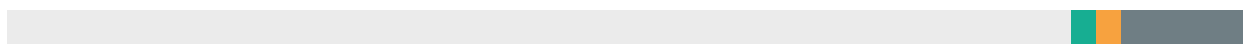


**Apache Corporation  
Geronimo 28 State #2 SWD  
2RP-5705**

**Final Remediation Report**



This report presents the results of remediation activities at the Geronimo 28 State #2 SWD Transition Line. On behalf of Apache Corporation (Apache), Diamondback Disposal Services, Inc (Diamondback) was tasked with the cleanup and remediation of release 2RP-5705. The release occurred in Unit Letter I, Section 28, Township 17S, Range 28E at coordinates 32.80259, -104.17446. The remediation was performed in general accordance with the New Mexico Oil Conservation Division (NMOCD) rules and regulations for releases dated July 24, 2018.

The spill site is located mostly on state lease land consisting of grass, prairie, or range lands. Approximately 129 bbls of produced water was lost, with 30 bbls being recovered, due to a failed 4" poly to steel transition.

Upon review of the site characteristics, depth to ground water being 157', and Table 1 Closure Criteria, The Recommended Remediation Action Levels (RRAL), determined by the latest NMOCD guidelines (19.15.29 NMAC) are as follows: 20,000mg/kg Chloride, 2,500 mg/kg GRO/DRO/MRO, 1,000 mg/kg GRO/DRO, 50 mg/kg BTEX, 10mg/kg Benzene.

Between the dates of January 13, 2021 and February 12, 2021, Diamondback excavated approximately 4,840 cubic yards (cy) of impacted material, loaded, and transported to R-360 (Halfway Facility) for disposal. Average depth of excavation is approximately 4 feet below ground surface (bgs). Between the dates of January 18, 2021 and February 12, 2021 the site was sampled to determine if RRAL's had been met. Five-point composite samples were collected, every 200 square feet for both wall and floor sections, packaged and delivered to a third-party lab, with chain of custody, for testing as per regulatory standards. (see attached analytical). Upon review of analytical, all floor samples prove to be below RRAL's for site closure. Being that the spill area was excavated to a depth of 4 feet bgs all restoration and reclamation standards have been met. All wall sections were also below Table 1 requirements. A 20-mil reinforced HDPE liner was installed at 4 feet bgs, with sewed seams and properly seated at edges of excavation. On February 2, 2021 backfilling began. A total of 4,860 cy of clean topsoil, similar to surrounding area, was imported and placed in excavation. Material was placed in a manner to promote compaction, crowned, and sloped to promote storm water runoff and erosion prevention. Entire site, including un-excavated disturbed areas, will be seeded with State of NM Sandy Seed Mix at a rate of 30 lbs/acre during the next optimal growing season.

For wall section 13 (See attached Map), Apache is asking for variance for restoration and reclamation section of rule, as Table 1 requirements are met for this section. Reasons for the variance include: above ground and underground facilities not able to be moved, due to structural integrity of lines, as well as safety issues involved with excavating near active facilities.

### Conclusions

Upon review all analytical and data provide by the third-party independent lab, it is our belief that all recommended remediation action levels have been met. Diamondback feels the migration of any remaining contaminants through the vadose zone, has been greatly reduced. Therefore, leaving this site in a manner that will pose very little if any future environmental threat.

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State of New Mexico  
Oil Conservation Division

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?	<u>182</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 checked="" type="checkbox"/> Yes <input 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 1/2-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.

Form C-141

Page 4

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: Bruce BAKER Title: Environmental Tech. SR.Signature: Bruce Baker Date: 1-14-20email: larry.baker@apachecorp.com Telephone: 432-631-6982**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

Incident ID	
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.  
Signature: Larry Baker Date: 6/4/2021  
email: larry.baker@apachecorp.com Telephone: 432-631-6982

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

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

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

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SAMPLE ID	SAMPLE DATE	DEPTH (feet bgs)	CHLORIDE mg/Kg	BTEX	TPH
Sec W 1. Wall H210116-01	1-18-21	1-4	352	<0.300	<10.0
Sec W 2. Wall H210116-02	1-18-21	1-4	304	<0.300	<10.0
Sec W 3. Wall H210116-03	1-18-21	1-4	48.0	<0.300	<10.0
Sec W4. Wall H210116-04	1-18-21	1-4	128	<0.300	<10.0
Sec W 5. Wall H210116-05	1-18-21	1-4	448	<0.300	<10.0
Sec W6. Wall H210116-06	1-18-21	1-4	80.0	<0.300	<10.0
Sec W 7. Wall H1210116-07	1-18-21	1-4	160	<0.300	<10.0
Sec W 8. Wall H210116-08	1-18-21	1-4	320	<0.300	<10.0
Sec W 9 . Wall 11210116-09	1-18-21	1-4	128	<0.300	<10.0
Sec W 10. Wall H210116-10	1-18-21	1-4	64.0	<0.300	<10.0
Sec W 11. Wall H1210116-11	1-18-21	1-4	144	<0.300	<10.0
Sec W 12. Wall 11210116-12	1-18-21	1-4	144	<0.300	<10.0
Sec W 13. Wall H1210116-13	1-18-21	1-4	1040	<0.300	<10.0
Sec W 14. Wall 210116-14	1-18-21	1-4	320	<0.300	<10.0
Sec B 1. Floor H210116-15	1-18-21	4	32.0	<0.300	<10.0
Sec B 2. Floor H210116-16	1-18-21	4	96.0	<0.300	<10.0
Sec B 3. Floor H210116-17	1-18-21	4	128	<0.300	<10.0
Sec B 4. Floor H210116-18	1-18--21	4	320	<0.300	<10.0
Sec B 5. Floor H1210116-19	1-18--21	4	112	<0.300	<10.0
Sec B 6. Floor 1H210116-20	1-18-21	4	224	<0.300	<10.0

SAMPLE ID	SAMPLE DATE	DEPTH (feet bgs)	CHLORIDE mg/Kg	BTEX	TPH
Sec B 7. Floor H210116-21	1-18-21	4	672	<0.300	<10.0
Sec B. 8 Floor H210116-22	1-18-21	4	1640	<0.300	<10.0
Sec B. 9 Floor H210116-23	1-18-21	4	896	<0.300	<10.0
Sec B. 10 Floor H210116-24	1-18-21	4	960	<0.300	<10.0
Sec B. 11 Floor H210116-25	1-18-21	4	1380	<0.300	<10.0
Sec B. 13 Floor H210127-01	1-19-21	4	320	<0.300	<10.0
Sec B. 14 Floor H210127-02	1-19-21	4	320	<0.300	<10.0
Sec B. 15 Floor H210127-03	1-19-21	4	3560	<0.300	<10.0
Sec B. 16 Floor H210127-04	1-19--21	4	944	<0.300	<10.0
Sec B. 17 Floor H210127-05	1-19-21	4	976	<0.300	<10.0
Sec B. 18 Floor H210127-06	1-19-21	4	2960	<0.300	<10.0
Sec B. 19 Floor H210127-07	1-19-21	4	2360	<0.300	<10.0
Sec B. 20 Floor H210127-08	1-19-21	4	5280	<0.300	<10.0
Sec B. 21 Floor H210127-09	1-19-21	4	2000	<0.300	<10.0
Sec B. 22 Floor H210127-10	1-19-21	4	1250	<0.300	<10.0
Sec B. 23 Floor H210127-11	1-19-21	4	4960	<0.300	<10.0
Sec B. 24 Floor H210127-12	1-19-21	4	4960	<0.300	<11.0

SAMPLE ID	SAMPLE DATE	DEPTH (feet bgs)	CHLORIDE mg/Kg	BTEX	TPH
Sec B. 25 Floor H210127-13	1-19-21	4	3920	<0.300	<10.0
Sec B. 26 Floor H210127-14	1-19-21	4	880	<0.300	<10.0
Sec B. 27 Floor H210127-15	1-19-21	4	3400	<0.300	<10.0
Sec B. 28 Floor H210127-16	1-19-21	4	6560	<0.300	<10.0
Sec B. 29 Floor H210127-17	1-19-21	4	1420	<0.300	<10.0
Sec B. 30 Floor H210127-18	1-19-21	4	6720	<0.300	<.10
Sec B. 31 Floor H210127-19	1-19-21	4	3480	<0.300	<10.0
Sec B. 32 Floor H210127-20	1-19-21	4	6720	<0.300	<10.0
Sec B. 33 Floor H210127-21	1-19-21	4	6880	<0.300	<10.0
Sec B. 34 Floor H210127-22	1-19-21	4	10400	<0.300	<10.0
Sec B. 35 Floor H210127-23	1-19-21	4	6660	<0.300	<10.0
Sec B. 36 Floor H210127-24	1-19-21	4	5060	<0.300	<10.0
Sec B. 37 Floor H210127-25	1-19-21	4	256	<0.300	<10.0
Sec W.15 Wall H210190-01	1-26-21	1-4	272	<0.300	<10.0
Sec W.16 Wall H210190-02	1-26-21	1-4	208	<0.300	<10.0

SAMPLE ID	SAMPLE DATE	DEPTH (feet bgs)	CHLORIDE mg/Kg	BTEX	TPH
Sec W.17 Wall H210190-03	1-26-21	1-4	2600	<0.300	<10.0
Sec W.17 Wall H210382-01	2-12-21	1-4	112	N/A	N/A
Sec W.18 Wall H210190-04	1-26-21	1-4	2600	<0.300	<10.0
Sec W.18 Wall H210382-02	2-12-21	1-4	48.0	N/A	N/A
Sec B. 69 Floor H210190-05	1-26-21	4	1790	<0.300	<10.0
Sec B.70 Floor H210190-06	1-26-21	4	144	<0.300	<10.0
Sec B.71 Floor H210190-07	1-26-21	4	3080	<0.300	<10.0
Sec B.72 Floor H210190-8	1-26-21	4	1840	<0.300	<10.0
Sec W.73 Wall H210190-09	1-26-21	1-4	8640	<0.300	<10.0
Sec W.74 Wall H210190-10	1-26-21	1-4	3120	<0.300	<10.0
Sec W.75 Wall H210190-11	1-26-21	1-4	7600	<0.300	<10.0
Sec W.76 Wall H210190-12	1-26-21	1-4	1410	<0.300	<10.0
Sec W.77 Wall H210190-13	1-26-21	1-4	1730	<0.300	<10.0
Sec W.78 Wall H210190-14	1-26-21	1-4	1840	<0.300	<10.0
Sec W.79 Wall H210190-15	1-26-21	1-4	4640	<0.300	<10.0

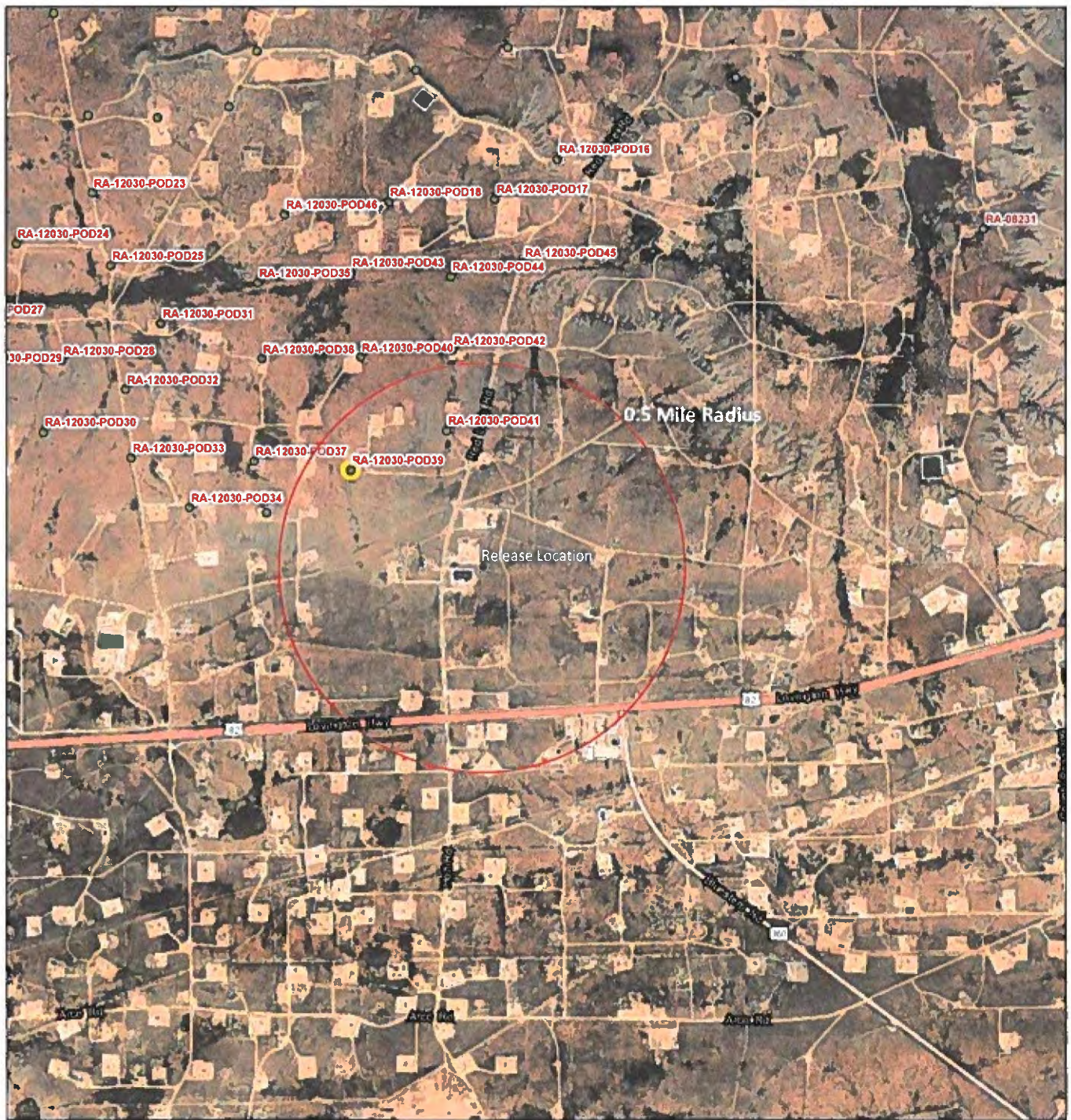
SAMPLE ID	SAMPLE DATE	DEPTH (feet bgs)	CHLORIDE mg/Kg	BTEX	TPH
Sec W.80 Wall H210190-16	1-26-21	1-4	688	<0.300	<10.0
Sec W.81 Wall H210190-17	1-26-21	1-4	1440	<0.300	<10.0
Sec W.82 Wall H210190-18	1-26-21	1-4	1880	<0.300	<10.0
Sec B. 38 Floor H210143-01	1-28-21	4	720	<0.300	<10.0
Sec B. 39 Floor H210143-02	1-28-21	4	1170	<0.300	<10.0
Sec B. 40 Floor H210143-03	1-28-21	4	240	<0.300	<10.0
Sec B. 41 Floor H210143-04	1-28-21	4	256	<0.300	<10.0
Sec B. 42 Floor H210143-05	1-28-21	4	1300	<0.300	<10.0
Sec B. 43 Floor H210143-06	1-28-21	4	896	<0.300	<10.0
Sec B. 44 Floor H210143-07	1-28-21	4	2280	<0.300	<10.0
Sec B. 45 Floor H210143-08	1-28-21	4	4560	<0.300	<10.0

SAMPLE ID	SAMPLE DATE	DEPTH (feet bgs)	CHLORIDE mg/Kg	BTEX	TPH
Sec B. 46 Floor H210143-09	1-28-21	4	5120	<0.300	<10.0
Sec B. 47 Floor H4210143-10	1-28-21	4	3680	<0.300	<10.0
Sec B. 48 Floor 11210143-11	1-28-21	4	2000	<0.300	<10.0
Sec B. 49 Floor H210143-12	1-28-21	4	6260	<0.300	<10.0
Sec B. 50 Floor 11210143-13	1-28-21	4	9860	<0.300	<10.0
Sec B. 51 Floor H210143-14	1-28-21	4	7060	<0.300	<10.0
Sec B. 52Floor 11210143-15	1-28-21	4	8400	<0.300	<10.0
Sec B. 53 Floor 11210143-16	1-28-21	4	4400	<0.300	<10.0
Sec B. 54 Floor 11210143-17	1-28-21	4	12800	<0.300	<10.0
Sec B. 55 Floor 11210143-18	1-28-21	4	5730	<0.300	<10.0
Sec B. 56 Floor H210143-19	1-28-21	4	7460	<0.300	<10.0
Sec B. 57 Floor H210143-20	1-28-21	4	9730	<0.300	<10.0
Sec B. 58 Floor 11210143-21	1-28-21	4	7730	<0.300	<10.0
Sec B. 59 Floor H210143-22	1-28-21	4	5460	<0.300	<10.0
Sec B. 60 Floor 11210143-23	1-28-21	4	5060	<0.300	<10.0
Sec B. 61 Floor 11210143-24	1-28-21	4	4400	<0.300	<10.0

SAMPLE ID	SAMPLE DATE	DEPTH (feet bgs) 4	CHLORIDE mg/Kg	CHLORIDE mg/Kg	TPH
Sec B. 62 Floor 11210143-26	1-28-21	4	7330	<0.300	<10.0
Sec B. 63 Floor 11210143-27	1-28-21	4	8660	<0.300	<10.0
Sec B. 64 Floor H210143-28	1-28-21	4	8660	<0.300	<10.0
Sec B. 83 Floor H210143-28	1-28-21	4	6400	<0.300	<10.0
Sec B. 84 Floor H210143-29	1-28-21	4	8400	0.300	183.2



Figure 3 - Point of Diversion Map



1/10/2020, 1:52:27 PM

OSE District Boundary

GIS WATERS PODs

Pending

1:18,056

0 0.17 0.35 0.7 mi  
 0 0.28 0.55 1.1 km

Esri, HERE, Garmin, (c) OpenStreetMap contributors, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community. Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and

Printed from Public Web Map  
 Unofficial Map from OSE POD Locations Web Application

