



2350 W Marland Blvd Hobbs, NM 88240

Closure Report

January 17, 2020

Re: North Monument G/SA Unit #355

API# 30-025-38453

Case # 1RP-5729

*To: Environmental Specialist-New Mexico Oil Conservation Division Energy, Minerals and
Natural Resources Department 1625 N. French Drive Hobbs, New Mexico 88240*

On September 27, 2019 a release occurred due the deterioration of the lower packing on a back-pressure valve. An initial C-141 was submitted to NMOCD and approved on October 4, 2019. The release is located north of Monument, New Mexico (GPS: 32.6206551, -103.3250351) in unit letter C section 35 township 19S range 36E. Groundwater data was collected utilizing USGS and NMOSE wells of record. The nearest well indicates water to be 70 feet below ground surface.

The release area was excavated to a depth of 6 inches. On November 15, 2019 final five-point bottom and wall composite samples were taken not to exceed 200 square feet and submitted to a commercial laboratory for analysis of CL-, BTEX and TPH. All lab results were below table 1 standards for releases greater than 50 feet to groundwater. Approximately 120 yards of excavated material was taken to an approved NMOCD disposal facility. The excavation was backfilled with clean imported caliche.

Apache Corporation has completed remediation activities in accordance with NMOCD closure criteria and respectfully request closure for 1RP-5314.

Enclosed: C-141, Groundwater Data, Maps, Sample Data, Laboratory Analysis, and Photos

Submitted by;

A handwritten signature in black ink that reads 'Jeff Broom'.

Environmental Technician

Jeffrey.Broom@apachecorp.com

Cell# 432-664-4677

Off# 575-393-7106

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

State of New Mexico
Energy Minerals and Natural
Resources Department

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

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	NRM1927739144
District RP	1RP-5729
Facility ID	
Application ID	PRM1927739582

Release Notification

Responsible Party

Responsible Party: Apache Corporation	OGRID 873
Contact Name: Bruce Baker	Contact Telephone: (432) 631-6982
Contact email: Larry.Baker@apachecorp.com	Incident # (assigned by OCD)
Contact Mailing Address: 2350 W. Marland Blvd, Hobbs, NM 88240	

Location of Release Source

Latitude: W 32.6206551 Longitude: N -103.3250351

(NAD 83 in decimal degrees to 5 decimal places)

Site Name: North Monument G/SA Unit #355	Site Type: Well
Date Release Discovered: September 27, 2019	API# 30-025-18453

Unit Letter	Section	Township	Range	County
C	35	19S	36E	LEA

Surface Owner: ☒ State ☐ Federal ☐ Tribal ☒ Private (Name: Not Applicable)
rlm/10/4/2019

Nature and Volume of Release

Material(s) Released (Select all that apply) and attach calculations or specific justification for the volumes provided below)

<input checked="" type="checkbox"/> Crude Oil	Volume Released (1 bbls)	Volume Recovered (.50 bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (76 bbls)	Volume Recovered (29.5 bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

Deterioration of lower packing on back pressure valve.

State of New Mexico
Oil Conservation Division

Incident ID	NRM1927739144
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Was this a major release as defined by 19.15.29.7(A) NMAC?

☒ Yes ☐ No

If YES, for what reason(s) does the responsible party consider this a major release?

Release was great than 25 barrels.

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?

Via email given to NM OCD (Robert Hamlet, Dylan Rose-Coss, and Jim Griswold) by Jeff Broom, Environmental Technician, Apache Corporation on September 27, 2019.

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

- ☒ The source of the release has been stopped.
- ☒ The impacted area has been secured to protect human health and the environment.
- ☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
- ☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

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: Jeff Broom

Title: Environmental Technician

Signature: 

Date: 10/3/2019

Email: Jeffrey.Broom@apachecorp.com

Telephone: (432) 664-6908

OCD Only

Received by: Ramona Marcus

Date: 10/4/2019

Volume Calculation

800 cubic feet of soil contamination X 7.48 gallons per cubic foot = 5,984 gallons/42 gallons to a barrel=142 barrels X .33 soil porosity= 47 barrels fluid in soil + 30 barrels recovered = 77 barrels total loss.

State of New Mexico
Oil Conservation Division

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

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

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

- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☒ Field data
- ☒ Data table of soil contaminant concentration data
- ☒ Depth to water determination
- ☒ Determination of water sources and significant watercourses within 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.

State of New Mexico
Oil Conservation Division

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Printed Name: JEFF Brown Title: Environmental Technician
 Signature: Jeff Brown Date: 1/17/20
 email: Jeffrey.Brown@apachecorp.com Telephone: 432.664.4677

OCD Only

Received by: Cristina Eads Date: 03/16/2020

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Received by OCD: 1/17/2020 10:29 AM

State of New Mexico
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Closure

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

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

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

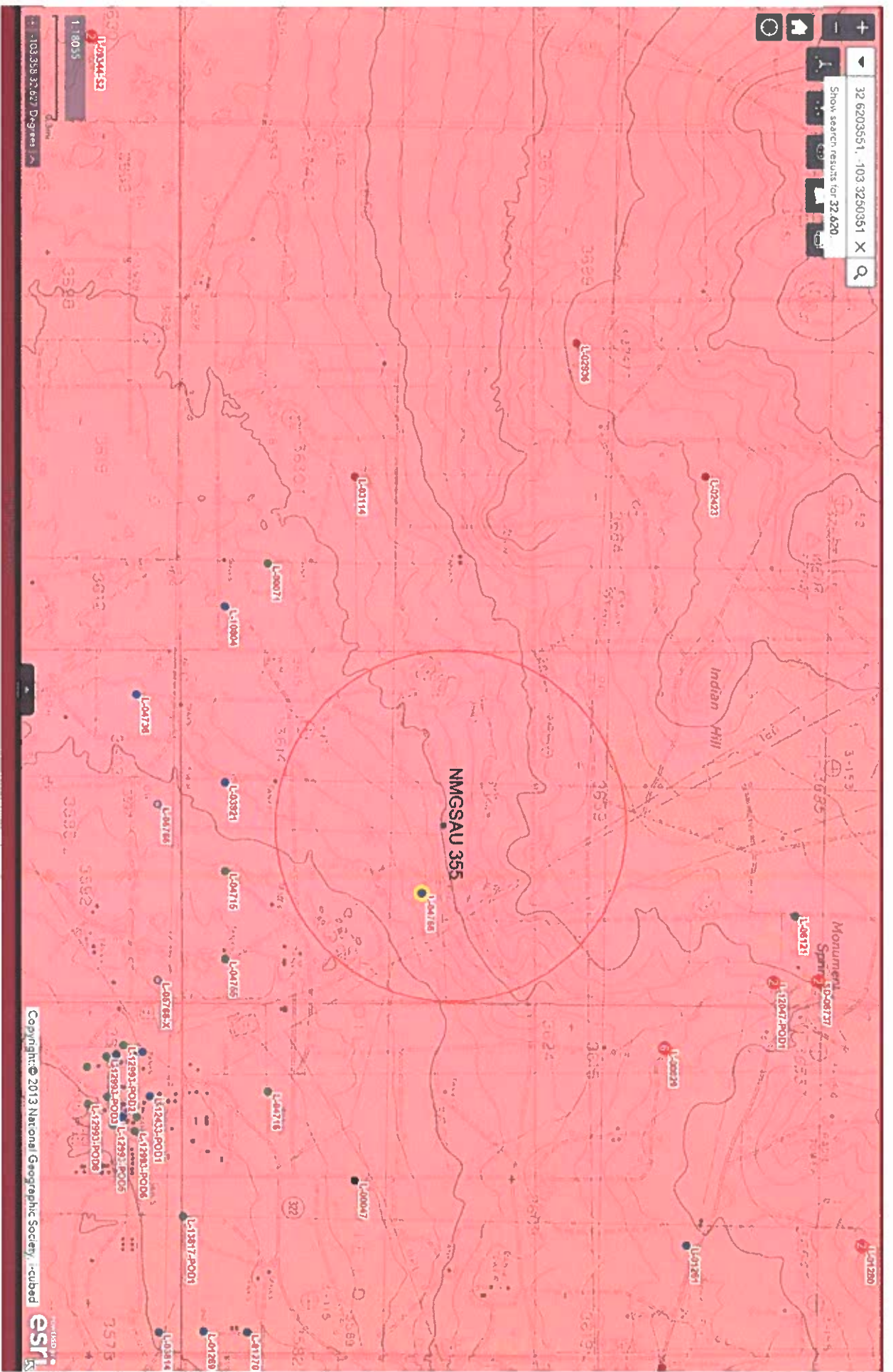
Printed Name: JEFF Broom Title: Environmental Technician
Signature: Jeff Broom Date: 1/17/20
email: Jeffrey.Broom@apacinc.com Telephone: 432.664.877

