



Lupe Carrillo

Morris 26 E #1

Closure Report

API NO. 30-015-26057

2RP-5152

Release Date: 10/29/2018

U/L E, Section 26, Township 19S, Range 25E

Eddy County

6/17/2019

Prepared By:



White Buffalo Environmental, Inc.

407 East Broadway

Hobbs, NM 88240

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June 17, 2019

New Mexico Energy, Minerals & Natural Resources
NMOCD District II
C/O Mike Bratcher, Robert Hamlet & Victoria Venegas
811 S. First Street
Artesia, NM 88210

Percussion Petroleum, LLC
C/O Lupe Carrillo/Jerry Mathews
919 Milam Street, Suite 2475
Houston, TX 77002

Subject: Closure Request for Percussion Petroleum – Morris 26 E #1

To Whom it May Concern,

On behalf of Percussion Petroleum, White Buffalo Environmental (WBE) has prepared this CLOSURE REPORT that describes the assessment, delineation and remediation for the release associated with the Morris 26 E #1, dated 10/29/2018 with the RP# 2RP-5152.

Background

The site is located in Eddy County, New Mexico. The release was located on October 29, 2018. The transfer pump that sends produced water to the SWD had failed. This caused 65bbbls of oil and 190bbbls of produced water to be released in and around the earthen bermed containment. A vacuum truck was dispatched out to recover approximately 180bbbls of produced water and 60bbbls of oil. The fluid was released not only inside the earthen bermed containment, location pad but also in the pasture area. The area of impact measured 19,990 sq. ft total. The corresponding C-141 for the release is attached.

Ground Water Information

WBE has conducted a ground water study of this area. It has been determined that according to the New Mexico Office of the State Engineer, the average depth of ground water is 93'bgs (below ground surface). The top three closest wells to the site area listed below:

RA 03304 – shows the well is set at 130'bgs, with a ground water depth of 60'bgs and 1526' from the site.
RA 08986 – shows the well is set at 320'bgs, with a ground water depth of 220'bgs and 1911' from the site.

RA 02909– shows the well is set at 188'bgs, with a ground water depth of 130'bgs and 2106' from the site.

The Average Depth to GW is 93'bgs, minimum depth is 40'bgs and the maximum depth is 220'bgs. The old Chevron Map shows the site to be 100'bgs.



Closure Criteria for Soils Impacted by a Release

DGW	Constituent	Method	Limit
51'-100'	Chloride	EPA 300.0 OR SM4500 CLB	10,000 mg/kg
	TPH (GRO + DRO + MRO)	EPA SW-846 METHOD 8015M	2,500 mg/kg
	GRO + DRO	EPA SW-846 METHOD 8015M	1,000 mg/kg
	BTEX	EPA SW-846 METHOD 8021B OR 8260B	50 mg/kg
	Benzene	EPA SW-846 METHOD 8021B OR 8260B	10 mg/kg

The Closure Criteria for Soils Impacted by Release above, based on ground water depth of 93' bgs, which falls under the 51'-100' depth category. Therefore, the site was delineated according to the above closure criteria.

Karst Mapping

The Karst Mapping Data found for this site is located inside the low marked area in blue. When the site was delineated, it was fully delineated to meet the NMOCD standards for Karst areas. Please see the Karst Map that is attached herein.

Site Delineation and Remediation

White Buffalo Environmental (WBE), fully delineated the site vertically and horizontally starting on March 8, 2019. The site was assessed, measured and photographed. After the one-call was clear to proceed the delineation of the site began by use of a hand-auger. Soil was field tested for chloride using both the chloride strip and the titration method. A PID meter was also used to indicate concentrations of BTEX and hydrocarbons. Soil samples were taken from twenty sample points within the containment, pad and pasture area. The area was sampled using 1' intervals for each sample point. TPH was found in most of the field sampling, so you will see that the depths of the sampling were due high concentrations of TPH. All of the delineation samples were taken to Cardinal Laboratory for confirmation. **Please see the sample trending data sheet attached to this report for more information. Below you will find the vertical final sample depth data confirmed by Cardinal Lab.

Ver Sam ID	Depth	CHL mg/kg	BTEX mg/kg	GRO mg/kg	DRO mg/kg	E-DRO mg/kg	Ttl TPH mg/kg
SP1	13'	336	<0.300	17.8	<10	<10	17.8
SP2	6'	304	<0.300	<10	<10	<10	<10
SP3	7'	4000	<0.300	<10	60.2	<10	60.2
SP4	11'	1330	<0.300	<10	206	53.5	259.5
SP5	13'	1740	2.201	19.6	320	79	399
SP6	6"	6320	3.34	154	10500	2240	12894
SP6	4'	720	<0.300	<10	18.9	<10	18.9
SP7	6'	4160	<0.300	<10	79.9	12.8	92.7



SP8	2'	96	<0.300	<10	<10	<10	<10
SP9	2'	192	<0.300	<10	<10	<10	<10
SP10	2'	4920	<0.300	<10	<10	<10	<10
SP11	2'	5000	<0.300	<10	26.2	<10	26.2
SP12	2'	4800	<0.300	<10	<10	<10	<10
SP13	2'	5360	<0.300	<10	<10	<10	<10
SP14	2'	304	<0.300	<10	116	71.7	187.7
SP15	4'	3600	<0.300	<10	<10	<10	<10
SP16	2'	224	<0.300	<10	<10	<10	<10
SP17	2'	1220	<0.300	<10	<10	<10	<10
SP18	2'	288	<0.300	<10	<10	<10	<10
SP19	2'	320	<0.300	<10	<10	<10	<10
SP20	2'	128	<0.300	<10	<10	<10	<10

With the vertical samples confirmations from Cardinal Lab's it was determined that 6" to 1' in the area of the containment for sample point 5, 6 and 7, the pasture area was back-dragged due to the sampling data falling under the rule closure criteria, except for SP10 and SP13. These two sample point areas were excavated to 4'bgs, in a 4x4 area, one bottom hole composite was taken and four side walls were jarred and delivered to Cardinal Lab for confirmation.

Horizontal samples then were conducted to find the horizontal extent for the impacted area. Each sample was sampled in the field and then taken to Cardinal lab for confirmation. Below you will find the closure samples for the sidewalls that were jarred and delivered to Cardinal Lab.

