



303 Veterans Airpark Lane Midland, TX 79705

## **Remediation Plan**

March 15, 2023

Re: WBDU 68  
Case nAPP2235436061

### **Background:**

On 12/19/2022 a release occurred due to a stuffing box failure. The release (GPS: 32.4789391, -103.1807785) is located north of Eunice, New Mexico in unit letter H section 17 township 21S range 37E. A groundwater survey was conducted utilizing NMOSE and NMOCD GIS maps. All data suggest that groundwater beneath the release to be 70 feet.

On 1/13/2023 vertical delineation was conducted utilizing a backhoe to a depth of 2 feet at SP 1. 5-point horizontal surface composite samples were collected not to exceed 200 square feet. All samples collected were submitted to commercial laboratory for the analysis of chloride, TPH, and BTEX.

### **Remediation Plan:**

Apache corporation proposes that the release area be excavated to a depth of 6 inches to 1 foot. All excavated soil (220 yards) will be hauled to an OCD approved disposal facility. 5-point bottom composite samples will be collected not to exceed 400 square feet. 5-point wall composite samples will be collected not to exceed 200 square feet. All samples collected will be submitted to a commercial laboratory for analysis of chloride, TPH, and BTEX. Once laboratory analysis is below table one standards for releases 51-100 feet to groundwater the excavation will be backfilled with clean imported caliche to restore the lease pad. The remediation will be completed within 90 days of OCD approval of the plan.

Enclosed: C-141, Groundwater Data, Maps, Sample Data, and Laboratory Results.

Submitted by.

*Larry Baker*

**Environmental Technician Sr. Staff**

[larry.baker@apachecorp.com](mailto:larry.baker@apachecorp.com)

**Office # 432-818-1654**

Incident ID	NAPP2235436061
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>70</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 <b>not</b> 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.

## Oil Conservation Division

Incident ID	NAPP2235436061
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. Staff  
Signature: Larry Baker Date: 3/15/2023  
email: larry.baker@apachecorp.com Telephone: 432-818-1654

**OCD Only**

Received by: Jocelyn Harimon Date: 03/16/2023

Incident ID	NAPP2235436061
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: Environmental Tech Sr. Staff  
Signature: Larry Baker Date: 3/15/2023  
email: larry.baker@apachecorp.com Telephone: 432-818-1654

