT DRO >C28-C36	<10.0	10.0	09/22/2017	ND					

Surrogate: 1-Chlorooctane 69.6 % 28.3-164

Surrogate: 1-Chlorooctadecane 72.5 % 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 and 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 damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of 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:

 ETECH Environmental & Safety Solutions, Inc.
 FRED HOLMES
 P. O. BOX 8469
 MIDLAND TX, 79708
 Fax To: (432) 563-2213

Received:	09/19/2017	Sampling Date:	09/19/2017
Reported:	09/25/2017	Sampling Type:	Soil
Project Name:	CHISOLM NEPTUNE 31 FEDERAL #1	Sampling Condition:	Cool & Intact
Project Number:	894-8340	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

Sample ID: AUGER HOLE 9 3' (H702531-04)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/22/2017	ND	2.00	100	2.00	1.00		
Toluene*	<0.050	0.050	09/22/2017	ND	1.86	93.1	2.00	0.535		
Ethylbenzene*	<0.050	0.050	09/22/2017	ND	1.94	96.9	2.00	0.366		
Total Xylenes*	<0.150	0.150	09/22/2017	ND	5.84	97.3	6.00	0.325		
Total BTEX	<0.300	0.300	09/22/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	09/21/2017	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	09/22/2017	ND	197	98.4	200	0.202		
DRO >C10-C28	<10.0	10.0	09/22/2017	ND	208	104	200	0.537		
EXT DRO >C28-C36	<10.0	10.0	09/22/2017	ND						

Surrogate: 1-Chlorooctane 65.1 % 28.3-164

Surrogate: 1-Chlorooctadecane 70.3 % 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 and 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 damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of 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:

 ETECH Environmental & Safety Solutions, Inc.
 FRED HOLMES
 P. O. BOX 8469
 MIDLAND TX, 79708
 Fax To: (432) 563-2213

Received:	09/19/2017	Sampling Date:	09/19/2017
Reported:	09/25/2017	Sampling Type:	Soil
Project Name:	CHISOLM NEPTUNE 31 FEDERAL #1	Sampling Condition:	Cool & Intact
Project Number:	894-8340	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

Sample ID: AUGER HOLE 10 1' (H702531-05)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/22/2017	ND	2.00	100	2.00	1.00	
Toluene*	4.85	0.050	09/22/2017	ND	1.86	93.1	2.00	0.535	
Ethylbenzene*	7.45	0.050	09/22/2017	ND	1.94	96.9	2.00	0.366	
Total Xylenes*	17.8	0.150	09/22/2017	ND	5.84	97.3	6.00	0.325	
Total BTEX	30.1	0.300	09/22/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 138 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	09/21/2017	ND	432	108	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	42.8	10.0	09/22/2017	ND	197	98.4	200	0.202	
DRO >C10-C28	472	10.0	09/22/2017	ND	208	104	200	0.537	
EXT DRO >C28-C36	82.9	10.0	09/22/2017	ND					

Surrogate: 1-Chlorooctane 86.0 % 28.3-164

Surrogate: 1-Chlorooctadecane 84.7 % 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 and 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 damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of 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:

 ETECH Environmental & Safety Solutions, Inc.
 FRED HOLMES
 P. O. BOX 8469
 MIDLAND TX, 79708
 Fax To: (432) 563-2213

Received:	09/19/2017	Sampling Date:	09/19/2017
Reported:	09/25/2017	Sampling Type:	Soil
Project Name:	CHISOLM NEPTUNE 31 FEDERAL #1	Sampling Condition:	Cool & Intact
Project Number:	894-8340	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

Sample ID: AUGER HOLE 10 2' (H702531-06)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/22/2017	ND	2.00	100	2.00	1.00	
Toluene*	<0.050	0.050	09/22/2017	ND	1.86	93.1	2.00	0.535	
Ethylbenzene*	0.073	0.050	09/22/2017	ND	1.94	96.9	2.00	0.366	
Total Xylenes*	0.213	0.150	09/22/2017	ND	5.84	97.3	6.00	0.325	
Total BTEX	<0.300	0.300	09/22/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	09/21/2017	ND	432	108	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/22/2017	ND	197	98.4	200	0.202	
DRO >C10-C28	468	10.0	09/22/2017	ND	208	104	200	0.537	
EXT DRO >C28-C36	86.2	10.0	09/22/2017	ND					

Surrogate: 1-Chlorooctane 83.3 % 28.3-164

Surrogate: 1-Chlorooctadecane 89.3 % 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 and 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 damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of 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:

 ETECH Environmental & Safety Solutions, Inc.
 FRED HOLMES
 P. O. BOX 8469
 MIDLAND TX, 79708
 Fax To: (432) 563-2213

Received:	09/19/2017	Sampling Date:	09/19/2017
Reported:	09/25/2017	Sampling Type:	Soil
Project Name:	CHISOLM NEPTUNE 31 FEDERAL #1	Sampling Condition:	Cool & Intact
Project Number:	894-8340	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

