303 Veterans Airpark Lane Midland, TX 79705

Closure Report

August 11, 2020

Re: EBDU Injection Lateral
Case # NRM2015533063

On May 13, 2020 a release occurred due to a 2 inch steel transition failed on the injection line. The release (GPS: 32.49956, -103.12059) is located north of Eunice, NM in unit letter C section 12 township 21S range 37E. A groundwater survey was conducted utilizing data from NMOSE and USGS. The three nearest wells of record indicate that groundwater is 60 feet below ground surface.

The saturated soil was excavated during the line repair. All excavated material (24 cubic yards) was hauled to an OCD approved facility. After the line was repaired a tin horn was installed at the repair and clean imported topsoil was backfilled to surface around the tin horn. On August 10, 2020 final five point bottom and horizontal composite samples were collected not exceeding 200 square feet and submitted to a commercial laboratory for analysis of chloride, TPH, and BTEX. The laboratory results were below table one standards.

Apache Corporation has completed remediation and respectfully request that the event be closed.

Enclosed: C-141, Groundwater Data, Sample Diagram, Sample Data, Laboratory Results, and Photos

Submitted by;

Bruce Baker

Environmental Technician
larry.baker@apachecorp.com
Cell# 432-631-6982
Off# 432-818-1000

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	60 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☑ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☑ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☑ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☑ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☑ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☑ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☑ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☑ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☑ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☑ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☑ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☑ Yes ☐ No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: ***Each of the following items must be included in the report.***

- ☑ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☐ Field data
- ☑ Data table of soil contaminant concentration data
- ☑ Depth to water determination
- ☑ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☑ Boring or excavation logs
- ☑ Photographs including date and GIS information
- ☑ Topographic/Aerial maps
- ☑ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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.

Printed Name: Larry Baker Title: Environmental Tech SR.

Signature: Larry Baker Date: 8/11/2020

email: larry.baker@apachecorp.com Telephone: 432-631-6982

OCD Only

Received by: _____ Date: _____

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: ***Each of the following items must be included in the closure report.***

☑ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☑ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☑ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☑ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Larry Baker Title: Environmental Tech SR.

Signature: Larry Baker Date: 8/11/2020

email: larry.baker@apachecorp.com Telephone: 432-631-6982

OCD Only

Received by: _____ Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____


207
USGS 323025103062801
USGS 323022103062301
32.49956 -103.12059 EBDU Lateral Injection Line Release
18
CP 01221
2630 ft
1997
© 2020 Google
Google earth
Imagery Date: 2/20/2019 lat 32.509886° lon -103.140562° elev 3486 ft eye alt 15188 ft

✓

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Data Category: Groundwater | Geographic Area: New Mexico | GO

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Groundwater levels for New Mexico