Hor Sam ID	Depth	CHL mg/kg	BTEX mg/kg	GRO mg/kg	DRO mg/kg	E-DRO mg/kg	Ttl TPH mg/kg
SW1	2'	656	<0.300	<10	101	36.6	137.6
SW2	2'	304	<0.300	<10	<10	<10	>10
SW3	2'	160	<0.300	<10	<10	<10	<10
SW4	2'	32	<0.300	<10	<10	<10	<10
SW5	2'	48	<0.300	<10	<10	<10	<10
SW6	2'	32	<0.300	<10	<10	<10	<10
SW7	2'	256	<0.300	<10	83.8	30	113.8
SW8	2'	720	<0.300	<10	<10	<10	<10
SW9	2'	272	<0.300	<10	13.3	<10	<10
SW10	2'	32	<0.300	<10	<10	<10	<10
SW11	2'	368	<0.300	<10	<10	<10	<10

On April 1, 2019 an email was sent to the NMOCD to request to witness final closure samples. On the pad area all sample points fell well under the concentration levels for the site closure criteria, except for SP17. This area was dug out in a 4x4 section. Sample point 10 and 13 was excavated to 4'bgs, in a 4x4



area, one bottom hole composite was taken and four side walls were jarred and delivered to Cardinal Lab for confirmation. A total of 72 cubic yards were hauled to disposal and 198 yards of clean caliche was brought back in for backfill of the excavation areas mention above as well as rebuilding the berms to meet the SPCC Requirements. The rest of the pad and location was back-dragged to its natural state.

Below you will find the closure samples of the excavated final samples for this site and confirmed by Cardinal Laboratories. Please also see details on the sample map attached herein.

CLOSURE SAM ID	Depth	CHL mg/kg	BTEX mg/kg	GRO mg/kg	DRO mg/kg	E-DRO mg/kg	Ttl TPH mg/kg
SWE CON	2'	96	<0.300	<10	37.2	16.8	54
SWW CON	2'	1150	<0.300	<10	<10	<10	<10
SWS CON	2'	64	<0.300	<10	<10	<10	<10
SWN CON	2'	48	<0.300	<10	<10	<10	<10
SP10 COMP	4'	384	<0.300	<10	38	26.4	64.4
SP10 SW1	2'	48	<0.300	<10	<10	<10	<10
SP10 SW2	2'	96	<0.300	<10	<10	<10	<10
SP10 SW3	2'	16	<0.300	<10	<10	<10	<10
SP10 SW4	2'	32	<0.300	<10	<10	<10	<10
SP13 COMP	4'	288	<0.300	<10	<10	<10	<10
SP13 SWS	2'	352	<0.300	<10	<10	<10	<10
SP13 SWE	2'	240	<0.300	<10	32.7	15.5	47.7
SP13 SWW	2'	256	<0.300	<10	<10	<10	<10
SP13 SWN	2'	256	<0.300	<10	14.5	<10	14.5
SP17 COM	4'	272	<0.300	<10	32.5	<10	32.5
SP17 SSW	2'	224	<0.300	<10	<10	<10	<10
SP17 SWN	2'	176	<0.300	<10	<10	<10	<10
SP17 SWE	2'	192	<0.300	<10	<10	<10	<10
SP17 SWS	2'	224	<0.300	<10	<10	<10	<10

Scope and Limitations

The scope of our services consisted of the performance of the assessment sampling, vertical and horizontal of the release stabilization, regulatory liaison and preparation of this closure report. All work has been performed in accordance with the NMOCD Rules and Regulations for Spills and Releases dated August 14, 2018. (19.15.29 NMAC)

On behalf of Percussion Petroleum and White Buffalo, we respectfully request closure of the release on the Morris Boyd 26 E #1 Facility. If you have any concerns or questions please direct them to me, contact information is listed below.



Sincerely,

Natalie Gladden

Natalie Gladden
Environmental & Regulatory Director
White Buffalo Environmental, Inc.
407 East Broadway
Hobbs, NM 88240
Office (575) 738-0424
Fax (575) 738-0430
Cell (575) 390-6397
Email: natalie.gladden@whitebuffalo.com

Attachments:

- C-141 & COA, including pages 3-6
- Groundwater Data
- Site Photographs & Site Diagram
- Karst Map's
- Sample Data and Sample Map
- Final Sampling Results with Labs
- Final Pictures of site

Final C-141

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	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Percussion Petroleum Operating, LLC	OGRID 371755
Contact Name Jerry Matthews	Contact Telephone 575-748-5234
Contact email Jerry@percussionpetroleum.com	Incident # (assigned by OCD) NAB1900732571
Contact mailing address 156 Rock Daisy Road Lakewood, NM 88254	

Location of Release Source

Latitude 32.63353 _____ Longitude -104.4606 _____
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Morris 26E #1	Site Type State
Date Release Discovered 10/29/2018	API# (if applicable) 30-015-26057

Unit Letter	Section	Township	Range	County
E	26	19S	25E	Eddy

Surface Owner: State Federal Tribal Private (Name: _____)

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 (bbls) 65 bbls	Volume Recovered (bbls) 60 bbls
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 190 bbls	Volume Recovered (bbls) 180 bbls
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input 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: Failure of transfer pump that sends produced water to a SWD.

Form C-141

State of New Mexico
Oil Conservation Division

Page 2

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release? >25 bbls
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Toby Rhodes to Mike Bratcher (Email, 10/29/18 3:30 PM)	

Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.
If all the actions described above have <u>not</u> 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: <u>Michael Martin</u> Title: <u>Petroleum Engineer</u> Signature: <u></u> Date: <u>6/12/2019</u> email: <u>_Michael@percussionpetroleum.com</u> Telephone: <u>_(713) 429-4249</u>
<u>OCD Only</u> Received by: _____ Date: _____

Form C-141

State of New Mexico
Oil Conservation Division

Page 3

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	60-220' (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.

Form C-141

State of New Mexico
Oil Conservation Division

Page 4

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: Natalie Gladden Title: Environmental and Regulatory Director

Signature:  Date: 6/18/19

email: Natalie.Gladden@whitebuffalo.com Telephone: 575-390-6397

OCD Only

Received by: _____ Date: _____

Form C-141
Page 5

State of New Mexico
Oil Conservation Division

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: Natalie Gladden _____ Title: Environmental and Regulatory Director _____

Signature: *Natalie Gladden* Date: 6/18/19

email: natalie.gladden@whitebuffalo.com Telephone: 575-390-6397

OCD Only

Received by: _____ Date: _____

- Approved
 Approved with Attached Conditions of Approval
 Denied
 Deferral Approved

Signature: _____ Date: _____

Form C-141

State of New Mexico
Oil Conservation Division

Page 6

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

Printed Name: Natalie Gladden Title: Environmental and Regulatory Director

Signature:  Date: _____

email: natalie.gladden@whitebuffalo.com Telephone: 575-390-6397

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

Groundwater Data



New Mexico Office of the State Engineer Water Column/Average Depth to Water

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

No records found.