# Geronimo 28 State SWD #2

Sample Map

Legend

 Excavation

 Floor Samples

 Floor Section Lines

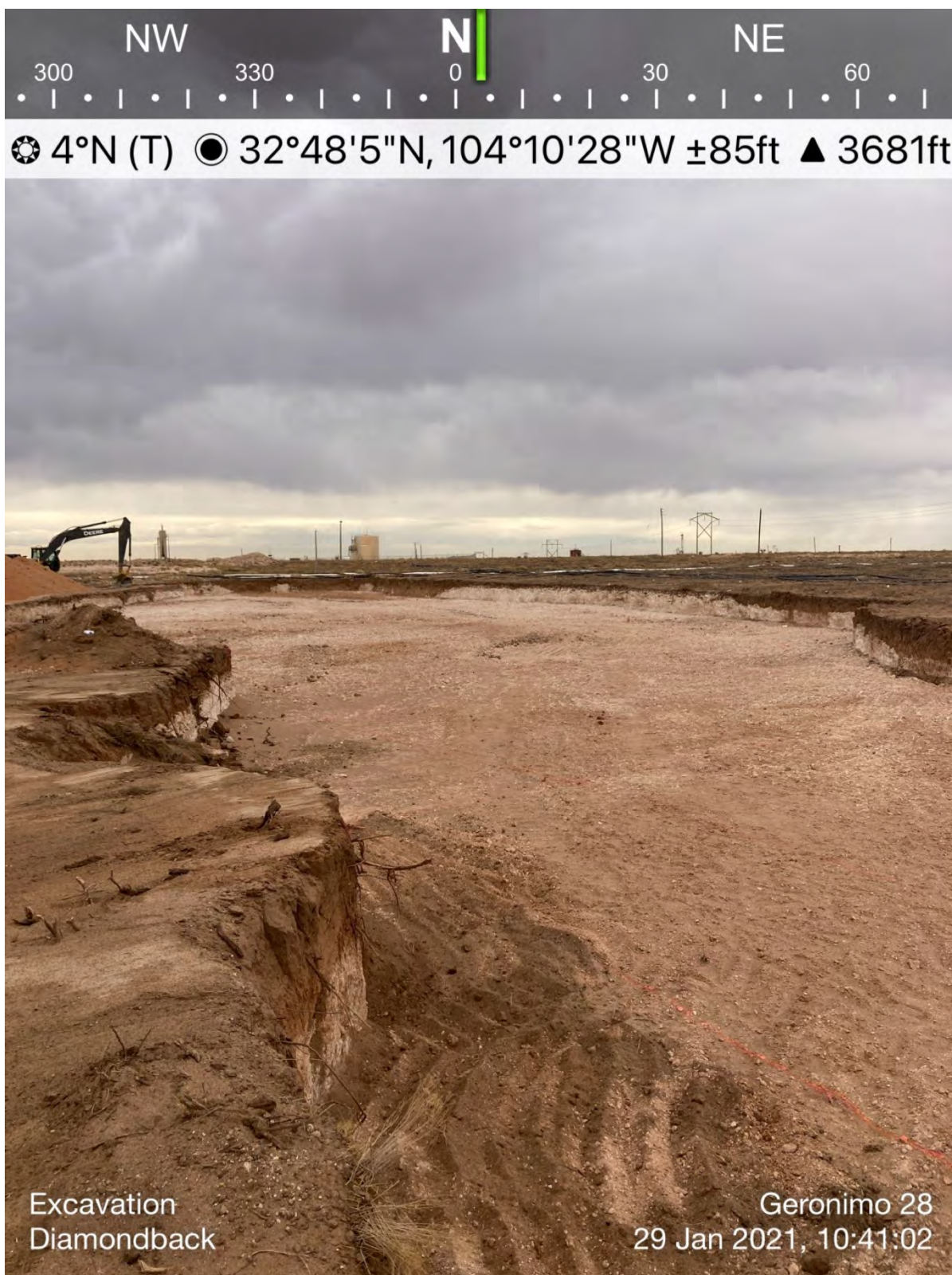
 Wall Samples

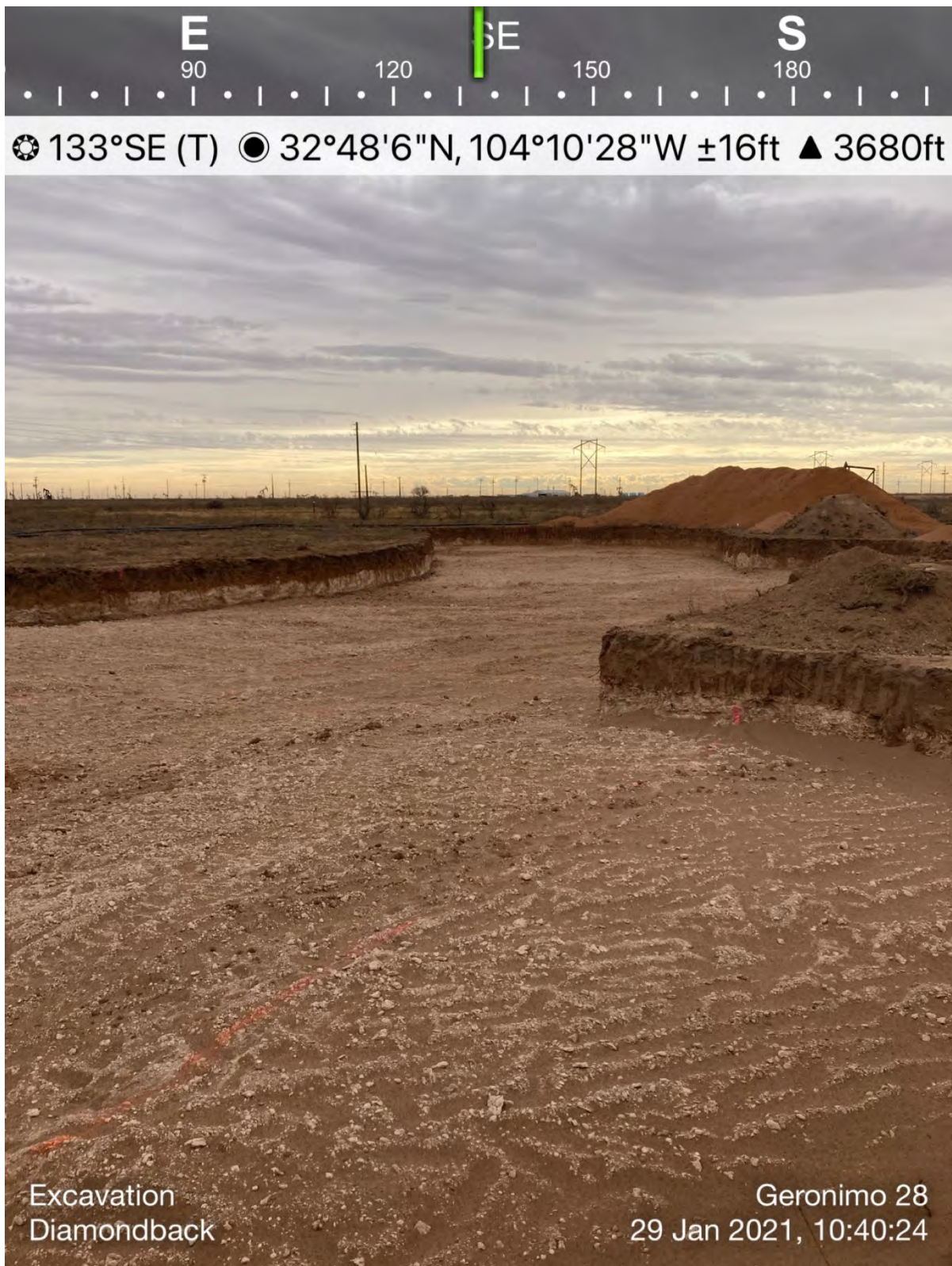
 Wall Section Line



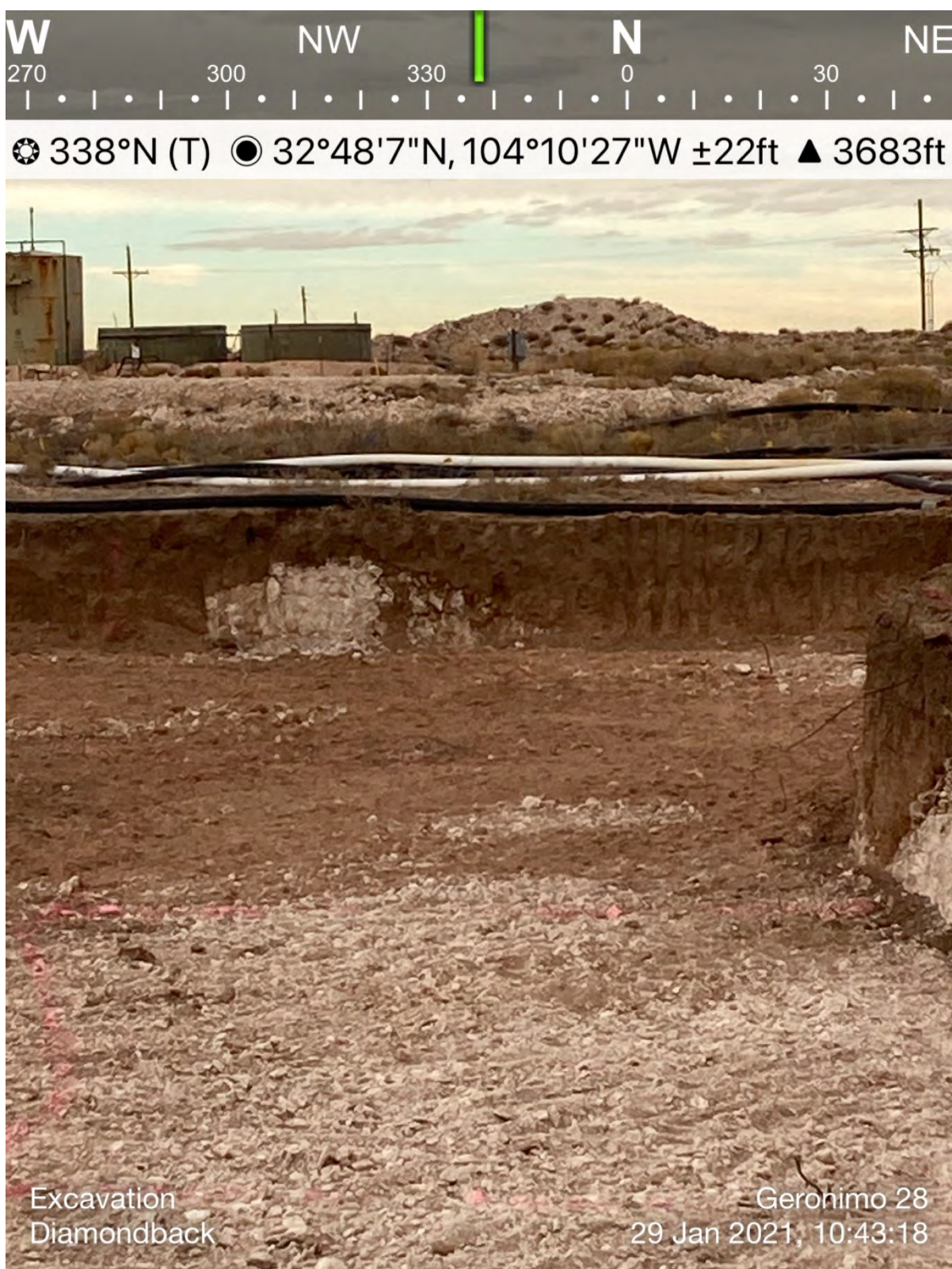


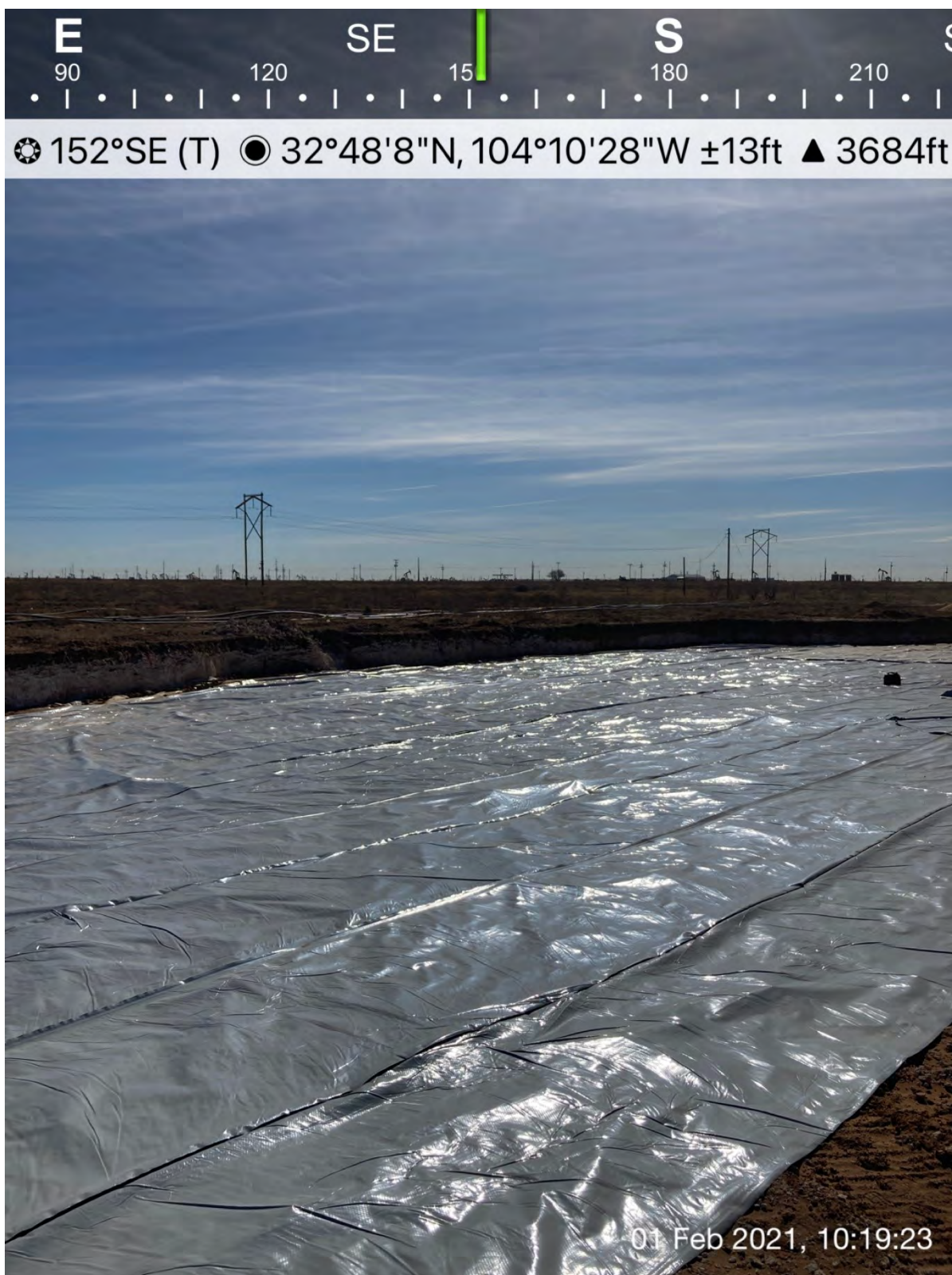


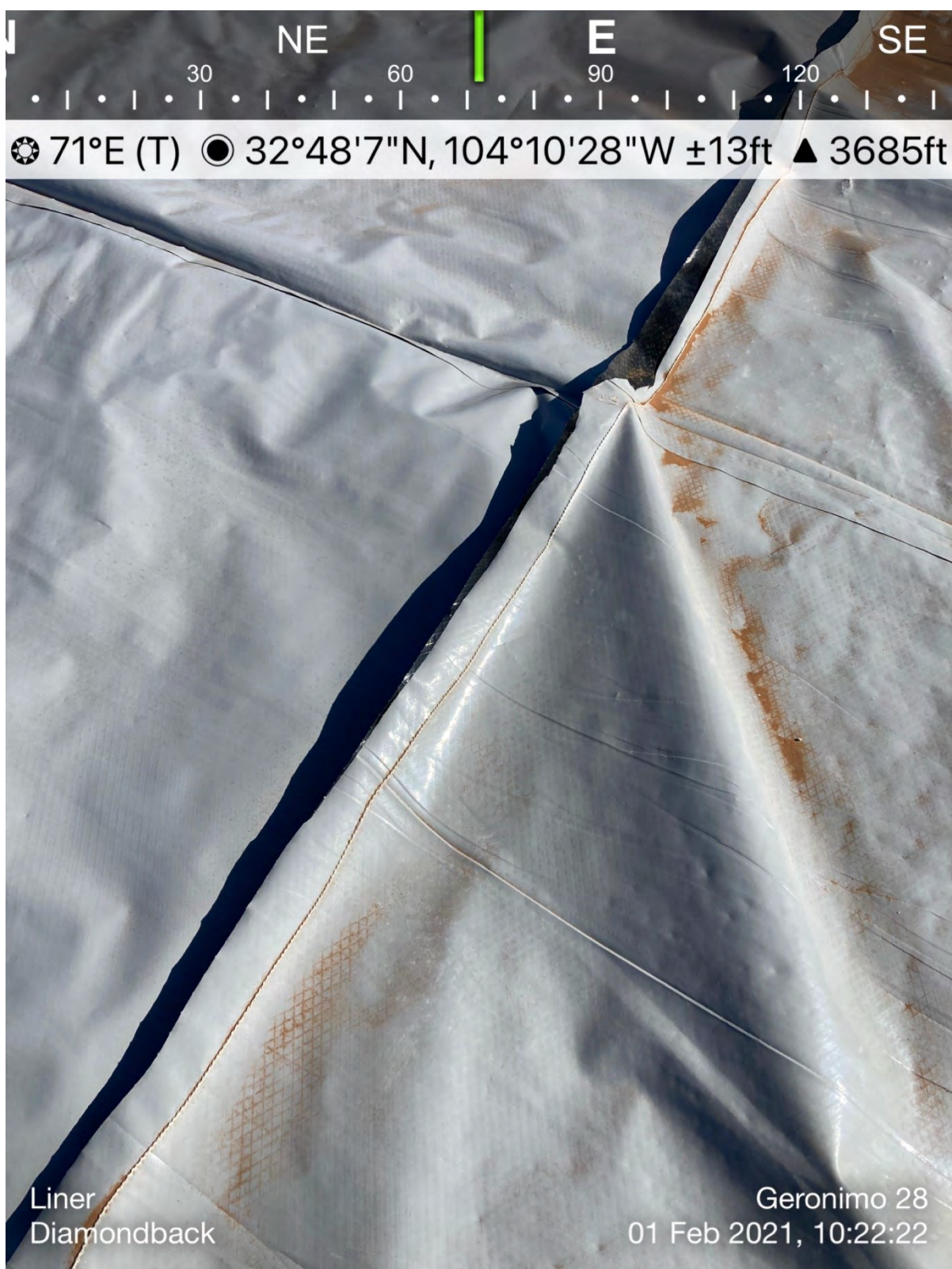








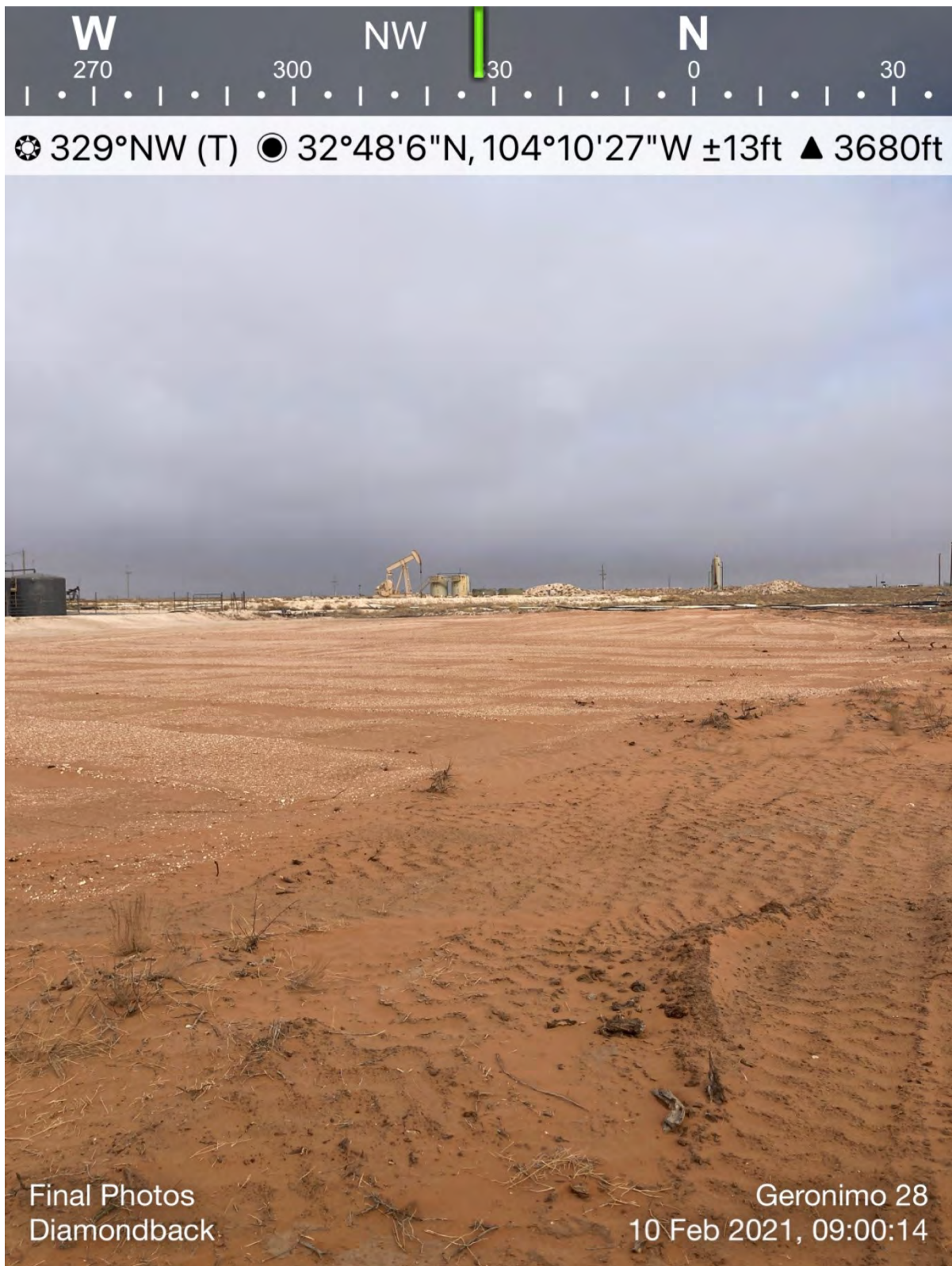
















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PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

January 21, 2021

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: GERONIMO #28

Enclosed are the results of analyses for samples received by the laboratory on 01/18/21 16:36.

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

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

Method EPA 552.2	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 "Coley D. Keene". The signature is written in a cursive 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: 01/18/2021  
 Reported: 01/21/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/18/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: W 1 (H210116-01)**

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	01/19/2021	ND	2.08	104	2.00	3.33	
Toluene*	<0.050	0.050	01/19/2021	ND	2.10	105	2.00	3.91	
Ethylbenzene*	<0.050	0.050	01/19/2021	ND	2.06	103	2.00	4.07	
Total Xylenes*	<0.150	0.150	01/19/2021	ND	6.34	106	6.00	3.40	
Total BTEX	<0.300	0.300	01/19/2021	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 103 % 73.3-129

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	352	16.0	01/20/2021	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	01/20/2021	ND	203	102	200	0.487	
DRO >C10-C28*	<10.0	10.0	01/20/2021	ND	165	82.5	200	4.52	
EXT DRO >C28-C36	<10.0	10.0	01/20/2021	ND					

Surrogate: 1-Chlorooctane 82.9 % 44.3-144

Surrogate: 1-Chlorooctadecane 83.7 % 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: 01/18/2021  
 Reported: 01/21/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/18/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: W 2 (H210116-02)**

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	01/19/2021	ND	2.08	104	2.00	3.33		
Toluene*	<0.050	0.050	01/19/2021	ND	2.10	105	2.00	3.91		
Ethylbenzene*	<0.050	0.050	01/19/2021	ND	2.06	103	2.00	4.07		
Total Xylenes*	<0.150	0.150	01/19/2021	ND	6.34	106	6.00	3.40		
Total BTEx	<0.300	0.300	01/19/2021	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	304	16.0	01/20/2021	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	01/20/2021	ND	203	102	200	0.487	
DRO >C10-C28*	<10.0	10.0	01/20/2021	ND	165	82.5	200	4.52	
EXT DRO >C28-C36	<10.0	10.0	01/20/2021	ND					

Surrogate: 1-Chlorooctane 59.5 % 44.3-144

Surrogate: 1-Chlorooctadecane 59.9 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 01/18/2021  
 Reported: 01/21/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/18/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: W 3 (H210116-03)**

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	01/19/2021	ND	2.08	104	2.00	3.33	
Toluene*	<0.050	0.050	01/19/2021	ND	2.10	105	2.00	3.91	
Ethylbenzene*	<0.050	0.050	01/19/2021	ND	2.06	103	2.00	4.07	
Total Xylenes*	<0.150	0.150	01/19/2021	ND	6.34	106	6.00	3.40	
Total BTEX	<0.300	0.300	01/19/2021	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 104 % 73.3-129

Chloride, SM4500Cl-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	01/20/2021	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	01/20/2021	ND	203	102	200	0.487	
DRO >C10-C28*	<10.0	10.0	01/20/2021	ND	165	82.5	200	4.52	
EXT DRO >C28-C36	<10.0	10.0	01/20/2021	ND					

Surrogate: 1-Chlorooctane 74.0 % 44.3-144

Surrogate: 1-Chlorooctadecane 74.6 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 01/18/2021  
 Reported: 01/21/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/18/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: W 4 (H210116-04)**

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	01/20/2021	ND	2.08	104	2.00	3.33		
Toluene*	<0.050	0.050	01/20/2021	ND	2.10	105	2.00	3.91		
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.06	103	2.00	4.07		
Total Xylenes*	<0.150	0.150	01/20/2021	ND	6.34	106	6.00	3.40		
Total BTX	<0.300	0.300	01/20/2021	ND						

Surrogate: 4-Bromofluorobenzene (PIE) 104 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	01/20/2021	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	01/20/2021	ND	203	102	200	0.487	
DRO >C10-C28*	<10.0	10.0	01/20/2021	ND	165	82.5	200	4.52	
EXT DRO >C28-C36	<10.0	10.0	01/20/2021	ND					

Surrogate: 1-Chlorooctane 82.0 % 44.3-144

Surrogate: 1-Chlorooctadecane 81.8 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 01/18/2021  
 Reported: 01/21/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/18/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: W 5 (H210116-05)**

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	01/20/2021	ND	2.08	104	2.00	3.33	
Toluene*	<0.050	0.050	01/20/2021	ND	2.10	105	2.00	3.91	
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.06	103	2.00	4.07	
Total Xylenes*	<0.150	0.150	01/20/2021	ND	6.34	106	6.00	3.40	
Total BTX	<0.300	0.300	01/20/2021	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 103 % 73.3-129

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	01/20/2021	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	01/20/2021	ND	203	102	200	0.487	
DRO >C10-C28*	<10.0	10.0	01/20/2021	ND	165	82.5	200	4.52	
EXT DRO >C28-C36	<10.0	10.0	01/20/2021	ND					

Surrogate: 1-Chlorooctane 80.1 % 44.3-144

Surrogate: 1-Chlorooctadecane 79.7 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 01/18/2021  
 Reported: 01/21/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/18/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: W 6 (H210116-06)**