OCD Only

Received by: Cristina Eads Date: 03/16/2020

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

Closure Approved by: Cristina Eads Date: 03/16/2020
Printed Name: Cristina Eads Title: Environmental Specialist





New Mexico Office of the State Engineer

Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE)							
		(quarters are smallest to largest)						(NAD83 UTM in meters)	
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
L	04756	2	3	2	35	19S	36E	657455	3610347*

Driller License:	208	Driller Company:	VAN NOY, W L						
Driller Name:	W.L. VAN NOY								
Drill Start Date:	11/26/1961	Drill Finish Date:	12/09/1961		Plug Date:				
Log File Date:	12/18/1961	PCW Rcv Date:			Source:	Shallow			
Pump Type:		Pipe Discharge Size:			Estimated Yield:				
Casing Size:	10.75	Depth Well:	250 feet		Depth Water:	70 feet			

Water Bearing Stratifications:	Top	Bottom	Description
	178	232	Sandstone/Gravel/Conglomerate

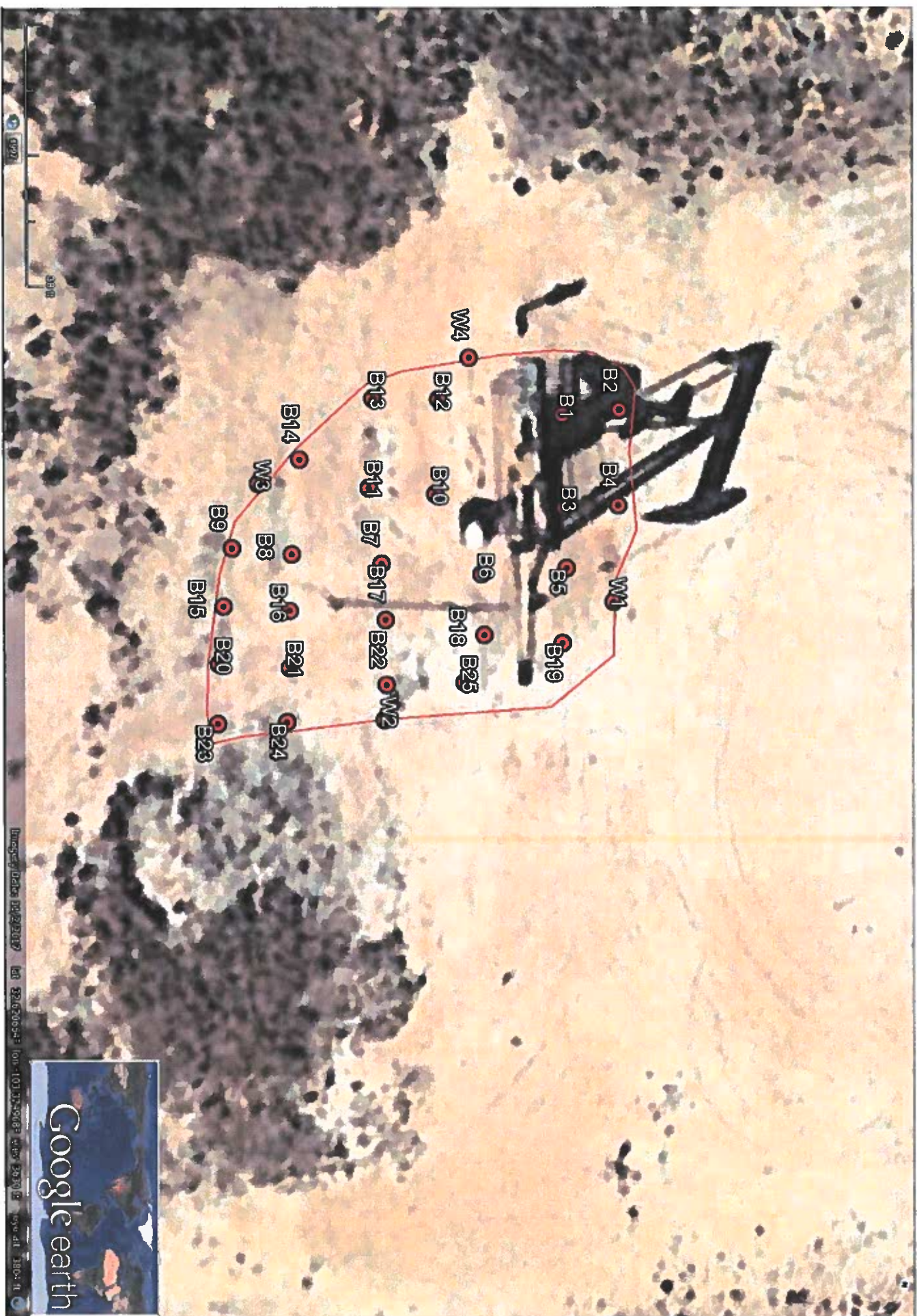
Casing Perforations:	Top	Bottom
	190	230