Click to hide state-specific text

1,720 meters

Disregard measurement not for th

Search Results -- 1 sites found

Agency code = usgs

site_no list =

- 323025103062801

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

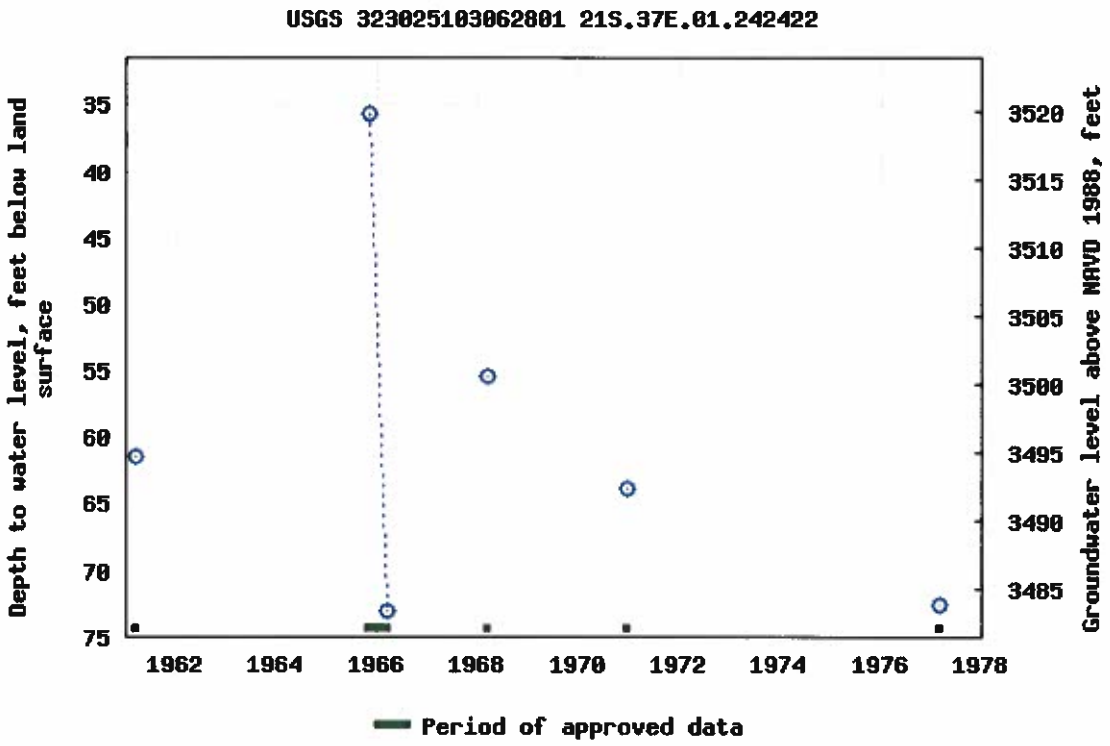
USGS 323025103062801 21S.37E.01.242422

Available data for this site | Groundwater: Field measurements | GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°30'25", Longitude 103°06'28" NAD27
Land-surface elevation 3,556 feet above NAVD88
The depth of the well is 90 feet below land surface.
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



Breaks in the plot represent a gap of at least one year between field measurements.
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Title: Groundwater for New Mexico: Water Levels
URL: https://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?

Page Contact Information: New Mexico Water Data Maintainer
Page Last Modified: 2018-05-30 17:53:20 EDT
1.65 1.47 nadww01

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Groundwater levels for New Mexico

Click to hide state-specific text

1810 m

Disregard measurement not for this releas

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 323022103062301

Minimum number of levels = 1
Save file of selected sites to local disk for future upload