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	01/20/2021	ND	2.08	104	2.00	3.33		
Toluene*	<0.050	0.050	01/20/2021	ND	2.10	105	2.00	3.91		
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.06	103	2.00	4.07		
Total Xylenes*	<0.150	0.150	01/20/2021	ND	6.34	106	6.00	3.40		
Total BTX	<0.300	0.300	01/20/2021	ND						

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

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	01/20/2021	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	01/20/2021	ND	203	102	200	0.487	
DRO >C10-C28*	<10.0	10.0	01/20/2021	ND	165	82.5	200	4.52	
EXT DRO >C28-C36	<10.0	10.0	01/20/2021	ND					

Surrogate: 1-Chlorooctane 82.4 % 44.3-144

Surrogate: 1-Chlorooctadecane 83.3 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 01/18/2021  
 Reported: 01/21/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/18/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: W 7 (H210116-07)**

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	01/20/2021	ND	2.08	104	2.00	3.33		
Toluene*	<0.050	0.050	01/20/2021	ND	2.10	105	2.00	3.91		
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.06	103	2.00	4.07		
Total Xylenes*	<0.150	0.150	01/20/2021	ND	6.34	106	6.00	3.40		
Total BTEX	<0.300	0.300	01/20/2021	ND						

Surrogate: 4-Bromofluorobenzene (PIL) 103 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	01/20/2021	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	01/20/2021	ND	203	102	200	0.487	
DRO >C10-C28*	<10.0	10.0	01/20/2021	ND	165	82.5	200	4.52	
EXT DRO >C28-C36	<10.0	10.0	01/20/2021	ND					

Surrogate: 1-Chlorooctane 82.5 % 44.3-144

Surrogate: 1-Chlorooctadecane 82.6 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 01/18/2021  
 Reported: 01/21/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/18/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: W 8 (H210116-08)**

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	01/20/2021	ND	2.08	104	2.00	3.33	
Toluene*	<0.050	0.050	01/20/2021	ND	2.10	105	2.00	3.91	
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.06	103	2.00	4.07	
Total Xylenes*	<0.150	0.150	01/20/2021	ND	6.34	106	6.00	3.40	
Total BTEX	<0.300	0.300	01/20/2021	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 104 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	320	16.0	01/20/2021	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	01/20/2021	ND	203	102	200	0.487	
DRO >C10-C28*	<10.0	10.0	01/20/2021	ND	165	82.5	200	4.52	
EXT DRO >C28-C36	<10.0	10.0	01/20/2021	ND					

Surrogate: 1-Chlorooctane 80.2 % 44.3-144

Surrogate: 1-Chlorooctadecane 79.8 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 01/18/2021  
 Reported: 01/21/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/18/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: W 9 (H210116-09)**

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	01/20/2021	ND	2.08	104	2.00	3.33	
Toluene*	<0.050	0.050	01/20/2021	ND	2.10	105	2.00	3.91	
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.06	103	2.00	4.07	
Total Xylenes*	<0.150	0.150	01/20/2021	ND	6.34	106	6.00	3.40	
Total BTX	<0.300	0.300	01/20/2021	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 105 % 73.3-129

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	01/20/2021	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	01/20/2021	ND	203	102	200	0.487	
DRO >C10-C28*	<10.0	10.0	01/20/2021	ND	165	82.5	200	4.52	
EXT DRO >C28-C36	<10.0	10.0	01/20/2021	ND					

Surrogate: 1-Chlorooctane 78.7 % 44.3-144

Surrogate: 1-Chlorooctadecane 79.2 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 01/18/2021  
 Reported: 01/21/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/18/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: W 10 (H210116-10)**

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	01/20/2021	ND	2.08	104	2.00	3.33	
Toluene*	<0.050	0.050	01/20/2021	ND	2.10	105	2.00	3.91	
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.06	103	2.00	4.07	
Total Xylenes*	<0.150	0.150	01/20/2021	ND	6.34	106	6.00	3.40	
Total BTX	<0.300	0.300	01/20/2021	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 103 % 73.3-129

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	01/20/2021	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	01/20/2021	ND	203	102	200	0.487	
DRO >C10-C28*	<10.0	10.0	01/20/2021	ND	165	82.5	200	4.52	
EXT DRO >C28-C36	<10.0	10.0	01/20/2021	ND					

Surrogate: 1-Chlorooctane 79.2 % 44.3-144

Surrogate: 1-Chlorooctadecane 80.4 % 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:	01/18/2021	Sampling Date:	01/18/2021
Reported:	01/21/2021	Sampling Type:	Soil
Project Name:	GERONIMO #28	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NONE GIVEN		

**Sample ID: W 11 (H210116-11)**

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	01/20/2021	ND	2.08	104	2.00	3.33		
Toluene*	<0.050	0.050	01/20/2021	ND	2.10	105	2.00	3.91		
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.06	103	2.00	4.07		
Total Xylenes*	<0.150	0.150	01/20/2021	ND	6.34	106	6.00	3.40		
Total BTEX	<0.300	0.300	01/20/2021	ND						

Surrogate: 4-Bromofluorobenzene (PIE) 103 % 73.3-129

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	01/20/2021	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	01/20/2021	ND	203	102	200	0.487	
DRO >C10-C28*	<10.0	10.0	01/20/2021	ND	165	82.5	200	4.52	
EXT DRO >C28-C36	<10.0	10.0	01/20/2021	ND					

Surrogate: 1-Chlorooctane 74.6 % 44.3-144

Surrogate: 1-Chlorooctadecane 75.9 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 01/18/2021  
 Reported: 01/21/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/18/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: W 12 (H210116-12)**

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	01/20/2021	ND	2.11	106	2.00	0.143	
Toluene*	<0.050	0.050	01/20/2021	ND	2.09	104	2.00	0.206	
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.04	102	2.00	0.666	
Total Xylenes*	<0.150	0.150	01/20/2021	ND	5.98	99.7	6.00	0.764	
Total BTEX	<0.300	0.300	01/20/2021	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 99.1 % 73.3-129

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	01/20/2021	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	01/20/2021	ND	203	102	200	0.487	
DRO >C10-C28*	<10.0	10.0	01/20/2021	ND	165	82.5	200	4.52	
EXT DRO >C28-C36	<10.0	10.0	01/20/2021	ND					

Surrogate: 1-Chlorooctane 77.5 % 44.3-144

Surrogate: 1-Chlorooctadecane 78.5 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 01/18/2021  
 Reported: 01/21/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/18/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: W 13 (H210116-13)**

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	01/20/2021	ND	2.11	106	2.00	0.143	
Toluene*	<0.050	0.050	01/20/2021	ND	2.09	104	2.00	0.206	
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.04	102	2.00	0.666	
Total Xylenes*	<0.150	0.150	01/20/2021	ND	5.98	99.7	6.00	0.764	
Total BTEX	<0.300	0.300	01/20/2021	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 98.8 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1040	16.0	01/20/2021	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	01/20/2021	ND	203	102	200	0.487	
DRO >C10-C28*	<10.0	10.0	01/20/2021	ND	165	82.5	200	4.52	
EXT DRO >C28-C36	<10.0	10.0	01/20/2021	ND					

Surrogate: 1-Chlorooctane 80.8 % 44.3-144

Surrogate: 1-Chlorooctadecane 81.6 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 01/18/2021  
 Reported: 01/21/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/18/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: W 14 (H210116-14)**

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	01/20/2021	ND	2.11	106	2.00	0.143	
Toluene*	<0.050	0.050	01/20/2021	ND	2.09	104	2.00	0.206	
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.04	102	2.00	0.666	
Total Xylenes*	<0.150	0.150	01/20/2021	ND	5.98	99.7	6.00	0.764	
Total BTEX	<0.300	0.300	01/20/2021	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 99.7 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	320	16.0	01/20/2021	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	01/20/2021	ND	203	102	200	0.487	
DRO >C10-C28*	<10.0	10.0	01/20/2021	ND	165	82.5	200	4.52	
EXT DRO >C28-C36	<10.0	10.0	01/20/2021	ND					

Surrogate: 1-Chlorooctane 82.7 % 44.3-144

Surrogate: 1-Chlorooctadecane 84.6 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 01/18/2021  
 Reported: 01/21/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/18/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: B 1 (H210116-15)**

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	01/20/2021	ND	2.11	106	2.00	0.143	
Toluene*	<0.050	0.050	01/20/2021	ND	2.09	104	2.00	0.206	
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.04	102	2.00	0.666	
Total Xylenes*	<0.150	0.150	01/20/2021	ND	5.98	99.7	6.00	0.764	
Total BTEX	<0.300	0.300	01/20/2021	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 98.4 % 73.3-129

Chloride, SM4500Cl-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	01/20/2021	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	01/20/2021	ND	203	102	200	0.487	
DRO >C10-C28*	<10.0	10.0	01/20/2021	ND	165	82.5	200	4.52	
EXT DRO >C28-C36	<10.0	10.0	01/20/2021	ND					

Surrogate: 1-Chlorooctane 72.8 % 44.3-144

Surrogate: 1-Chlorooctadecane 71.7 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 01/18/2021  
 Reported: 01/21/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/18/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: B 2 (H210116-16)**

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	01/20/2021	ND	2.11	106	2.00	0.143	
Toluene*	<0.050	0.050	01/20/2021	ND	2.09	104	2.00	0.206	
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.04	102	2.00	0.666	
Total Xylenes*	<0.150	0.150	01/20/2021	ND	5.98	99.7	6.00	0.764	
Total BTEX	<0.300	0.300	01/20/2021	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 99.8 % 73.3-129

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	01/20/2021	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	01/20/2021	ND	203	102	200	0.487	
DRO >C10-C28*	<10.0	10.0	01/20/2021	ND	165	82.5	200	4.52	
EXT DRO >C28-C36	<10.0	10.0	01/20/2021	ND					

Surrogate: 1-Chlorooctane 77.9 % 44.3-144

Surrogate: 1-Chlorooctadecane 78.5 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 01/18/2021  
 Reported: 01/21/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/18/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: B 3 (H210116-17)**

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	01/20/2021	ND	2.11	106	2.00	0.143	
Toluene*	<0.050	0.050	01/20/2021	ND	2.09	104	2.00	0.206	
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.04	102	2.00	0.666	
Total Xylenes*	<0.150	0.150	01/20/2021	ND	5.98	99.7	6.00	0.764	
Total BTEX	<0.300	0.300	01/20/2021	ND					

Surrogate: 4-Bromofluorobenzene (PII) 99.8 % 73.3-129

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	01/20/2021	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	01/20/2021	ND	203	102	200	0.487	
DRO >C10-C28*	<10.0	10.0	01/20/2021	ND	165	82.5	200	4.52	
EXT DRO >C28-C36	<10.0	10.0	01/20/2021	ND					

Surrogate: 1-Chlorooctane 76.1 % 44.3-144

Surrogate: 1-Chlorooctadecane 77.1 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	01/18/2021	Sampling Date:	01/18/2021
Reported:	01/21/2021	Sampling Type:	Soil
Project Name:	GERONIMO #28	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NONE GIVEN		

**Sample ID: B 4 (H210116-18)**

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	01/20/2021	ND	2.11	106	2.00	0.143	
Toluene*	<0.050	0.050	01/20/2021	ND	2.09	104	2.00	0.206	
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.04	102	2.00	0.666	
Total Xylenes*	<0.150	0.150	01/20/2021	ND	5.98	99.7	6.00	0.764	
Total BTX	<0.300	0.300	01/20/2021	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 99.6 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	320	16.0	01/20/2021	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	01/20/2021	ND	203	102	200	0.487	
DRO >C10-C28*	<10.0	10.0	01/20/2021	ND	165	82.5	200	4.52	
EXT DRO >C28-C36	<10.0	10.0	01/20/2021	ND					

Surrogate: 1-Chlorooctane 82.1 % 44.3-144

Surrogate: 1-Chlorooctadecane 81.0 % 42.2-156

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\*=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: 01/18/2021  
 Reported: 01/21/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/18/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: B 5 (H210116-19)**

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	01/20/2021	ND	2.11	106	2.00	0.143		
Toluene*	<0.050	0.050	01/20/2021	ND	2.09	104	2.00	0.206		
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.04	102	2.00	0.666		
Total Xylenes*	<0.150	0.150	01/20/2021	ND	5.98	99.7	6.00	0.764		
Total BTEX	<0.300	0.300	01/20/2021	ND						

Surrogate: 4-Bromofluorobenzene (PIE) 99.7 % 73.3-129

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	01/20/2021	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	01/20/2021	ND	203	102	200	0.487	
DRO >C10-C28*	<10.0	10.0	01/20/2021	ND	165	82.5	200	4.52	
EXT DRO >C28-C36	<10.0	10.0	01/20/2021	ND					

Surrogate: 1-Chlorooctane 76.4 % 44.3-144

Surrogate: 1-Chlorooctadecane 77.9 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 01/18/2021  
 Reported: 01/21/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/18/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: B 6 (H210116-20)****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	01/20/2021	ND	2.11	106	2.00	0.143	
Toluene*	<0.050	0.050	01/20/2021	ND	2.09	104	2.00	0.206	
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.04	102	2.00	0.666	
Total Xylenes*	<0.150	0.150	01/20/2021	ND	5.98	99.7	6.00	0.764	
Total BTEX	<0.300	0.300	01/20/2021	ND					

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

**Chloride, SM4500Cl-B**

mg/kg

Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	01/20/2021	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	01/20/2021	ND	221	110	200	9.33	
DRO >C10-C28*	<10.0	10.0	01/20/2021	ND	225	113	200	10.2	
EXT DRO >C28-C36	<10.0	10.0	01/20/2021	ND					

Surrogate: 1-Chlorooctane 91.8 % 44.3-144

Surrogate: 1-Chlorooctadecane 88.9 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 01/18/2021  
 Reported: 01/21/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/18/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: B 7 (H210116-21)**

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	01/20/2021	ND	2.11	106	2.00	0.143	
Toluene*	<0.050	0.050	01/20/2021	ND	2.09	104	2.00	0.206	
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.04	102	2.00	0.666	
Total Xylenes*	<0.150	0.150	01/20/2021	ND	5.98	99.7	6.00	0.764	
Total BTEX	<0.300	0.300	01/20/2021	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 100 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	672	16.0	01/20/2021	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	01/20/2021	ND	221	110	200	9.33	
DRO >C10-C28*	<10.0	10.0	01/20/2021	ND	225	113	200	10.2	
EXT DRO >C28-C36	<10.0	10.0	01/20/2021	ND					

Surrogate: 1-Chlorooctane 97.1 % 44.3-144

Surrogate: 1-Chlorooctadecane 93.9 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 01/18/2021  
 Reported: 01/21/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/18/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: B 8 (H210116-22)**

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	01/20/2021	ND	2.18	109	2.00	3.51	
Toluene*	<0.050	0.050	01/20/2021	ND	2.19	110	2.00	4.69	
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.18	109	2.00	6.30	
Total Xylenes*	<0.150	0.150	01/20/2021	ND	6.36	106	6.00	6.43	
Total BTEx	<0.300	0.300	01/20/2021	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1640	16.0	01/20/2021	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	01/20/2021	ND	221	110	200	9.33	
DRO >C10-C28*	<10.0	10.0	01/20/2021	ND	225	113	200	10.2	
EXT DRO >C28-C36	<10.0	10.0	01/20/2021	ND					

Surrogate: 1-Chlorooctane 102 % 44.3-144

Surrogate: 1-Chlorooctadecane 98.9 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 01/18/2021  
 Reported: 01/21/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/18/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: B 9 (H210116-23)**

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	01/20/2021	ND	2.18	109	2.00	3.51	
Toluene*	<0.050	0.050	01/20/2021	ND	2.19	110	2.00	4.69	
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.18	109	2.00	6.30	
Total Xylenes*	<0.150	0.150	01/20/2021	ND	6.36	106	6.00	6.43	
Total BTX	<0.300	0.300	01/20/2021	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 101 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	896	16.0	01/20/2021	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	01/20/2021	ND	221	110	200	9.33	
DRO >C10-C28*	<10.0	10.0	01/20/2021	ND	225	113	200	10.2	
EXT DRO >C28-C36	<10.0	10.0	01/20/2021	ND					

Surrogate: 1-Chlorooctane 98.0 % 44.3-144

Surrogate: 1-Chlorooctadecane 97.0 % 42.2-156

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**Analytical Results For:**

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

Received:	01/18/2021	Sampling Date:	01/18/2021
Reported:	01/21/2021	Sampling Type:	Soil
Project Name:	GERONIMO #28	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NONE GIVEN		

**Sample ID: B 10 (H210116-24)**

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	01/20/2021	ND	2.18	109	2.00	3.51		
Toluene*	<0.050	0.050	01/20/2021	ND	2.19	110	2.00	4.69		
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.18	109	2.00	6.30		
Total Xylenes*	<0.150	0.150	01/20/2021	ND	6.36	106	6.00	6.43		
Total BTX	<0.300	0.300	01/20/2021	ND						

Surrogate: 4-Bromofluorobenzene (PIL) 99.5 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	960	16.0	01/20/2021	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	01/20/2021	ND	221	110	200	9.33	
DRO >C10-C28*	<10.0	10.0	01/20/2021	ND	225	113	200	10.2	
EXT DRO >C28-C36	<10.0	10.0	01/20/2021	ND					

Surrogate: 1-Chlorooctane 98.3 % 44.3-144

Surrogate: 1-Chlorooctadecane 94.0 % 42.2-156

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**Analytical Results For:**

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

Received: 01/18/2021  
 Reported: 01/21/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/18/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: B 11 (H210116-25)**

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	01/20/2021	ND	2.18	109	2.00	3.51		
Toluene*	<0.050	0.050	01/20/2021	ND	2.19	110	2.00	4.69		
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.18	109	2.00	6.30		
Total Xylenes*	<0.150	0.150	01/20/2021	ND	6.36	106	6.00	6.43		
Total BTX	<0.300	0.300	01/20/2021	ND						

Surrogate: 4-Bromofluorobenzene (PIL) 99.9 % 73.3-129

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1380	16.0	01/20/2021	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	01/20/2021	ND	221	110	200	9.33	
DRO >C10-C28*	<10.0	10.0	01/20/2021	ND	225	113	200	10.2	
EXT DRO >C28-C36	<10.0	10.0	01/20/2021	ND					

Surrogate: 1-Chlorooctane 90.6 % 44.3-144

Surrogate: 1-Chlorooctadecane 87.7 % 42.2-156

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### Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
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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 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

<b>Company Name:</b> Apache <b>Project Manager:</b> Bruce Baker <b>Address:</b> <b>City:</b> Hobbs <b>State:</b> NM <b>Zip:</b> 88240 <b>Phone #:</b> <b>Fax #:</b> <b>Project #:</b> <b>Project Name:</b> <b>Project Location:</b> Geopline 28 <b>Sample Name:</b> Joe Keene		<b>P.O. #:</b> <b>Company:</b> <b>Attn:</b> <b>Address:</b> <b>City:</b> <b>State:</b> <b>Zip:</b> <b>Phone #:</b> <b>Fax #:</b>	
<b>FOR LAB USE ONLY</b> <b>Lab I.D.</b> H21D116 <b>Sample I.D.</b> 11 12 13 14 15 16 17 18 19 20 33 33 33 33 33 33 33 33 33 12 13 14 15 16 17 18 19 20 33 33 33 33 33 33 33 33 33		<b>MATRIX</b> (G)RAB OR (C)OMP # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER <b>PRESERV</b> ACID/BASE (C) COOL OTHER <b>SAMPLING</b> DATE TIME 11/18 12:11 12:16 12:16 12:20 12:20 2:00 2:00 3:10 3:10 3:12 3:12 3:16 3:16 3:18 3:18	
<b>Relinquished By:</b> Joe Keene <b>Date:</b> 11/18/21 <b>Time:</b> 4:36 <b>Received By:</b> Scott Henderson <b>Date:</b> 11/18/21 <b>Time:</b> 4:36		<b>Verbal Result:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <b>Add'l Phone #:</b> <b>All Results are emailed. Please provide Email address:</b>	
<b>Delivered By:</b> (Circle One) <b>Observed Temp. °C:</b> 2.4 <b>Corrected Temp. °C:</b> <b>Sampler - UPS - Bus - Other:</b>		<b>Sample Condition</b> Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> <b>Checked By:</b> (Initials) JHK <b>Turnaround Time:</b> Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/> <b>Thermometer ID:</b> #97113 <b>Correction Factor:</b> +0.4°C <b>Bacteria (only) Sample Condition</b> Cool <input type="checkbox"/> Intact <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> <b>Observed Temp. °C:</b> <b>Corrected Temp. °C:</b>	
<b>REMARKS:</b>			

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



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

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

<b>Company Name:</b> <i>Apurva Brown Baker</i> <b>Project Manager:</b> <i>Apurva Brown Baker</i> <b>Address:</b> <b>City:</b> <i>Hobbs</i> <b>State:</b> <i>NM</i> <b>Zip:</b> <i>88240</i> <b>Phone #:</b> <b>Fax #:</b> <b>Project #:</b> <b>Project Owner:</b> <b>Project Name:</b> <b>Project Location:</b> <i>Peruino 28</i> <b>Sampler Name:</b> <i>Joe Cassella Sr.</i>		<b>BILL TO</b> <b>P.O. #:</b> <b>Company:</b> <b>Attn:</b> <b>Address:</b> <b>City:</b> <b>State:</b> <b>Zip:</b> <b>Phone #:</b> <b>Fax #:</b>		<b>ANALYSIS REQUEST</b>			
<b>FOR LAB USE ONLY</b> <b>Lab I.D.</b> <i>H21011b</i> <b>Sample I.D.</b> <i>21 22 23 24 25 B7 B8 B9 B10 B11</i>		<b>MATRIX</b> (G) RAB OR (C) OMP # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER:		<b>PRESERV.</b> ACID/BASE (ICE) COOL OTHER:		<b>SAMPLING</b> DATE <i>1/18</i> TIME <i>3:22</i> <i>1/18 3:24 3:28 3:30</i>	
<b>Relinquished By:</b> <i>Joe Cassella</i> <b>Refurnished By:</b> <i>Joe Cassella</i> <b>Date:</b> <i>1/18/21</i> <b>Time:</b> <b>Date:</b> <b>Received By:</b> <i>Joel Henderson</i> <b>Time:</b>		<b>Observed Temp. °C</b> <i>2.4</i> <b>Corrected Temp. °C</b> <b>Sample Condition</b> <input checked="" type="checkbox"/> Intact <input type="checkbox"/> Yes <input type="checkbox"/> No <b>Checked By:</b> <i>[Signature]</i> <b>Turnaround Time:</b> <i>11:30</i> <b>Standard:</b> <input checked="" type="checkbox"/> <i>RUSH</i> <b>Bacteria (only) Sample Condition</b> <input type="checkbox"/> Cool <input type="checkbox"/> Intact <input type="checkbox"/> Yes <input type="checkbox"/> No <b>Observed Temp. °C</b> <b>Corrected Temp. °C</b>		<b>REMARKS:</b> <b>Verbal Result:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <b>Add'l Phone #:</b> <b>All Results are emailed. Please provide Email address:</b>		<b>Thermometer ID:</b> <i>113</i> <b>Correction Factor:</b> <i>0.046</i> <b>Observed Temp. °C</b> <b>Corrected Temp. °C</b>	

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January 21, 2021

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: GERONIMO #28

Enclosed are the results of analyses for samples received by the laboratory on 01/19/21 16:42.

