



303 Veterans Airpark Lane Midland, TX 79705

Remediation Plan

November 18, 2020

Re: Eugene Wood Lease
Case # NRM2024530079

Background:

On 08/25/2020 a release occurred due to a failed phase arrestor. The release (GPS: 32.38021, -103.14785) is located south of Eunice, NM in unit letter G section 22 township 22S range 37E. A groundwater survey was conducted utilizing the NMOSE and USGS wells of record. The 3 nearest wells of record suggest groundwater is greater than 50 feet with the shallowest well 75 feet to groundwater.

On 11/4/2020 vertical delineation was conducted utilizing a hand auger. Samples were collected in one-foot intervals. SP 1 was advanced to a depth of 2 foot. All samples collected were submitted to a commercial laboratory for analysis of chloride, TPH, and BTEX. On 11/4/2020 surface horizontal 5-point composite samples not to exceed 200 square feet were collected and submitted to a commercial laboratory for analysis of chloride, TPH, and BTEX.

Remediation Plan:

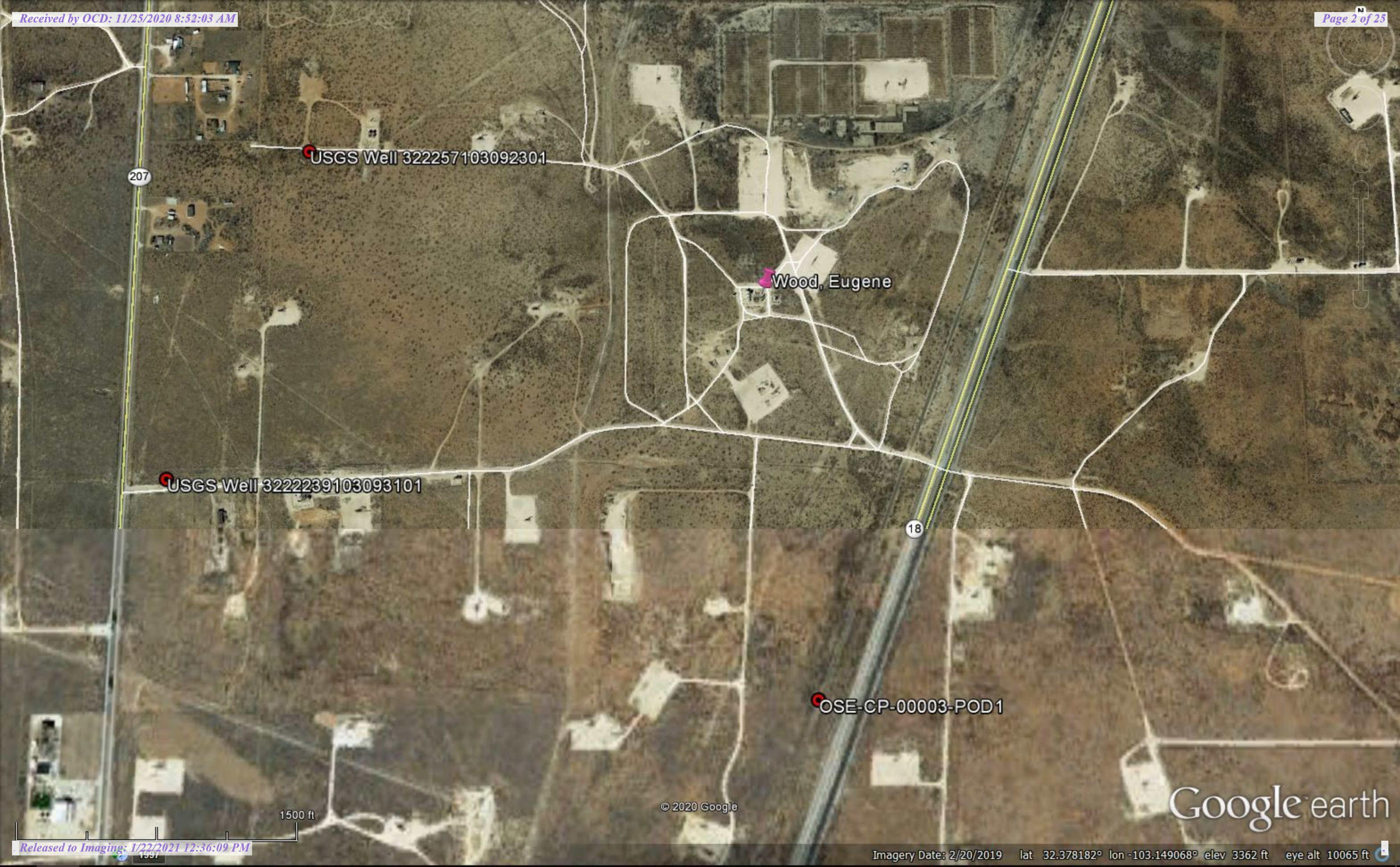
Apache Corporation proposes that the release area (130 cubic yards) surface is loosened and micro-blaze be applied to the release area. 5-point bottom composite samples will be collected not to exceed 500 square feet and submitted to a commercial laboratory for analysis of chloride, TPH, and BTEX. If table one standards cannot be achieved after 90 days, the elevated levels will be excavated and hauled to an NMOCD approved facility and backfilled with clean imported caliche.