*UTM location was derived from PLSS - see Help

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

1/2/20 2:02 PM

POINT OF DIVERSION SUMMARY



NEDU Injection Line
Complete List

Map ID	Sample Date	Sample ID	Depth	Chloride	Benzene	Toulene	Ethhybenzene	Total Xylenes	Total BTEX	GRO	DRO	EXT DRO	GPS Coordinates
Well Samples													
W1	4/26/2019	W1	6"	352	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	46.9	12.8	32.62080, -103.32500
W2	4/26/2019	W2	6"	144	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	32.62056, -103.32479
W3	5/16/2019	W3	6"	112	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	32.62053, -103.32499
W4	4/26/2019	W4	6"	80	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	32.62074, -103.32515

NEDU Injection Line
Complete List

<u>Bottom Samples</u>													
B1	5/1/2019	B1	6"	2000	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	32.62073, -103.32512
B2	5/1/2019	B2	6"	2050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	25.5	<10.0	32.62073, -103.32512
B3	5/1/2019	B3	6"	368	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	32.62073, -103.32505
B4	5/1/2019	B4	6"	352	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	32.62073, -103.32505
B5	5/1/2019	B5	6"	48	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	32.62075, -103.32498
B6	5/2/2019	B6	6"	176	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	32.62066, -103.32496
B7	5/2/2019	B7	6"	464	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	10.4	<10.0	32.62061, -103.32497
B8	5/2/2019	B8	6"	352	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	32.62056, -103.32495
B9	5/2/2019	B9	6"	144	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	48.3	<10.0	32.62056, -103.32499
B10	5/2/2019	B10	6"	288	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	32.62067, -103.32509
B11	5/2/2019	B11	6"	64	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	32.62065, -103.32511
B12	5/2/2019	B12	6"	96	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	32.62064, -103.32514
B13	5/2/2019	B13	6"	208	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	15.4	<10.0	32.62058, -103.32511
B14	5/6/2019	B14	6"	112	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	32.62056, -103.32507
B15	5/2/2019	B15	6"	80	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	32.62055, -103.32744
B16	5/2/2019	B16	6"	288	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	32.4	<10.0	32.62063, -103.32491
B17	5/2/2019	B17	6"	1090	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	189	<10.0	32.62067, -103.32491
B18	5/2/2019	B18	6"	256	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	119	<10.0	32.62073, -103.32494
B19	5/2/2019	B19	6"	432	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	335	84.8	32.62060, -103.32486
B20	5/2/2019	B20	6"	192	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	140	27.3	32.62056, -103.32491

NEDU Injection Line
Complete List

B21	5/2/2019	B21	6"	704	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	28	<10.0	32.62056, -103.32487
B22	5/2/2019	B22	6"	448	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	459	120	32.62061, -103.32484
B23	5/2/2019	B23	6"	352	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	32.62056, -103.32482
B24	5/2/2019	B24	6"	416	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	177	44.2	32.62060, -103.32481
B25	5/2/2019	B25	6"	3440	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	180	25.7	32.62063, -103.32487



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

November 19, 2019

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: NMGSAU #355

Enclosed are the results of analyses for samples received by the laboratory on 11/15/19 13:45.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-19-12. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 11/15/2019
 Reported: 11/19/2019
 Project Name: NMGS AU #355
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 11/15/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: W 1 @ 6" (H903892-01)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/16/2019	ND	1.71	85.6	2.00	6.30	
Toluene*	<0.050	0.050	11/16/2019	ND	1.71	85.3	2.00	6.39	
Ethylbenzene*	<0.050	0.050	11/16/2019	ND	1.72	86.2	2.00	6.22	
Total Xylenes*	<0.150	0.150	11/16/2019	ND	5.19	86.5	6.00	6.39	
Total BTX	<0.300	0.300	11/16/2019	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	352	16.0	11/19/2019	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/16/2019	ND	214	107	200	1.12	
DRO >C10-C28*	46.9	10.0	11/16/2019	ND	217	109	200	0.635	
EXT DRO >C28-C36	12.8	10.0	11/16/2019	ND					

Surrogate: 1-Chlorooctane 112 % 41-142

Surrogate: 1-Chlorooctadecane 121 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 11/15/2019
 Reported: 11/19/2019
 Project Name: NMGS AU #355
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 11/15/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: W 2 @ 6" (H903892-02)

BTEx 8021B			mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/16/2019	ND	1.71	85.6	2.00	6.30		
Toluene*	<0.050	0.050	11/16/2019	ND	1.71	85.3	2.00	6.39		
Ethylbenzene*	<0.050	0.050	11/16/2019	ND	1.72	86.2	2.00	6.22		
Total Xylenes*	<0.150	0.150	11/16/2019	ND	5.19	86.5	6.00	6.39		
Total BTEx	<0.300	0.300	11/16/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 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	144	16.0	11/19/2019	ND	416	104	400	3.77			

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/16/2019	ND	214	107	200	1.12		
DRO >C10-C28*	<10.0	10.0	11/16/2019	ND	217	109	200	0.635		
EXT DRO >C28-C36	<10.0	10.0	11/16/2019	ND						

Surrogate: 1-Chlorooctane 111 % 41-142

Surrogate: 1-Chlorooctadecane 119 % 37.6-147

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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: 11/15/2019
 Reported: 11/19/2019
 Project Name: NMGS AU #355
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 11/15/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: W 3 @ 6" (H903892-03)

BTEX 80218		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/16/2019	ND	1.71	85.6	2.00	6.30	
Toluene*	<0.050	0.050	11/16/2019	ND	1.71	85.3	2.00	6.39	
Ethylbenzene*	<0.050	0.050	11/16/2019	ND	1.72	86.2	2.00	6.22	
Total Xylenes*	<0.150	0.150	11/16/2019	ND	5.19	86.5	6.00	6.39	
Total BTEX	<0.300	0.300	11/16/2019	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	112	16.0	11/19/2019	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/16/2019	ND	214	107	200	1.12	
DRO >C10-C28*	<10.0	10.0	11/16/2019	ND	217	109	200	0.635	
EXT DRO >C28-C36	<10.0	10.0	11/16/2019	ND					

Surrogate: 1-Chlorooctane 117 % 41-142

Surrogate: 1-Chlorooctadecane 127 % 37.6-147

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Celestine 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: 11/15/2019
 Reported: 11/19/2019
 Project Name: NMGS AU #355
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 11/15/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: W 4 @ 6" (H903892-04)

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	11/16/2019	ND	1.71	85.6	2.00	6.30	
Toluene*	<0.050	0.050	11/16/2019	ND	1.71	85.3	2.00	6.39	
Ethylbenzene*	<0.050	0.050	11/16/2019	ND	1.72	86.2	2.00	6.22	
Total Xylenes*	<0.150	0.150	11/16/2019	ND	5.19	86.5	6.00	6.39	
Total BTEX	<0.300	0.300	11/16/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 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	80.0	16.0	11/19/2019	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/16/2019	ND	214	107	200	1.12	
DRO >C10-C28*	<10.0	10.0	11/16/2019	ND	217	109	200	0.635	
EXT DRO >C28-C36	<10.0	10.0	11/16/2019	ND					