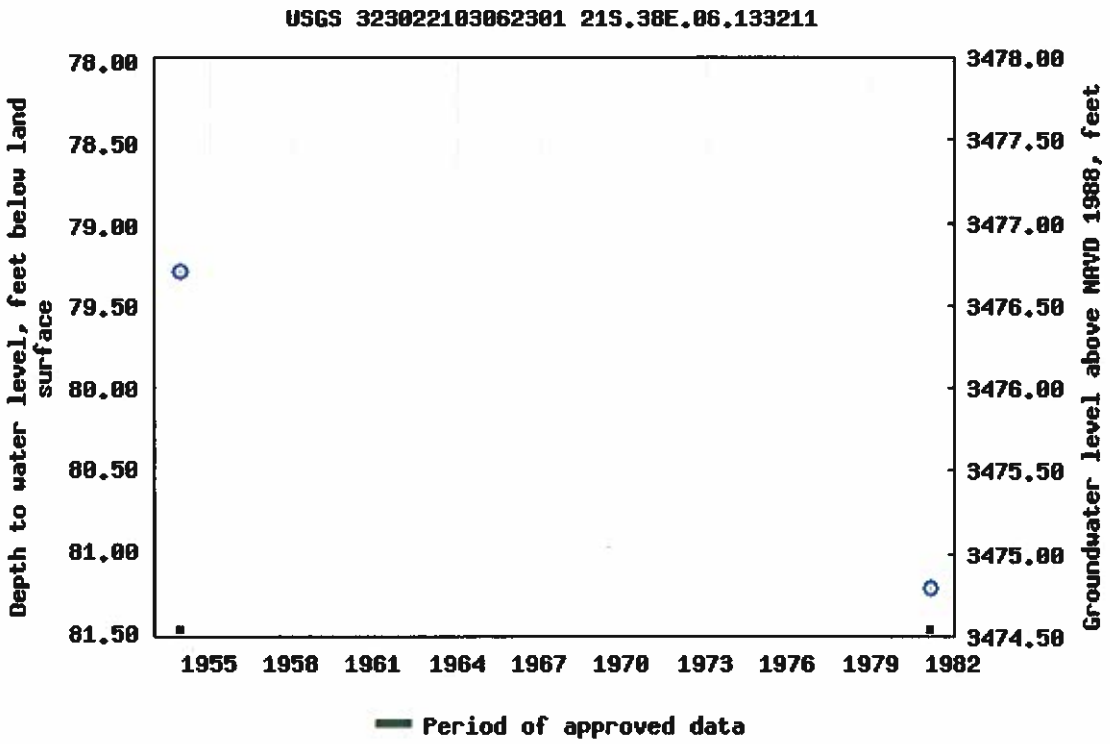
USGS 323022103062301 21S.38E.06.133211

Available data for this site | Groundwater: Field measurements | GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°30'22", Longitude 103°06'23" NAD27
Land-surface elevation 3,556 feet above NAVD88
The depth of the well is 90 feet below land surface.
This well is completed in the Ogallala Formation (121OGLL) local aquifer.

Output formats

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



Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

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U.S. Department of the Interior | U.S. Geological Survey
Title: Groundwater for New Mexico: Water Levels
URL: https://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?

Page Contact Information: New Mexico Water Data Maintainer
Page Last Modified: 2018-05-30 17:51:55 EDT
1.87 1.52 nadww01

New Mexico Office of the State Engineer
Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	CP 01221 POD1	4	4	4	11	21S	37E	676254	3588506

Driller License: 1711 **Driller Company:** STRAUB CORPORATION
Driller Name: MARTIN STRAUB

Drill Start Date: 11/07/2013 **Drill Finish Date:** 11/07/2013 **Plug Date:**
Log File Date: 12/09/2013 **PCW Rcv Date:** **Source:** Shallow
Pump Type: **Pipe Discharge Size:** **Estimated Yield:**
Casing Size: 4.00 **Depth Well:** 75 feet **Depth Water:** 60 feet

Water Bearing Stratifications:	Top	Bottom	Description
	60	66	Sandstone/Gravel/Conglomerate
	66	75	Sandstone/Gravel/Conglomerate