Enclosed: C-141, Groundwater data, Maps, Sample Data, Laboratory Results, and Field Notes

Submitted by;

Bruce Baker

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



USGS Well 322257103092301

Wood, Eugene

USGS Well 3222239103093101

OSE-CP-00003-POD1

1500 ft

© 2020 Google

Google earth

Incident ID	NRM2024530079
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?	<u>75'</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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

Page 4

Incident ID	NRM2024530079
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: Senior Environmental Technician
Signature: Larry Baker Date: 11/25/2020
email: larry.baker@apachecorp.com Telephone: 432-631-6982

OCD Only

Received by: Cristina Eads Date: 11/25/2020

Incident ID	NRM2024530079
District RP	
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: *Each of the following items must be included in the plan.*

- ☒ Detailed description of proposed remediation technique
- ☒ Scaled sitemap with GPS coordinates showing delineation points
- ☒ Estimated volume of material to be remediated
- ☒ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☒ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- ☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated.
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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: Senior Environmental Technician
Signature: Larry Baker Date: 11/25/2020
email: larry.baker@apachecorp.com Telephone: 432-631-6982

OCD Only

Received by: Cristina Eads Date: 11/25/2020


☐ Approved ☒ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: Cristina Eads Date: 01/22/2021



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 00003 POD1		4	22	22S	37E	674372	3583367*	

Driller License:

Driller Company:

Driller Name: E.BURKE

Drill Start Date:

Drill Finish Date:

Plug Date:

Log File Date:

PCW Rcv Date:

07/13/1942

Source:

Shallow

Pump Type:

TURBIN

Pipe Discharge Size:

Estimated Yield:

30 GPM

Casing Size:

8.00

Depth Well:

142 feet

Depth Water:

110 feet

*UTM location was derived from PLSS - see Help

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

11/18/20 2:13 PM

POINT OF DIVERSION SUMMARY

USGS 322239103093101 22S.37E.22.113332

Available data for this site

Groundwater: Field measurements

GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°22'39", Longitude 103°09'31" NAD27
Land-surface elevation 3,361 feet above NAVD88
The depth of the well is 150 feet below land surface.
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