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

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

Method EPA 552.2	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

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: 01/19/2021  
 Reported: 01/21/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/19/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 13 (H210127-01)****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	01/21/2021	ND	2.14	107	2.00	0.693	
Toluene*	<0.050	0.050	01/21/2021	ND	2.11	105	2.00	0.742	
Ethylbenzene*	<0.050	0.050	01/21/2021	ND	2.07	103	2.00	0.759	
Total Xylenes*	<0.150	0.150	01/21/2021	ND	6.03	101	6.00	0.903	
Total BTEX	<0.300	0.300	01/21/2021	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 100 % 73.3-129

**Chloride, SM4500Cl-B**

mg/kg

Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	320	16.0	01/21/2021	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	01/20/2021	ND	228	114	200	2.21	
DRO >C10-C28*	<10.0	10.0	01/20/2021	ND	243	122	200	0.519	
EXT DRO >C28-C36	<10.0	10.0	01/20/2021	ND					

Surrogate: 1-Chlorooctane 98.0 % 44.3-144

Surrogate: 1-Chlorooctadecane 97.0 % 42.2-156

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\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 01/19/2021  
 Reported: 01/21/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/19/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 14 (H210127-02)**

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	01/21/2021	ND	2.14	107	2.00	0.693	
Toluene*	<0.050	0.050	01/21/2021	ND	2.11	105	2.00	0.742	
Ethylbenzene*	<0.050	0.050	01/21/2021	ND	2.07	103	2.00	0.759	
Total Xylenes*	<0.150	0.150	01/21/2021	ND	6.03	101	6.00	0.903	
Total BTEX	<0.300	0.300	01/21/2021	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	320	16.0	01/21/2021	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	01/20/2021	ND	228	114	200	2.21	
DRO >C10-C28*	<10.0	10.0	01/20/2021	ND	243	122	200	0.519	
EXT DRO >C28-C36	<10.0	10.0	01/20/2021	ND					

Surrogate: 1-Chlorooctane 94.5 % 44.3-144

Surrogate: 1-Chlorooctadecane 92.7 % 42.2-156

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 01/19/2021  
 Reported: 01/21/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/19/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 15 (H210127-03)**

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	01/20/2021	ND	2.09	105	2.00	2.24	
Toluene*	<0.050	0.050	01/20/2021	ND	2.11	106	2.00	3.03	
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.08	104	2.00	3.49	
Total Xylenes*	<0.150	0.150	01/20/2021	ND	6.38	106	6.00	3.09	
Total BTEX	<0.300	0.300	01/20/2021	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 103 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3560	16.0	01/21/2021	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	01/20/2021	ND	228	114	200	2.21	
DRO >C10-C28*	<10.0	10.0	01/20/2021	ND	243	122	200	0.519	
EXT DRO >C28-C36	<10.0	10.0	01/20/2021	ND					

Surrogate: 1-Chlorooctane 94.2 % 44.3-144

Surrogate: 1-Chlorooctadecane 90.3 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 01/19/2021  
 Reported: 01/21/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/19/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 16 (H210127-04)**

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	01/20/2021	ND	2.09	105	2.00	2.24		
Toluene*	<0.050	0.050	01/20/2021	ND	2.11	106	2.00	3.03		
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.08	104	2.00	3.49		
Total Xylenes*	<0.150	0.150	01/20/2021	ND	6.38	106	6.00	3.09		
Total BTX	<0.300	0.300	01/20/2021	ND						

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

Chloride, SM4500Cl-B			mg/kg							
			Analyzed By: AC							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	944	16.0	01/21/2021	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	01/20/2021	ND	228	114	200	2.21		
DRO >C10-C28*	<10.0	10.0	01/20/2021	ND	243	122	200	0.519		
EXT DRO >C28-C36	<10.0	10.0	01/20/2021	ND						

Surrogate: 1-Chlorooctane 95.3 % 44.3-144

Surrogate: 1-Chlorooctadecane 93.5 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 01/19/2021  
 Reported: 01/21/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/19/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 17 (H210127-05)**

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	01/20/2021	ND	2.09	105	2.00	2.24	
Toluene*	<0.050	0.050	01/20/2021	ND	2.11	106	2.00	3.03	
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.08	104	2.00	3.49	
Total Xylenes*	<0.150	0.150	01/20/2021	ND	6.38	106	6.00	3.09	
Total BTEX	<0.300	0.300	01/20/2021	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 103 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	976	16.0	01/21/2021	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	01/20/2021	ND	228	114	200	2.21	
DRO >C10-C28*	<10.0	10.0	01/20/2021	ND	243	122	200	0.519	
EXT DRO >C28-C36	<10.0	10.0	01/20/2021	ND					

Surrogate: 1-Chlorooctane 92.0 % 44.3-144

Surrogate: 1-Chlorooctadecane 86.7 % 42.2-156

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 01/19/2021  
 Reported: 01/21/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/19/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 18 (H210127-06)**

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	01/20/2021	ND	2.09	105	2.00	2.24	
Toluene*	<0.050	0.050	01/20/2021	ND	2.11	106	2.00	3.03	
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.08	104	2.00	3.49	
Total Xylenes*	<0.150	0.150	01/20/2021	ND	6.38	106	6.00	3.09	
Total BTEX	<0.300	0.300	01/20/2021	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 105 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2960	16.0	01/21/2021	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	01/20/2021	ND	228	114	200	2.21	
DRO >C10-C28*	<10.0	10.0	01/20/2021	ND	243	122	200	0.519	
EXT DRO >C28-C36	<10.0	10.0	01/20/2021	ND					

Surrogate: 1-Chlorooctane 114 % 44.3-144

Surrogate: 1-Chlorooctadecane 107 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 01/19/2021  
 Reported: 01/21/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/19/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 19 (H210127-07)**

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	01/20/2021	ND	2.09	105	2.00	2.24	
Toluene*	<0.050	0.050	01/20/2021	ND	2.11	106	2.00	3.03	
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.08	104	2.00	3.49	
Total Xylenes*	<0.150	0.150	01/20/2021	ND	6.38	106	6.00	3.09	
Total BTEx	<0.300	0.300	01/20/2021	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 104 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2360	16.0	01/21/2021	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	01/20/2021	ND	228	114	200	2.21	
DRO >C10-C28*	<10.0	10.0	01/20/2021	ND	243	122	200	0.519	
EXT DRO >C28-C36	<10.0	10.0	01/20/2021	ND					

Surrogate: 1-Chlorooctane 86.1 % 44.3-144

Surrogate: 1-Chlorooctadecane 81.4 % 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:	01/19/2021	Sampling Date:	01/19/2021
Reported:	01/21/2021	Sampling Type:	Soil
Project Name:	GERONIMO #28	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

**Sample ID: B 20 (H210127-08)**

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	01/20/2021	ND	2.09	105	2.00	2.24	
Toluene*	<0.050	0.050	01/20/2021	ND	2.11	106	2.00	3.03	
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.08	104	2.00	3.49	
Total Xylenes*	<0.150	0.150	01/20/2021	ND	6.38	106	6.00	3.09	
Total BTEx	<0.300	0.300	01/20/2021	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 105 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5280	16.0	01/21/2021	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	01/20/2021	ND	228	114	200	2.21	
DRO >C10-C28*	<10.0	10.0	01/20/2021	ND	243	122	200	0.519	
EXT DRO >C28-C36	<10.0	10.0	01/20/2021	ND					

Surrogate: 1-Chlorooctane 92.6 % 44.3-144

Surrogate: 1-Chlorooctadecane 88.9 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 01/19/2021  
 Reported: 01/21/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/19/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 21 (H210127-09)**

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	01/20/2021	ND	2.09	105	2.00	2.24	
Toluene*	<0.050	0.050	01/20/2021	ND	2.11	106	2.00	3.03	
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.08	104	2.00	3.49	
Total Xylenes*	<0.150	0.150	01/20/2021	ND	6.38	106	6.00	3.09	
Total BTEX	<0.300	0.300	01/20/2021	ND					

Surrogate: 4-Bromofluorobenzene (PII) 104 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2000	16.0	01/21/2021	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	01/20/2021	ND	228	114	200	2.21	
DRO >C10-C28*	<10.0	10.0	01/20/2021	ND	243	122	200	0.519	
EXT DRO >C28-C36	<10.0	10.0	01/20/2021	ND					

Surrogate: 1-Chlorooctane 85.9 % 44.3-144

Surrogate: 1-Chlorooctadecane 86.5 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 01/19/2021  
 Reported: 01/21/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/19/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 22 (H210127-10)**

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	01/20/2021	ND	2.09	105	2.00	2.24	
Toluene*	<0.050	0.050	01/20/2021	ND	2.11	106	2.00	3.03	
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.08	104	2.00	3.49	
Total Xylenes*	<0.150	0.150	01/20/2021	ND	6.38	106	6.00	3.09	
Total BTEX	<0.300	0.300	01/20/2021	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 105 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1250	16.0	01/21/2021	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	01/20/2021	ND	228	114	200	2.21	
DRO >C10-C28*	<10.0	10.0	01/20/2021	ND	243	122	200	0.519	
EXT DRO >C28-C36	<10.0	10.0	01/20/2021	ND					

Surrogate: 1-Chlorooctane 88.1 % 44.3-144

Surrogate: 1-Chlorooctadecane 83.3 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 01/19/2021  
 Reported: 01/21/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/19/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 23 (H210127-11)**

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	01/20/2021	ND	2.09	105	2.00	2.24	
Toluene*	<0.050	0.050	01/20/2021	ND	2.11	106	2.00	3.03	
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.08	104	2.00	3.49	
Total Xylenes*	<0.150	0.150	01/20/2021	ND	6.38	106	6.00	3.09	
Total BTX	<0.300	0.300	01/20/2021	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 104 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4960	16.0	01/21/2021	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	01/21/2021	ND	233	117	200	1.52	
DRO >C10-C28*	<10.0	10.0	01/21/2021	ND	246	123	200	3.07	
EXT DRO >C28-C36	<10.0	10.0	01/21/2021	ND					

Surrogate: 1-Chlorooctane 100 % 44.3-144

Surrogate: 1-Chlorooctadecane 93.7 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 01/19/2021  
 Reported: 01/21/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/19/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 24 (H210127-12)**

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	01/20/2021	ND	2.09	105	2.00	2.24	
Toluene*	<0.050	0.050	01/20/2021	ND	2.11	106	2.00	3.03	
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.08	104	2.00	3.49	
Total Xylenes*	<0.150	0.150	01/20/2021	ND	6.38	106	6.00	3.09	
Total BTEX	<0.300	0.300	01/20/2021	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 103 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	4960	16.0	01/21/2021	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	01/21/2021	ND	233	117	200	1.52	
DRO >C10-C28*	<10.0	10.0	01/21/2021	ND	246	123	200	3.07	
EXT DRO >C28-C36	11.0	10.0	01/21/2021	ND					

Surrogate: 1-Chlorooctane 97.8 % 44.3-144

Surrogate: 1-Chlorooctadecane 90.7 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 01/19/2021  
 Reported: 01/21/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/19/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 25 (H210127-13)**

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	01/20/2021	ND	2.09	105	2.00	2.24		
Toluene*	<0.050	0.050	01/20/2021	ND	2.11	106	2.00	3.03		
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.08	104	2.00	3.49		
Total Xylenes*	<0.150	0.150	01/20/2021	ND	6.38	106	6.00	3.09		
Total BTEX	<0.300	0.300	01/20/2021	ND						

Surrogate: 4-Bromofluorobenzene (PIL) 103 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	3920	16.0	01/21/2021	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	01/21/2021	ND	233	117	200	1.52	
DRO >C10-C28*	<10.0	10.0	01/21/2021	ND	246	123	200	3.07	
EXT DRO >C28-C36	<10.0	10.0	01/21/2021	ND					

Surrogate: 1-Chlorooctane 91.1 % 44.3-144

Surrogate: 1-Chlorooctadecane 84.5 % 42.2-156

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**Analytical Results For:**

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

Received: 01/19/2021  
 Reported: 01/21/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/19/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 26 (H210127-14)**

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	01/20/2021	ND	2.09	105	2.00	2.24	
Toluene*	<0.050	0.050	01/20/2021	ND	2.11	106	2.00	3.03	
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.08	104	2.00	3.49	
Total Xylenes*	<0.150	0.150	01/20/2021	ND	6.38	106	6.00	3.09	
Total BTX	<0.300	0.300	01/20/2021	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 103 % 73.3-129

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	01/21/2021	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	01/21/2021	ND	233	117	200	1.52	
DRO >C10-C28*	<10.0	10.0	01/21/2021	ND	246	123	200	3.07	
EXT DRO >C28-C36	<10.0	10.0	01/21/2021	ND					

Surrogate: 1-Chlorooctane 98.8 % 44.3-144

Surrogate: 1-Chlorooctadecane 93.7 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 01/19/2021  
 Reported: 01/21/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/19/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 27 (H210127-15)**

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	01/20/2021	ND	2.09	105	2.00	2.24	
Toluene*	<0.050	0.050	01/20/2021	ND	2.11	106	2.00	3.03	
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.08	104	2.00	3.49	
Total Xylenes*	<0.150	0.150	01/20/2021	ND	6.38	106	6.00	3.09	
Total BTX	<0.300	0.300	01/20/2021	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 104 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	3400	16.0	01/21/2021	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	01/21/2021	ND	233	117	200	1.52	
DRO >C10-C28*	<10.0	10.0	01/21/2021	ND	246	123	200	3.07	
EXT DRO >C28-C36	<10.0	10.0	01/21/2021	ND					

Surrogate: 1-Chlorooctane 92.8 % 44.3-144

Surrogate: 1-Chlorooctadecane 87.8 % 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: 01/19/2021  
 Reported: 01/21/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/19/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 28 (H210127-16)****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	01/20/2021	ND	2.09	105	2.00	2.24	
Toluene*	<0.050	0.050	01/20/2021	ND	2.11	106	2.00	3.03	
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.08	104	2.00	3.49	
Total Xylenes*	<0.150	0.150	01/20/2021	ND	6.38	106	6.00	3.09	
Total BTEX	<0.300	0.300	01/20/2021	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 104 % 73.3-129

**Chloride, SM4500Cl-B**

mg/kg

Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6560	16.0	01/21/2021	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	01/21/2021	ND	233	117	200	1.52	
DRO >C10-C28*	<10.0	10.0	01/21/2021	ND	246	123	200	3.07	
EXT DRO >C28-C36	<10.0	10.0	01/21/2021	ND					

Surrogate: 1-Chlorooctane 95.7 % 44.3-144

Surrogate: 1-Chlorooctadecane 90.9 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 01/19/2021  
 Reported: 01/21/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/19/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 29 (H210127-17)**

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	01/20/2021	ND	2.09	105	2.00	2.24	
Toluene*	<0.050	0.050	01/20/2021	ND	2.11	106	2.00	3.03	
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.08	104	2.00	3.49	
Total Xylenes*	<0.150	0.150	01/20/2021	ND	6.38	106	6.00	3.09	
Total BTEX	<0.300	0.300	01/20/2021	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 103 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1420	16.0	01/21/2021	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	01/21/2021	ND	233	117	200	1.52	
DRO >C10-C28*	<10.0	10.0	01/21/2021	ND	246	123	200	3.07	
EXT DRO >C28-C36	<10.0	10.0	01/21/2021	ND					

Surrogate: 1-Chlorooctane 92.0 % 44.3-144

Surrogate: 1-Chlorooctadecane 87.1 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 01/19/2021  
 Reported: 01/21/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/19/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 30 (H210127-18)**

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	01/20/2021	ND	2.09	105	2.00	2.24		
Toluene*	<0.050	0.050	01/20/2021	ND	2.11	106	2.00	3.03		
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.08	104	2.00	3.49		
Total Xylenes*	<0.150	0.150	01/20/2021	ND	6.38	106	6.00	3.09		
Total BTEx	<0.300	0.300	01/20/2021	ND						

Surrogate: 4-Bromofluorobenzene (PIL) 105 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1880	16.0	01/21/2021	ND	400	100	400	3.92	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	01/21/2021	ND	233	117	200	1.52	
DRO >C10-C28*	<10.0	10.0	01/21/2021	ND	246	123	200	3.07	
EXT DRO >C28-C36	<10.0	10.0	01/21/2021	ND					

Surrogate: 1-Chlorooctane 92.1 % 44.3-144

Surrogate: 1-Chlorooctadecane 87.1 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 01/19/2021  
 Reported: 01/21/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/19/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 31 (H210127-19)**

BTEx S021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/20/2021	ND	2.09	105	2.00	2.24	
Toluene*	<0.050	0.050	01/20/2021	ND	2.11	106	2.00	3.03	
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.08	104	2.00	3.49	
Total Xylenes*	<0.150	0.150	01/20/2021	ND	6.38	106	6.00	3.09	
Total BTEx	<0.300	0.300	01/20/2021	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 103 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3480	16.0	01/21/2021	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	01/21/2021	ND	233	117	200	1.52	
DRO >C10-C28*	<10.0	10.0	01/21/2021	ND	246	123	200	3.07	
EXT DRO >C28-C36	<10.0	10.0	01/21/2021	ND					

Surrogate: 1-Chlorooctane 100 % 44.3-144

Surrogate: 1-Chlorooctadecane 94.4 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 01/19/2021  
 Reported: 01/21/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/19/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 32 (H210127-20)**

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	01/20/2021	ND	2.09	105	2.00	2.24		
Toluene*	<0.050	0.050	01/20/2021	ND	2.11	106	2.00	3.03		
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.08	104	2.00	3.49		
Total Xylenes*	<0.150	0.150	01/20/2021	ND	6.38	106	6.00	3.09		
Total BTX	<0.300	0.300	01/20/2021	ND						

Surrogate: 4-Bromofluorobenzene (PIE) 104 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	6720	16.0	01/21/2021	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	01/21/2021	ND	233	117	200	1.52	
DRO >C10-C28*	<10.0	10.0	01/21/2021	ND	246	123	200	3.07	
EXT DRO >C28-C36	<10.0	10.0	01/21/2021	ND					

Surrogate: 1-Chlorooctane 96.3 % 44.3-144

Surrogate: 1-Chlorooctadecane 91.9 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 01/19/2021  
 Reported: 01/21/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/19/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 33 (H210127-21)**

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	01/20/2021	ND	2.09	105	2.00	2.24		
Toluene*	<0.050	0.050	01/20/2021	ND	2.11	106	2.00	3.03		
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.08	104	2.00	3.49		
Total Xylenes*	<0.150	0.150	01/20/2021	ND	6.38	106	6.00	3.09		
Total BTEX	<0.300	0.300	01/20/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6880	16.0	01/21/2021	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	01/21/2021	ND	233	117	200	1.52	
DRO >C10-C28*	<10.0	10.0	01/21/2021	ND	246	123	200	3.07	
EXT DRO >C28-C36	<10.0	10.0	01/21/2021	ND					

Surrogate: 1-Chlorooctane 99.0 % 44.3-144

Surrogate: 1-Chlorooctadecane 96.0 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 01/19/2021  
 Reported: 01/21/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/19/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 34 (H210127-22)**

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	01/20/2021	ND	2.09	105	2.00	2.24		
Toluene*	<0.050	0.050	01/20/2021	ND	2.11	106	2.00	3.03		
Ethylbenzene*	<0.050	0.050	01/20/2021	ND	2.08	104	2.00	3.49		
Total Xylenes*	<0.150	0.150	01/20/2021	ND	6.38	106	6.00	3.09		
Total BTEX	<0.300	0.300	01/20/2021	ND						

Surrogate: 4-Bromofluorobenzene (PIC) 104 % 73.3-129

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	10400	16.0	01/21/2021	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	01/21/2021	ND	233	117	200	1.52	
DRO >C10-C28*	<10.0	10.0	01/21/2021	ND	246	123	200	3.07	
EXT DRO >C28-C36	<10.0	10.0	01/21/2021	ND					

Surrogate: 1-Chlorooctane 98.5 % 44.3-144

Surrogate: 1-Chlorooctadecane 96.9 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 01/19/2021  
 Reported: 01/21/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/19/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 35 (H210127-23)**

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	01/21/2021	ND	2.23	111	2.00	3.15		
Toluene*	<0.050	0.050	01/21/2021	ND	2.20	110	2.00	2.54		
Ethylbenzene*	<0.050	0.050	01/21/2021	ND	2.15	107	2.00	2.40		
Total Xylenes*	<0.150	0.150	01/21/2021	ND	6.26	104	6.00	2.35		
Total BTEX	<0.300	0.300	01/21/2021	ND						

Surrogate: 4-Bromofluorobenzene (PIC) 101 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	6660	16.0	01/21/2021	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	01/21/2021	ND	233	117	200	1.52	
DRO >C10-C28*	<10.0	10.0	01/21/2021	ND	246	123	200	3.07	
EXT DRO >C28-C36	<10.0	10.0	01/21/2021	ND					

Surrogate: 1-Chlorooctane 99.1 % 44.3-144

Surrogate: 1-Chlorooctadecane 96.1 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	01/19/2021	Sampling Date:	01/19/2021
Reported:	01/21/2021	Sampling Type:	Soil
Project Name:	GERONIMO #28	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

**Sample ID: B 36 (H210127-24)**

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	01/21/2021	ND	2.23	111	2.00	3.15	
Toluene*	<0.050	0.050	01/21/2021	ND	2.20	110	2.00	2.54	
Ethylbenzene*	<0.050	0.050	01/21/2021	ND	2.15	107	2.00	2.40	
Total Xylenes*	<0.150	0.150	01/21/2021	ND	6.26	104	6.00	2.35	
Total BTEX	<0.300	0.300	01/21/2021	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 101 % 73.3-129

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5060	16.0	01/21/2021	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	01/21/2021	ND	233	117	200	1.52	
DRO >C10-C28*	<10.0	10.0	01/21/2021	ND	246	123	200	3.07	
EXT DRO >C28-C36	<10.0	10.0	01/21/2021	ND					

Surrogate: 1-Chlorooctane 92.4 % 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: 01/19/2021  
 Reported: 01/21/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/19/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 37 (H210127-25)**

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	01/21/2021	ND	2.23	111	2.00	3.15	
Toluene*	<0.050	0.050	01/21/2021	ND	2.20	110	2.00	2.54	
Ethylbenzene*	<0.050	0.050	01/21/2021	ND	2.15	107	2.00	2.40	
Total Xylenes*	<0.150	0.150	01/21/2021	ND	6.26	104	6.00	2.35	
Total BTX	<0.300	0.300	01/21/2021	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 101 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	256	16.0	01/21/2021	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	01/21/2021	ND	233	117	200	1.52	
DRO >C10-C28*	<10.0	10.0	01/21/2021	ND	246	123	200	3.07	
EXT DRO >C28-C36	<10.0	10.0	01/21/2021	ND					

Surrogate: 1-Chlorooctane 111 % 44.3-144

Surrogate: 1-Chlorooctadecane 109 % 42.2-156

**Cardinal Laboratories**

\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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### Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
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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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

Company Name: Apache  
Project Manager: Bruce Baker

Address:

City: Hobbs

Phone #:

State: NM Zip: 88240

Fax #:

Project #:

Project Owner:

Project Name:

Project Location: Acquino 38

Sample Name: See Attached

FOR LAB USE ONLY

Lab I.D.