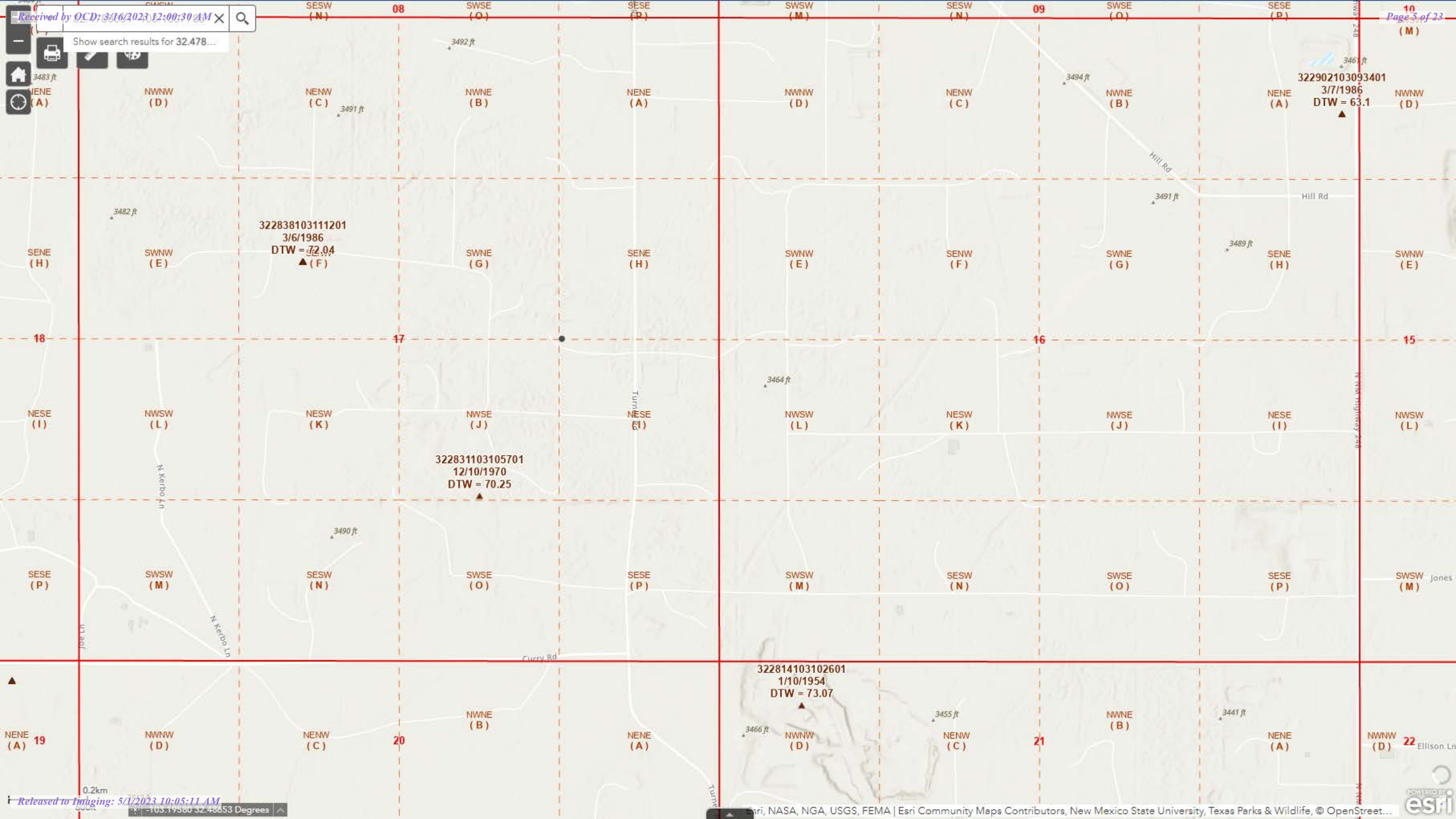
**OCD Only**

Received by: Jocelyn Harimon Date: 03/16/2023

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

Signature: Jennifer Nobui Date: 05/01/2023





Received by OCD: 3/16/2023 12:00:30 AM

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Show search results for 32.478...

NENE (A) 19

NWNW (D)

NENW (C)

NWNE (B)

NENE (A)

NWNW (D)

NENW (C)

NWNE (B)

NENE (A)

NWNW (D)

22 Ellison Ln

Released to Imaging: 5/1/2023 10:05:11 AM

-103.19580 32.48653 Degrees

Esri, NASA, NGA, USGS, FEMA | Esri Community Maps Contributors, New Mexico State University, Texas Parks & Wildlife, © OpenStreet...





Show search results for 32.478...



Turner Rd

Turner Rd

Turner Rd

Mill Rd

CP-00554

CP-00167-POD1

CP-01026-POD1

CP-00129-POD1

2

CP-00131-POD1

CP-00448-POD1

2

Joe Ln

CP-00676

CP-01822-POD1

Joe Ln

CP-00895

CP-00130-POD1

CP-00164-POD1

CP-00171-POD1

2

Curry Rd

Curry Rd

Curry Rd

1:9027

0.2km





# 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 01026	POD1	1	1	3	17	21S	37E	669809	3594958

<b>Driller License:</b>	1626	<b>Driller Company:</b>	TAYLOR, ROY ALLEN	
<b>Driller Name:</b>	TAYLOR, ROY ALLEN			
<b>Drill Start Date:</b>	10/12/2009	<b>Drill Finish Date:</b>	10/14/2009	<b>Plug Date:</b>
<b>Log File Date:</b>	10/23/2009	<b>PCW Rev Date:</b>		<b>Source:</b> Shallow
<b>Pump Type:</b>		<b>Pipe Discharge Size:</b>		<b>Estimated Yield:</b> 25 GPM
<b>Casing Size:</b>	5.14	<b>Depth Well:</b>	167 feet	<b>Depth Water:</b> 95 feet

Water Bearing Stratifications:	Top	Bottom	Description
	95	167	Sandstone/Gravel/Conglomerate

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.