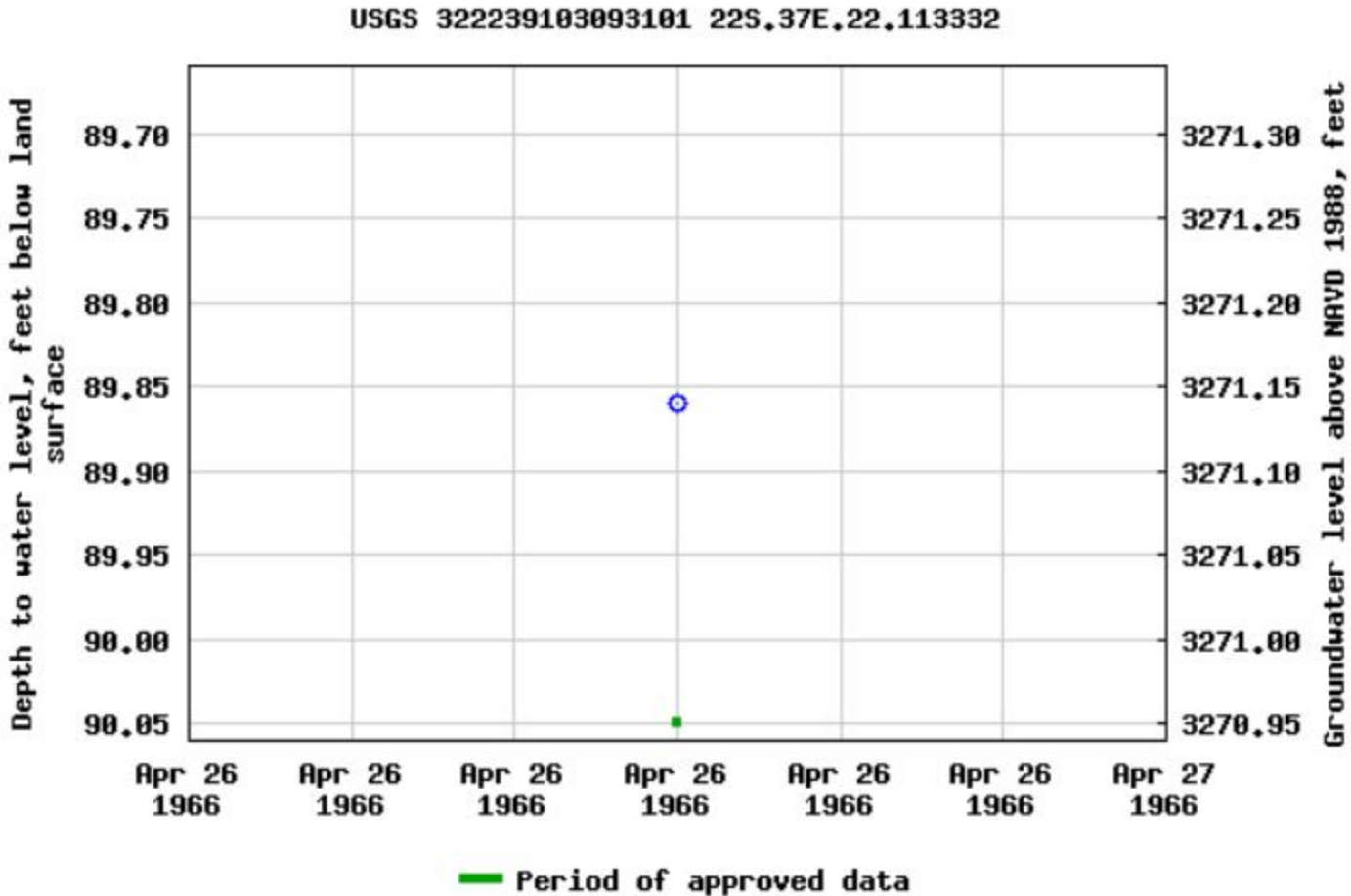
Output formats

[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.
[Download a presentation-quality graph](#)

USGS 322257103092301 22S.37E.22.111434

Available data for this site

Groundwater: Field measurements

GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°22'57", Longitude 103°09'23" NAD27
Land-surface elevation 3,377 feet above NAVD88
The depth of the well is 320 feet below land surface.
This well is completed in the Chinle Formation (231CHNL) local aquifer.