Sample I.D.

H210127  
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Relinquished By: [Signature] Date: 6/19/20 Received By: [Signature]  
Time: 4:42 Date: 6/19/20  
Relinquished By: [Signature] Date: 6/19/20 Received By: [Signature]  
Time: 4:42 Date: 6/19/20

Delivered By: (Circle One) Observed Temp. °C 4.1  
Sampler - UPS - Bus - Other: Corrected Temp. °C  
Sample Condition: Intact  
Cool: Yes Intact: Yes  
☒ Yes ☐ No ☐ No  
CHECKED BY: (Initials) 4.0

Turnaround Time: Standard Rush  
Thermometer ID #113 Standard  
Correction Factor: None  
Bacteria (only) Sample Condition: Intact  
☒ Yes ☐ No ☐ No  
Cool: Yes Intact: Yes  
☒ Yes ☐ No ☐ No  
Observed Temp. °C: 4.1  
Corrected Temp. °C: 4.0





CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Apache  
Project Manager: Bruce Baker  
Address: \_\_\_\_\_  
City: Hobbs State: NM Zip: 88240  
Phone #: \_\_\_\_\_ Fax #: \_\_\_\_\_  
Project #: \_\_\_\_\_ Project Owner: \_\_\_\_\_  
Project Name: \_\_\_\_\_  
Project Location: Berginno St  
Sampler Name: Dea Quiscales Jr.

**BILL TO**  
P.O. #: \_\_\_\_\_ Company: \_\_\_\_\_  
Attn: \_\_\_\_\_ Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
Phone #: \_\_\_\_\_ Fax #: \_\_\_\_\_

**ANALYSIS REQUEST**

FOR LAB USE ONLY  
Lab I.D. \_\_\_\_\_ Sample I.D. \_\_\_\_\_  
Matrix: ☐ GROUNDWATER ☐ WASTEWATER ☐ SOIL ☐ OIL ☐ SLUDGE ☐ OTHER: \_\_\_\_\_  
Preserv: ☐ ACID/BASE: \_\_\_\_\_ ☐ COOL ☐ OTHER: \_\_\_\_\_  
Sampling: \_\_\_\_\_  
Date: 1/19 Time: 3:00  
Time: 3:04  
Time: 3:06  
Time: 3:08

Lab I.D.	Sample I.D.	Matrix	Preserv	Sampling	DATE	TIME	ANALYSIS REQUEST
<u>H20127</u>	<u>B33</u>	<u>(G)RAB OR (C)OMP</u>	<u>(C)OMP</u>	<u>1/19</u>	<u>3:00</u>	<u>CI</u>	
<u>22</u>	<u>B34</u>						
<u>23</u>	<u>B35</u>						
<u>24</u>	<u>B36</u>						
<u>25</u>	<u>B37</u>						

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Relinquished By: Dea Quiscales Date: 1/19/21 Received By: Monica  
Time: 1:13  
Date: \_\_\_\_\_  
Time: \_\_\_\_\_  
Received By: \_\_\_\_\_

Verbal Result: ☐ Yes ☐ No Add'l Phone #: \_\_\_\_\_  
All Results are emailed. Please provide Email address: \_\_\_\_\_  
REMARKS: \_\_\_\_\_

Delivered By: (Circle One) Observed Temp. °C 4.1 Sample Condition: ☒ Cool ☐ Intact ☐ Yes ☐ No ☐ Yes ☐ No  
Sampler - UPS - Bus - Other: Corrected Temp. °C \_\_\_\_\_  
Thermometer ID #113 Correction Factor None  
Turnaround Time: ☒ Standard ☐ Rush ☐ Bacteria (only) Sample Condition: ☐ Cool ☐ Intact ☐ Yes ☐ No ☐ Yes ☐ No  
Corrected Temp. °C \_\_\_\_\_

† Cardinal cannot accept verbal changes. Please email changes to [celey.keene@cardinallabsnm.com](mailto:celey.keene@cardinallabsnm.com)



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

January 28, 2021

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: GERONIMO #28

Enclosed are the results of analyses for samples received by the laboratory on 01/21/21 8:45.

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

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

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

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

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

Sincerely,

Caley D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

APACHE CORP - HOBBS  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240

Project: GERONIMO #28  
Project Number: NONE GIVEN  
Project Manager: BRUCE BAKER  
Fax To: (575) 393-2432

Reported:  
28-Jan-21 11:52

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B 38	H210143-01	Soil	20-Jan-21 09:20	21-Jan-21 08:45
B 39	H210143-02	Soil	20-Jan-21 09:22	21-Jan-21 08:45
B 40	H210143-03	Soil	20-Jan-21 09:24	21-Jan-21 08:45
B 41	H210143-04	Soil	20-Jan-21 09:26	21-Jan-21 08:45
B 42	H210143-05	Soil	20-Jan-21 09:28	21-Jan-21 08:45
B 43	H210143-06	Soil	20-Jan-21 09:30	21-Jan-21 08:45
B 44	H210143-07	Soil	20-Jan-21 09:32	21-Jan-21 08:45
B 45	H210143-08	Soil	20-Jan-21 09:34	21-Jan-21 08:45
B 46	H210143-09	Soil	20-Jan-21 11:20	21-Jan-21 08:45
B 47	H210143-10	Soil	20-Jan-21 11:22	21-Jan-21 08:45
B 48	H210143-11	Soil	20-Jan-21 11:24	21-Jan-21 08:45
B 49	H210143-12	Soil	20-Jan-21 11:26	21-Jan-21 08:45
B 50	H210143-13	Soil	20-Jan-21 11:28	21-Jan-21 08:45
B 51	H210143-14	Soil	20-Jan-21 11:30	21-Jan-21 08:45
B 52	H210143-15	Soil	20-Jan-21 11:32	21-Jan-21 08:45
B 53	H210143-16	Soil	20-Jan-21 11:34	21-Jan-21 08:45
B 54	H210143-17	Soil	20-Jan-21 11:36	21-Jan-21 08:45
B 55	H210143-18	Soil	20-Jan-21 11:38	21-Jan-21 08:45
B 56	H210143-19	Soil	20-Jan-21 11:40	21-Jan-21 08:45
B 57	H210143-20	Soil	20-Jan-21 11:42	21-Jan-21 08:45
B 58	H210143-21	Soil	20-Jan-21 11:44	21-Jan-21 08:45
B 59	H210143-22	Soil	20-Jan-21 11:46	21-Jan-21 08:45
B 60	H210143-23	Soil	20-Jan-21 11:48	21-Jan-21 08:45
B 61	H210143-24	Soil	20-Jan-21 11:50	21-Jan-21 08:45
B 62	H210143-25	Soil	20-Jan-21 14:22	21-Jan-21 08:45
B 63	H210143-26	Soil	20-Jan-21 14:24	21-Jan-21 08:45
B 64	H210143-27	Soil	20-Jan-21 14:26	21-Jan-21 08:45

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

APACHE CORP - HOBBS  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240

Project: GERONIMO #28  
Project Number: NONE GIVEN  
Project Manager: BRUCE BAKER  
Fax To: (575) 393-2432

Reported:  
28-Jan-21 11:52

B 83	H210143-28	Soil	20-Jan-21 14:28	21-Jan-21 08:45
B 84	H210143-29	Soil	20-Jan-21 14:30	21-Jan-21 08:45
B 85	H210143-30	Soil	20-Jan-21 14:32	21-Jan-21 08:45
B 86	H210143-31	Soil	20-Jan-21 14:34	21-Jan-21 08:45

01/28/21 - Sampler revised the sample IDs of -28 to -31. This is the revised report and will replace the one sent 01/25/21.

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

APACHE CORP - HOBBS  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240

Project: GERONIMO #28  
Project Number: NONE GIVEN  
Project Manager: BRUCE BAKER  
Fax To: (575) 393-2432

Reported:  
28-Jan-21 11:52

**B 38**  
**H210143-01 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	720		16.0	mg/kg	4	1012102	AC	22-Jan-21	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	1012104	MS	21-Jan-21	8021B	
Toluene*	<0.050		0.050	mg/kg	50	1012104	MS	21-Jan-21	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	1012104	MS	21-Jan-21	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	1012104	MS	21-Jan-21	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	1012104	MS	21-Jan-21	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			97.9 %	73.3-129		1012104	MS	21-Jan-21	8021B	

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	1012105	MS	21-Jan-21	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	1012105	MS	21-Jan-21	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	1012105	MS	21-Jan-21	8015B	
Surrogate: 1-Chlorooctane			83.5 %	44.3-144		1012105	MS	21-Jan-21	8015B	
Surrogate: 1-Chlorooctadecane			89.8 %	42.2-156		1012105	MS	21-Jan-21	8015B	

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  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240

Project: GERONIMO #28  
Project Number: NONE GIVEN  
Project Manager: BRUCE BAKER  
Fax To: (575) 393-2432

Reported:  
28-Jan-21 11:52

**B 39****H210143-02 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Chloride	1170		16.0	mg/kg	4	1012102	AC	22-Jan-21	4500-Cl-B	

**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	1012104	MS	21-Jan-21	8021B	
Toluene*	<0.050		0.050	mg/kg	50	1012104	MS	21-Jan-21	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	1012104	MS	21-Jan-21	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	1012104	MS	21-Jan-21	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	1012104	MS	21-Jan-21	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			98.4 %	73.3-129		1012104	MS	21-Jan-21	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	1012105	MS	21-Jan-21	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	1012105	MS	21-Jan-21	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	1012105	MS	21-Jan-21	8015B	

Surrogate: 1-Chlorooctane			83.7 %	44.3-144		1012105	MS	21-Jan-21	8015B	
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Surrogate: 1-Chlorooctadecane			87.9 %	42.2-156		1012105	MS	21-Jan-21	8015B	
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\*=Accredited Analyte

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Caley D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

APACHE CORP - HOBBS  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240

Project: GERONIMO #28  
Project Number: NONE GIVEN  
Project Manager: BRUCE BAKER  
Fax To: (575) 393-2432

Reported:  
28-Jan-21 11:52

**B 40****H210143-03 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	240		16.0	mg/kg	4	1012102	AC	22-Jan-21	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	1012104	MS	21-Jan-21	8021B	
Toluene*	<0.050		0.050	mg/kg	50	1012104	MS	21-Jan-21	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	1012104	MS	21-Jan-21	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	1012104	MS	21-Jan-21	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	1012104	MS	21-Jan-21	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			101 %	73.3-129		1012104	MS	21-Jan-21	8021B	

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	1012105	MS	21-Jan-21	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	1012105	MS	21-Jan-21	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	1012105	MS	21-Jan-21	8015B	
Surrogate: 1-Chlorooctane			79.4 %	44.3-144		1012105	MS	21-Jan-21	8015B	
Surrogate: 1-Chlorooctadecane			83.1 %	42.2-156		1012105	MS	21-Jan-21	8015B	

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

APACHE CORP - HOBBS  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240

Project: GERONIMO #28  
Project Number: NONE GIVEN  
Project Manager: BRUCE BAKER  
Fax To: (575) 393-2432

Reported:  
28-Jan-21 11:52

**B 41****H210143-04 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	256		16.0	mg/kg	4	1012203	AC	22-Jan-21	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	1012104	MS	21-Jan-21	8021B	
Toluene*	<0.050		0.050	mg/kg	50	1012104	MS	21-Jan-21	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	1012104	MS	21-Jan-21	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	1012104	MS	21-Jan-21	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	1012104	MS	21-Jan-21	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			100 %	73.3-129		1012104	MS	21-Jan-21	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	1012105	MS	21-Jan-21	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	1012105	MS	21-Jan-21	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	1012105	MS	21-Jan-21	8015B	

Surrogate: 1-Chlorooctane			82.8 %	44.3-144		1012105	MS	21-Jan-21	8015B	
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Surrogate: 1-Chlorooctadecane			86.7 %	42.2-156		1012105	MS	21-Jan-21	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

APACHE CORP - HOBBS  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240

Project: GERONIMO #28  
Project Number: NONE GIVEN  
Project Manager: BRUCE BAKER  
Fax To: (575) 393-2432

Reported:  
28-Jan-21 11:52

**B 42****H210143-05 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	1300		16.0	mg/kg	4	1012203	AC	22-Jan-21	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	1012104	MS	21-Jan-21	8021B	
Toluene*	<0.050		0.050	mg/kg	50	1012104	MS	21-Jan-21	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	1012104	MS	21-Jan-21	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	1012104	MS	21-Jan-21	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	1012104	MS	21-Jan-21	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			99.8 %	73.3-129		1012104	MS	21-Jan-21	8021B	

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	1012105	MS	21-Jan-21	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	1012105	MS	21-Jan-21	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	1012105	MS	21-Jan-21	8015B	
Surrogate: 1-Chlorooctane			86.5 %	44.3-144		1012105	MS	21-Jan-21	8015B	
Surrogate: 1-Chlorooctadecane			91.6 %	42.2-156		1012105	MS	21-Jan-21	8015B	

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

APACHE CORP - HOBBS  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240

Project: GERONIMO #28  
Project Number: NONE GIVEN  
Project Manager: BRUCE BAKER  
Fax To: (575) 393-2432

Reported:  
28-Jan-21 11:52

**B 43****H210143-06 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>896</b>		16.0	mg/kg	4	1012203	AC	22-Jan-21	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050	0.050	mg/kg	50	1012104	MS	21-Jan-21	8021B	
Toluene*	<0.050	0.050	mg/kg	50	1012104	MS	21-Jan-21	8021B	
Ethylbenzene*	<0.050	0.050	mg/kg	50	1012104	MS	21-Jan-21	8021B	
Total Xylenes*	<0.150	0.150	mg/kg	50	1012104	MS	21-Jan-21	8021B	
Total BTEX	<0.300	0.300	mg/kg	50	1012104	MS	21-Jan-21	8021B	

Surrogate: 4-Bromofluorobenzene (PID)	99.6 %	73.3-129	1012104	MS	21-Jan-21	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0	10.0	mg/kg	1	1012105	MS	21-Jan-21	8015B	
DRO >C10-C28*	<10.0	10.0	mg/kg	1	1012105	MS	21-Jan-21	8015B	
EXT DRO >C28-C36	<10.0	10.0	mg/kg	1	1012105	MS	21-Jan-21	8015B	

Surrogate: 1-Chlorooctane	81.5 %	44.3-144	1012105	MS	21-Jan-21	8015B	
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Surrogate: 1-Chlorooctadecane	86.5 %	42.2-156	1012105	MS	21-Jan-21	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

APACHE CORP - HOBBS  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240

Project: GERONIMO #28  
Project Number: NONE GIVEN  
Project Manager: BRUCE BAKER  
Fax To: (575) 393-2432

Reported:  
28-Jan-21 11:52

**B 44****H210143-07 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	2280		16.0	mg/kg	4	1012203	AC	22-Jan-21	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050	0.050	mg/kg	50	1012104	MS	21-Jan-21	8021B	
Toluene*	<0.050	0.050	mg/kg	50	1012104	MS	21-Jan-21	8021B	
Ethylbenzene*	<0.050	0.050	mg/kg	50	1012104	MS	21-Jan-21	8021B	
Total Xylenes*	<0.150	0.150	mg/kg	50	1012104	MS	21-Jan-21	8021B	
Total BTEX	<0.300	0.300	mg/kg	50	1012104	MS	21-Jan-21	8021B	
Surrogate: 4-Bromofluorobenzene (PID)		100 %	73.3-129		1012104	MS	21-Jan-21	8021B	

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0	10.0	mg/kg	1	1012105	MS	21-Jan-21	8015B	
DRO >C10-C28*	<10.0	10.0	mg/kg	1	1012105	MS	21-Jan-21	8015B	
EXT DRO >C28-C36	<10.0	10.0	mg/kg	1	1012105	MS	21-Jan-21	8015B	
Surrogate: 1-Chlorooctane		89.8 %	44.3-144		1012105	MS	21-Jan-21	8015B	
Surrogate: 1-Chlorooctadecane		93.2 %	42.2-156		1012105	MS	21-Jan-21	8015B	

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

APACHE CORP - HOBBS  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240

Project: GERONIMO #28  
Project Number: NONE GIVEN  
Project Manager: BRUCE BAKER  
Fax To: (575) 393-2432

Reported:  
28-Jan-21 11:52

**B 45****H210143-08 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	4560		16.0	mg/kg	4	1012203	AC	22-Jan-21	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	1012104	MS	21-Jan-21	8021B	
Toluene*	<0.050		0.050	mg/kg	50	1012104	MS	21-Jan-21	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	1012104	MS	21-Jan-21	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	1012104	MS	21-Jan-21	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	1012104	MS	21-Jan-21	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			101 %	73.3-129		1012104	MS	21-Jan-21	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	1012105	MS	21-Jan-21	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	1012105	MS	21-Jan-21	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	1012105	MS	21-Jan-21	8015B	

Surrogate: 1-Chlorooctane			86.9 %	44.3-144		1012105	MS	21-Jan-21	8015B	
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Surrogate: 1-Chlorooctadecane			91.3 %	42.2-156		1012105	MS	21-Jan-21	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

APACHE CORP - HOBBS  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240

Project: GERONIMO #28  
Project Number: NONE GIVEN  
Project Manager: BRUCE BAKER  
Fax To: (575) 393-2432

Reported:  
28-Jan-21 11:52

**B 46****H210143-09 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	5120		16.0	mg/kg	4	1012203	AC	22-Jan-21	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	1012111	MS	21-Jan-21	8021B	
Toluene*	<0.050		0.050	mg/kg	50	1012111	MS	21-Jan-21	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	1012111	MS	21-Jan-21	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	1012111	MS	21-Jan-21	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	1012111	MS	21-Jan-21	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			100 %	73.3-129		1012111	MS	21-Jan-21	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	

Surrogate: 1-Chlorooctane			88.6 %	44.3-144		1012108	MS	21-Jan-21	8015B	
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Surrogate: 1-Chlorooctadecane			96.1 %	42.2-156		1012108	MS	21-Jan-21	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

APACHE CORP - HOBBS  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240

Project: GERONIMO #28  
Project Number: NONE GIVEN  
Project Manager: BRUCE BAKER  
Fax To: (575) 393-2432

Reported:  
28-Jan-21 11:52

**B 47****H210143-10 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	3680		16.0	mg/kg	4	1012203	AC	22-Jan-21	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	1012111	MS	21-Jan-21	8021B	
Toluene*	<0.050		0.050	mg/kg	50	1012111	MS	21-Jan-21	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	1012111	MS	21-Jan-21	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	1012111	MS	21-Jan-21	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	1012111	MS	21-Jan-21	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			99.4 %	73.3-129		1012111	MS	21-Jan-21	8021B	

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	
Surrogate: 1-Chlorooctane			92.6 %	44.3-144		1012108	MS	21-Jan-21	8015B	
Surrogate: 1-Chlorooctadecane			97.4 %	42.2-156		1012108	MS	21-Jan-21	8015B	

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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  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240

Project: GERONIMO #28  
Project Number: NONE GIVEN  
Project Manager: BRUCE BAKER  
Fax To: (575) 393-2432

Reported:  
28-Jan-21 11:52

**B 48****H210143-11 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	2000		16.0	mg/kg	4	1012203	AC	22-Jan-21	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	1012111	MS	21-Jan-21	8021B	
Toluene*	<0.050		0.050	mg/kg	50	1012111	MS	21-Jan-21	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	1012111	MS	21-Jan-21	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	1012111	MS	21-Jan-21	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	1012111	MS	21-Jan-21	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			101 %	73.3-129		1012111	MS	21-Jan-21	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	

Surrogate: 1-Chlorooctane			81.4 %	44.3-144		1012108	MS	21-Jan-21	8015B	
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Surrogate: 1-Chlorooctadecane			82.9 %	42.2-156		1012108	MS	21-Jan-21	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

APACHE CORP - HOBBS  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240

Project: GERONIMO #28  
Project Number: NONE GIVEN  
Project Manager: BRUCE BAKER  
Fax To: (575) 393-2432

Reported:  
28-Jan-21 11:52

**B 49****H210143-12 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	6260		16.0	mg/kg	4	1012203	AC	22-Jan-21	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	1012111	MS	21-Jan-21	8021B	
Toluene*	<0.050		0.050	mg/kg	50	1012111	MS	21-Jan-21	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	1012111	MS	21-Jan-21	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	1012111	MS	21-Jan-21	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	1012111	MS	21-Jan-21	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			99.2 %	73.3-129		1012111	MS	21-Jan-21	8021B	

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	
Surrogate: 1-Chlorooctane			93.9 %	44.3-144		1012108	MS	21-Jan-21	8015B	
Surrogate: 1-Chlorooctadecane			98.8 %	42.2-156		1012108	MS	21-Jan-21	8015B	

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

APACHE CORP - HOBBS  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240

Project: GERONIMO #28  
Project Number: NONE GIVEN  
Project Manager: BRUCE BAKER  
Fax To: (575) 393-2432

Reported:  
28-Jan-21 11:52

**B 50****H210143-13 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	9860		16.0	mg/kg	4	1012203	AC	22-Jan-21	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	1012111	MS	21-Jan-21	8021B	
Toluene*	<0.050		0.050	mg/kg	50	1012111	MS	21-Jan-21	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	1012111	MS	21-Jan-21	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	1012111	MS	21-Jan-21	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	1012111	MS	21-Jan-21	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			100 %	73.3-129		1012111	MS	21-Jan-21	8021B	

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	
Surrogate: 1-Chlorooctane			93.2 %	44.3-144		1012108	MS	21-Jan-21	8015B	
Surrogate: 1-Chlorooctadecane			98.6 %	42.2-156		1012108	MS	21-Jan-21	8015B	

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

APACHE CORP - HOBBS  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240

Project: GERONIMO #28  
Project Number: NONE GIVEN  
Project Manager: BRUCE BAKER  
Fax To: (575) 393-2432

Reported:  
28-Jan-21 11:52

**B 51****H210143-14 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	7060		16.0	mg/kg	4	1012203	AC	22-Jan-21	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	1012111	MS	21-Jan-21	8021B	
Toluene*	<0.050		0.050	mg/kg	50	1012111	MS	21-Jan-21	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	1012111	MS	21-Jan-21	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	1012111	MS	21-Jan-21	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	1012111	MS	21-Jan-21	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			99.4 %	73.3-129		1012111	MS	21-Jan-21	8021B	

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	
Surrogate: 1-Chlorooctane			95.3 %	44.3-144		1012108	MS	21-Jan-21	8015B	
Surrogate: 1-Chlorooctadecane			99.5 %	42.2-156		1012108	MS	21-Jan-21	8015B	

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

APACHE CORP - HOBBS  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240

Project: GERONIMO #28  
Project Number: NONE GIVEN  
Project Manager: BRUCE BAKER  
Fax To: (575) 393-2432