UTMNAD83 Radius Search (in meters):

Easting (X): 550596

Northing (Y): 3610789.67

Radius: 1000

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

3/8/19 11:08 AM

WATER COLUMN/ AVERAGE
DEPTH TO WATER



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

POD Number	POD Code	Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Well Depth	Water Column
RA 03304	RA	ED		1	27	19S	25E			549081	3610973*	1526	130	60 70
RA 08986	RA	ED	1	3	3	22	19S	25E		548825	3611507	1911	320	220 100
RA 02909	RA	ED	1	3	22	19S	25E			548864	3611989*	2106	188	130 58
RA 03018	RA	ED	3	2	4	34	19S	25E		549987	3608639*	2235	530	
RA 02958	RA	ED	1	4	34	19S	25E			549681	3608740*	2244	450	
RA 10496	RA	ED	3	3	4	25	19S	25E		552801	3609865*	2390	110	40 70
RA 10155	RA	ED	4	3	4	25	19S	25E		553001	3609865*	2576	225	60 165
RA 07026	RA	ED	3	3	30	19S	26E			553699	3609975*	3208	135	105 30
RA 05450	RA	CH	4	2	15	19S	25E			550057	3614015*	3270	204	80 124
RA 09295	RA	ED	4	3	4	13	19S	25E		552979	3613115*	3329	250	85 165
RA 09293	RA	ED	3	4	4	13	19S	25E		553180	3613114*	3475	250	60 190
RA 09294	RA	ED	3	4	4	13	19S	25E		553180	3613114*	3475	194	76 118
RA 08611	RA	ED	1	1	1	19	19S	26E		553583	3612909*	3662	235	90 145
RA 10002	RA	ED	2	2	1	31	19S	26E		554208	3609675*	3779	200	95 105
RA 10898 POD1	RA	ED	2	1	3	01	20S	25E		552198	3607248*	3887	810	121 689
RA 09988	RA	ED	2	4	1	19	19S	26E		554190	3612507*	3983	100	65 35
RA 08612	RA	ED	1	2	1	19	19S	26E		553989	3612912*	4002	221	80 141
RA 05900	RA	ED	2	2	16	19S	25E			548442	3614424*	4224	185	95 90
RA 05458	RA	ED	3	3	01	20S	25E			552101	3606747*	4313	500	95 405
RA 07817	RA	ED	2	1	2	19	19S	26E		554592	3612915*	4525	224	145 79
RA 07817 CLW	RA	ED	2	1	2	19	19S	26E		554592	3612915*	4525	275	130 145
RA 09077	RA	ED	2	1	2	19	19S	26E		554592	3612915*	4525	200	
RA 10817	RA	ED	1	1	1	12	20S	25E		552002	3606443*	4568	743	102 641
RA 10949 POD1	RA	ED	3	1	2	06	20S	26E		554409	3607867*	4804	807	71 736
RA 10779	RA	ED	1	3	2	10	20S	25E		549580	3606026*	4870	1300	
RA 10262	RA	ED	2	2	2	19	19S	26E		554994	3612917*	4885	200	85 115
RA 01343	RA	ED	2	1	1	18	19S	26E		553777	3614525*	4906	440	69 371

Average Depth to Water: **93 feet**
 Minimum Depth: **40 feet**
 Maximum Depth: **220 feet**

Record Count: 27

UTM NAD83 Radius Search (in meters):

Easting (X): 550596 **Northing (Y):** 3610789.67 **Radius:** 5000



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
	RA 03304				1	27	19S	25E
								549081
								3610973*

Driller License: 62	Driller Company: BEATTY, J.R.	
Driller Name: BEATTY, J.R.		
Drill Start Date: 10/13/1954	Drill Finish Date: 10/15/1954	Plug Date:
Log File Date: 11/22/1954	PCW Rev Date:	Source: Shallow
Pump Type:	Pipe Discharge Size:	Estimated Yield:
Casing Size: 7.00	Depth Well: 130 feet	Depth Water: 60 feet

Water Bearing Stratifications:	Top	Bottom	Description
	90	100	Sandstone/Gravel/Conglomerate
	103	118	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	90	118

*UTM location was derived from PLSS - see Help

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

3/8/19 11:10 AM

POINT OF DIVERSION SUMMARY



New Mexico Office of the State Engineer

Point of Diversion Summary

(quarters arc 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
	RA 08986	1	3	3	22	19S	25E	548825	3611507

Driller License: 421	Driller Company: GLENN'S WATER WELL SERVICE	
Driller Name: GLENN'S WATER WELL SERVICE		
Drill Start Date: 05/15/1995	Drill Finish Date: 05/15/1995	Plug Date:
Log File Date: 05/17/1995	PCW Rcv Date:	Source: Shallow
Pump Type:	Pipe Discharge Size:	Estimated Yield:
Casing Size:	Depth Well: 320 feet	Depth Water: 220 feet

Meter Number: 4314	Meter Make: HALLIBURTON
Meter Serial Number: 2ST23206	Meter Multiplier: 1.0000
Number of Dials: 6	Meter Type: Diversion
Unit of Measure: Barrels 42 gal.	Return Flow Percent:
Usage Multiplier:	Reading Frequency:

Meter Readings (in Acre-Feet)

Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount
01/01/2001	2000	160500	A	PRT		0
03/01/2001	2000	180000	A	RPT		2.513
12/31/2001	2001	180960	A	RPT		0.124
04/01/2002	2002	180960	A	RPT		0
06/30/2002	2002	180960	A	RPT		0
09/30/2002	2002	180960	A	RPT		0
04/01/2003	2003	180960	A	RPT		0
08/15/2003	2003	180960	A	tw		0
09/30/2003	2003	180960	A	tw		0
12/31/2003	2003	180960	A	tw		0
07/01/2004	2004	180960	A	sj		0
10/01/2004	2004	180960	A	sj		0
12/31/2004	2004	180960	A	sj		0
09/30/2005	2005	180960	A	RPT		0

**YTD Meter Amounts:	Year	Amount
	2000	2.513
	2001	0.124
	2002	0
	2003	0
	2004	0
	2005	0

Meter Number: 8259	Meter Make: HALIBURTON
Meter Serial Number: 2 ST 23206	Meter Multiplier: 1.0000

3/8/2019

nmwrws.ose.state.nm.us/nmwrws/ReportDispatcher?type=PODGHTML&name=PodGroundSummaryHTML.jrxml&basin=RA&nbr=08986&s...