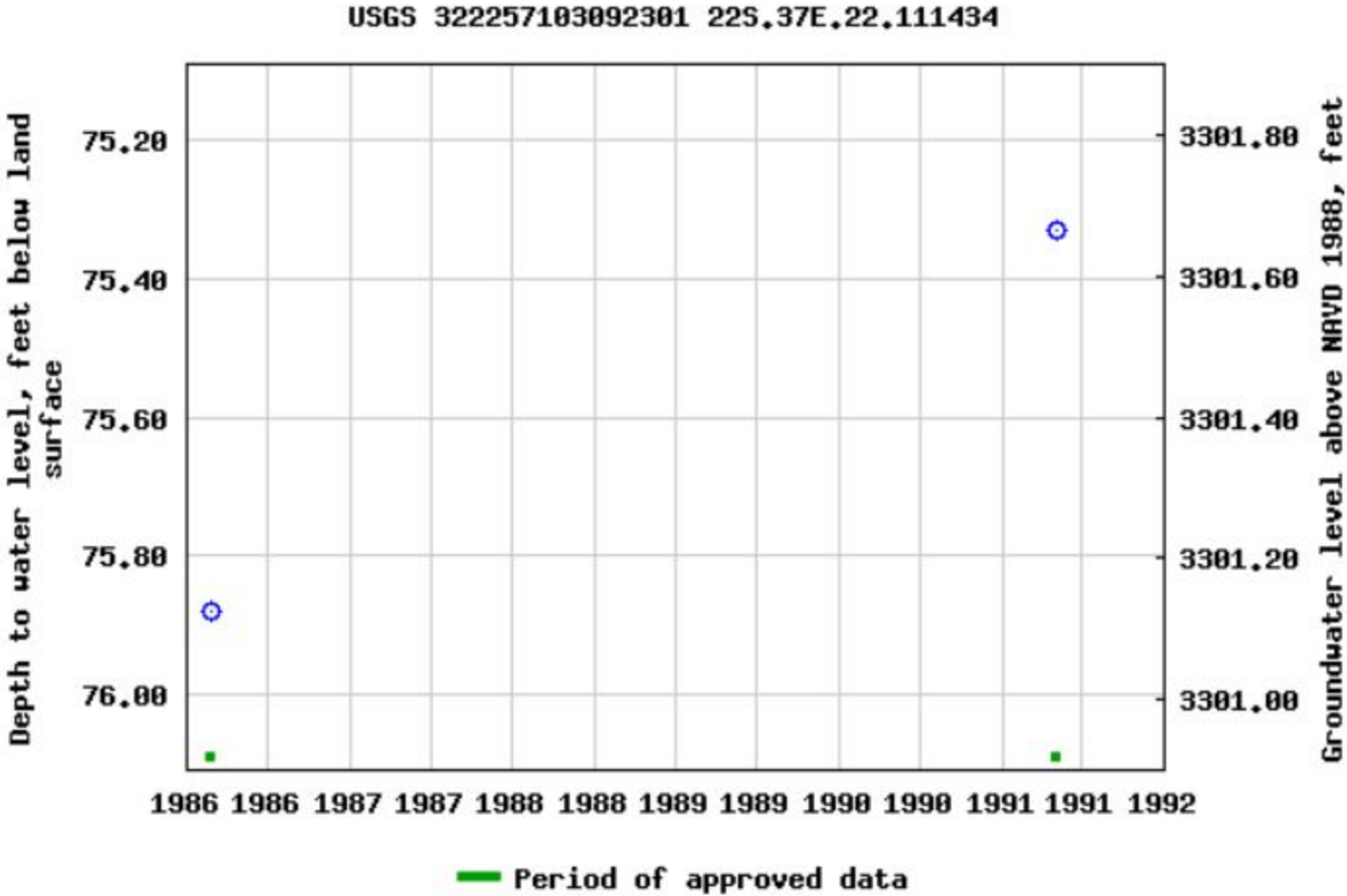
Output formats

Table of data

Tab-separated data

Graph of data

Reselect period