Reported:  
28-Jan-21 11:52

**B 52****H210143-15 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	8400		16.0	mg/kg	4	1012203	AC	22-Jan-21	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	1012111	MS	21-Jan-21	8021B	
Toluene*	<0.050		0.050	mg/kg	50	1012111	MS	21-Jan-21	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	1012111	MS	21-Jan-21	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	1012111	MS	21-Jan-21	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	1012111	MS	21-Jan-21	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			99.3 %	73.3-129		1012111	MS	21-Jan-21	8021B	

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	
Surrogate: 1-Chlorooctane			88.2 %	44.3-144		1012108	MS	21-Jan-21	8015B	
Surrogate: 1-Chlorooctadecane			98.1 %	42.2-156		1012108	MS	21-Jan-21	8015B	

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

APACHE CORP - HOBBS  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240

Project: GERONIMO #28  
Project Number: NONE GIVEN  
Project Manager: BRUCE BAKER  
Fax To: (575) 393-2432

Reported:  
28-Jan-21 11:52

**B 53****H210143-16 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	4400		16.0	mg/kg	4	1012203	AC	22-Jan-21	4500-CI-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Toluene*	<0.050		0.050	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			101 %	73.3-129		1012111	MS	22-Jan-21	8021B	

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	
Surrogate: 1-Chlorooctane			89.5 %	44.3-144		1012108	MS	21-Jan-21	8015B	
Surrogate: 1-Chlorooctadecane			95.0 %	42.2-156		1012108	MS	21-Jan-21	8015B	

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

APACHE CORP - HOBBS  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240

Project: GERONIMO #28  
Project Number: NONE GIVEN  
Project Manager: BRUCE BAKER  
Fax To: (575) 393-2432

Reported:  
28-Jan-21 11:52

**B 54****H210143-17 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	12800		16.0	mg/kg	4	1012203	AC	22-Jan-21	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Toluene*	<0.050		0.050	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	1012111	MS	22-Jan-21	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			99.1 %	73.3-129		1012111	MS	22-Jan-21	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	

Surrogate: 1-Chlorooctane			86.7 %	44.3-144		1012108	MS	21-Jan-21	8015B	
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Surrogate: 1-Chlorooctadecane			101 %	42.2-156		1012108	MS	21-Jan-21	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

APACHE CORP - HOBBS  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240

Project: GERONIMO #28  
Project Number: NONE GIVEN  
Project Manager: BRUCE BAKER  
Fax To: (575) 393-2432

Reported:  
28-Jan-21 11:52

**B 55****H210143-18 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	5730		16.0	mg/kg	4	1012203	AC	22-Jan-21	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Toluene*	<0.050		0.050	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			101 %	73.3-129		1012111	MS	22-Jan-21	8021B	

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	
Surrogate: 1-Chlorooctane			84.2 %	44.3-144		1012108	MS	21-Jan-21	8015B	
Surrogate: 1-Chlorooctadecane			92.3 %	42.2-156		1012108	MS	21-Jan-21	8015B	

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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  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240

Project: GERONIMO #28  
Project Number: NONE GIVEN  
Project Manager: BRUCE BAKER  
Fax To: (575) 393-2432

Reported:  
28-Jan-21 11:52

**B 56****H210143-19 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	7460		16.0	mg/kg	4	1012203	AC	22-Jan-21	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Toluene*	<0.050		0.050	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			100 %	73.3-129		1012111	MS	22-Jan-21	8021B	

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	
Surrogate: 1-Chlorooctane			87.2 %	44.3-144		1012108	MS	21-Jan-21	8015B	
Surrogate: 1-Chlorooctadecane			93.6 %	42.2-156		1012108	MS	21-Jan-21	8015B	

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

APACHE CORP - HOBBS  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240

Project: GERONIMO #28  
Project Number: NONE GIVEN  
Project Manager: BRUCE BAKER  
Fax To: (575) 393-2432

Reported:  
28-Jan-21 11:52

**B 57****H210143-20 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	9730		16.0	mg/kg	4	1012203	AC	22-Jan-21	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Toluene*	<0.050		0.050	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	1012111	MS	22-Jan-21	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			101 %	73.3-129		1012111	MS	22-Jan-21	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	

Surrogate: 1-Chlorooctane			92.2 %	44.3-144		1012108	MS	21-Jan-21	8015B	
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Surrogate: 1-Chlorooctadecane			100 %	42.2-156		1012108	MS	21-Jan-21	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

APACHE CORP - HOBBS  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240

Project: GERONIMO #28  
Project Number: NONE GIVEN  
Project Manager: BRUCE BAKER  
Fax To: (575) 393-2432

Reported:  
28-Jan-21 11:52

**B 58****H210143-21 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	7730		16.0	mg/kg	4	1012203	AC	22-Jan-21	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Toluene*	<0.050		0.050	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	1012111	MS	22-Jan-21	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			100 %	73.3-129		1012111	MS	22-Jan-21	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	

Surrogate: 1-Chlorooctane			86.4 %	44.3-144		1012108	MS	21-Jan-21	8015B	
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Surrogate: 1-Chlorooctadecane			95.2 %	42.2-156		1012108	MS	21-Jan-21	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

APACHE CORP - HOBBS  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240

Project: GERONIMO #28  
Project Number: NONE GIVEN  
Project Manager: BRUCE BAKER  
Fax To: (575) 393-2432

Reported:  
28-Jan-21 11:52

**B 59****H210143-22 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	5460		16.0	mg/kg	4	1012203	AC	22-Jan-21	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Toluene*	<0.050		0.050	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	1012111	MS	22-Jan-21	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			99.4 %	73.3-129		1012111	MS	22-Jan-21	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	

Surrogate: 1-Chlorooctane			91.2 %	44.3-144		1012108	MS	21-Jan-21	8015B	
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Surrogate: 1-Chlorooctadecane			98.2 %	42.2-156		1012108	MS	21-Jan-21	8015B	
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**Analytical Results For:**

APACHE CORP - HOBBS  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240

Project: GERONIMO #28  
Project Number: NONE GIVEN  
Project Manager: BRUCE BAKER  
Fax To: (575) 393-2432

Reported:  
28-Jan-21 11:52

**B 60****H210143-23 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	5060		16.0	mg/kg	4	1012203	AC	22-Jan-21	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Toluene*	<0.050		0.050	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			100 %	73.3-129		1012111	MS	22-Jan-21	8021B	

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	
Surrogate: 1-Chlorooctane			88.6 %	44.3-144		1012108	MS	21-Jan-21	8015B	
Surrogate: 1-Chlorooctadecane			95.4 %	42.2-156		1012108	MS	21-Jan-21	8015B	

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

APACHE CORP - HOBBS  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240

Project: GERONIMO #28  
Project Number: NONE GIVEN  
Project Manager: BRUCE BAKER  
Fax To: (575) 393-2432

Reported:  
28-Jan-21 11:52

**B 61****H210143-24 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	4400		16.0	mg/kg	4	1012110	AC	22-Jan-21	4500-Cl-B	QM-07
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Toluene*	<0.050		0.050	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			99.8 %	73.3-129		1012111	MS	22-Jan-21	8021B	

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	1012108	MS	21-Jan-21	8015B	
Surrogate: 1-Chlorooctane			83.0 %	44.3-144		1012108	MS	21-Jan-21	8015B	
Surrogate: 1-Chlorooctadecane			93.6 %	42.2-156		1012108	MS	21-Jan-21	8015B	

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**Analytical Results For:**

APACHE CORP - HOBBS  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240

Project: GERONIMO #28  
Project Number: NONE GIVEN  
Project Manager: BRUCE BAKER  
Fax To: (575) 393-2432

Reported:  
28-Jan-21 11:52

**B 62****H210143-25 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	7520		16.0	mg/kg	4	1012110	AC	22-Jan-21	4500-CI-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Toluene*	<0.050		0.050	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			102 %	73.3-129		1012111	MS	22-Jan-21	8021B	

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	1012108	MS	22-Jan-21	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	1012108	MS	22-Jan-21	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	1012108	MS	22-Jan-21	8015B	
Surrogate: 1-Chlorooctane			91.0 %	44.3-144		1012108	MS	22-Jan-21	8015B	
Surrogate: 1-Chlorooctadecane			98.9 %	42.2-156		1012108	MS	22-Jan-21	8015B	

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

APACHE CORP - HOBBS  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240

Project: GERONIMO #28  
Project Number: NONE GIVEN  
Project Manager: BRUCE BAKER  
Fax To: (575) 393-2432

Reported:  
28-Jan-21 11:52

**B 63****H210143-26 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	7330		16.0	mg/kg	4	1012110	AC	22-Jan-21	4500-CI-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Toluene*	<0.050		0.050	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			99.6 %		73.3-129	1012111	MS	22-Jan-21	8021B	

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	1012108	MS	22-Jan-21	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	1012108	MS	22-Jan-21	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	1012108	MS	22-Jan-21	8015B	
Surrogate: 1-Chlorooctane			90.7 %		44.3-144	1012108	MS	22-Jan-21	8015B	
Surrogate: 1-Chlorooctadecane			99.9 %		42.2-156	1012108	MS	22-Jan-21	8015B	

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\*=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  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240

Project: GERONIMO #28  
Project Number: NONE GIVEN  
Project Manager: BRUCE BAKER  
Fax To: (575) 393-2432

Reported:  
28-Jan-21 11:52

**B 64****H210143-27 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	8660		16.0	mg/kg	4	1012110	AC	22-Jan-21	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Toluene*	<0.050		0.050	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			99.6 %	73.3-129		1012111	MS	22-Jan-21	8021B	

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	1012108	MS	22-Jan-21	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	1012108	MS	22-Jan-21	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	1012108	MS	22-Jan-21	8015B	
Surrogate: 1-Chlorooctane			87.1 %	44.3-144		1012108	MS	22-Jan-21	8015B	
Surrogate: 1-Chlorooctadecane			95.1 %	42.2-156		1012108	MS	22-Jan-21	8015B	

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

APACHE CORP - HOBBS  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240

Project: GERONIMO #28  
Project Number: NONE GIVEN  
Project Manager: BRUCE BAKER  
Fax To: (575) 393-2432

Reported:  
28-Jan-21 11:52

**B 83****H210143-28 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	6400		16.0	mg/kg	4	1012110	AC	22-Jan-21	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Toluene*	<0.050		0.050	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	1012111	MS	22-Jan-21	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			101 %	73.3-129		1012111	MS	22-Jan-21	8021B	

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	1012108	MS	22-Jan-21	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	1012108	MS	22-Jan-21	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	1012108	MS	22-Jan-21	8015B	
Surrogate: 1-Chlorooctane			80.5 %	44.3-144		1012108	MS	22-Jan-21	8015B	
Surrogate: 1-Chlorooctadecane			86.8 %	42.2-156		1012108	MS	22-Jan-21	8015B	

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

APACHE CORP - HOBBS  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240

Project: GERONIMO #28  
Project Number: NONE GIVEN  
Project Manager: BRUCE BAKER  
Fax To: (575) 393-2432

Reported:  
28-Jan-21 11:52

**B 84****H210143-29 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	8400		16.0	mg/kg	4	1012110	AC	22-Jan-21	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	1012206	MS	22-Jan-21	8021B	
Toluene*	<0.050		0.050	mg/kg	50	1012206	MS	22-Jan-21	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	1012206	MS	22-Jan-21	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	1012206	MS	22-Jan-21	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	1012206	MS	22-Jan-21	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			101 %	73.3-129		1012206	MS	22-Jan-21	8021B	

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	1012202	MS	22-Jan-21	8015B	
DRO >C10-C28*	124		10.0	mg/kg	1	1012202	MS	22-Jan-21	8015B	
EXT DRO >C28-C36	59.2		10.0	mg/kg	1	1012202	MS	22-Jan-21	8015B	
Surrogate: 1-Chlorooctane			87.4 %	44.3-144		1012202	MS	22-Jan-21	8015B	
Surrogate: 1-Chlorooctadecane			96.3 %	42.2-156		1012202	MS	22-Jan-21	8015B	

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

APACHE CORP - HOBBS  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240

Project: GERONIMO #28  
Project Number: NONE GIVEN  
Project Manager: BRUCE BAKER  
Fax To: (575) 393-2432

Reported:  
28-Jan-21 11:52

**B 85****H210143-30 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	4080		16.0	mg/kg	4	1012110	AC	22-Jan-21	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	1012206	MS	22-Jan-21	8021B	
Toluene*	<0.050		0.050	mg/kg	50	1012206	MS	22-Jan-21	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	1012206	MS	22-Jan-21	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	1012206	MS	22-Jan-21	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	1012206	MS	22-Jan-21	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			99.1 %	73.3-129		1012206	MS	22-Jan-21	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	1012202	MS	22-Jan-21	8015B	
DRO >C10-C28*	20.1		10.0	mg/kg	1	1012202	MS	22-Jan-21	8015B	
EXT DRO >C28-C36	10.3		10.0	mg/kg	1	1012202	MS	22-Jan-21	8015B	

Surrogate: 1-Chlorooctane			78.7 %	44.3-144		1012202	MS	22-Jan-21	8015B	
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Surrogate: 1-Chlorooctadecane			83.6 %	42.2-156		1012202	MS	22-Jan-21	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

APACHE CORP - HOBBS  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240

Project: GERONIMO #28  
Project Number: NONE GIVEN  
Project Manager: BRUCE BAKER  
Fax To: (575) 393-2432

Reported:  
28-Jan-21 11:52

**B 86****H210143-31 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	6640		16.0	mg/kg	4	1012110	AC	22-Jan-21	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	1012206	MS	22-Jan-21	8021B	
Toluene*	<0.050		0.050	mg/kg	50	1012206	MS	22-Jan-21	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	1012206	MS	22-Jan-21	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	1012206	MS	22-Jan-21	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	1012206	MS	22-Jan-21	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			102 %	73.3-129		1012206	MS	22-Jan-21	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	1012202	MS	22-Jan-21	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	1012202	MS	22-Jan-21	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	1012202	MS	22-Jan-21	8015B	

Surrogate: 1-Chlorooctane			83.1 %	44.3-144		1012202	MS	22-Jan-21	8015B	
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Surrogate: 1-Chlorooctadecane			86.3 %	42.2-156		1012202	MS	22-Jan-21	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

APACHE CORP - HOBBS  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240

Project: GERONIMO #28  
Project Number: NONE GIVEN  
Project Manager: BRUCE BAKER  
Fax To: (575) 393-2432

Reported:  
28-Jan-21 11:52

**Inorganic Compounds - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1012102 - 1:4 DI Water****Blank (1012102-BLK1)**

Prepared &amp; Analyzed: 21-Jan-21

Chloride	ND	16.0	mg/kg
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**LCS (1012102-BS1)**

Prepared &amp; Analyzed: 21-Jan-21

Chloride	384	16.0	mg/kg	400	96.0	80-120
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**LCS Dup (1012102-BSD1)**

Prepared &amp; Analyzed: 21-Jan-21

Chloride	400	16.0	mg/kg	400	100	80-120	4.08	20
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**Batch 1012110 - 1:4 DI Water****Blank (1012110-BLK1)**

Prepared &amp; Analyzed: 21-Jan-21

Chloride	ND	16.0	mg/kg
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**LCS (1012110-BS1)**

Prepared &amp; Analyzed: 21-Jan-21

Chloride	416	16.0	mg/kg	400	104	80-120
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**LCS Dup (1012110-BSD1)**

Prepared &amp; Analyzed: 21-Jan-21

Chloride	416	16.0	mg/kg	400	104	80-120	0.00	20
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**Batch 1012203 - 1:4 DI Water****Blank (1012203-BLK1)**

Prepared &amp; Analyzed: 22-Jan-21

Chloride	ND	16.0	mg/kg
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**LCS (1012203-BS1)**

Prepared &amp; Analyzed: 22-Jan-21

Chloride	400	16.0	mg/kg	400	100	80-120
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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

APACHE CORP - HOBBS  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240

Project: GERONIMO #28  
Project Number: NONE GIVEN  
Project Manager: BRUCE BAKER  
Fax To: (575) 393-2432

Reported:  
28-Jan-21 11:52

**Inorganic Compounds - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1012203 - 1:4 DI Water****LCS Dup (1012203-BSD1)**

Prepared &amp; Analyzed: 22-Jan-21

Chloride	416	16.0	mg/kg	400		104	80-120	3.92	20	
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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

APACHE CORP - HOBBS  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240

Project: GERONIMO #28  
Project Number: NONE GIVEN  
Project Manager: BRUCE BAKER  
Fax To: (575) 393-2432

Reported:  
28-Jan-21 11:52

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1012104 - Volatiles****Blank (1012104-BLK1)**

Prepared &amp; Analyzed: 21-Jan-21

Benzene	ND	0.050	mg/kg
Toluene	ND	0.050	mg/kg
Ethylbenzene	ND	0.050	mg/kg
Total Xylenes	ND	0.150	mg/kg
Total BTEX	ND	0.300	mg/kg

Surrogate: 4-Bromofluorobenzene (PID) ND mg/kg 0.0500 99.8 73.3-129

**LCS (1012104-BS1)**

Prepared &amp; Analyzed: 21-Jan-21

Benzene	2.07	0.050	mg/kg	2.00	103	72.2-131
Toluene	2.04	0.050	mg/kg	2.00	102	71.7-126
Ethylbenzene	2.00	0.050	mg/kg	2.00	99.8	68.9-126
Total Xylenes	5.88	0.150	mg/kg	6.00	97.9	71.4-125

Surrogate: 4-Bromofluorobenzene (PID) 0.0489 mg/kg 0.0500 97.8 73.3-129

**LCS Dup (1012104-BS1)**

Prepared &amp; Analyzed: 21-Jan-21

Benzene	2.05	0.050	mg/kg	2.00	102	72.2-131	1.11	14.6
Toluene	2.01	0.050	mg/kg	2.00	100	71.7-126	1.68	17.4
Ethylbenzene	1.97	0.050	mg/kg	2.00	98.3	68.9-126	1.57	18.9
Total Xylenes	5.77	0.150	mg/kg	6.00	96.2	71.4-125	1.80	18.5

Surrogate: 4-Bromofluorobenzene (PID) 0.0486 mg/kg 0.0500 97.1 73.3-129

**Batch 1012111 - Volatiles****Blank (1012111-BLK1)**

Prepared &amp; Analyzed: 21-Jan-21

Benzene	ND	0.050	mg/kg
Toluene	ND	0.050	mg/kg
Ethylbenzene	ND	0.050	mg/kg
Total Xylenes	ND	0.150	mg/kg
Total BTEX	ND	0.300	mg/kg

Surrogate: 4-Bromofluorobenzene (PID) ND mg/kg 0.0500 99.6 73.3-129

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

APACHE CORP - HOBBS  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240

Project: GERONIMO #28  
Project Number: NONE GIVEN  
Project Manager: BRUCE BAKER  
Fax To: (575) 393-2432

Reported:  
28-Jan-21 11:52

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1012111 - Volatiles****LCS (1012111-BS1)**

Prepared &amp; Analyzed: 21-Jan-21

Benzene	2.07	0.050	mg/kg	2.00		104	72.2-131			
Toluene	2.03	0.050	mg/kg	2.00		102	71.7-126			
Ethylbenzene	2.00	0.050	mg/kg	2.00		100	68.9-126			
Total Xylenes	5.88	0.150	mg/kg	6.00		98.1	71.4-125			
Surrogate: 4-Bromofluorobenzene (PID)	0.0493		mg/kg	0.0500		98.6	73.3-129			

**LCS Dup (1012111-BS1)**

Prepared &amp; Analyzed: 21-Jan-21

Benzene	2.13	0.050	mg/kg	2.00		106	72.2-131	2.50	14.6	
Toluene	2.08	0.050	mg/kg	2.00		104	71.7-126	2.40	17.4	
Ethylbenzene	2.04	0.050	mg/kg	2.00		102	68.9-126	1.98	18.9	
Total Xylenes	6.00	0.150	mg/kg	6.00		100	71.4-125	1.91	18.5	
Surrogate: 4-Bromofluorobenzene (PID)	0.0494		mg/kg	0.0500		98.8	73.3-129			

**Batch 1012206 - Volatiles****Blank (1012206-BLK1)**

Prepared &amp; Analyzed: 22-Jan-21

Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	ND		mg/kg	0.0500		99.7	73.3-129			

**LCS (1012206-BS1)**

Prepared &amp; Analyzed: 22-Jan-21

Benzene	2.15	0.050	mg/kg	2.00		108	72.2-131			
Toluene	2.09	0.050	mg/kg	2.00		104	71.7-126			
Ethylbenzene	2.07	0.050	mg/kg	2.00		103	68.9-126			
Total Xylenes	6.05	0.150	mg/kg	6.00		101	71.4-125			
Surrogate: 4-Bromofluorobenzene (PID)	0.0491		mg/kg	0.0500		98.2	73.3-129			

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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  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240

Project: GERONIMO #28  
Project Number: NONE GIVEN  
Project Manager: BRUCE BAKER  
Fax To: (575) 393-2432

Reported:  
28-Jan-21 11:52

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1012206 - Volatiles****LCS Dup (1012206-BSD1)**

Prepared &amp; Analyzed: 22-Jan-21

Benzene	2.17	0.050	mg/kg	2.00		109	72.2-131	1.01	14.6	
Toluene	2.10	0.050	mg/kg	2.00		105	71.7-126	0.521	17.4	
Ethylbenzene	2.07	0.050	mg/kg	2.00		103	68.9-126	0.112	18.9	
Total Xylenes	6.04	0.150	mg/kg	6.00		101	71.4-125	0.160	18.5	
Surrogate: 4-Bromofluorobenzene (PID)	0.0493		mg/kg	0.0500		98.5	73.3-129			

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

APACHE CORP - HOBBS  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240

Project: GERONIMO #28  
Project Number: NONE GIVEN  
Project Manager: BRUCE BAKER  
Fax To: (575) 393-2432

Reported:  
28-Jan-21 11:52

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1012105 - General Prep - Organics****Blank (1012105-BLK1)**

Prepared &amp; Analyzed: 21-Jan-21

GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	35.6		mg/kg	50.0		71.2	44.3-144			
Surrogate: 1-Chlorooctadecane	37.5		mg/kg	50.0		75.0	42.2-156			

**LCS (1012105-BS1)**

Prepared &amp; Analyzed: 21-Jan-21

GRO C6-C10	215	10.0	mg/kg	200		108	83.7-135			
DRO >C10-C28	217	10.0	mg/kg	200		108	80.4-133			
Total TPH C6-C28	432	10.0	mg/kg	400		108	83.1-133			
Surrogate: 1-Chlorooctane	45.8		mg/kg	50.0		91.6	44.3-144			
Surrogate: 1-Chlorooctadecane	49.3		mg/kg	50.0		98.7	42.2-156			

**LCS Dup (1012105-BS1)**

Prepared &amp; Analyzed: 21-Jan-21

GRO C6-C10	221	10.0	mg/kg	200		111	83.7-135	2.79	13.8	
DRO >C10-C28	216	10.0	mg/kg	200		108	80.4-133	0.463	22.1	
Total TPH C6-C28	437	10.0	mg/kg	400		109	83.1-133	1.17	17.7	
Surrogate: 1-Chlorooctane	46.7		mg/kg	50.0		93.5	44.3-144			
Surrogate: 1-Chlorooctadecane	49.7		mg/kg	50.0		99.4	42.2-156			