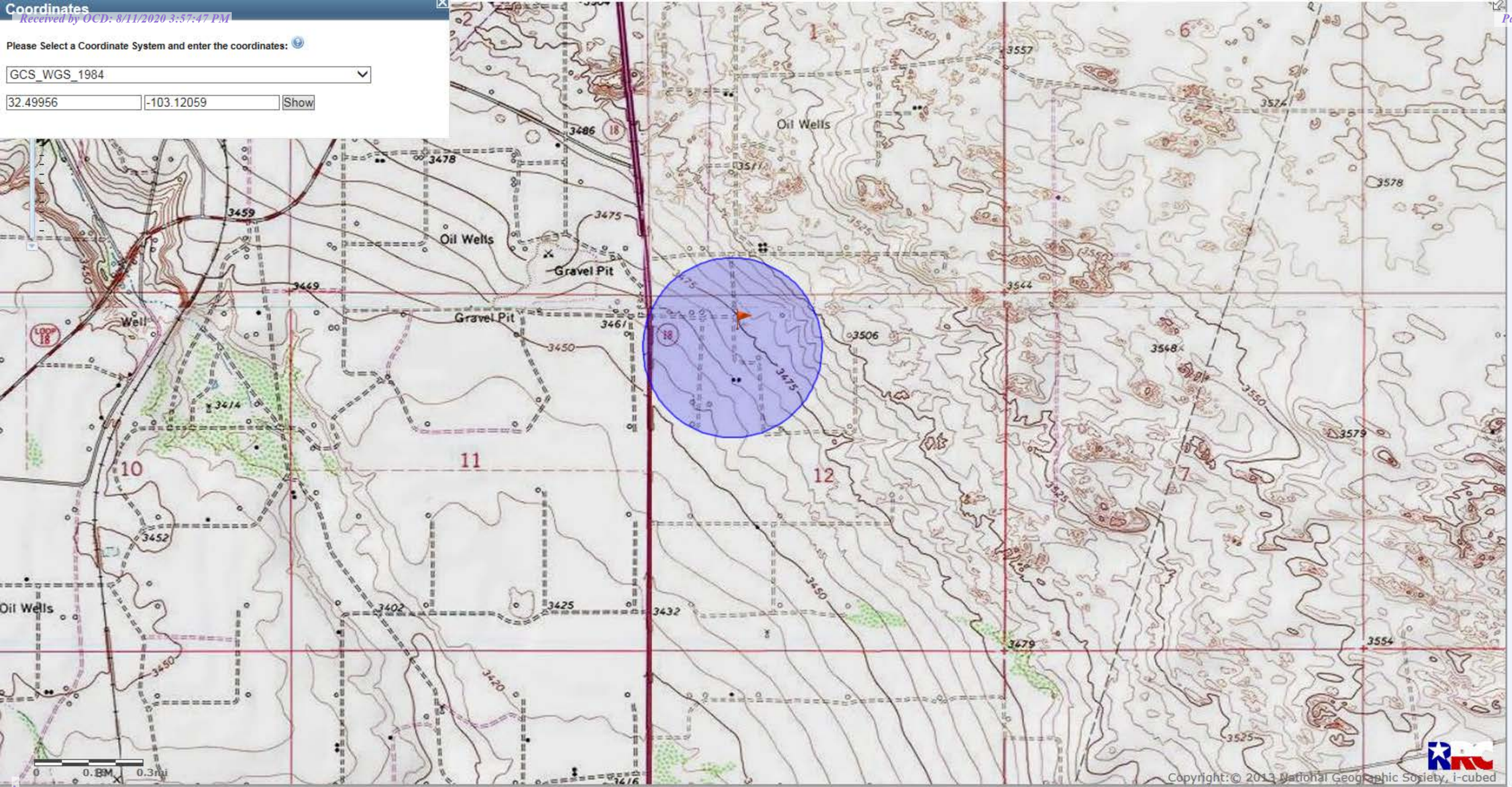
Casing Perforations:	Top	Bottom
	50	75

Coordinates

Please Select a Coordinate System and enter the coordinates:

GCS_WGS_1984

32.49956 -103.12059 Show



Lat: 32.506618, Long: -103.154064 (WGS 84)


H1
H4
B1
H2
H3
45 ft
© 2020 Google
Google earth

NEDU Injection Line

Complete List

Map ID	Sample Date	Sample ID	Depth	Chloride	Benzene	Toulene	Ethybenzene	Total Xylenes	Total BTEX	GRO	DRO	EXT DRO	GPS Coordinates
Horizontal Samples													
H1	8/10/2020	HC1	S	336	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	32.499636 -103.120570
H2	8/10/2020	HC2	S	<16.0	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	32.499608 -103.120551
H3	8/10/2020	HC3	S	64	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	32.499587 -103.120566
H4	8/10/2020	HC4	S	16	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	32.499609 -103.120590
Bottom Samples													
B1	8/10/2020	B1	3'	160	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	32.499611 -103.120568

CARDINAL Laboratories

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

August 11, 2020

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: EBDU LATERAL LINE

Enclosed are the results of analyses for samples received by the laboratory on 08/10/20 11:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. 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 accreditated 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,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

APACHE CORP - HOBBS
BRUCE BAKER
2350 W. MARLAND BLVD.
HOBBS NM, 88240
Fax To: (575) 393-2432

Received:	08/10/2020	Sampling Date:	08/10/2020
Reported:	08/11/2020	Sampling Type:	Soil
Project Name:	EBDU LATERAL LINE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: B 1 (H002062-01)

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	08/10/2020	ND	2.08	104	2.00	5.01	
Toluene*	<0.050	0.050	08/10/2020	ND	2.07	103	2.00	4.89	
Ethylbenzene*	<0.050	0.050	08/10/2020	ND	2.08	104	2.00	5.37	
Total Xylenes*	<0.150	0.150	08/10/2020	ND	5.96	99.3	6.00	5.38	
Total BTEX	<0.300	0.300	08/10/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.6 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**160**	16.0	08/10/2020	ND	400	100	400	3.92	