Surrogate: 1-Chlorooctane 110 % 41-142

Surrogate: 1-Chlorooctadecane 117 % 37.6-147

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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: 11/15/2019
 Reported: 11/19/2019
 Project Name: NMGS AU #355
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 11/15/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B 1 @ 6" (H903892-05)

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	11/18/2019	ND	1.79	89.5	2.00	2.57		
Toluene*	<0.050	0.050	11/18/2019	ND	1.77	88.4	2.00	3.34		
Ethylbenzene*	<0.050	0.050	11/18/2019	ND	1.81	90.4	2.00	3.30		
Total Xylenes*	<0.150	0.150	11/18/2019	ND	5.46	90.9	6.00	3.25		
Total BTX	<0.300	0.300	11/18/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 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	2000	16.0	11/19/2019	ND	416	104	400	3.77			

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/16/2019	ND	214	107	200	1.12		
DRO >C10-C28*	<10.0	10.0	11/16/2019	ND	217	109	200	0.635		
EXT DRO >C28-C36	<10.0	10.0	11/16/2019	ND						

Surrogate: 1-Chlorooctane 119 % 41-142

Surrogate: 1-Chlorooctadecane 127 % 37.6-147

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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: 11/15/2019
 Reported: 11/19/2019
 Project Name: NMGS AU #355
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 11/15/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B 2 @ 6" (H903892-06)

BTX 80218			mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/18/2019	ND	1.79	89.5	2.00	2.57		
Toluene*	<0.050	0.050	11/18/2019	ND	1.77	88.4	2.00	3.34		
Ethylbenzene*	<0.050	0.050	11/18/2019	ND	1.81	90.4	2.00	3.30		
Total Xylenes*	<0.150	0.150	11/18/2019	ND	5.46	90.9	6.00	3.25		
Total BTX	<0.300	0.300	11/18/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 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	2040	16.0	11/19/2019	ND	416	104	400	3.77			

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/16/2019	ND	214	107	200	1.12		
DRO >C10-C28*	25.5	10.0	11/16/2019	ND	217	109	200	0.635		
EXT DRO >C28-C36	<10.0	10.0	11/16/2019	ND						

Surrogate: 1-Chlorooctane 116 % 41-142

Surrogate: 1-Chlorooctadecane 125 % 37.6-147

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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: 11/15/2019
 Reported: 11/19/2019
 Project Name: NMGS AU #355
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 11/15/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: 8 3 @ 6" (H903892-07)

BTEx 8021B			mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	85	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/18/2019	ND	1.79	89.5	2.00	2.57		
Toluene*	<0.050	0.050	11/18/2019	ND	1.77	88.4	2.00	3.34		
Ethylbenzene*	<0.050	0.050	11/18/2019	ND	1.81	90.4	2.00	3.30		
Total Xylenes*	<0.150	0.150	11/18/2019	ND	5.46	90.9	6.00	3.25		
Total BTEx	<0.300	0.300	11/18/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 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	368	16.0	11/19/2019	ND	416	104	400	3.77			

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/16/2019	ND	214	107	200	1.12		
DRO >C10-C28*	<10.0	10.0	11/16/2019	ND	217	109	200	0.635		
EXT DRO >C28-C36	<10.0	10.0	11/16/2019	ND						

Surrogate: 1-Chlorooctane 120 % 41-142

Surrogate: 1-Chlorooctadecane 130 % 37.6-147

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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: 11/15/2019
 Reported: 11/19/2019
 Project Name: NMGS AU #355
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 11/15/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B 4 @ 6" (H903892-08)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/18/2019	ND	1.79	89.5	2.00	2.57	
Toluene*	<0.050	0.050	11/18/2019	ND	1.77	88.4	2.00	3.34	
Ethylbenzene*	<0.050	0.050	11/18/2019	ND	1.81	90.4	2.00	3.30	
Total Xylenes*	<0.150	0.150	11/18/2019	ND	5.46	90.9	6.00	3.25	
Total BTX	<0.300	0.300	11/18/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 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	352	16.0	11/19/2019	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/16/2019	ND	214	107	200	1.12	
DRO >C10-C28*	<10.0	10.0	11/16/2019	ND	217	109	200	0.635	
EXT DRO >C28-C36	<10.0	10.0	11/16/2019	ND					

Surrogate: 1-Chlorooctane 121 % 41-142

Surrogate: 1-Chlorooctadecane 130 % 37.6-147

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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: 11/15/2019
 Reported: 11/19/2019
 Project Name: NMGS AU #355
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 11/15/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B 5 @ 6" (H903892-09)

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	11/18/2019	ND	1.79	89.5	2.00	2.57	
Toluene*	<0.050	0.050	11/18/2019	ND	1.77	88.4	2.00	3.34	
Ethylbenzene*	<0.050	0.050	11/18/2019	ND	1.81	90.4	2.00	3.30	
Total Xylenes*	<0.150	0.150	11/18/2019	ND	5.46	90.9	6.00	3.25	
Total BTX	<0.300	0.300	11/18/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 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	48.0	16.0	11/19/2019	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/18/2019	ND	213	106	200	1.71	
DRO >C10-C28*	<10.0	10.0	11/18/2019	ND	212	106	200	1.81	
EXT DRO >C28-C36	<10.0	10.0	11/18/2019	ND					

Surrogate: 1-Chlorooctane 101 % 41-142

Surrogate: 1-Chlorooctadecane 109 % 37.6-147

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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: 11/15/2019
 Reported: 11/19/2019
 Project Name: NMGS AU #355
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 11/15/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B 6 @ 6" (H903892-10)

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	11/18/2019	ND	1.79	89.5	2.00	2.57	
Toluene*	<0.050	0.050	11/18/2019	ND	1.77	88.4	2.00	3.34	
Ethylbenzene*	<0.050	0.050	11/18/2019	ND	1.81	90.4	2.00	3.30	
Total Xylenes*	<0.150	0.150	11/18/2019	ND	5.46	90.9	6.00	3.25	
Total BTEX	<0.300	0.300	11/18/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 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	176	16.0	11/19/2019	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/18/2019	ND	213	106	200	1.71	
DRO >C10-C28*	<10.0	10.0	11/18/2019	ND	212	106	200	1.81	
EXT DRO >C28-C36	<10.0	10.0	11/18/2019	ND					

Surrogate: 1-Chlorooctane 95.9 % 41-142

Surrogate: 1-Chlorooctadecane 98.2 % 37.6-147

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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: 11/15/2019
 Reported: 11/19/2019
 Project Name: NMGS AU #355
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 11/15/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B 7 @ 6" (H903892-11)