3/14/23 1:24 PM

POINT OF DIVERSION SUMMARY



# 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
223C6	CP 01822 POD1	3	3	3	17	21S	37E	669855	3594265 <input type="checkbox"/>

<b>Driller License:</b>	1044	<b>Driller Company:</b>	EADES WELL DRILLING & PUMP SERVICE	
<b>Driller Name:</b>	EADES, ALANESL.G. HAYDENAS			
<b>Drill Start Date:</b>	01/02/2020	<b>Drill Finish Date:</b>	01/02/2020	<b>Plug Date:</b>
<b>Log File Date:</b>	01/27/2020	<b>PCW Rev Date:</b>		<b>Source:</b> Artesian
<b>Pump Type:</b>		<b>Pipe Discharge Size:</b>		<b>Estimated Yield:</b>
<b>Casing Size:</b>	5.00	<b>Depth Well:</b>	162 feet	<b>Depth Water:</b> 110 feet

Water Bearing Stratifications:	Top	Bottom	Description
	110	150	Sandstone/Gravel/Conglomerate
	150	162	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	122	162

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3/14/23 1:26 PM

POINT OF DIVERSION SUMMARY





# 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 00554	2	2	16	21S	37E	672744	3595610*	<input type="checkbox"/>

<b>Driller License:</b>	208	<b>Driller Company:</b>	VAN NOY, W.L.	
<b>Driller Name:</b>	VAN NOY, W.L.			
<b>Drill Start Date:</b>	06/01/1976	<b>Drill Finish Date:</b>	06/05/1976	<b>Plug Date:</b>
<b>Log File Date:</b>	04/05/1977	<b>PCW Rev Date:</b>		<b>Source:</b> Shallow
<b>Pump Type:</b>		<b>Pipe Discharge Size:</b>		<b>Estimated Yield:</b>
<b>Casing Size:</b>	5.00	<b>Depth Well:</b>	80 feet	<b>Depth Water:</b> 70 feet

Water Bearing Stratifications:	Top	Bottom	Description
	75	80	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	64	80

\*UTM location was derived from PLSS - see Help

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3/14/23 2:38 PM

POINT OF DIVERSION SUMMARY



# 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 00554	2	2	16	21S	37E	672744	3595610*	<input type="checkbox"/>

<b>Driller License:</b>	208	<b>Driller Company:</b>	VAN NOY, W.L.	
<b>Driller Name:</b>	VAN NOY, W.L.			
<b>Drill Start Date:</b>	06/01/1976	<b>Drill Finish Date:</b>	06/05/1976	<b>Plug Date:</b>
<b>Log File Date:</b>	04/05/1977	<b>PCW Rev Date:</b>		<b>Source:</b> Shallow
<b>Pump Type:</b>		<b>Pipe Discharge Size:</b>		<b>Estimated Yield:</b>
<b>Casing Size:</b>	5.00	<b>Depth Well:</b>	80 feet	<b>Depth Water:</b> 70 feet

Water Bearing Stratifications:	Top	Bottom	Description
	75	80	Sandstone/Gravel/Conglomerate