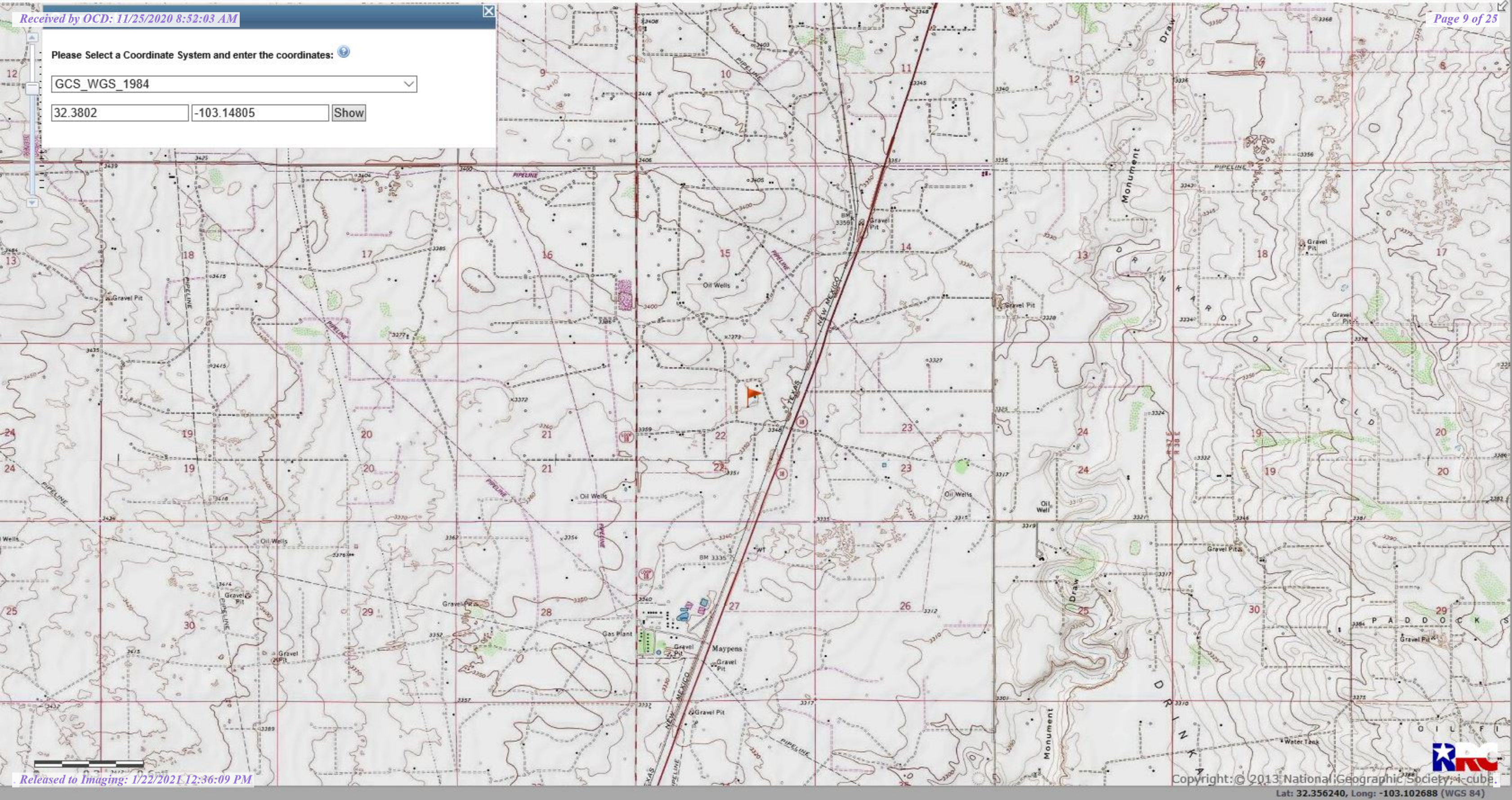
Breaks in the plot represent a gap of at least one year between field measurements.