Sample ID: AUGER HOLE 10 3' (H702531-07)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/22/2017	ND	2.00	100	2.00	1.00	
Toluene*	<0.050	0.050	09/22/2017	ND	1.86	93.1	2.00	0.535	
Ethylbenzene*	<0.050	0.050	09/22/2017	ND	1.94	96.9	2.00	0.366	
Total Xylenes*	<0.150	0.150	09/22/2017	ND	5.84	97.3	6.00	0.325	
Total BTEX	<0.300	0.300	09/22/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	09/21/2017	ND	432	108	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/22/2017	ND	197	98.4	200	0.202	
DRO >C10-C28	<10.0	10.0	09/22/2017	ND	208	104	200	0.537	
EXT DRO >C28-C36	<10.0	10.0	09/22/2017	ND					

Surrogate: 1-Chlorooctane 75.5 % 28.3-164

Surrogate: 1-Chlorooctadecane 78.3 % 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 and 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 damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of 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:

 ETECH Environmental & Safety Solutions, Inc.
 FRED HOLMES
 P. O. BOX 8469
 MIDLAND TX, 79708
 Fax To: (432) 563-2213

Received:	09/19/2017	Sampling Date:	09/19/2017
Reported:	09/25/2017	Sampling Type:	Soil
Project Name:	CHISOLM NEPTUNE 31 FEDERAL #1	Sampling Condition:	Cool & Intact
Project Number:	894-8340	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

Sample ID: AUGER HOLE 10 SURFACE (H702531-08)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/22/2017	ND	2.00	100	2.00	1.00	
Toluene*	0.764	0.050	09/22/2017	ND	1.86	93.1	2.00	0.535	
Ethylbenzene*	0.864	0.050	09/22/2017	ND	1.94	96.9	2.00	0.366	
Total Xylenes*	3.10	0.150	09/22/2017	ND	5.84	97.3	6.00	0.325	
Total BTEX	4.73	0.300	09/22/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 114 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	880	16.0	09/21/2017	ND	432	108	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	55.5	50.0	09/22/2017	ND	197	98.4	200	0.202		
DRO >C10-C28	13000	50.0	09/22/2017	ND	208	104	200	0.537		
EXT DRO >C28-C36	2860	50.0	09/22/2017	ND						

Surrogate: 1-Chlorooctane 86.0 % 28.3-164

Surrogate: 1-Chlorooctadecane 488 % 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 and 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 damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of 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

- S-06 The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- 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





CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

BILL TO

ANALYSIS REQUEST

Company Name: ETECH/CHISOLM
 Project Manager: SHARON FRED HOLMES
 Address: 13000 W CR 100
 City: ODESSA State: TX Zip: 79765
 Phone #: 432-563-2200 Fax #: _____
 Project #: 8904-8340 Project Owner: _____
 Project Name: CHISOLM WERNING 31 FEDERAL #1
 Project Location: EDDY CO, N.M.
 Sampler Name: Sharon Fred
 P.O. #: _____
 Company: ETECH
 Attn: KRISTI CRISWELL
 Address: 13000 W CR100
 City: ODESSA
 State: TX Zip: 79765
 Phone #: 432-563-2200
 Fax #: _____

FOR LAB USE ONLY

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	TESTS
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :			
<u>H109531</u>	<u>Auger Hole 9 Surface</u>	<input checked="" type="checkbox"/>	<u>1</u>			<input checked="" type="checkbox"/>				<u>9/19/17</u>	<u>1310</u>	<u>PH</u>
	<u>Auger Hole 9 1'</u>	<input checked="" type="checkbox"/>									<u>1312</u>	<u>PH</u>
	<u>Auger Hole 9 2'</u>	<input checked="" type="checkbox"/>									<u>1315</u>	<u>PH</u>
	<u>Auger Hole 9 3'</u>	<input checked="" type="checkbox"/>									<u>1317</u>	<u>PH</u>
	<u>Auger Hole 10 1'</u>	<input checked="" type="checkbox"/>									<u>1347</u>	<u>PH</u>
	<u>Auger Hole 10 2'</u>	<input checked="" type="checkbox"/>									<u>1350</u>	<u>PH</u>
	<u>Auger Hole 10 3'</u>	<input checked="" type="checkbox"/>									<u>1352</u>	<u>PH</u>
	<u>Auger Hole 10 Surface</u>	<input checked="" type="checkbox"/>									<u>1345</u>	<u>PH</u>

PLEASE NOTE: Liability and Damages, Cardinal's liability and clients' exclusive remedy for any claim arising under this contract or bill, shall be limited to the amount paid by the client for the analysis. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruption, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: Sharon Fred Date: 9/19/17
 Relinquished By: Sharon Fred Date: 9/19/17

Received By: Sharon Fred Date: 9/19/17
 Received By: Sharon Fred Date: 9/19/17

Delivered By: (Circle One) UPS 4:00
 Sampler - UPS - Bus - Other: Carroll Tool 4:25
 Sample Condition: Intact Cool Yes No Yes No
 CHECKED BY: Sharon Fred

Phone Result: Yes No Add'l Phone #:
 Fax Result: Yes No Add'l Fax #:
 REMARKS:

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