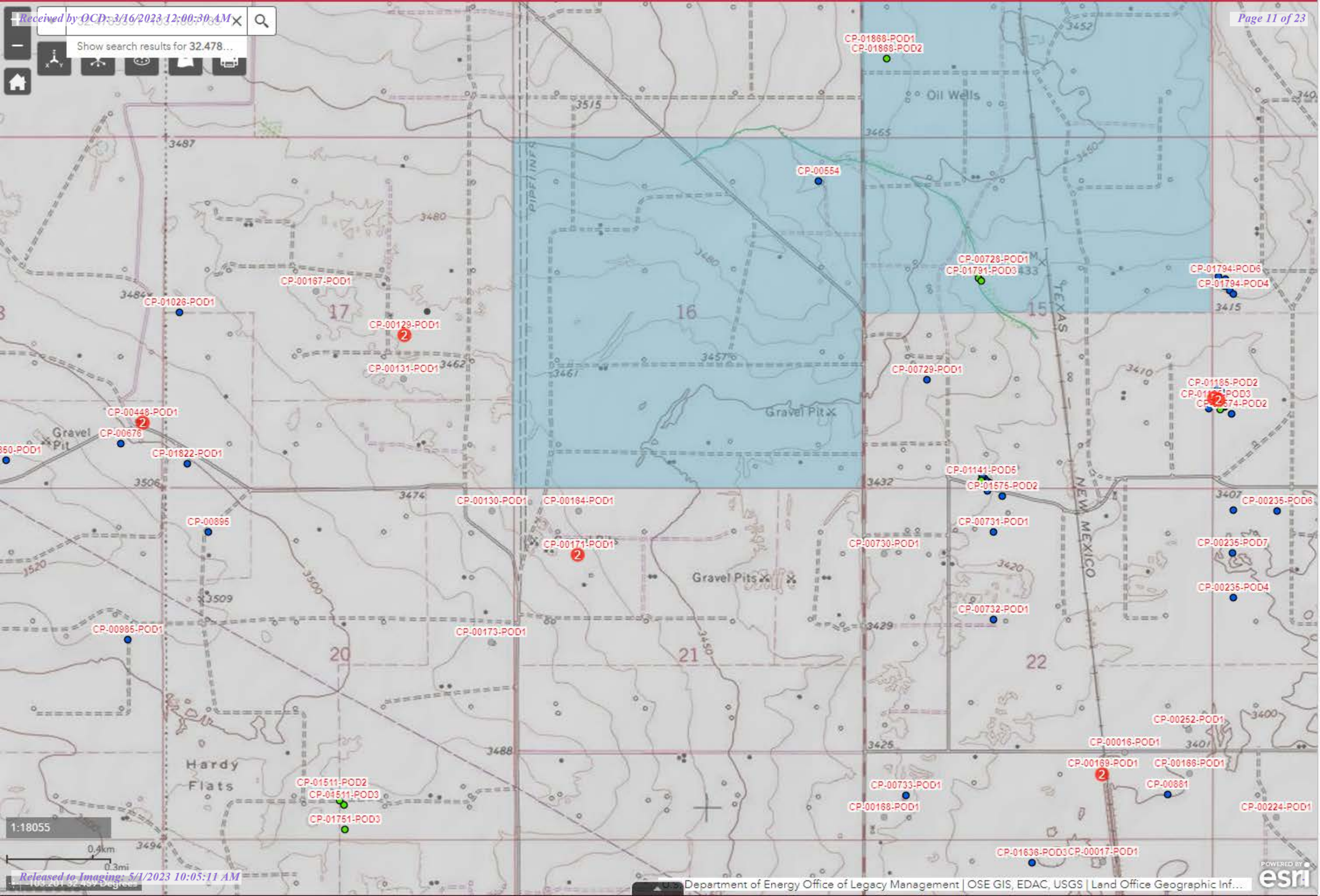
Casing Perforations:	Top	Bottom
	64	80

\*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.