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	11/18/2019	ND	1.79	89.5	2.00	2.57	
Toluene*	<0.050	0.050	11/18/2019	ND	1.77	88.4	2.00	3.34	
Ethylbenzene*	<0.050	0.050	11/18/2019	ND	1.81	90.4	2.00	3.30	
Total Xylenes*	<0.150	0.150	11/18/2019	ND	5.46	90.9	6.00	3.25	
Total BTEX	<0.300	0.300	11/18/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 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	464	16.0	11/19/2019	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/18/2019	ND	213	106	200	1.71	
DRO >C10-C28*	10.4	10.0	11/18/2019	ND	212	106	200	1.81	
EXT DRO >C28-C36	<10.0	10.0	11/18/2019	ND					

Surrogate: 1-Chlorooctane 99.8 % 41-142

Surrogate: 1-Chlorooctadecane 105 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 11/15/2019
 Reported: 11/19/2019
 Project Name: NMGS AU #355
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 11/15/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B 8 @ 6" (H903892-12)

BTX 8021B			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/18/2019	ND	1.79	89.5	2.00	2.57	
Toluene*	<0.050	0.050	11/18/2019	ND	1.77	88.4	2.00	3.34	
Ethylbenzene*	<0.050	0.050	11/18/2019	ND	1.81	90.4	2.00	3.30	
Total Xylenes*	<0.150	0.150	11/18/2019	ND	5.46	90.9	6.00	3.25	
Total BTX	<0.300	0.300	11/18/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 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	352	16.0	11/19/2019	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/18/2019	ND	213	106	200	1.71	
DRO >C10-C28*	<10.0	10.0	11/18/2019	ND	212	106	200	1.81	
EXT DRO >C28-C36	<10.0	10.0	11/18/2019	ND					

Surrogate: 1-Chlorooctane 109 % 41-142

Surrogate: 1-Chlorooctadecane 117 % 37.6-147

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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: 11/15/2019
 Reported: 11/19/2019
 Project Name: NMGS AU #355
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 11/15/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B 9 @ 6" (H903892-13)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/18/2019	ND	1.79	89.5	2.00	2.57	
Toluene*	<0.050	0.050	11/18/2019	ND	1.77	88.4	2.00	3.34	
Ethylbenzene*	<0.050	0.050	11/18/2019	ND	1.81	90.4	2.00	3.30	
Total Xylenes*	<0.150	0.150	11/18/2019	ND	5.46	90.9	6.00	3.25	
Total BTX	<0.300	0.300	11/18/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 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	144	16.0	11/19/2019	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/18/2019	ND	213	106	200	1.71	
DRO >C10-C28*	48.3	10.0	11/18/2019	ND	212	106	200	1.81	
EXT DRO >C28-C36	<10.0	10.0	11/18/2019	ND					

Surrogate: 1-Chlorooctane 105 % 41-142

Surrogate: 1-Chlorooctadecane 115 % 37.6-147

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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: 11/15/2019
 Reported: 11/19/2019
 Project Name: NMGS AU #355
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 11/15/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B 10 @ 6" (H903892-14)

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	11/18/2019	ND	1.79	89.5	2.00	2.57	
Toluene*	<0.050	0.050	11/18/2019	ND	1.77	88.4	2.00	3.34	
Ethylbenzene*	<0.050	0.050	11/18/2019	ND	1.81	90.4	2.00	3.30	
Total Xylenes*	<0.150	0.150	11/18/2019	ND	5.46	90.9	6.00	3.25	
Total BTEX	<0.300	0.300	11/18/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 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	288	16.0	11/19/2019	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/18/2019	ND	213	106	200	1.71	
DRO >C10-C28*	<10.0	10.0	11/18/2019	ND	212	106	200	1.81	
EXT DRO >C28-C36	<10.0	10.0	11/18/2019	ND					

Surrogate: 1-Chlorooctane 106 % 41-142

Surrogate: 1-Chlorooctadecane 113 % 37.6-147

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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: 11/15/2019
 Reported: 11/19/2019
 Project Name: NMGS AU #355
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 11/15/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B 11 @ 6" (H903892-15)

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	11/18/2019	ND	1.79	89.5	2.00	2.57	
Toluene*	<0.050	0.050	11/18/2019	ND	1.77	88.4	2.00	3.34	
Ethylbenzene*	<0.050	0.050	11/18/2019	ND	1.81	90.4	2.00	3.30	
Total Xylenes*	<0.150	0.150	11/18/2019	ND	5.46	90.9	6.00	3.25	
Total BTEX	<0.300	0.300	11/18/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 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	64.0	16.0	11/19/2019	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/18/2019	ND	213	106	200	1.71	
DRO >C10-C28*	<10.0	10.0	11/18/2019	ND	212	106	200	1.81	
EXT DRO >C28-C36	<10.0	10.0	11/18/2019	ND					

Surrogate: 1-Chlorooctane 103 % 41-142

Surrogate: 1-Chlorooctadecane 108 % 37.6-147

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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: 11/15/2019
 Reported: 11/19/2019
 Project Name: NMGS AU #355
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 11/15/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B 12 @ 6" (H903892-16)

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	11/18/2019	ND	1.79	89.5	2.00	2.57	
Toluene*	<0.050	0.050	11/18/2019	ND	1.77	88.4	2.00	3.34	
Ethylbenzene*	<0.050	0.050	11/18/2019	ND	1.81	90.4	2.00	3.30	
Total Xylenes*	<0.150	0.150	11/18/2019	ND	5.46	90.9	6.00	3.25	
Total BTEX	<0.300	0.300	11/18/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 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	96.0	16.0	11/19/2019	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/18/2019	ND	213	106	200	1.71	
DRO >C10-C28*	<10.0	10.0	11/18/2019	ND	212	106	200	1.81	
EXT DRO >C28-C36	<10.0	10.0	11/18/2019	ND					

Surrogate: 1-Chlorooctane 103 % 41-142

Surrogate: 1-Chlorooctadecane 108 % 37.6-147

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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: 11/15/2019
 Reported: 11/19/2019
 Project Name: NMGS AU #355
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 11/15/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B 13 @ 6" (H903892-17)

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	11/18/2019	ND	1.79	89.5	2.00	2.57	
Toluene*	<0.050	0.050	11/18/2019	ND	1.77	88.4	2.00	3.34	
Ethylbenzene*	<0.050	0.050	11/18/2019	ND	1.81	90.4	2.00	3.30	
Total Xylenes*	<0.150	0.150	11/18/2019	ND	5.46	90.9	6.00	3.25	
Total BTEX	<0.300	0.300	11/18/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 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	208	16.0	11/19/2019	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/18/2019	ND	213	106	200	1.71	
DRO >C10-C28*	<10.0	10.0	11/18/2019	ND	212	106	200	1.81	
EXT DRO >C28-C36	<10.0	10.0	11/18/2019	ND					

Surrogate: 1-Chlorooctane 90.9 % 41-142

Surrogate: 1-Chlorooctadecane 95.3 % 37.6-147

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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: 11/15/2019
 Reported: 11/19/2019
 Project Name: NMGS AU #355
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 11/15/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B 14 @ 6" (H903892-18)