**Batch 1012108 - General Prep - Organics****Blank (1012108-BLK1)**

Prepared &amp; Analyzed: 21-Jan-21

GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	45.6		mg/kg	50.0		91.1	44.3-144			
Surrogate: 1-Chlorooctadecane	47.0		mg/kg	50.0		94.0	42.2-156			

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

APACHE CORP - HOBBS  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240

Project: GERONIMO #28  
Project Number: NONE GIVEN  
Project Manager: BRUCE BAKER  
Fax To: (575) 393-2432

Reported:  
28-Jan-21 11:52

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1012108 - General Prep - Organics****LCS (1012108-BS1)**

Prepared &amp; Analyzed: 21-Jan-21

GRO C6-C10	211	10.0	mg/kg	200		105	83.7-135			
DRO >C10-C28	234	10.0	mg/kg	200		117	80.4-133			
Total TPH C6-C28	445	10.0	mg/kg	400		111	83.1-133			
Surrogate: 1-Chlorooctane	49.4		mg/kg	50.0		98.8	44.3-144			
Surrogate: 1-Chlorooctadecane	49.3		mg/kg	50.0		98.5	42.2-156			

**LCS Dup (1012108-BSD1)**

Prepared &amp; Analyzed: 21-Jan-21

GRO C6-C10	219	10.0	mg/kg	200		109	83.7-135	3.74	13.8	
DRO >C10-C28	241	10.0	mg/kg	200		120	80.4-133	2.78	22.1	
Total TPH C6-C28	459	10.0	mg/kg	400		115	83.1-133	3.23	17.7	
Surrogate: 1-Chlorooctane	49.3		mg/kg	50.0		98.5	44.3-144			
Surrogate: 1-Chlorooctadecane	51.5		mg/kg	50.0		103	42.2-156			

**Batch 1012202 - General Prep - Organics****Blank (1012202-BLK1)**

Prepared &amp; Analyzed: 22-Jan-21

GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	40.4		mg/kg	50.0		80.8	44.3-144			
Surrogate: 1-Chlorooctadecane	42.1		mg/kg	50.0		84.2	42.2-156			

**LCS (1012202-BS1)**

Prepared &amp; Analyzed: 22-Jan-21

GRO C6-C10	188	10.0	mg/kg	200		94.1	83.7-135			
DRO >C10-C28	189	10.0	mg/kg	200		94.6	80.4-133			
Total TPH C6-C28	377	10.0	mg/kg	400		94.3	83.1-133			
Surrogate: 1-Chlorooctane	40.4		mg/kg	50.0		80.7	44.3-144			
Surrogate: 1-Chlorooctadecane	42.6		mg/kg	50.0		85.2	42.2-156			

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

APACHE CORP - HOBBS  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240

Project: GERONIMO #28  
Project Number: NONE GIVEN  
Project Manager: BRUCE BAKER  
Fax To: (575) 393-2432

Reported:  
28-Jan-21 11:52

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1012202 - General Prep - Organics****LCS Dup (1012202-BSD1)**

Prepared &amp; Analyzed: 22-Jan-21

GRO C6-C10	204	10.0	mg/kg	200		102	83.7-135	8.01	13.8	
DRO >C10-C28	200	10.0	mg/kg	200		99.8	80.4-133	5.38	22.1	
Total TPH C6-C28	403	10.0	mg/kg	400		101	83.1-133	6.70	17.7	
Surrogate: 1-Chlorooctane	43.1		mg/kg	50.0		86.1	44.3-144			
Surrogate: 1-Chlorooctadecane	43.6		mg/kg	50.0		87.1	42.2-156			

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### Notes and Definitions

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 cursive script, 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

<b>Company Name:</b> <i>Acadia</i> <b>Project Manager:</b> <i>Bruce Baker</i> <b>Address:</b> <b>City:</b> <i>Hobbs</i> <b>State:</b> <i>NM</i> <b>Zip:</b> <i>88240</i> <b>Phone #:</b> <b>Fax #:</b> <b>Project #:</b> <b>Project Owner:</b> <b>Project Name:</b> <b>Project Location:</b> <i>Extraneous 38</i> <b>Sampler Name:</b> <i>See Quasada IR</i>		<b>BILL TO</b> <b>P.O. #:</b> <b>Company:</b> <b>Attn:</b> <b>Address:</b> <b>City:</b> <b>State:</b> <b>Zip:</b> <b>Phone #:</b> <b>Fax #:</b>	
<b>FOR LAB USE ONLY</b> <b>Lab I.D.</b> <b>Sample I.D.</b>		<b>MATRIX</b> (G)RAB OR (C)OMP. # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER: ACID/BASE ICE / COOL OTHER:	
PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising directly or indirectly from 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 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.		<b>PRESERV.</b> <b>SAMPLING</b>	
<b>Relinquished By:</b> <b>Relinquished By:</b> <b>Delivered By:</b> (Circle One) <b>Sampler - UPS - Bus - Other:</b>		<b>Received By:</b> <b>Date:</b> <i>1-21-21</i> <b>Time:</b> <i>0845</i> <b>Received By:</b> <i>Bruce Baker</i> <b>Time:</b> <i>1:21</i> <b>Observed Temp. °C:</b> <i>1.3</i> <b>Corrected Temp. °C:</b> <b>Sample Condition:</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Intact <input type="checkbox"/> Not Intact <b>CHECKED BY:</b> (Initials) <b>Turnaround Time:</b> <b>Thermometer ID #113</b> <b>Correction Factor None</b>	
<b>REMARKS:</b> <i>ID's changed Samples #28-31 per Joe Quasada IR.</i>		<b>Verbal Result:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <b>Add'l Phone #:</b> <b>All Results are emailed. Please provide Email address:</b>	



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

<b>Company Name:</b> <u>Acquia</u>		<b>BILL TO</b>		<b>ANALYSIS REQUEST</b>																																							
<b>Project Manager:</b> <u>Brian Baker</u>		<b>P.O. #:</b>																																									
<b>Address:</b>		<b>Company:</b>																																									
<b>City:</b> <u>Hobbs</u> <b>State:</b> <u>NM</u> <b>Zip:</b> <u>88240</u>		<b>Attn:</b>																																									
<b>Phone #:</b>		<b>Address:</b>																																									
<b>Project #:</b>		<b>City:</b>																																									
<b>Project Name:</b>		<b>State:</b>																																									
<b>Project Location:</b> <u>Acquia, Inc. 28</u>		<b>Phone #:</b>																																									
<b>Sampler Name:</b> <u>Joe Quisenberry Jr.</u>		<b>Fax #:</b>																																									
<b>FOR LAB USE ONLY</b>		<b>MATRIX</b>		<b>PRESERV.</b>		<b>SAMPLING</b>																																					
<b>Lab I.D.</b>		<b>Sample I.D.</b>		<b>(G)RAB OR (C)OMP.</b>		<b># CONTAINERS</b>		<b>GROUNDWATER</b>		<b>WASTEWATER</b>		<b>SOIL</b>		<b>OIL</b>		<b>SLUDGE</b>		<b>OTHER :</b>		<b>ACID/BASE:</b>		<b>ICE / COOL</b>		<b>OTHER :</b>		<b>DATE</b>		<b>TIME</b>		<b>EXT TPAH</b>		<b>BTEX</b>											
<u>H210143</u>		<u>B48</u>		<u>C</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>11:24</u>		<u>11:24</u>		<u>11:24</u>		<u>11:24</u>											
<u>12 B49</u>		<u>B50</u>		<u>C</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>11:28</u>		<u>11:28</u>		<u>11:28</u>		<u>11:28</u>											
<u>13 B50</u>		<u>B51</u>		<u>C</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>11:30</u>		<u>11:30</u>		<u>11:30</u>		<u>11:30</u>											
<u>14 B51</u>		<u>B52</u>		<u>C</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>11:32</u>		<u>11:32</u>		<u>11:32</u>		<u>11:32</u>											
<u>15 B52</u>		<u>B53</u>		<u>C</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>11:34</u>		<u>11:34</u>		<u>11:34</u>		<u>11:34</u>											
<u>16 B53</u>		<u>B54</u>		<u>C</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>11:36</u>		<u>11:36</u>		<u>11:36</u>		<u>11:36</u>											
<u>17 B54</u>		<u>B55</u>		<u>C</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>11:38</u>		<u>11:38</u>		<u>11:38</u>		<u>11:38</u>											
<u>18 B55</u>		<u>B56</u>		<u>C</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>11:40</u>		<u>11:40</u>		<u>11:40</u>		<u>11:40</u>											
<u>19 B56</u>		<u>B57</u>		<u>C</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>1</u>		<u>11:42</u>		<u>11:42</u>		<u>11:42</u>		<u>11:42</u>											
<u>20 B57</u>																																											

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**Relinquished By:** 1-31-21 1845 Time Received By: 1845 Time Received By: 1845 Time

**Relinquished By:** 1-31-21 1845 Time Received By: 1845 Time

**Delivered By:** (Circle One) Observed Temp. °C 1.3 Corrected Temp. °C 1.3 Sample Condition Intact Yes Checked By: 1845 Initials 1845 Initials

**Sampler - UPS - Bus - Other:** Corrected Temp. °C 1.3 Sample Condition Intact Yes Checked By: 1845 Initials 1845 Initials

**Turnaround Time:** Standard 1845 Time Received By: 1845 Time Received By: 1845 Time

**Thermometer ID #113** Correction Factor None Standard 1845 Time Received By: 1845 Time Received By: 1845 Time

**Bacteria (only) Sample Condition** Observed Temp. °C 1.3 Corrected Temp. °C 1.3 Sample Condition Intact Yes Checked By: 1845 Initials 1845 Initials

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



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

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

<b>Company Name:</b> <b>Project Manager:</b> <b>Address:</b> <b>City:</b> <b>Phone #:</b> <b>Project #:</b> <b>Project Name:</b> <b>Project Location:</b> <b>Sampler Name:</b>		<b>P.O. #:</b> <b>Company:</b> <b>Attn:</b> <b>Address:</b> <b>City:</b> <b>State:</b> <b>Phone #:</b> <b>Fax #:</b>		<b>BILL TO</b>		<b>ANALYSIS REQUEST</b>											
<b>FOR LAB USE ONLY</b>		<b>State:</b> <b>Zip:</b>		<b>Matrix:</b> (G) RAB OR (C) COMP # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER:		<b>Preserv:</b> ACID/BASE: (ICE) COOL OTHER:		<b>Sampling:</b> DATE TIME		CL Ex+TPH BTEX							
<b>Lab I.D.</b> <b>Sample I.D.</b>		<b>Matrix:</b> (G) RAB OR (C) COMP # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER:		<b>Preserv:</b> ACID/BASE: (ICE) COOL OTHER:		<b>Sampling:</b> DATE TIME		CL Ex+TPH BTEX									
<b>Relinquished By:</b> <b>Date:</b> <b>Time:</b>		<b>Received By:</b> <b>Date:</b> <b>Time:</b>		<b>Turnaround Time:</b> <b>Standard</b> <b>Rush</b>		<b>Thermometer ID #113</b> <b>Correction Factor</b>		<b>Standard</b> <b>Rush</b>		<b>Bacteria (only) Sample Condition</b> Cool Intact Observed Temp. °C Corrected Temp. °C							
<b>Relinquished By:</b> <b>Date:</b> <b>Time:</b>		<b>Received By:</b> <b>Date:</b> <b>Time:</b>		<b>Turnaround Time:</b> <b>Standard</b> <b>Rush</b>		<b>Thermometer ID #113</b> <b>Correction Factor</b>		<b>Standard</b> <b>Rush</b>		<b>Bacteria (only) Sample Condition</b> Cool Intact Observed Temp. °C Corrected Temp. °C							



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(575) 393-2326 FAX (575) 393-2476

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

<b>Company Name:</b> <i>Pepper</i> <b>Project Manager:</b> <i>Bruce Bullock</i> <b>Address:</b> <b>City:</b> <i>Hobbs</i> <b>State:</b> <i>NM</i> <b>Zip:</b> <i>88240</i> <b>Phone #:</b> <b>Fax #:</b> <b>Project #:</b> <b>Project Owner:</b> <b>Project Name:</b> <b>Project Location:</b> <i>Bearline</i> <b>Sample Name:</b> <i>See Sample</i>		<b>BILL TO</b> <b>P.O. #:</b> <b>Company:</b> <b>Attn:</b> <b>Address:</b> <b>City:</b> <b>State:</b> <b>Zip:</b> <b>Phone #:</b> <b>Fax #:</b>		<b>ANALYSIS REQUEST</b>													
<b>FOR LAB USE ONLY</b> <b>Lab I.D.</b> <i>H210143</i> <b>Sample I.D.</b> <i>31 B28 86</i>		<b>MATRIX</b> <input checked="" type="checkbox"/> (G)RAB OR <input checked="" type="checkbox"/> (C)OMP <input type="checkbox"/> # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER:		<b>PRESERV</b> ACID/BASE: <input checked="" type="checkbox"/> ICE/ <input type="checkbox"/> COOL OTHER:		<b>SAMPLING</b> <b>DATE</b> <i>1/20</i> <b>TIME</b> <i>2:34</i>		<b>ANALYSIS REQUEST</b>									
<b>Relinquished By:</b> <b>Date:</b> <i>1-21-21</i> <b>Received By:</b> <i>Bruce Bullock</i> <b>Time:</b> <i>8:45</i>		<b>Relinquished By:</b> <b>Date:</b> <i>1-21-21</i> <b>Received By:</b> <i>Bruce Bullock</i> <b>Time:</b> <i>8:45</i>		<b>Turnaround Time:</b> <i>Standard</i> <b>Thermometer ID #113</b> <b>Correction Factor</b> <i>None</i>		<b>Verbal Result:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <b>Add'l Phone #:</b> <b>Remarks:</b>		<b>Verbal Result:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <b>Add'l Phone #:</b> <b>Remarks:</b>									
<b>Delivered By: (Circle One)</b> Sampler - UPS - Bus - Other:		<b>Observed Temp. °C</b> <i>1.3</i> <b>Corrected Temp. °C</b>		<b>Sample Condition</b> Cool <input checked="" type="checkbox"/> Intact <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		<b>CHECKED BY:</b> <i>YO.</i> <b>Initials</b>		<b>Standard</b> <input checked="" type="checkbox"/> <b>Rush</b> <input type="checkbox"/> <b>Bacteria (only)</b> <input type="checkbox"/> <b>Sample Condition</b> Cool <input type="checkbox"/> Intact <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> <b>Observed Temp. °C</b> <b>Corrected Temp. °C</b>									

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





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

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January 28, 2021

BRUCE BAKER APACHE

CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: GERONIMO #28

Enclosed are the results of analyses for samples received by the laboratory on 01/26/21 16:25.

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](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 "Coley D. Keene".

Celey D. Keene

Lab Director/Quality Manager

Fax To: (575) 393-2432

Analytical Results For:

APACHE CORP - HOBBS  
BRUCE BAKER 2350 W.  
MARLAND BLVD. HOBBS  
NM, 88240

Sampling Date: 01/26/2021

Received: 01/26/2021  
Reported: Project Name: 01/28/2021 GERONIMO #28  
By: Tamara Oldaker Cool & Intact Soil  
Sampling Type: Sampling Condition: Sample Received

Project Number: NONE GIVEN  
Project Location: NONE GIVEN  
Sample ID: W 15 (H210190-01)

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	01/27/2021	ND	2.02	101	2.00	6.65	
Toluene*	<0.050	0.050	01/27/2021	ND	1.94	97.2	2.00	7.49	
Ethylbenzene*	<0.050	0.050	01/27/2021	ND	1.90	94.8	2.00	8.16	
Total Xylenes*	<0.150	0.150	01/27/2021	ND	5.50	91.7	6.00	8.98	
Total BTEX	<0.300	0.300	01/27/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.5 % 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	272	16.0	01/27/2021	ND	400	100	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	01/27/2021	ND	196	98.0	200	9.43	
DRO >C10-C28*	<10.0	10.0	01/27/2021	ND	212	106	200	5.08	
EXT DRO >C28-C36	<10.0	10.0	01/27/2021	ND					

Surrogate: 1-Chlorooctane 85.7 % 44.3-144  
Surrogate: 1-Chlorooctadecane 88.0 % 42.2-156

Cardinal Laboratories \*=Accredited Analyte  
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Celey D. Keene, Lab Director/Quality



Manager

Page 2 of 22

Fax To: (575) 393-2432

Received: 01/26/2021  
 Reported: 01/28/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/26/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: W 16 (H210190-02)**

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	01/27/2021	ND	2.02	101	2.00	6.65	
Toluene*	<0.050	0.050	01/27/2021	ND	1.94	97.2	2.00	7.49	
Ethylbenzene*	<0.050	0.050	01/27/2021	ND	1.90	94.8	2.00	8.16	
Total Xylenes*	<0.150	0.150	01/27/2021	ND	5.50	91.7	6.00	8.98	
Total BTEX	<0.300	0.300	01/27/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.8 % 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	208	16.0	01/27/2021	ND	400	100	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	01/27/2021	ND	196	98.0	200	9.43	
DRO >C10-C28*	<10.0	10.0	01/27/2021	ND	212	106	200	5.08	
EXT DRO >C28-C36	<10.0	10.0	01/27/2021	ND					

Surrogate: 1-Chlorooctane	84.4 %	44.3-144
Surrogate: 1-Chlorooctadecane	88.1 %	42.2-156

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Fax To: (575) 393-2432

Received:	01/26/2021	Sampling Date:	01/26/2021
Reported:	01/28/2021	Sampling Type:	Soil
Project Name:	GERONIMO #28	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

**Sample ID: W 17 (H210190-03)**

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	01/27/2021	ND	2.02	101	2.00	6.65	
Toluene*	<0.050	0.050	01/27/2021	ND	1.94	97.2	2.00	7.49	
Ethylbenzene*	<0.050	0.050	01/27/2021	ND	1.90	94.8	2.00	8.16	
Total Xylenes*	<0.150	0.150	01/27/2021	ND	5.50	91.7	6.00	8.98	
Total BTEX	<0.300	0.300	01/27/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.4 % 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	2600	16.0	01/27/2021	ND	400	100	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	01/27/2021	ND	196	98.0	200	9.43	
DRO >C10-C28*	<10.0	10.0	01/27/2021	ND	212	106	200	5.08	
	EXT DRO >C28-C36		<10.0	10.0	01/27/2021	ND			

Surrogate: 1-Chlorooctane 94.9 % 44.3-144  
 Surrogate: 1-Chlorooctadecane 99.0 % 42.2-156

Fax To: (575) 393-2432

Received:	01/26/2021	Sampling Date:	01/26/2021
Reported:	01/28/2021	Sampling Type:	Soil
Project Name:	GERONIMO #28	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

**Sample ID: W 18 (H210190-04)**

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	01/27/2021	ND	2.02	101	2.00	6.65	
Toluene*	<0.050	0.050	01/27/2021	ND	1.94	97.2	2.00	7.49	
Ethylbenzene*	<0.050	0.050	01/27/2021	ND	1.90	94.8	2.00	8.16	
Total Xylenes*	<0.150	0.150	01/27/2021	ND	5.50	91.7	6.00	8.98	
Total BTEX	<0.300	0.300	01/27/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID 99.5 % 73.3-<sup>129</sup>

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2600	16.0	01/27/2021	ND	400	100	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	01/27/2021	ND	196	98.0	200	9.43	
DRO >C10-C28*	<10.0	10.0	01/27/2021	ND	212	106	200	5.08	
	EXT DRO >C28-C36		<10.0	10.0	01/27/2021	ND			

Surrogate: 1-Chlorooctane 93.5 % 44.3-144  
 Surrogate: 1-Chlorooctadecane 97.6 % 42.2-156

Project Number: NONE GIVEN

Project Location: NONE GIVEN

**Sample ID: B 69 (H210190-05)****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	01/27/2021	ND	2.02	101	2.00	6.65	
Toluene*	<0.050	0.050	01/27/2021	ND	1.94	97.2	2.00	7.49	
Ethylbenzene*	<0.050	0.050	01/27/2021	ND	1.90	94.8	2.00	8.16	
Total Xylenes*	<0.150	0.150	01/27/2021	ND	5.50	91.7	6.00	8.98	
Total BTEX	<0.300	0.300	01/27/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.4 % 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
<b>Chloride</b>	<b>1790</b>	16.0	01/27/2021	ND	400	100	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	01/27/2021	ND	196	98.0	200	9.43	
DRO >C10-C28*	<10.0	10.0	01/27/2021	ND	212	106	200	5.08	

EXT DRO >C28-C36 <10.0 10.0 01/27/2021 ND

Surrogate: 1-Chlorooctane 84.6 % 44.3-144

Surrogate: 1-Chlorooctadecane 87.1 % 42.2-156

Project Number: NONE GIVEN

Project Location: NONE GIVEN

**Sample ID: B 70 (H210190-06)**

**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	01/27/2021	ND	2.02	101	2.00	6.65	
Toluene*	<0.050	0.050	01/27/2021	ND	1.94	97.2	2.00	7.49	
Ethylbenzene*	<0.050	0.050	01/27/2021	ND	1.90	94.8	2.00	8.16	
Total Xylenes*	<0.150	0.150	01/27/2021	ND	5.50	91.7	6.00	8.98	
Total BTEX	<0.300	0.300	01/27/2021	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
<b>Chloride</b>	<b>144</b>	16.0	01/27/2021	ND	400	100	400	0.00	

**TPH 8015M mg/kg Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
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GRO C6-C10*	<10.0	10.0	01/27/2021	ND	196	98.0	200	9.43
DRO >C10-C28*	<10.0	10.0	01/27/2021	ND	212	106	200	5.08
EXT DRO >C28-C36	<10.0	10.0	01/27/2021	ND				

Surrogate: 1-Chlorooctane 87.3 % 44.3-144

Surrogate: 1-Chlorooctadecane 90.8 % 42.2-156

Project Number: NONE GIVEN

Project Location: NONE GIVEN

**Sample ID: B 71 (H210190-07)**

**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	01/27/2021	ND	2.02	101	2.00	6.65	
Toluene*	<0.050	0.050	01/27/2021	ND	1.94	97.2	2.00	7.49	
Ethylbenzene*	<0.050	0.050	01/27/2021	ND	1.90	94.8	2.00	8.16	
Total Xylenes*	<0.150	0.150	01/27/2021	ND	5.50	91.7	6.00	8.98	
Total BTEX	<0.300	0.300	01/27/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.8 % 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
<b>Chloride</b>	<b>3080</b>	16.0	01/27/2021	ND	400	100	400	0.00	

**TPH 8015M**

mg/kg

Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
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GRO C6-C10*	<10.0	10.0	01/27/2021	ND	196	98.0	200	9.43
DRO >C10-C28*	<10.0	10.0	01/27/2021	ND	212	106	200	5.08
	EXT DRO >C28-C36		<10.0	10.0	01/27/2021	ND		

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Surrogate: 1-Chlorooctane	89.0 %	44.3-144
Surrogate: 1-Chlorooctadecane	92.5 %	42.2-156