[Download a presentation-quality graph](#)

Please Select a Coordinate System and enter the coordinates:

GCS_WGS_1984

32.3802 -103.14805 Show





© 2020 Google

Google earth

NEDU Injection Line

Complete List

Sample Date	Sample ID	Depth	Field Chloride	Chloride	Benzene	Toulene	Ethybenzene	Total Xylenes	Total BTEX	GRO	DRO	EXT DRO	GPS Coordinates
<u>Delineation and Horizontal Sampling</u>													
11/4/2020	SP1 @ Surface	Surface	1,161	1060	<0.050	<0.050	<0.050	0.430	0.48	165	37100	9440	32.38032 -103.14805
11/4/2020	SP1 @ 1'	1'	744	848	<0.050	<0.050	<0.050	<0.150	<0.300	14.1	1630	555	
11/4/2020	SP1 @ 2'	2'	525	400	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	237	166	
11/4/2020	H1	Surface	149	96	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	32.380365 -103.148070
11/4/2020	H2	Surface	148	80	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	32.380308 -103.147896
11/4/2020	H3	Surface	151	80	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	32.380270 -103.148094



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

November 09, 2020

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: EL WOOD

Enclosed are the results of analyses for samples received by the laboratory on 11/04/20 14:06.

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 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, flowing style.

Celey D. Keene

Lab Director/Quality Manager



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: 11/04/2020
 Reported: 11/09/2020
 Project Name: EL WOOD
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 11/04/2020
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: H 1 (H002926-01)

BTX 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	11/05/2020	ND	1.93	96.3	2.00	5.05	
Toluene*	<0.050	0.050	11/05/2020	ND	1.87	93.7	2.00	5.48	
Ethylbenzene*	<0.050	0.050	11/05/2020	ND	1.86	93.0	2.00	4.69	
Total Xylenes*	<0.150	0.150	11/05/2020	ND	5.40	90.0	6.00	4.74	
Total BTX	<0.300	0.300	11/05/2020	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	96.0	16.0	11/05/2020	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	11/06/2020	ND	241	120	200	1.93	
DRO >C10-C28*	<10.0	10.0	11/06/2020	ND	226	113	200	3.41	
EXT DRO >C28-C36	<10.0	10.0	11/06/2020	ND					

Surrogate: 1-Chlorooctane 95.4 % 44.3-144

Surrogate: 1-Chlorooctadecane 90.0 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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: 11/04/2020
 Reported: 11/09/2020
 Project Name: EL WOOD
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 11/04/2020
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: H 2 (H002926-02)

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	11/05/2020	ND	1.93	96.3	2.00	5.05	
Toluene*	<0.050	0.050	11/05/2020	ND	1.87	93.7	2.00	5.48	
Ethylbenzene*	<0.050	0.050	11/05/2020	ND	1.86	93.0	2.00	4.69	
Total Xylenes*	<0.150	0.150	11/05/2020	ND	5.40	90.0	6.00	4.74	
Total BTEx	<0.300	0.300	11/05/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.1 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	11/05/2020	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	11/06/2020	ND	241	120	200	1.93	
DRO >C10-C28*	<10.0	10.0	11/06/2020	ND	226	113	200	3.41	
EXT DRO >C28-C36	<10.0	10.0	11/06/2020	ND					

Surrogate: 1-Chlorooctane 95.7 % 44.3-144

Surrogate: 1-Chlorooctadecane 90.4 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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: 11/04/2020
 Reported: 11/09/2020
 Project Name: EL WOOD
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 11/04/2020
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: H 3 (H002926-03)