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	11/18/2019	ND	1.79	89.5	2.00	2.57	
Toluene*	<0.050	0.050	11/18/2019	ND	1.77	88.4	2.00	3.34	
Ethylbenzene*	<0.050	0.050	11/18/2019	ND	1.81	90.4	2.00	3.30	
Total Xylenes*	<0.150	0.150	11/18/2019	ND	5.46	90.9	6.00	3.25	
Total BTEX	<0.300	0.300	11/18/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 98.9 % 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	112	16.0	11/19/2019	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/18/2019	ND	213	106	200	1.71	
DRO >C10-C28*	<10.0	10.0	11/18/2019	ND	212	106	200	1.81	
EXT DRO >C28-C36	<10.0	10.0	11/18/2019	ND					

Surrogate: 1-Chlorooctane 108 % 41-142

Surrogate: 1-Chlorooctadecane 112 % 37.6-147

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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: 11/15/2019
 Reported: 11/19/2019
 Project Name: NMGS AU #355
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 11/15/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B 15 @ 6" (H903892-19)

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	11/18/2019	ND	1.79	89.5	2.00	2.57	
Toluene*	<0.050	0.050	11/18/2019	ND	1.77	88.4	2.00	3.34	
Ethylbenzene*	<0.050	0.050	11/18/2019	ND	1.81	90.4	2.00	3.30	
Total Xylenes*	<0.150	0.150	11/18/2019	ND	5.46	90.9	6.00	3.25	
Total BTEX	<0.300	0.300	11/18/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.9 % 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	80.0	16.0	11/19/2019	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/18/2019	ND	213	106	200	1.71	
DRO >C10-C28*	<10.0	10.0	11/18/2019	ND	212	106	200	1.81	
EXT DRO >C28-C36	<10.0	10.0	11/18/2019	ND					

Surrogate: 1-Chlorooctane 112 % 41-142

Surrogate: 1-Chlorooctadecane 115 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 11/15/2019
 Reported: 11/19/2019
 Project Name: NMGS AU #355
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 11/15/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B 16 @ 6" (H903892-20)

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	11/18/2019	ND	1.79	89.5	2.00	2.57	
Toluene*	<0.050	0.050	11/18/2019	ND	1.77	88.4	2.00	3.34	
Ethylbenzene*	<0.050	0.050	11/18/2019	ND	1.81	90.4	2.00	3.30	
Total Xylenes*	<0.150	0.150	11/18/2019	ND	5.46	90.9	6.00	3.25	
Total BTX	<0.300	0.300	11/18/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 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	288	16.0	11/19/2019	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/18/2019	ND	213	106	200	1.71	
DRO >C10-C28*	32.4	10.0	11/18/2019	ND	212	106	200	1.81	
EXT DRO >C28-C36	<10.0	10.0	11/18/2019	ND					

Surrogate: 1-Chlorooctane 106 % 41-142

Surrogate: 1-Chlorooctadecane 115 % 37.6-147

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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: 11/15/2019
 Reported: 11/19/2019
 Project Name: NMGS AU #355
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 11/15/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B 17 @ 6" (H903892-21)

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	11/18/2019	ND	1.79	89.5	2.00	2.57	
Toluene*	<0.050	0.050	11/18/2019	ND	1.77	88.4	2.00	3.34	
Ethylbenzene*	<0.050	0.050	11/18/2019	ND	1.81	90.4	2.00	3.30	
Total Xylenes*	<0.150	0.150	11/18/2019	ND	5.46	90.9	6.00	3.25	
Total BTEX	<0.300	0.300	11/18/2019	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	1090	16.0	11/19/2019	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/18/2019	ND	213	106	200	1.71	
DRO >C10-C28*	189	10.0	11/18/2019	ND	212	106	200	1.81	
EXT DRO >C28-C36	<10.0	10.0	11/18/2019	ND					

Surrogate: 1-Chlorooctane 111 % 41-142

Surrogate: 1-Chlorooctadecane 134 % 37.6-147

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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: 11/15/2019
 Reported: 11/19/2019
 Project Name: NMGS AU #355
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 11/15/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B 18 @ 6" (H903892-22)

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	11/18/2019	ND	1.79	89.5	2.00	2.57	
Toluene*	<0.050	0.050	11/18/2019	ND	1.77	88.4	2.00	3.34	
Ethylbenzene*	<0.050	0.050	11/18/2019	ND	1.81	90.4	2.00	3.30	
Total Xylenes*	<0.150	0.150	11/18/2019	ND	5.46	90.9	6.00	3.25	
Total BTEX	<0.300	0.300	11/18/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 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	256	16.0	11/19/2019	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/18/2019	ND	213	106	200	1.71	
DRO >C10-C28*	119	10.0	11/18/2019	ND	212	106	200	1.81	
EXT DRO >C28-C36	<10.0	10.0	11/18/2019	ND					

Surrogate: 1-Chlorooctane 105 % 41-142

Surrogate: 1-Chlorooctadecane 121 % 37.6-147

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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: 11/15/2019
 Reported: 11/19/2019
 Project Name: NMGS AU #355
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 11/15/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B 19 @ 6" (H903892-23)

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	11/18/2019	ND	1.79	89.5	2.00	2.57	
Toluene*	<0.050	0.050	11/18/2019	ND	1.77	88.4	2.00	3.34	
Ethylbenzene*	<0.050	0.050	11/18/2019	ND	1.81	90.4	2.00	3.30	
Total Xylenes*	<0.150	0.150	11/18/2019	ND	5.46	90.9	6.00	3.25	
Total BTEX	<0.300	0.300	11/18/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 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	432	16.0	11/19/2019	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/18/2019	ND	213	106	200	1.71	
DRO >C10-C28*	335	10.0	11/18/2019	ND	212	106	200	1.81	
EXT DRO >C28-C36	84.8	10.0	11/18/2019	ND					

Surrogate: 1-Chlorooctane 117 % 41-142

Surrogate: 1-Chlorooctadecane 132 % 37.6-147

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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: 11/15/2019
 Reported: 11/19/2019
 Project Name: NMGS AU #355
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 11/15/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B 20 @ 6" (H903892-24)

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	11/18/2019	ND	1.79	89.5	2.00	2.57	
Toluene*	<0.050	0.050	11/18/2019	ND	1.77	88.4	2.00	3.34	
Ethylbenzene*	<0.050	0.050	11/18/2019	ND	1.81	90.4	2.00	3.30	
Total Xylenes*	<0.150	0.150	11/18/2019	ND	5.46	90.9	6.00	3.25	
Total BTX	<0.300	0.300	11/18/2019	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	192	16.0	11/19/2019	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/18/2019	ND	213	106	200	1.71	
DRO >C10-C28*	140	10.0	11/18/2019	ND	212	106	200	1.81	
EXT DRO >C28-C36	27.3	10.0	11/18/2019	ND					

Surrogate: 1-Chlorooctane 112 % 41-142

Surrogate: 1-Chlorooctadecane 125 % 37.6-147

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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: 11/15/2019
 Reported: 11/19/2019
 Project Name: NMGS AU #355
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 11/15/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B 21 @ 6" (H903892-25)