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Fax To: (575) 393-2432

Received: 01/26/2021 Sampling Date: 01/26/2021  
 Sampling Type: Sampling Condition: SoilCool & Intact  
 Reported: 01/28/2021 Sample Received By: Tamara Oldaker  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

**Sample ID: B 72 (H210190-08)**

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	01/27/2021	ND	2.02	101	2.00	6.65	
Toluene*	<0.050	0.050	01/27/2021	ND	1.94	97.2	2.00	7.49	
Ethylbenzene*	<0.050	0.050	01/27/2021	ND	1.90	94.8	2.00	8.16	
Total Xylenes*	<0.150	0.150	01/27/2021	ND	5.50	91.7	6.00	8.98	
Total BTEx	<0.300	0.300	01/27/2021	ND					
<hr/>									
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
<b>Chloride</b>	<b>1840</b>	16.0	01/27/2021	ND	400	100	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	01/27/2021	ND	196	98.0	200	9.43	
DRO >C10-C28*	<10.0	10.0	01/27/2021	ND	212	106	200	5.08	

EXT DRO >C28-C36	<10.0	10.0	01/27/2021	ND
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Surrogate: 1-Chlorooctane	89.3 %	44.3-144
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Surrogate: 1-Chlorooctadecane	93.2 %	42.2-156
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Fax To: (575) 393-2432

Received: 01/26/2021  
 Reported: 01/28/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/26/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 73 (H210190-09)**

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	01/27/2021	ND	2.02	101	2.00	6.65	
Toluene*	<0.050	0.050	01/27/2021	ND	1.94	97.2	2.00	7.49	
Ethylbenzene*	<0.050	0.050	01/27/2021	ND	1.90	94.8	2.00	8.16	
Total Xylenes*	<0.150	0.150	01/27/2021	ND	5.50	91.7	6.00	8.98	
Total BTEX	<0.300	0.300	01/27/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID	99.8 %	73.3-129
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Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8640	16.0	01/27/2021	ND	400	100	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	01/27/2021	ND	196	98.0	200	9.43	
DRO >C10-C28*	<10.0	10.0	01/27/2021	ND	212	106	200	5.08	
EXT DRO >C28-C36	<10.0	10.0	01/27/2021	ND					
Surrogate: 1-Chlorooctane	90.8 %	44.3-144							
Surrogate: 1-Chlorooctadecane	94.6 %	42.2-156							

Fax To: (575) 393-2432

Sampling Date: 01/26/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

Received: 01/26/2021  
 Reported: 01/28/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

**Sample ID: B 74 (H210190-10)**

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	01/27/2021	ND	2.02	101	2.00	6.65	
Toluene*	<0.050	0.050	01/27/2021	ND	1.94	97.2	2.00	7.49	
Ethylbenzene*	<0.050	0.050	01/27/2021	ND	1.90	94.8	2.00	8.16	
Total Xylenes*	<0.150	0.150	01/27/2021	ND	5.50	91.7	6.00	8.98	
Total BTEX	<0.300	0.300	01/27/2021	ND					
Surrogate: 4-Bromofluorobenzene (PID	100 %	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	3120	16.0	01/27/2021	ND	400	100	400	0.00	
TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Reporting Limit Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	Result	
GRO C6-C10*	<10.0	10.0	01/27/2021	ND	196	98.0	200	9.43	

DRO >C10-C28*					212	106	5.08
EXT DRO >C28-C36	<10.0	10.0	01/27/2021	ND			

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Surrogate: 1-Chlorooctane	87.5 %	44.3-144
Surrogate: 1-Chlorooctadecane	91.1 %	42.2-156

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Fax To: (575) 393-2432

Sampling Date: 01/26/2021

Sampling Type: Soil

Received: 01/26/2021

Sampling Condition: Cool & Intact

Reported: 01/28/2021

Sample Received By: Tamara Oldaker

Project Name: GERONIMO #28

Project Number: NONE GIVEN

Project Location: NONE GIVEN

**Sample ID: B 75 (H210190-11)**

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	01/27/2021	ND	2.02	101	2.00	6.65	
Toluene*	<0.050	0.050	01/27/2021	ND	1.94	97.2	2.00	7.49	
Ethylbenzene*	<0.050	0.050	01/27/2021	ND	1.90	94.8	2.00	8.16	
Total Xylenes*	<0.150	0.150	01/27/2021	ND	5.50	91.7	6.00	8.98	
Total BTEX	<0.300	0.300	01/27/2021	ND					

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Surrogate: 4-Bromofluorobenzene (PID) 99.5 % 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	7600	16.0	01/27/2021	ND	400	100	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*					196	98.0		9.43	
DRO >C10-C28*			01/27/2021	ND	212	106	200	5.08	
EXT DRO >C28-C36	<10.0	10.0	01/27/2021	ND					

Surrogate: 1-Chlorooctane 86.3 % 44.3-144

Surrogate: 1-Chlorooctadecane 89.9 % 42.2-156

Fax  
To: (575) 393-2432

Received: 01/26/2021  
01/28/2021  
Reported: GERONIMO  
Project Name: #28  
Project Number: NONE GIVEN  
Project Location: NONE GIVEN

Sampling Date:  
Sampling Type:

Sampling Condition:  
Sample Received By:

01/26/2021  
Soil  
Cool & Intact  
Tamara Oldaker

## Sample ID: B 76 (H210190-12)

## 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	01/27/2021	ND	2.02	101	2.00	6.65	

Toluene*	<0.050	0.050	01/27/2021	ND	1.94	97.2	2.00	7.49
Ethylbenzene*	<0.050	0.050	01/27/2021	ND	1.90	94.8	2.00	8.16
Total Xylenes*	<0.150	0.150	01/27/2021	ND	5.50	91.7	6.00	8.98
Total BTEX	<0.300	0.300	01/27/2021	ND				

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Surrogate: 4-Bromofluorobenzene (PID) 101 % 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	1410	16.0	01/27/2021	ND	400	100	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*					196	98.0		9.43	
DRO >C10-C28*			01/27/2021	ND	212	106	200	5.08	
EXT DRO >C28-C36	<10.0	10.0	01/27/2021	ND					

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Surrogate: 1-Chlorooctane 78.9 % 44.3-144  
 Surrogate: 1-Chlorooctadecane 82.6 % 42.2-156

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Fax To: (575) 393-2432

Sampling Date: 01/26/2021

Sampling Type: Soil

Received: 01/26/2021 Sampling Condition: Cool & Intact  
 Reported: 01/28/2021 Sample Received By: Tamara Oldaker  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

**Sample ID: B 77 (H210190-13)**

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	01/27/2021	ND	2.02	101	2.00	6.65	
Toluene*	<0.050	0.050	01/27/2021	ND	1.94	97.2	2.00	7.49	
Ethylbenzene*	<0.050	0.050	01/27/2021	ND	1.90	94.8	2.00	8.16	
Total Xylenes*	<0.150	0.150	01/27/2021	ND	5.50	91.7	6.00	8.98	
Total BTEX	<0.300	0.300	01/27/2021	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	1730	16.0	01/27/2021	ND	400	100	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					

			Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*			01/27/2021	ND	196	98.0	200	9.43	
DRO >C10-C28*	<10.0	10.0	01/27/2021	ND	212	106	200	5.08	
EXT DRO >C28-C36	<10.0	10.0	01/27/2021	ND					

Surrogate: 1-Chlorooctane 82.7 % 44.3-144  
 Surrogate: 1-Chlorooctadecane 85.7 % 42.2-156

Fax To: (575) 393-2432

Received: 01/26/2021  
 Reported: 01/28/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/26/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 78 (H210190-14)**

**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	01/27/2021	ND	2.02	101	2.00	6.65	
Toluene*	<0.050	0.050	01/27/2021	ND	1.94	97.2	2.00	7.49	
Ethylbenzene*	<0.050	0.050	01/27/2021	ND	1.90	94.8	2.00	8.16	
Total Xylenes*	<0.150	0.150	01/27/2021	ND	5.50	91.7	6.00	8.98	
Total BTEX	<0.300	0.300	01/27/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.8 % 73.3-129

**Chloride, SM4500CI-B mg/kg Analyzed By: GM**

			Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*			01/27/2021	ND	196	98.0	200	9.43	
DRO >C10-C28*	<10.0	10.0	01/27/2021	ND	212	106	200	5.08	
EXT DRO >C28-C36	<10.0	10.0	01/27/2021	ND					

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>1840</b>	16.0	01/27/2021	ND	400	100	400	0.00	
<b>TPH 8015M</b>	<b>mg/kg</b>		<b>Analyzed By: MS</b>						
Surrogate: 1-Chlorooctane	97.4 %	44.3-144							
Surrogate: 1-Chlorooctadecane	101 %	42.2-156							

Fax To: (575) 393-2432

Sampling Date: 01/26/2021

Received: 01/26/2021 01/28/2021 GERONIMO #28

Sampling Type: Sampling Condition: Sample Received By:

Tamara Oldaker Soil Cool &amp; Intact Reported:

Project Name:

Project Number: NONE GIVEN

Project Location: NONE GIVEN

**Sample ID: B 79 (H210190-15)****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	01/27/2021	ND	2.02	101	2.00	6.65	
Toluene*	<0.050	0.050	01/27/2021	ND	1.94	97.2	2.00	7.49	
Ethylbenzene*	<0.050	0.050	01/27/2021	ND	1.90	94.8	2.00	8.16	
Total Xylenes*	<0.150	0.150	01/27/2021	ND	5.50	91.7	6.00	8.98	
Total BTEX	<0.300	0.300	01/27/2021	ND					

			Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*			01/27/2021	ND	196	98.0	200	9.43	
DRO >C10-C28*	<10.0	10.0	01/27/2021	ND	212	106	200	5.08	
EXT DRO >C28-C36	<10.0	10.0	01/27/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 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	4640	16.0	01/27/2021	ND	400	100	400	0.00	

TPH 8015M			mg/kg		Analyzed By: MS				
Surrogate: 1-Chlorooctane	97.6 %	44.3-144							
Surrogate: 1-Chlorooctadecane	102 %	42.2-156							

Fax To: (575) 393-2432

Sampling Date: 01/26/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

Received: 01/26/2021  
 Reported: 01/28/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sample ID: B 80 (H210190-16)

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	01/27/2021	ND	2.02	101	2.00	6.65	
Toluene*	<0.050	0.050	01/27/2021	ND	1.94	97.2	2.00	7.49	
Ethylbenzene*	<0.050	0.050	01/27/2021	ND	1.90	94.8	2.00	8.16	
Total Xylenes*	<0.150	0.150	01/27/2021	ND	5.50	91.7	6.00	8.98	

Total BTEX	<0.300	0.300	01/27/2021	ND
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Surrogate: 4-Bromofluorobenzene (PID	99.5 %	73.3-129
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Chloride, SM4500CI-B	mg/kg	Analyzed By: GM
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Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
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Chloride	688	16.0	01/27/2021	ND	400	100	400	0.00	
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TPH 8015M	mg/kg	Analyzed By: MS
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Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
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GRO C6-C10*	<10.0	10.0	01/27/2021	ND	196	98.0	200	9.43
DRO >C10-C28*	<10.0	10.0	01/27/2021	ND	212	106	200	5.08
EXT DRO >C28-C36	<10.0	10.0	01/27/2021	ND				

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Surrogate: 1-Chlorooctane	85.2 %	44.3-144
Surrogate: 1-Chlorooctadecane	89.1 %	42.2-156

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Fax To: (575) 393-2432

Sampling Date: 01/26/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

Received: 01/26/2021  
Reported: 01/28/2021  
Project Name: GERONIMO #28  
Project Number: NONE GIVEN  
Project Location: NONE GIVEN

**Sample ID: B 81 (H210190-17)**

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	01/27/2021	ND	2.02	101	2.00	6.65			
Toluene*	<0.050	0.050	01/27/2021	ND	1.94	97.2	2.00	7.49			
Ethylbenzene*	<0.050	0.050	01/27/2021	ND	1.90	94.8	2.00	8.16			
Total Xylenes*	<0.150	0.150	01/27/2021	ND	5.50	91.7	6.00	8.98			
Total BTEX	<0.300	0.300	01/27/2021	ND							

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Surrogate: 4-Bromofluorobenzene (PID) 97.6 % 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		
<b>Chloride</b>	<b>1440</b>	16.0	01/27/2021	ND	400	100	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	01/27/2021	ND	196	98.0	200	9.43			
DRO >C10-C28*	<10.0	10.0	01/27/2021	ND	212	106	200	5.08			
EXT DRO >C28-C36	<10.0	10.0	01/27/2021	ND							

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Surrogate: 1-Chlorooctane	84.2 %	44.3-144
Surrogate: 1-Chlorooctadecane	88.4 %	42.2-156

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Fax To: (575) 393-2432

Received: 01/26/2021  
 Reported: 01/28/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 01/26/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: B 82 (H210190-18)**

BTEX 8021B			mg/kg		Analyzed By: MS					
Analyte	Result	Rep orting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	01/27/2021	ND	2.02	101	2.00	6.65		
Toluene*	<0.050	0.050	01/27/2021	ND	1.94	97.2	2.00	7.49		
Ethylbenzene*	<0.050	0.050	01/27/2021	ND	1.90	94.8	2.00	8.16		
Total Xylenes*	<0.150	0.150	01/27/2021	ND	5.50	91.7	6.00	8.98		
Total BTEX	<0.300	0.300	01/27/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.5 % 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	1880	16.0	01/27/2021	ND	400	100	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	01/27/2021	ND	196	98.0	200	9.43	
DRO >C10-C28*	<10.0	10.0	01/27/2021	ND	212	106	200	5.08	
EXT DRO >C28-C36	<10.0	10.0	01/27/2021	ND					

Surrogate: 1-Chlorooctane 94.5 % 44.3-144  
 Surrogate: 1-Chlorooctadecane 98.4 % 42.2-156

Notes and Definitions

		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	

Cardinal Laboratories

\*=Accredited Analyte

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*Celey D. Keene*

Celey D. Keene, Lab Director/Quality Manager

Page 19 of 22



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: <u>Agave</u>		P.O. #:		BILL TO										ANALYSIS REQUEST																															
Project Manager: <u>Bruce Baker</u>		Company:																																											
Address:		Attn:																																											
City: <u>Hobbs</u>		Address:																																											
Phone #:		City:																																											
Project #:		State:																																											
Project Name:		Zip:																																											
Project Location: <u>Basins 88</u>		Phone #:																																											
Sampler Name: <u>Joe Quisenberry</u>		Fax #:																																											
FOR LAB USE ONLY		PRESERV		SAMPLING																																									
Lab I.D.		Sample I.D.		(G)RAB OR (C)OMP		# CONTAINERS		GROUNDWATER		WASTEWATER		SOIL		OIL		SLUDGE		OTHER:		ACID/BASE:		(C) COOL		OTHER:		DATE		TIME		C1		EXT TPA		BTEX											
<u>#210190</u>		1 W15		1		1		1		1		1		1		1		1		1		1		1		11/26/84		8:40		/		/		/											
2 W16		1		1		1		1		1		1		1		1		1		1		1		1		10/02		8:48		/		/		/											
3 W17		1		1		1		1		1		1		1		1		1		1		1		1		10/14		1:00		/		/		/											
4 W18		1		1		1		1		1		1		1		1		1		1		1		1		1:04		1:22		/		/		/											
5 B#69		1		1		1		1		1		1		1		1		1		1		1		1		1:22		1:24		/		/		/											
6 B#70		1		1		1		1		1		1		1		1		1		1		1		1		1:24		1:26		/		/		/											
7 B#71		1		1		1		1		1		1		1		1		1		1		1		1		1:26		1:28		/		/		/											
8 B#72		1		1		1		1		1		1		1		1		1		1		1		1		1:28		1:30		/		/		/											
9 B#73		1		1		1		1		1		1		1		1		1		1		1		1		1:30		1:30		/		/		/											
10 B#74		1		1		1		1		1		1		1		1		1		1		1		1		1:30		1:30		/		/		/											
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: <u>Joe Quisenberry</u>		Date: <u>1/26/84</u>		Received By: <u>Joe Quisenberry</u>		Date: <u>1/26/84</u>		Time: <u>4:35</u>		Sample Condition: Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/>		CHECKED BY: <u>Joe Quisenberry</u>		REMARKS: <u>Standard</u>																													
Delivered By: (Circle One)		Sampler - UPS - Bus - Other:		5.8c #113		Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/>		YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		70.																																	



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

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <u>Acme</u>		P.O. #:		BILL TO		ANALYSIS REQUEST																					
Project Manager: <u>Paul Becker</u>		Company:																									
Address:		Attn:																									
City: <u>Hobbs</u>		State: <u>NM</u> Zip: <u>88240</u>																									
Phone #:		Address:																									
Fax #:		City:																									
Project #:		State:		Zip:																							
Project Name:		Phone #:																									
Project Location: <u>Berardino St</u>		Fax #:																									
Sample Name: <u>See Analysis for details</u>																											
FOR LAB USE ONLY																											
Lab I.D.	Sample I.D.	(G)RAB OR (S)OMP		MATRIX		PRESERV		SAMPLING																			
		# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICB / COOL	OTHER:																
#210190	11 8775	1																									
	12 8774	1																									
	13 8777	1																									
	14 8778	1																									
	15 8779	1																									
	16 8820	1																									
	17 8821	1																									
	18 8822	1																									
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 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: <u>Paul Becker</u>		Date: <u>11/24/81</u>		Received By: <u>Barbara Williams</u>		Date: <u>11/26/81</u>		Time: <u>4:30</u>		Time: <u>1:32</u>		Time: <u>3:02</u>		Time: <u>3:00</u>		Time: <u>3:04</u>		Time: <u>3:12</u>		Time: <u>3:06</u>		Time: <u>3:08</u>		Time: <u>3:10</u>	
Relinquished By: <u>Paul Becker</u>		Date: <u>11/24/81</u>		Received By: <u>Barbara Williams</u>		Date: <u>11/26/81</u>		Time: <u>4:30</u>		Time: <u>1:32</u>		Time: <u>3:02</u>		Time: <u>3:00</u>		Time: <u>3:04</u>		Time: <u>3:12</u>		Time: <u>3:06</u>		Time: <u>3:08</u>		Time: <u>3:10</u>			
Delivered By: (Circle One)		Observed Temp. °C		Corrected Temp. °C		Sample Condition		CHECKED BY: (Initials)		Turnaround Time:		Standard		Bacteria (only)		Sample Condition		Observed Temp. °C		Corrected Temp. °C							
Sampler - UPS - Bus - Other:		5.8				Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/>		70				<input checked="" type="checkbox"/> Rush		<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No													
FORM 006 R-3-11 06/04/20																											

† Cardinal cannot accept verbal changes. Please email changes to [celey.keene@cardinalabnm.com](mailto:celey.keene@cardinalabnm.com)



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

February 17, 2021

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: GERONIMO #28

Enclosed are the results of analyses for samples received by the laboratory on 02/16/21 14:53.

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](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 "Coley 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: 02/16/2021  
 Reported: 02/17/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 02/12/2021  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Tamara Oldaker

**Sample ID: W 17 (H210382-01)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	02/17/2021	ND	432	108	400	3.77	

**Sample ID: W 18 (H210382-02)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	02/17/2021	ND	432	108	400	3.77		

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

Cardinal Laboratories

\*=Accredited Analyte

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

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

Company Name: <b>Apex</b> Project Manager: <b>Bruce Baker</b>		P.O. #: Company: Attn: Address: City: State: <b>NM</b> Zip: Project #: <b>28</b> Project Owner: Project Location: <b>Gerardo #28</b> Sample Name: <b>Dose 4/12/18</b>		BILL TO ANALYSIS REQUEST	
Address: City: <b>Hobbs</b> Phone #: <b>575 393-2326</b> Project #: <b>28</b> Project Name: Project Location: Sample Name:		State: <b>NM</b> Zip: Fax #: Project Owner: Project Location: Sample Name:		P.O. #: Company: Attn: Address: City: State: Zip: Phone #: Fax #:	
Lab I.D. <b>H210382</b> Sample I.D. <b>217</b> (G)RAB OR (C)OMF # CONTAINERS <b>1</b> MATRIX GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER: ACID/BASE: ICE / COOL OTHER: DATE <b>2/12/18</b> TIME <b>10:30</b> DATE <b>2/12/18</b> TIME <b>10:32</b>		FOR LAB USE ONLY MATRIX GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER: ACID/BASE: ICE / COOL OTHER: DATE TIME		PRESERV. SAMPLING	
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 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: <b>Soed</b> Relinquished By: <b>Soed</b> Date: <b>2/12/18</b> Time: <b>15:53</b> Received By: <b>Amara</b> Received By: <b>Amara</b> Date: <b>2/12/18</b> Time: <b>15:53</b>		Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #: All Results are emailed. Please provide Email address: REMARKS: <b>2. Mail Results</b> Turnaround Time: <b>2. Mail Results</b> Standard <input type="checkbox"/> Rush <input checked="" type="checkbox"/> Bacteria (only) Sample Condition <input checked="" type="checkbox"/> Cool Intact <input type="checkbox"/> Yes <input type="checkbox"/> No Corrected Temp. °C <b>4.0</b> Observed Temp. °C <b>20.8</b> Corrected Temp. °C <b>20.8</b>	

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



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

February 17, 2021

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: GERONIMO #28

Enclosed are the results of analyses for samples received by the laboratory on 02/16/21 14:53.

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

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Sincerely,

A handwritten signature in black ink that reads "Coley D. Keene". The signature is written in a cursive 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: 02/16/2021  
 Reported: 02/17/2021  
 Project Name: GERONIMO #28  
 Project Number: NONE GIVEN  
 Project Location: NONE GIVEN

Sampling Date: 02/12/2021  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Tamara Oldaker

**Sample ID: W 17 (H210382-01)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	02/17/2021	ND	432	108	400	3.77	

**Sample ID: W 18 (H210382-02)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	02/17/2021	ND	432	108	400	3.77	

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

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**Notes and Definitions**

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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

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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

[illegible]

Incident ID	NRM1932357560
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.  
Signature: Larry Baker Date: 6/4/2021  
email: larry.baker@apachecorp.com Telephone: 432-631-6982

**OCD Only**

Received by: Robert Hamlet Date: 9/8/2021

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

Signature: Robert Hamlet Date: 9/8/2021

**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 30623

**CONDITIONS**

Operator: APACHE CORPORATION 303 Veterans Airpark Ln Midland, TX 79705	OGRID: 873
	Action Number: 30623
	Action Type: [C-141] Release Corrective Action (C-141)

**CONDITIONS**

Created By	Condition	Condition Date
rhamlet	The Workplan/Remediation Plan is approved with the following conditions: Please make sure the edges/sidewalls and floor closure samples are delineated/excavated to meet closure criteria standards for proven depth to water determination. If Sec W.73 Wall through Sec W.82 Wall samples are sidewall samples, please continue to delineate to 600 mg/kg for chlorides in the top 4 feet. If these are actually floor samples, relabel as floor samples to a depth of 4 feet. Variance for section Wall 13 is denied, use a hydrovac to safely delineate/excavate to 600 mg/kg for chlorides.	9/8/2021