Number of Dis 6 **Meter Type:** iverision
Unit of Measur Barrels 42 gal. **Return Flow Percent**
Usage Multiplier: 0.00 **Reading Frequency:**

Meter Readings (in Acre-Feet)

Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount
10/01/2004	2004	180960	A	sj		0

**YTD Meter Amounts:	Year	Amount
	2004	0

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3/8/19 11:10 AM

POINT OF DIVERSION SUMMARY



New Mexico Office of the State Engineer

Point of Diversion Summary

(quarters arc 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
RA 02909		1 3 22	19S	25E		548864	3611989*

Driller License:

Driller Company:

Driller Name: A.F. SMITH

Drill Start Date: 06/26/1952

Drill Finish Date: 07/05/1952

Plug Date:

Log File Date: 08/11/1952

PCW Rcv Date:

Source: Shallow

Pump Type:

Pipe Discharge Size:

Estimated Yield:

Casing Size: 8.63

Depth Well: 188 feet

Depth Water: 130 feet

Water Bearing Stratifications:

Top Bottom Description

120	130	Sandstone/Gravel/Conglomerate
-----	-----	-------------------------------

*UTM location was derived from PLSS - see Help

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

3/8/19 11:10 AM

POINT OF DIVERSION SUMMARY

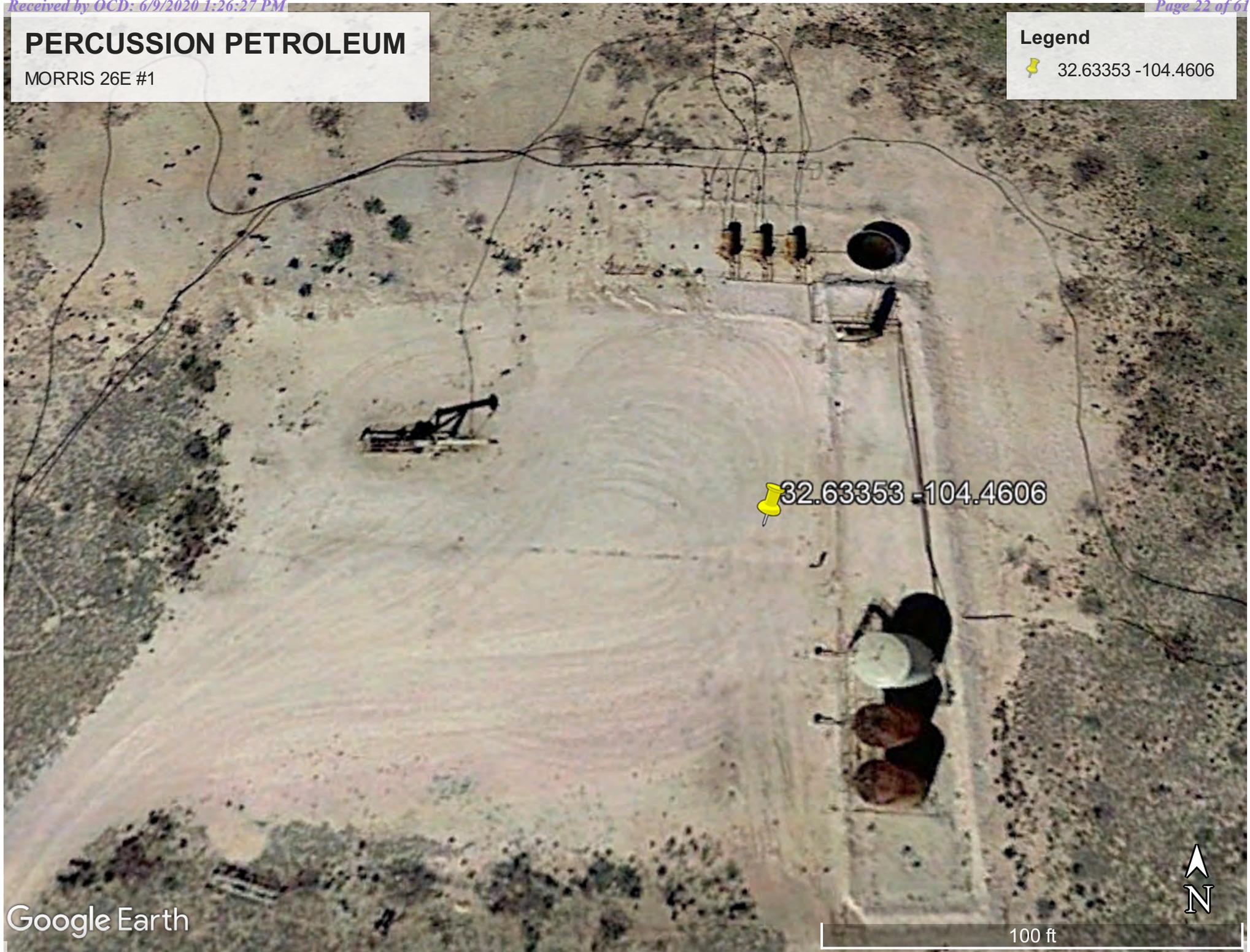
Site Diagram & Site Photographs

PERCUSSION PETROLEUM

MORRIS 26E #1

Legend

 32.63353 -104.4606



PERCUSSION PETROLEUM- MORRIS 26 E # 1 BATTERY BEFORE PHOTOS



PERCUSSION PETROLEUM- MORRIS 26 E # 1 BATTERY BEFORE PHOTOS



PERCUSSION PETROLEUM- MORRIS 26 E # 1 BATTERY BEFORE PHOTOS



PERCUSSION PETROLEUM- MORRIS 26 E # 1 BATTERY BEFORE PHOTOS



PERCUSSION PETROLEUM- MORRIS 26 E #1 BATTERY DURING PHOTOS



PERCUSSION PETROLEUM- MORRIS 26 E #1 BATTERY DURING PHOTOS



PERCUSSION PETROLEUM- MORRIS 26 E #1 BATTERY DURING PHOTOS

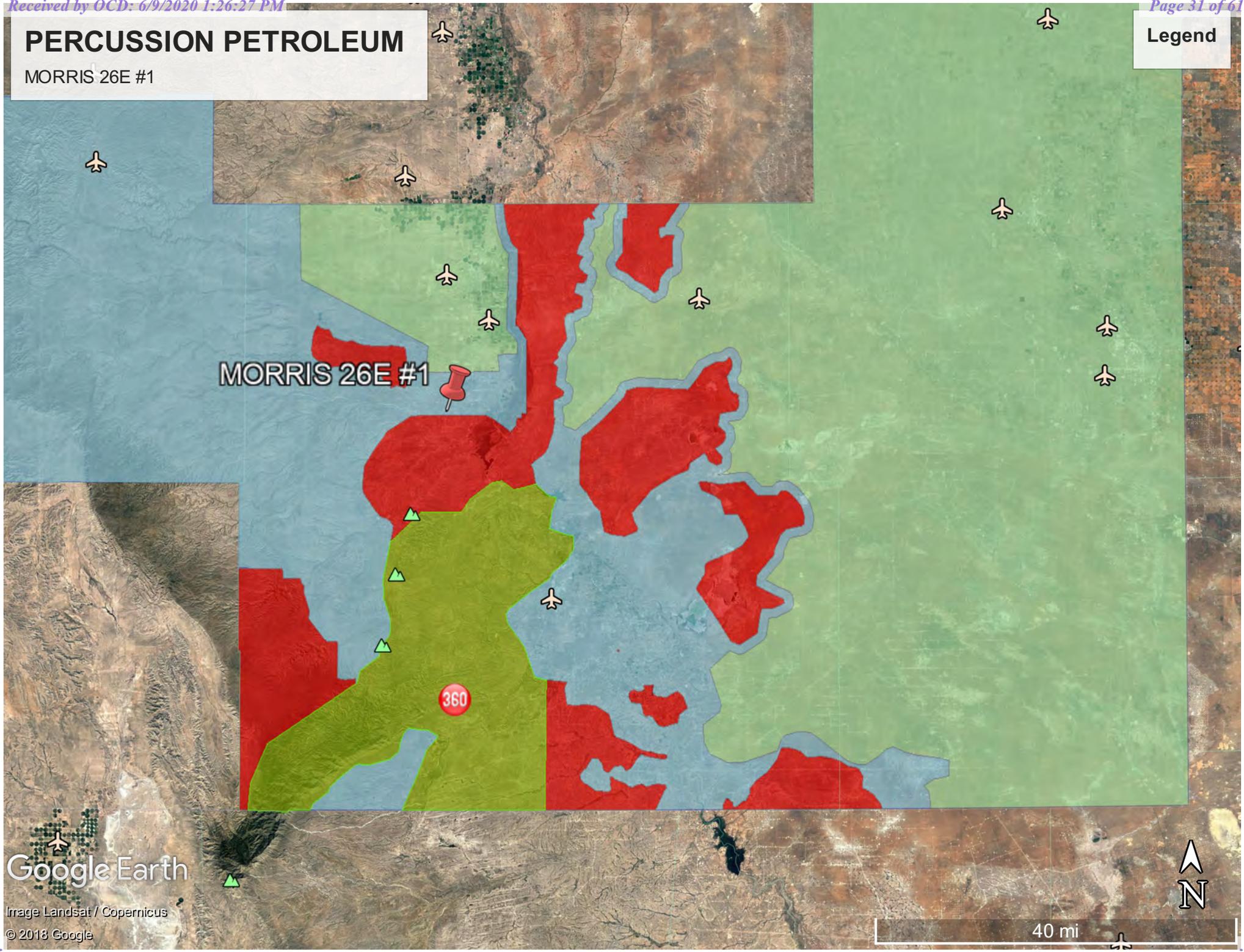


Karst Maps

PERCUSSION PETROLEUM

MORRIS 26E #1

Legend



Google Earth

Image Landsat / Copernicus
© 2018 Google

40 mi

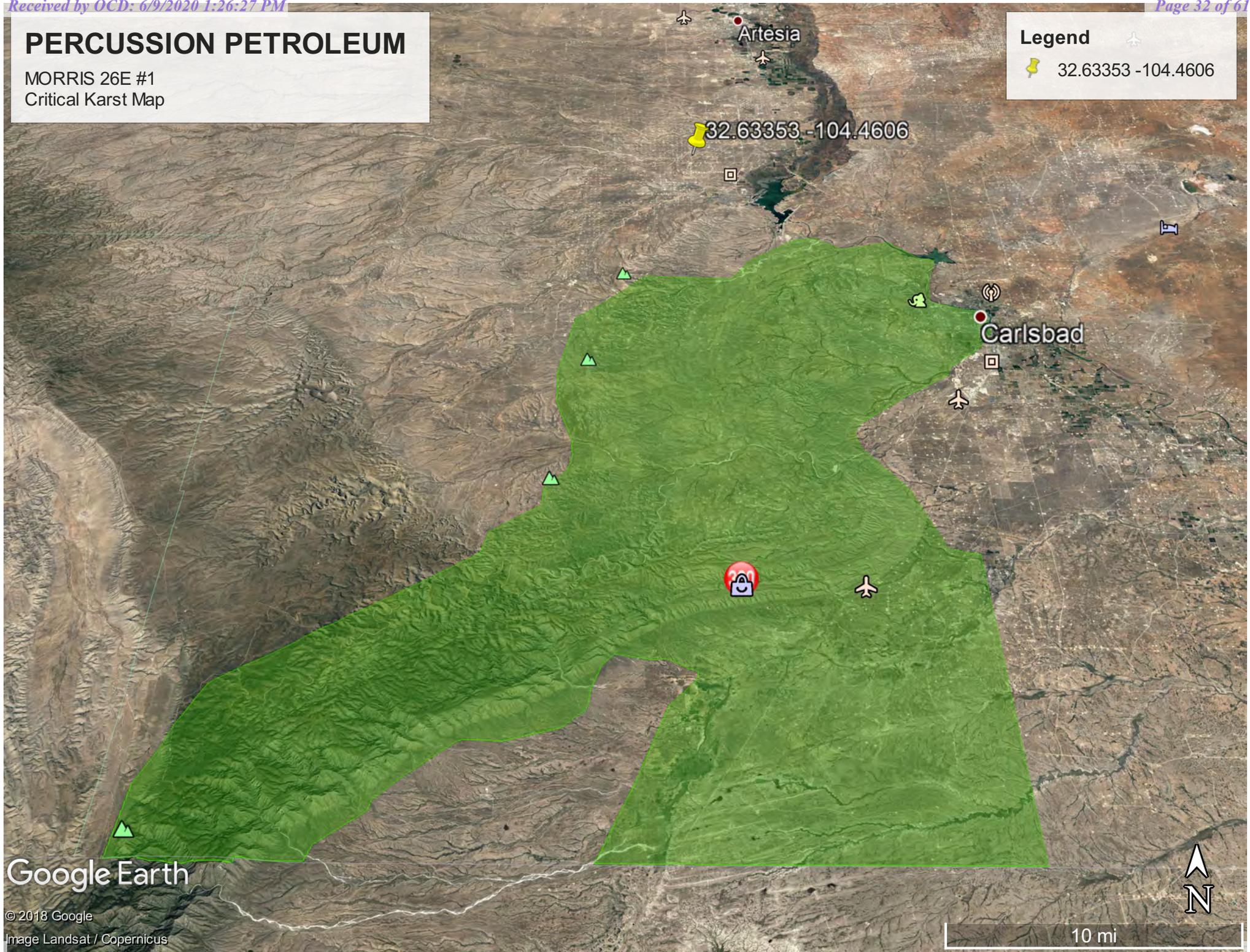


PERCUSSION PETROLEUM