BTEX 80218		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/18/2019	ND	1.93	96.5	2.00	9.93	
Toluene*	<0.050	0.050	11/18/2019	ND	2.02	101	2.00	15.6	
Ethylbenzene*	<0.050	0.050	11/18/2019	ND	2.09	105	2.00	21.8	
Total Xylenes*	<0.150	0.150	11/18/2019	ND	6.11	102	6.00	21.0	
Total BTEX	<0.300	0.300	11/18/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 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	704	16.0	11/19/2019	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/18/2019	ND	213	106	200	1.71	
DRO >C10-C28*	28.0	10.0	11/18/2019	ND	212	106	200	1.81	
EXT DRO >C28-C36	<10.0	10.0	11/18/2019	ND					

Surrogate: 1-Chlorooctane 109 % 41-142

Surrogate: 1-Chlorooctadecane 119 % 37.6-147

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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: 11/15/2019
 Reported: 11/19/2019
 Project Name: NMGSAU #355
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 11/15/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B 22 @ 6" (H903892-26)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/18/2019	ND	1.93	96.5	2.00	9.93	
Toluene*	<0.050	0.050	11/18/2019	ND	2.02	101	2.00	15.6	
Ethylbenzene*	<0.050	0.050	11/18/2019	ND	2.09	105	2.00	21.8	
Total Xylenes*	<0.150	0.150	11/18/2019	ND	6.11	102	6.00	21.0	
Total BTX	<0.300	0.300	11/18/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 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	448	16.0	11/19/2019	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/18/2019	ND	213	106	200	1.71	
DRO >C10-C28*	459	10.0	11/18/2019	ND	212	106	200	1.81	
EXT DRO >C28-C36	120	10.0	11/18/2019	ND					

Surrogate: 1-Chlorooctane 108 % 41-142

Surrogate: 1-Chlorooctadecane 127 % 37.6-147

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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: 11/15/2019
 Reported: 11/19/2019
 Project Name: NMGS AU #355
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 11/15/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B 23 @ 6" (H903892-27)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/18/2019	ND	1.93	96.5	2.00	9.93	
Toluene*	<0.050	0.050	11/18/2019	ND	2.02	101	2.00	15.6	
Ethylbenzene*	<0.050	0.050	11/18/2019	ND	2.09	105	2.00	21.8	
Total Xylenes*	<0.150	0.150	11/18/2019	ND	6.11	102	6.00	21.0	
Total BTEX	<0.300	0.300	11/18/2019	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	352	16.0	11/19/2019	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/18/2019	ND	213	106	200	1.71	
DRO >C10-C28*	<10.0	10.0	11/18/2019	ND	212	106	200	1.81	
EXT DRO >C28-C36	<10.0	10.0	11/18/2019	ND					

Surrogate: 1-Chlorooctane 111 % 41-142

Surrogate: 1-Chlorooctadecane 118 % 37.6-147

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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: 11/15/2019
 Reported: 11/19/2019
 Project Name: NMGSAU #355
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 11/15/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B 24 @ 6" (H903892-28)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/18/2019	ND	1.93	96.5	2.00	9.93	
Toluene*	<0.050	0.050	11/18/2019	ND	2.02	101	2.00	15.6	
Ethylbenzene*	<0.050	0.050	11/18/2019	ND	2.09	105	2.00	21.8	
Total Xylenes*	<0.150	0.150	11/18/2019	ND	6.11	102	6.00	21.0	
Total BTEX	<0.300	0.300	11/18/2019	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	416	16.0	11/19/2019	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/18/2019	ND	213	106	200	1.71	
DRO >C10-C28*	177	10.0	11/18/2019	ND	212	106	200	1.81	
EXT DRO >C28-C36	44.2	10.0	11/18/2019	ND					

Surrogate: 1-Chlorooctane 115 % 41-142

Surrogate: 1-Chlorooctadecane 128 % 37.6-147

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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: 11/15/2019
 Reported: 11/19/2019
 Project Name: NMGS AU #355
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 11/15/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: B 25 @ 6" (H903892-29)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/18/2019	ND	1.93	96.5	2.00	9.93	
Toluene*	<0.050	0.050	11/18/2019	ND	2.02	101	2.00	15.6	
Ethylbenzene*	<0.050	0.050	11/18/2019	ND	2.09	105	2.00	21.8	
Total Xylenes*	<0.150	0.150	11/18/2019	ND	6.11	102	6.00	21.0	
Total BTEX	<0.300	0.300	11/18/2019	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	3440	16.0	11/19/2019	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/19/2019	ND	225	112	200	1.24	
DRO >C10-C28*	180	10.0	11/19/2019	ND	221	111	200	1.31	QM-07
EXT DRO >C28-C36	25.7	10.0	11/19/2019	ND					

Surrogate: 1-Chlorooctane 82.6 % 41-142

Surrogate: 1-Chlorooctadecane 92.4 % 37.6-147

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

QR-02	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
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

Received by OCD: 1/17/2020 10:29:01 AM

Figure 1

Received by OCD: 1/17/2020 10:29:01 AM



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Apache Corporation Project Manager: Bruce Baker Address: City: State: Zip: Phone #: Fax #: Project #: Project Owner: Project Name: NM65Au 355 Project Location: NM65Au 355 Sample Name: J. Brown FOR LAB USE ONLY				BILL TO P.O. #: Company: Attn: Address: City: State: Zip: Phone #: Fax #:			
Lab I.D. Sample I.D.				DATE TIME			
4903892 31 317 @ 6" 32 318 @ 6" 33 319 @ 6" 34 320 @ 6" 35 321 @ 6" 36 322 @ 6" 37 323 @ 6" 38 324 @ 6" 39 325 @ 6"				11/5/15 11:20 11:21 11:22 11:23 11:24 11:25 11:26 11:27 11:28			
(G)RAB OR (C)OMP # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER: ACID/BASE ICE / COOL OTHER:				MATRIX PRESERV SAMPLING			
CL BTEX EXT. TPH							