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	08/10/2020	ND	192	96.1	200	0.427	
DRO >C10-C28*	<10.0	10.0	08/10/2020	ND	197	98.4	200	3.06	
EXT DRO >C28-C36	<10.0	10.0	08/10/2020	ND					

Surrogate: 1-Chlorooctane *95.5 %* *44.3-144*

Surrogate: 1-Chlorooctadecane *104 %* *42.2-156*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

APACHE CORP - HOBBS
BRUCE BAKER
2350 W. MARLAND BLVD.
HOBBS NM, 88240
Fax To: (575) 393-2432

Received:	08/10/2020	Sampling Date:	08/10/2020
Reported:	08/11/2020	Sampling Type:	Soil
Project Name:	EBDU LATERAL LINE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: H 1 (H002062-02)

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	08/10/2020	ND	2.08	104	2.00	5.01	
Toluene*	<0.050	0.050	08/10/2020	ND	2.07	103	2.00	4.89	
Ethylbenzene*	<0.050	0.050	08/10/2020	ND	2.08	104	2.00	5.37	
Total Xylenes*	<0.150	0.150	08/10/2020	ND	5.96	99.3	6.00	5.38	
Total BTEX	<0.300	0.300	08/10/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.8 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**336**	16.0	08/10/2020	ND	400	100	400	3.92	

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	08/10/2020	ND	192	96.1	200	0.427	
DRO >C10-C28*	<10.0	10.0	08/10/2020	ND	197	98.4	200	3.06	
EXT DRO >C28-C36	<10.0	10.0	08/10/2020	ND					

Surrogate: 1-Chlorooctane *98.9 %* *44.3-144*

Surrogate: 1-Chlorooctadecane *107 %* *42.2-156*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

APACHE CORP - HOBBS
BRUCE BAKER
2350 W. MARLAND BLVD.
HOBBS NM, 88240
Fax To: (575) 393-2432

Received:	08/10/2020	Sampling Date:	08/10/2020
Reported:	08/11/2020	Sampling Type:	Soil
Project Name:	EBDU LATERAL LINE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: H 2 (H002062-03)

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	08/10/2020	ND	2.08	104	2.00	5.01	
Toluene*	<0.050	0.050	08/10/2020	ND	2.07	103	2.00	4.89	
Ethylbenzene*	<0.050	0.050	08/10/2020	ND	2.08	104	2.00	5.37	
Total Xylenes*	<0.150	0.150	08/10/2020	ND	5.96	99.3	6.00	5.38	
Total BTEX	<0.300	0.300	08/10/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.2 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	08/10/2020	ND	400	100	400	3.92	

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	08/10/2020	ND	192	96.1	200	0.427	
DRO >C10-C28*	<10.0	10.0	08/10/2020	ND	197	98.4	200	3.06	
EXT DRO >C28-C36	<10.0	10.0	08/10/2020	ND					

Surrogate: 1-Chlorooctane *100 %* *44.3-144*

Surrogate: 1-Chlorooctadecane *108 %* *42.2-156*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

APACHE CORP - HOBBS
BRUCE BAKER
2350 W. MARLAND BLVD.
HOBBS NM, 88240
Fax To: (575) 393-2432

Received:	08/10/2020	Sampling Date:	08/10/2020
Reported:	08/11/2020	Sampling Type:	Soil
Project Name:	EBDU LATERAL LINE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: H 3 (H002062-04)

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	08/10/2020	ND	2.08	104	2.00	5.01	
Toluene*	<0.050	0.050	08/10/2020	ND	2.07	103	2.00	4.89	
Ethylbenzene*	<0.050	0.050	08/10/2020	ND	2.08	104	2.00	5.37	
Total Xylenes*	<0.150	0.150	08/10/2020	ND	5.96	99.3	6.00	5.38	
Total BTEX	<0.300	0.300	08/10/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *100 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	08/10/2020	ND	400	100	400	3.92	