MORRIS 26E #1
Critical Karst Map

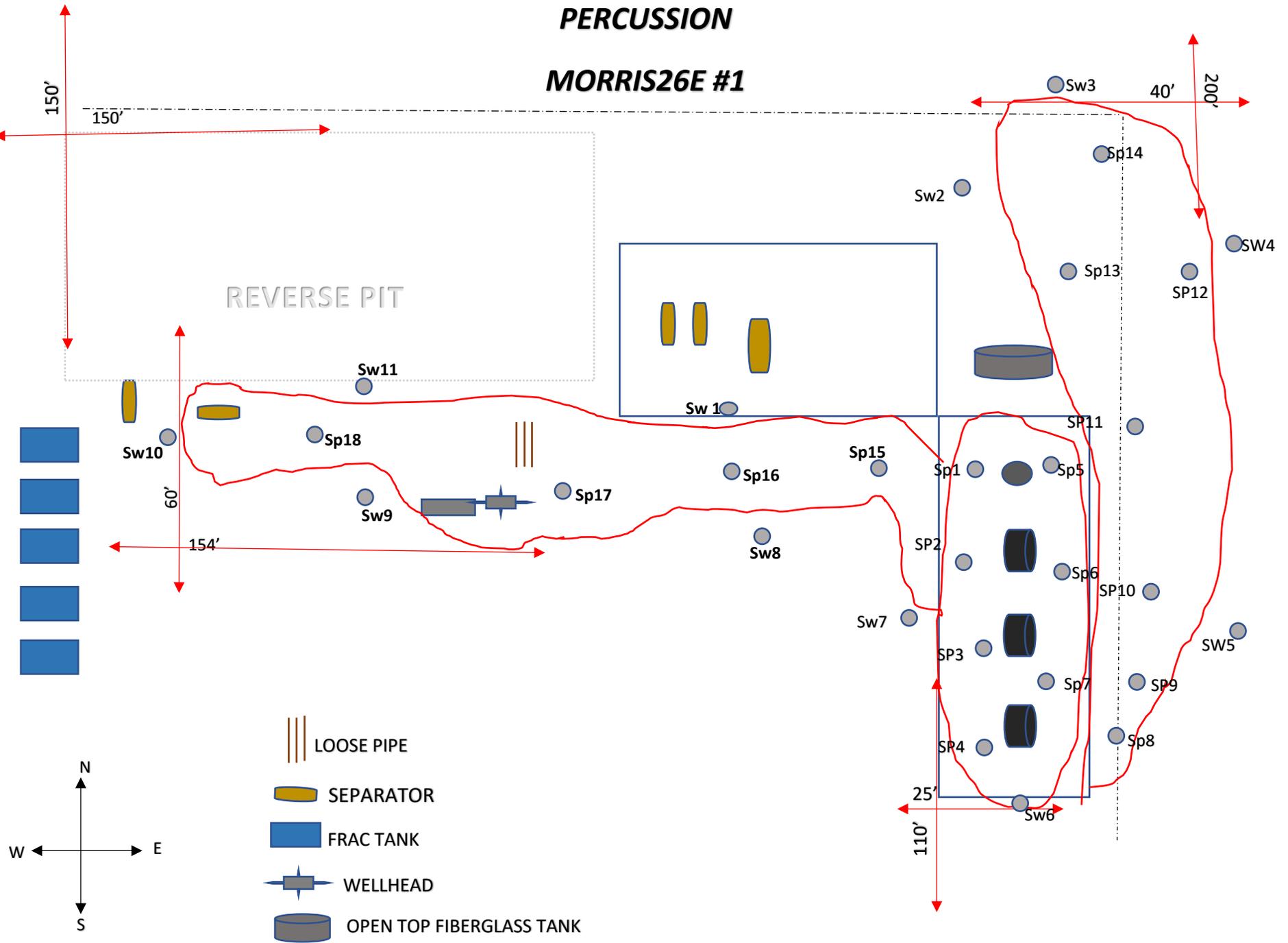
Legend

-  32.63353 -104.4606



Google Earth

Sample Data & Sample Map



Ver Sam ID	Depth	CHL mg/kg	BTEX mg/kg	GRO mg/kg	DRO mg/kg	E-DRO mg/kg	Ttl TPH mg/kg
SP1	13'	336	<0.300	17.8	<10	<10	17.8
SP2	6'	304	<0.300	<10	<10	<10	<10
SP3	7'	4000	<0.300	<10	60.2	<10	60.2
SP4	11'	1330	<0.300	<10	206	53.5	259.5
SP5	13'	1740	2.201	19.6	320	79	399
SP6	6"	6320	3.34	154	10500	2240	12894
SP6	4'	720	<0.300	<10	18.9	<10	18.9
SP7	6'	4160	<0.300	<10	79.9	12.8	92.7
SP8	2'	96	<0.300	<10	<10	<10	<10
SP9	2'	192	<0.300	<10	<10	<10	<10
SP10	2'	4920	<0.300	<10	<10	<10	<10
SP11	2'	5000	<0.300	<10	26.2	<10	26.2
SP12	2'	4800	<0.300	<10	<10	<10	<10
SP13	2'	5360	<0.300	<10	<10	<10	<10
SP14	2'	304	<0.300	<10	116	71.7	187.7
SP15	4'	3600	<0.300	<10	<10	<10	<10
SP16	2'	224	<0.300	<10	<10	<10	<10
SP17	2'	1220	<0.300	<10	<10	<10	<10
SP18	2'	288	<0.300	<10	<10	<10	<10
SP19	2'	320	<0.300	<10	<10	<10	<10
SP20	2'	128	<0.300	<10	<10	<10	<10