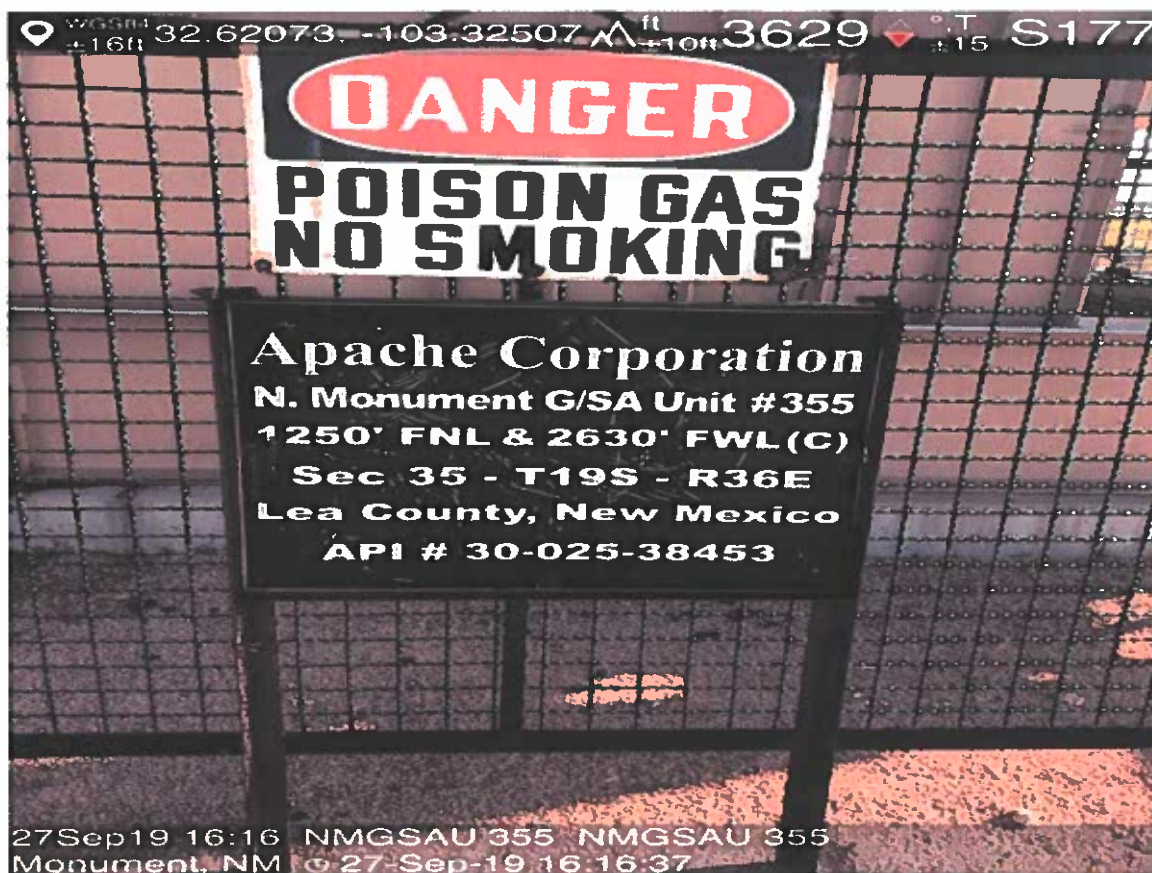
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Relinquished By: Jeff Brown
Date: 11/5/15
Time: 1:45
Received By: Brandon Oldaker
Date:
Time:

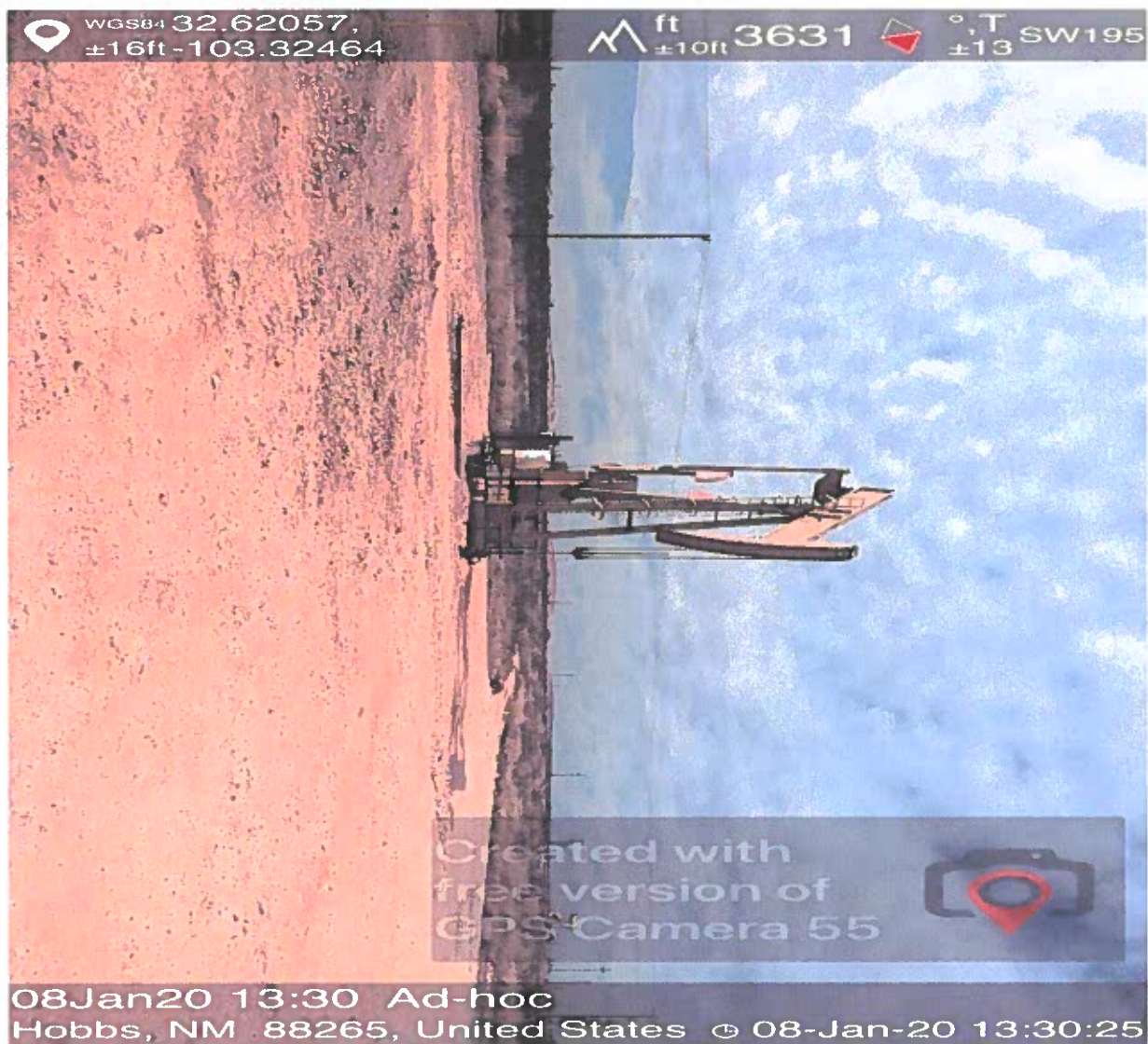
Relinquished By:
Date:
Time:

Delivered By: (Circle One) 1.70
Sampler - UPS - Bus - Other: 2.1 corrected
Sample Condition: Cool Intact
☐ Yes ☒ No
☐ Yes ☒ No
CHECKED BY: (Initials) Bus #97

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







08Jan20 13:30 Ad-hoc
Hobbs, NM 88265, United States © 08-Jan-20 13:30:25