BTX 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	11/05/2020	ND	1.93	96.3	2.00	5.05	
Toluene*	<0.050	0.050	11/05/2020	ND	1.87	93.7	2.00	5.48	
Ethylbenzene*	<0.050	0.050	11/05/2020	ND	1.86	93.0	2.00	4.69	
Total Xylenes*	<0.150	0.150	11/05/2020	ND	5.40	90.0	6.00	4.74	
Total BTX	<0.300	0.300	11/05/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.0 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	11/05/2020	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	11/06/2020	ND	241	120	200	1.93	
DRO >C10-C28*	<10.0	10.0	11/06/2020	ND	226	113	200	3.41	
EXT DRO >C28-C36	<10.0	10.0	11/06/2020	ND					

Surrogate: 1-Chlorooctane 96.9 % 44.3-144

Surrogate: 1-Chlorooctadecane 91.5 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

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

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*=Accredited Analyte

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A handwritten signature in black ink, appearing to read "C. D. Keene", written over a horizontal line.

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <u>Apex Corporation</u>		P.O. #:		ANALYSIS REQUEST	
Project Manager: <u>Bruce Baker</u>		Company:			
Address:		Attn:			
City:		Address:			
Phone #:		City:			
Fax #:		State:			
Project #: <u>EL weed</u>		Zip:			
Project Name: <u>EL weed</u>		Phone #:			
Project Location: <u>EL weed</u>		Fax #:			
Sampler Name: <u>Jeff Brown</u>		PRESERV.		SAMPLING	
FOR LAB USE ONLY					
Lab I.D. <u>H002924</u>		Sample I.D.			
<u>H002924</u> <u>1 H1</u> <u>2 H2</u> <u>3 H3</u>		(G)RAB OR (C)OMP.			
		# CONTAINERS			
		GROUNDWATER			
		WASTEWATER			
		SOIL			
		OIL			
		SLUDGE			
		OTHER :			
		ACID/BASE:			
		ICE / COOL			
		OTHER :			
		DATE		TIME	
		<u>11/4/20</u>		<u>1120</u>	
		<u>11/4/20</u>		<u>1125</u>	
		<u>11/4/20</u>		<u>1130</u>	
		<u>✓</u>		<u>✓</u>	
		<u>✓</u>		<u>✓</u>	
		<u>✓</u>		<u>✓</u>	
		<u>CL-</u>		<u>BTEX</u>	
		<u>EXT. TPH</u>			

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Relinquished By: Jeff Brown Date: 11/4/20 Received By: Amara Williams

Relinquished By: Jeff Brown Date: 11/4/20 Received By: Amara Williams

Delivered By: (Circle One) Observed Temp. °C 4.4 Sample Condition Cool Intact Yes ☒ Yes ☐ No ☐ No CHECKED BY: VP- (Initials)

Sampler - UPS - Bus - Other: Corrected Temp. °C Turnaround Time: Standard ☒ Rush ☐ Bacteria (only) Sample Condition Cool Intact Yes ☒ Yes ☐ No ☐ No Thermometer ID #97 #113 11/4/20 Corrected Temp. °C

† Cardinal cannot accept verbal changes. Please email changes to cely.keene@cardinalabnm.com



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

November 09, 2020

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: EL WOOD

Enclosed are the results of analyses for samples received by the laboratory on 11/04/20 14:06.