Hor Sam ID	Depth	CHL mg/kg	BTEX mg/kg	GRO mg/kg	DRO mg/kg	E-DRO mg/kg	Ttl TPH mg/kg
SW1	2'	656	<0.300	<10	101	36.6	137.6
SW2	2'	304	<0.300	<10	<10	<10	>10
SW3	2'	160	<0.300	<10	<10	<10	<10
SW4	2'	32	<0.300	<10	<10	<10	<10
SW5	2'	48	<0.300	<10	<10	<10	<10
SW6	2'	32	<0.300	<10	<10	<10	<10
SW7	2'	256	<0.300	<10	83.8	30	113.8
SW8	2'	720	<0.300	<10	<10	<10	<10
SW9	2'	272	<0.300	<10	13.3	<10	<10
SW10	2'	32	<0.300	<10	<10	<10	<10
SW11	2'	368	<0.300	<10	<10	<10	<10

CLOSURE SAM ID	Depth	CHL mg/kg	BTEX mg/kg	GRO mg/kg	DRO mg/kg	E-DRO mg/kg	Ttl TPH mg/kg
SWE CON	2'	96	<0.300	<10	37.2	16.8	54
SWW CON	2'	1150	<0.300	<10	<10	<10	<10
SWS CON	2'	64	<0.300	<10	<10	<10	<10
SWN CON	2'	48	<0.300	<10	<10	<10	<10
SP10 COMP	4'	384	<0.300	<10	38	26.4	64.4

Final Sampling Results & Lab Results



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

April 15, 2019

JERRY MATTHEWS
WHITE BUFFALO
8908 YALE AVE #210
TULSA, OK 74137

RE: MORRIS 26 E #1

Enclosed are the results of analyses for samples received by the laboratory on 04/12/19 14:55.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene
Lab Director/Quality Manager



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

Analytical Results For:

WHITE BUFFALO
 JERRY MATTHEWS
 8908 YALE AVE #210
 TULSA OK, 74137
 Fax To:

Received:	04/12/2019	Sampling Date:	04/11/2019
Reported:	04/15/2019	Sampling Type:	Soil
Project Name:	MORRIS 26 E #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	PERCUSSION PETRO.		

Sample ID: SP 10 - COMP (H901360-01)

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	04/13/2019	ND	2.04	102	2.00	0.584	
Toluene*	<0.050	0.050	04/13/2019	ND	1.94	97.0	2.00	1.81	
Ethylbenzene*	<0.050	0.050	04/13/2019	ND	2.01	100	2.00	0.468	
Total Xylenes*	<0.150	0.150	04/13/2019	ND	6.07	101	6.00	0.157	
Total BTEX	<0.300	0.300	04/13/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 93.2 % 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	384	16.0	04/15/2019	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	04/13/2019	ND	194	97.0	200	4.04	
DRO >C10-C28*	38.0	10.0	04/13/2019	ND	190	95.0	200	4.16	
EXT DRO >C28-C36	26.4	10.0	04/13/2019	ND					

Surrogate: 1-Chlorooctane 76.4 % 41-142

Surrogate: 1-Chlorooctadecane 78.7 % 37.6-147

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:

WHITE BUFFALO
 JERRY MATTHEWS
 8908 YALE AVE #210
 TULSA OK, 74137
 Fax To:

Received: 04/12/2019
 Reported: 04/15/2019
 Project Name: MORRIS 26 E #1
 Project Number: NONE GIVEN
 Project Location: PERCUSSION PETRO.

Sampling Date: 04/11/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: SP 10 - SW1 (H901360-02)

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	04/13/2019	ND	2.04	102	2.00	0.584		
Toluene*	<0.050	0.050	04/13/2019	ND	1.94	97.0	2.00	1.81		
Ethylbenzene*	<0.050	0.050	04/13/2019	ND	2.01	100	2.00	0.468		
Total Xylenes*	<0.150	0.150	04/13/2019	ND	6.07	101	6.00	0.157		
Total BTEX	<0.300	0.300	04/13/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 93.6 % 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	48.0	16.0	04/15/2019	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	04/13/2019	ND	194	97.0	200	4.04		
DRO >C10-C28*	<10.0	10.0	04/13/2019	ND	190	95.0	200	4.16		
EXT DRO >C28-C36	<10.0	10.0	04/13/2019	ND						

Surrogate: 1-Chlorooctane 92.0 % 41-142

Surrogate: 1-Chlorooctadecane 89.3 % 37.6-147

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* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

WHITE BUFFALO
 JERRY MATTHEWS
 8908 YALE AVE #210
 TULSA OK, 74137
 Fax To:

Received: 04/12/2019
 Reported: 04/15/2019
 Project Name: MORRIS 26 E #1
 Project Number: NONE GIVEN
 Project Location: PERCUSSION PETRO.

Sampling Date: 04/11/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: SP 10 - SW2 (H901360-03)

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	04/13/2019	ND	2.04	102	2.00	0.584	
Toluene*	<0.050	0.050	04/13/2019	ND	1.94	97.0	2.00	1.81	
Ethylbenzene*	<0.050	0.050	04/13/2019	ND	2.01	100	2.00	0.468	
Total Xylenes*	<0.150	0.150	04/13/2019	ND	6.07	101	6.00	0.157	
Total BTEX	<0.300	0.300	04/13/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 92.8 % 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	04/15/2019	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	04/13/2019	ND	194	97.0	200	4.04	
DRO >C10-C28*	<10.0	10.0	04/13/2019	ND	190	95.0	200	4.16	
EXT DRO >C28-C36	<10.0	10.0	04/13/2019	ND					

Surrogate: 1-Chlorooctane 101 % 41-142

Surrogate: 1-Chlorooctadecane 99.4 % 37.6-147

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* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

WHITE BUFFALO
 JERRY MATTHEWS
 8908 YALE AVE #210
 TULSA OK, 74137
 Fax To:

Received: 04/12/2019
 Reported: 04/15/2019
 Project Name: MORRIS 26 E #1
 Project Number: NONE GIVEN
 Project Location: PERCUSSION PETRO.