3/14/23 2:38 PM

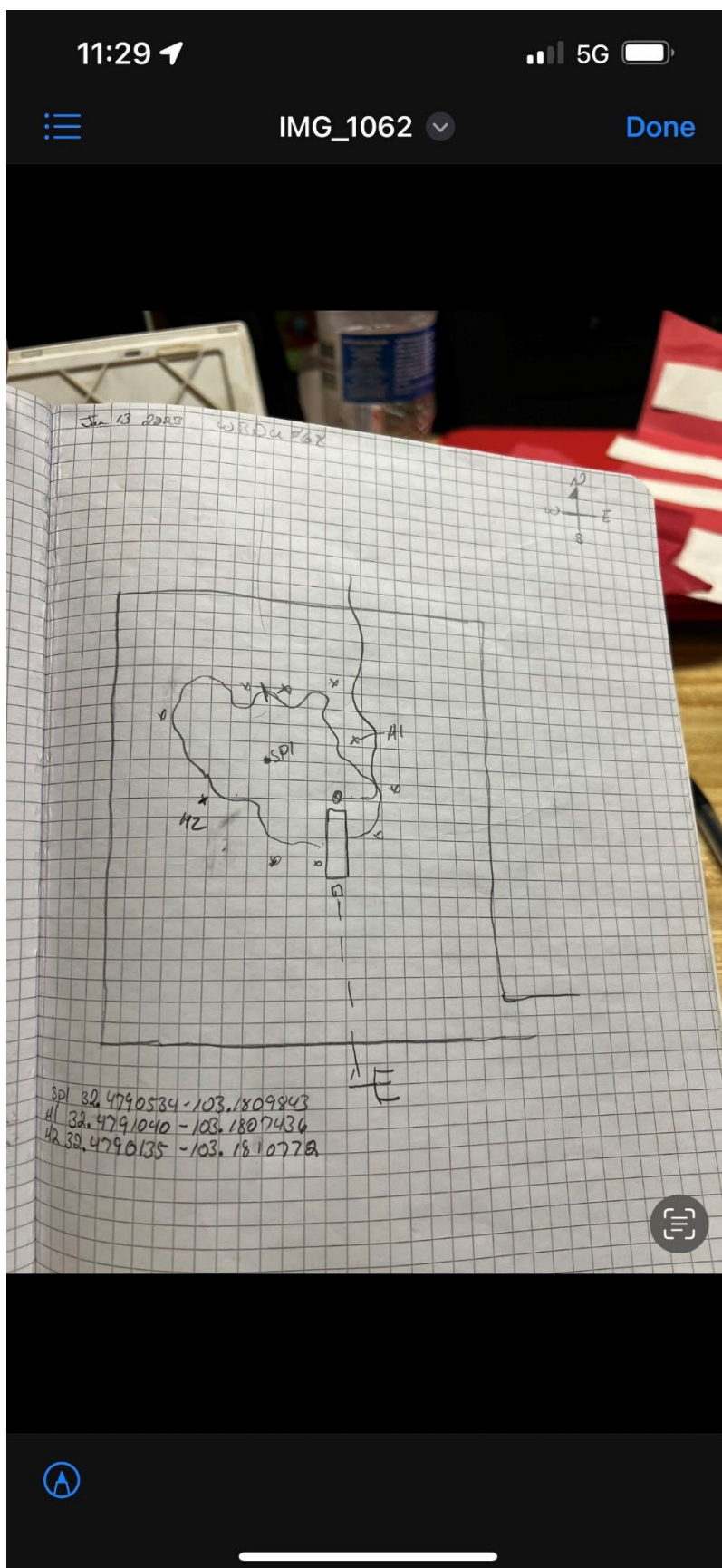
POINT OF DIVERSION SUMMARY











## Delination Samples

Sample Date	Sample ID	Depth	Chloride Lab	Benzene	Toulene	Ethybenzene	Total Xylenes	Total BTEX	GRO	DRO	EXT DRO	GPS Coordinates
1/13/2023	SP1	Surface	3,840	1.86	30.1	26.1	86.9	145	2730	14000	2310	32.4790534, -103.1809843
		1'	1,140	<0.050	<0.050	<0.050	<0.150	<0.300	<10	<10	<10	
		2'	80	<0.050	<0.050	<0.050	<0.150	<0.300	<10	<10	<10	
1/13/2023	H1	Surface	16	<0.050	<0.050	<0.050	<0.150	<0.300	<10	<10	<10	32.4791040, -103.1807436
1/13/2023	H2	Surface	16	<0.050	<0.050	<0.050	<0.150	<0.300	<10	<10	<10	32.4790135, -103.1810772