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 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 with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



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: 11/04/2020
 Reported: 11/09/2020
 Project Name: EL WOOD
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 11/04/2020
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: SP 1 @ SURFACE (H002927-01)

BTX 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	11/05/2020	ND	1.93	96.3	2.00	5.05	
Toluene*	<0.050	0.050	11/05/2020	ND	1.87	93.7	2.00	5.48	
Ethylbenzene*	0.050	0.050	11/05/2020	ND	1.86	93.0	2.00	4.69	
Total Xylenes*	0.430	0.150	11/05/2020	ND	5.40	90.0	6.00	4.74	
Total BTX	0.480	0.300	11/05/2020	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID) 131 % 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	1060	16.0	11/05/2020	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*	165	100	11/06/2020	ND	241	120	200	1.93	
DRO >C10-C28*	37100	100	11/06/2020	ND	226	113	200	3.41	
EXT DRO >C28-C36	9440	100	11/06/2020	ND					

Surrogate: 1-Chlorooctane 141 % 44.3-144

Surrogate: 1-Chlorooctadecane 1160 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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: 11/04/2020
 Reported: 11/09/2020
 Project Name: EL WOOD
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 11/04/2020
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: SP 1 @ 1' (H002927-02)

BTX 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	11/05/2020	ND	1.93	96.3	2.00	5.05	
Toluene*	<0.050	0.050	11/05/2020	ND	1.87	93.7	2.00	5.48	
Ethylbenzene*	<0.050	0.050	11/05/2020	ND	1.86	93.0	2.00	4.69	
Total Xylenes*	<0.150	0.150	11/05/2020	ND	5.40	90.0	6.00	4.74	
Total BTX	<0.300	0.300	11/05/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	848	16.0	11/05/2020	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*	14.1	10.0	11/06/2020	ND	241	120	200	1.93	
DRO >C10-C28*	1630	10.0	11/06/2020	ND	226	113	200	3.41	
EXT DRO >C28-C36	555	10.0	11/06/2020	ND					

Surrogate: 1-Chlorooctane 105 % 44.3-144

Surrogate: 1-Chlorooctadecane 147 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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: 11/04/2020
 Reported: 11/09/2020
 Project Name: EL WOOD
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 11/04/2020
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: SP 1 @ 2' (H002927-03)

BTX 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	11/05/2020	ND	1.93	96.3	2.00	5.05	
Toluene*	<0.050	0.050	11/05/2020	ND	1.87	93.7	2.00	5.48	
Ethylbenzene*	<0.050	0.050	11/05/2020	ND	1.86	93.0	2.00	4.69	
Total Xylenes*	<0.150	0.150	11/05/2020	ND	5.40	90.0	6.00	4.74	
Total BTX	<0.300	0.300	11/05/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.2 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	400	16.0	11/05/2020	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	11/06/2020	ND	241	120	200	1.93	
DRO >C10-C28*	237	10.0	11/06/2020	ND	226	113	200	3.41	
EXT DRO >C28-C36	166	10.0	11/06/2020	ND					

Surrogate: 1-Chlorooctane 94.8 % 44.3-144

Surrogate: 1-Chlorooctadecane 128 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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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.
GC-NC1	8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are biased high with interfering compounds.
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

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager

[illegible]

EL WOOD LEASE Delineation 11/4/20

SP 1 @ Surface - 32.38032, -103.14805

$$10.1/30.1 = 2.98 = .39 = 1,161$$

SP 1 @ 1'

$$10.1/30.1 = 2.98 = .25 = 744$$

SP 1 @ 2' (Refurn at this depth)

$$10.3/30.1 = 2.92 = .18 = 525$$

H1 - 32.380365, -103.148070

$$10.0/30.0 = 3 = .05 = 149$$

H2 - 32.380308, -103.147896

$$10.1/30.0 = 2.97 = .05 = 148$$

H3 - 32.380270, -103.148094

$$10.0/30.3 = 3.03 = .05 = 151$$

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 11337

CONDITIONS OF APPROVAL

Operator: #1000 APACHE CORPORATION Midland, TX79705		303 Veterans Airpark Ln	OGRID: 873	Action Number: 11337	Action Type: C-141
OCD Reviewer ceads	Condition Should excavation be necessary, confirmation samples of the excavated area will need to be taken.				