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	08/10/2020	ND	192	96.1	200	0.427	
DRO >C10-C28*	<10.0	10.0	08/10/2020	ND	197	98.4	200	3.06	
EXT DRO >C28-C36	<10.0	10.0	08/10/2020	ND					

Surrogate: 1-Chlorooctane *95.2 %* *44.3-144*

Surrogate: 1-Chlorooctadecane *101 %* *42.2-156*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

APACHE CORP - HOBBS
BRUCE BAKER
2350 W. MARLAND BLVD.
HOBBS NM, 88240
Fax To: (575) 393-2432

Received:	08/10/2020	Sampling Date:	08/10/2020
Reported:	08/11/2020	Sampling Type:	Soil
Project Name:	EBDU LATERAL LINE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: H 4 (H002062-05)

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	08/10/2020	ND	2.08	104	2.00	5.01	
Toluene*	<0.050	0.050	08/10/2020	ND	2.07	103	2.00	4.89	
Ethylbenzene*	<0.050	0.050	08/10/2020	ND	2.08	104	2.00	5.37	
Total Xylenes*	<0.150	0.150	08/10/2020	ND	5.96	99.3	6.00	5.38	
Total BTEX	<0.300	0.300	08/10/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *96.8 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	08/10/2020	ND	400	100	400	3.92	

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	08/10/2020	ND	192	96.1	200	0.427	
DRO >C10-C28*	<10.0	10.0	08/10/2020	ND	197	98.4	200	3.06	
EXT DRO >C28-C36	<10.0	10.0	08/10/2020	ND					

Surrogate: 1-Chlorooctane *95.2 %* *44.3-144*

Surrogate: 1-Chlorooctadecane *101 %* *42.2-156*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

		BILL TO	
Company Name:	Apache Corporation	P.O. #:	
Project Manager:	Bruce Baker	Company:	
Address:		Attn:	
City:	State: Zip:	Address:	
Phone #:	Fax #:	City:	
Project #:	Project Owner:	State: Zip:	
Project Name:	EBDU LATERAL LINE	Phone #:	
Project Location:	EBDU LATERAL LINE	Fax #:	
Sampler Name:	J. Brown		

FOR LAB USE ONLY				MATRIX							PRESERV.			SAMPLING		ANALYSIS REQUEST											
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	CL	BTEX	EXT. TPH										
H008062																											
1	B1												8/10/20	10:00	✓	✓	✓										
2	H1												8/10/20	10:02	✓	✓	✓										
3	H2												8/10/20	10:04	✓	✓	✓										
4	H3												8/10/20	10:06	✓	✓	✓										
5	H4												8/10/20	10:08	✓	✓	✓										

Relinquished By: Jeff Brown	Date: 8/10/20 Time: 11:40	Received By: Tamara Oldaker	Verbal Result: ☐ Yes ☐ No Add'l Phone #: All Results are emailed. Please provide Email address:	
Relinquished By:	Date: Time:	Received By:	REMARKS:	
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 5.8 Corrected Temp. °C	Sample Condition Cool: ☑ Yes ☐ No Intact: ☐ Yes ☐ No	CHECKED BY: (Initials) TO	Turnaround Time: Standard / Rush ☐ Thermometer ID #113 Correction Factor None
				☑ Bacteria (only) Sample Condition Cool: ☐ Yes ☐ No Intact: ☐ Yes ☐ No Observed Temp. °C Corrected Temp. °C

FORM-006 R 3.1 08/04/20

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com


WGS84 ±16ft 32.49964, -103.12049 ft ±10ft 3479 °,T ±63 SW248
EBDU Lateral Line
NM 06-Aug-20 10:21:20


WGS84 ±16ft 32.49963, -103.12063 ft ±10ft 3482 °,T ±10 E89
EBDU Lateral Line
NM 06-Aug-20 10:22:09


WGS84 ±16ft 32.49964, -103.12058 ft ±10ft 3480 °,T ±10 S174
EBDU Lateral Line
NM 06-Aug-20 10:21:38