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

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January 18, 2023

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: WBDU #68

Enclosed are the results of analyses for samples received by the laboratory on 01/13/23 13:17.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. 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](http://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: 01/13/2023  
 Reported: 01/18/2023  
 Project Name: WBDU #68  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 01/13/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SP 1 SURFACE (H230200-01)**

BTX 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>1.86</b>	1.00	01/16/2023	ND	2.30	115	2.00	2.33	
<b>Toluene*</b>	<b>30.1</b>	2.00	01/16/2023	ND	2.34	117	2.00	3.99	
<b>Ethylbenzene*</b>	<b>26.1</b>	2.00	01/16/2023	ND	2.31	116	2.00	2.74	
<b>Total Xylenes*</b>	<b>86.9</b>	6.00	01/16/2023	ND	7.14	119	6.00	3.06	
<b>Total BTX</b>	<b>145</b>	11.0	01/16/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 133 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>3840</b>	16.0	01/16/2023	ND	400	100	400	7.69	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10*</b>	<b>2730</b>	100	01/16/2023	ND	206	103	200	3.27		
<b>DRO &gt;C10-C28*</b>	<b>14000</b>	100	01/16/2023	ND	227	114	200	0.813		
<b>EXT DRO &gt;C28-C36</b>	<b>2310</b>	100	01/16/2023	ND						

Surrogate: 1-Chlorooctane 251 % 48.2-134

Surrogate: 1-Chlorooctadecane 265 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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



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: 01/13/2023  
 Reported: 01/18/2023  
 Project Name: WBDU #68  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 01/13/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SP 1 @ 1' (H230200-02)**

BTEX 8021B		mg/kg		Analyzed By: JH/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	01/17/2023	ND	2.07	104	2.00	6.07		
Toluene*	<0.050	0.050	01/17/2023	ND	2.06	103	2.00	4.22		
Ethylbenzene*	<0.050	0.050	01/17/2023	ND	2.04	102	2.00	3.65		
Total Xylenes*	<0.150	0.150	01/17/2023	ND	6.13	102	6.00	3.87		
Total BTEX	<0.300	0.300	01/17/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1140	16.0	01/16/2023	ND	400	100	400	7.69		

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	01/16/2023	ND	206	103	200	3.27	
DRO >C10-C28*	<10.0	10.0	01/16/2023	ND	227	114	200	0.813	
EXT DRO >C28-C36	<10.0	10.0	01/16/2023	ND					

Surrogate: 1-Chlorooctane 94.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 99.0 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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





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: 01/13/2023  
 Reported: 01/18/2023  
 Project Name: WBDU #68  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 01/13/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SP 1 @ 2' (H230200-03)**

BTEx 8021B		mg/kg		Analyzed By: JH/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	01/17/2023	ND	2.07	104	2.00	6.07		
Toluene*	<0.050	0.050	01/17/2023	ND	2.06	103	2.00	4.22		
Ethylbenzene*	<0.050	0.050	01/17/2023	ND	2.04	102	2.00	3.65		
Total Xylenes*	<0.150	0.150	01/17/2023	ND	6.13	102	6.00	3.87		
Total BTEx	<0.300	0.300	01/17/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 109 % 71.5-134

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	01/16/2023	ND	400	100	400	7.69	

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	01/16/2023	ND	206	103	200	3.27	
DRO >C10-C28*	<10.0	10.0	01/16/2023	ND	227	114	200	0.813	
EXT DRO >C28-C36	<10.0	10.0	01/16/2023	ND					

Surrogate: 1-Chlorooctane 98.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 104 % 49.1-148

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: 01/13/2023  
 Reported: 01/18/2023  
 Project Name: WBDU #68  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 01/13/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: H 1 (H230200-04)**

BTEx 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/17/2023	ND	2.07	104	2.00	6.07	
Toluene*	<0.050	0.050	01/17/2023	ND	2.06	103	2.00	4.22	
Ethylbenzene*	<0.050	0.050	01/17/2023	ND	2.04	102	2.00	3.65	
Total Xylenes*	<0.150	0.150	01/17/2023	ND	6.13	102	6.00	3.87	
Total BTEX	<0.300	0.300	01/17/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 71.5-134

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	01/16/2023	ND	400	100	400	7.69	

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	01/16/2023	ND	206	103	200	3.27	
DRO >C10-C28*	<10.0	10.0	01/16/2023	ND	227	114	200	0.813	
EXT DRO >C28-C36	<10.0	10.0	01/16/2023	ND					

Surrogate: 1-Chlorooctane 97.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 105 % 49.1-148

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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: 01/13/2023  
 Reported: 01/18/2023  
 Project Name: WBDU #68  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 01/13/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: H 2 (H230200-05)**

BTEX 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/17/2023	ND	2.07	104	2.00	6.07	
Toluene*	<0.050	0.050	01/17/2023	ND	2.06	103	2.00	4.22	
Ethylbenzene*	<0.050	0.050	01/17/2023	ND	2.04	102	2.00	3.65	
Total Xylenes*	<0.150	0.150	01/17/2023	ND	6.13	102	6.00	3.87	
Total BTEX	<0.300	0.300	01/17/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134

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	01/16/2023	ND	400	100	400	7.69	

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	01/16/2023	ND	206	103	200	3.27	
DRO >C10-C28*	<10.0	10.0	01/16/2023	ND	227	114	200	0.813	
EXT DRO >C28-C36	<10.0	10.0	01/16/2023	ND					

Surrogate: 1-Chlorooctane 96.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 105 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

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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.
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

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

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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

**BILL TO**

Company Name: Hoenke  
Project Manager: Bruce Baker  
Address:  
City: Hobbs State: NM Zip: 88240  
Phone #: Fax #:  
Project #: Project Owner:  
Project Location: WBDU #68  
Sample Name: Jose Quevedo  
FOR LAB USE ONLY

P.O. #:	
Company:	
Attn:	
Address:	
City:	
State:	
Zip:	
Phone #:	
Fax #:	

# ANALYSIS REQUEST

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP. # CONTAINERS	MATRIX							PRESERV.	SAMPLING															
			GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:														ICE / COOL	OTHER :		
H030000	SPI Surface	G 1								DATE TIME	11/13	C 1	BTEX	EXT TPH												
2	SPI @ 1'	G 1								DATE TIME	11:09 AM	1	1	1												
3	SPI @ 2'	G 1								DATE TIME	11:10 AM	1	1	1												
4	AH	C 1								DATE TIME	11:12 AM	1	1	1												
5	AH	C 1								DATE TIME	11:44 PM	1	1	1												

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<b>Relinquished By:</b> [Signature]		Date: 11/23	<b>Received By:</b> [Signature]	
<b>Reinquired By:</b> [Signature]		Date: 11/17 pm	<b>Received By:</b> [Signature]	
Delivered By: (Circle One)	Observed Temp. °C	Corrected Temp. °C	Sample Condition	CHECKED BY: (Initials)
Sampler - UPS - Bus - Other:	4.6	4.0	Cool Intact Yes No	[Signature]
Turnaround Time:		Standard Rush	Bacteria (only) Sample Condition Cool Intact Yes No	Observed Temp. °C Corrected Temp. °C
Thermometer ID #113 Correction Factor None		E.M.S. Results	No	

\* Cardinal cannot accept verbal changes. Please call if there are any issues or questions.

**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 197469

CONDITIONS

Operator:  APACHE CORPORATION 303 Veterans Airpark Ln Midland, TX 79705	OGRID:  873
	Action Number:  197469
	Action Type:  [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Remediation Plan Approved with Conditions. Composite confirmation samples will be collected from the bottom and sidewalls of the excavation from areas representing no more than hundred (200) square feet. Going forward, lateral delineation samples will be collected as depth discrete samples and not 5-point composite samples.	5/1/2023