Sampling Date: 04/11/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: SP 10 - SW3 (H901360-04)

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	04/13/2019	ND	2.04	102	2.00	0.584	
Toluene*	<0.050	0.050	04/13/2019	ND	1.94	97.0	2.00	1.81	
Ethylbenzene*	<0.050	0.050	04/13/2019	ND	2.01	100	2.00	0.468	
Total Xylenes*	<0.150	0.150	04/13/2019	ND	6.07	101	6.00	0.157	
Total BTEX	<0.300	0.300	04/13/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 92.0 % 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	16.0	16.0	04/15/2019	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	04/13/2019	ND	194	97.0	200	4.04	
DRO >C10-C28*	<10.0	10.0	04/13/2019	ND	190	95.0	200	4.16	
EXT DRO >C28-C36	<10.0	10.0	04/13/2019	ND					

Surrogate: 1-Chlorooctane 96.1 % 41-142

Surrogate: 1-Chlorooctadecane 94.9 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

WHITE BUFFALO
 JERRY MATTHEWS
 8908 YALE AVE #210
 TULSA OK, 74137
 Fax To:

Received: 04/12/2019
 Reported: 04/15/2019
 Project Name: MORRIS 26 E #1
 Project Number: NONE GIVEN
 Project Location: PERCUSSION PETRO.

Sampling Date: 04/11/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: SP 10 - SW4 (H901360-05)

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	04/13/2019	ND	2.04	102	2.00	0.584	
Toluene*	<0.050	0.050	04/13/2019	ND	1.94	97.0	2.00	1.81	
Ethylbenzene*	<0.050	0.050	04/13/2019	ND	2.01	100	2.00	0.468	
Total Xylenes*	<0.150	0.150	04/13/2019	ND	6.07	101	6.00	0.157	
Total BTEX	<0.300	0.300	04/13/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 92.6 % 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	32.0	16.0	04/15/2019	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	04/13/2019	ND	194	97.0	200	4.04	
DRO >C10-C28*	<10.0	10.0	04/13/2019	ND	190	95.0	200	4.16	
EXT DRO >C28-C36	<10.0	10.0	04/13/2019	ND					

Surrogate: 1-Chlorooctane 94.6 % 41-142

Surrogate: 1-Chlorooctadecane 94.0 % 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:

WHITE BUFFALO
 JERRY MATTHEWS
 8908 YALE AVE #210
 TULSA OK, 74137
 Fax To:

Received:	04/12/2019	Sampling Date:	04/11/2019
Reported:	04/15/2019	Sampling Type:	Soil
Project Name:	MORRIS 26 E #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	PERCUSSION PETRO.		

Sample ID: SP 13 - SWS (H901360-06)

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	04/13/2019	ND	2.04	102	2.00	0.584	
Toluene*	<0.050	0.050	04/13/2019	ND	1.94	97.0	2.00	1.81	
Ethylbenzene*	<0.050	0.050	04/13/2019	ND	2.01	100	2.00	0.468	
Total Xylenes*	<0.150	0.150	04/13/2019	ND	6.07	101	6.00	0.157	
Total BTEX	<0.300	0.300	04/13/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 92.3 % 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	352	16.0	04/15/2019	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	04/13/2019	ND	194	97.0	200	4.04	
DRO >C10-C28*	<10.0	10.0	04/13/2019	ND	190	95.0	200	4.16	
EXT DRO >C28-C36	<10.0	10.0	04/13/2019	ND					

Surrogate: 1-Chlorooctane 90.3 % 41-142

Surrogate: 1-Chlorooctadecane 91.9 % 37.6-147

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Analytical Results For:

WHITE BUFFALO
 JERRY MATTHEWS
 8908 YALE AVE #210
 TULSA OK, 74137
 Fax To:

Received: 04/12/2019
 Reported: 04/15/2019
 Project Name: MORRIS 26 E #1
 Project Number: NONE GIVEN
 Project Location: PERCUSSION PETRO.

Sampling Date: 04/11/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: SP 13 - SWE (H901360-07)

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	04/13/2019	ND	2.04	102	2.00	0.584	
Toluene*	<0.050	0.050	04/13/2019	ND	1.94	97.0	2.00	1.81	
Ethylbenzene*	<0.050	0.050	04/13/2019	ND	2.01	100	2.00	0.468	
Total Xylenes*	<0.150	0.150	04/13/2019	ND	6.07	101	6.00	0.157	
Total BTEX	<0.300	0.300	04/13/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 93.0 % 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	240	16.0	04/15/2019	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	04/13/2019	ND	194	97.0	200	4.04	
DRO >C10-C28*	32.7	10.0	04/13/2019	ND	190	95.0	200	4.16	
EXT DRO >C28-C36	15.5	10.0	04/13/2019	ND					

Surrogate: 1-Chlorooctane 93.4 % 41-142

Surrogate: 1-Chlorooctadecane 94.4 % 37.6-147

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Analytical Results For:

WHITE BUFFALO
 JERRY MATTHEWS
 8908 YALE AVE #210
 TULSA OK, 74137
 Fax To:

Received: 04/12/2019
 Reported: 04/15/2019
 Project Name: MORRIS 26 E #1
 Project Number: NONE GIVEN
 Project Location: PERCUSSION PETRO.

Sampling Date: 04/11/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: SP 13 - SWW (H901360-08)

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	04/13/2019	ND	2.04	102	2.00	0.584	
Toluene*	<0.050	0.050	04/13/2019	ND	1.94	97.0	2.00	1.81	
Ethylbenzene*	<0.050	0.050	04/13/2019	ND	2.01	100	2.00	0.468	
Total Xylenes*	<0.150	0.150	04/13/2019	ND	6.07	101	6.00	0.157	
Total BTEX	<0.300	0.300	04/13/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 92.1 % 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	256	16.0	04/15/2019	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	04/13/2019	ND	194	97.0	200	4.04	
DRO >C10-C28*	<10.0	10.0	04/13/2019	ND	190	95.0	200	4.16	
EXT DRO >C28-C36	<10.0	10.0	04/13/2019	ND					

Surrogate: 1-Chlorooctane 96.4 % 41-142

Surrogate: 1-Chlorooctadecane 94.0 % 37.6-147

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Analytical Results For:

WHITE BUFFALO
 JERRY MATTHEWS
 8908 YALE AVE #210
 TULSA OK, 74137
 Fax To:

Received: 04/12/2019
 Reported: 04/15/2019
 Project Name: MORRIS 26 E #1
 Project Number: NONE GIVEN
 Project Location: PERCUSSION PETRO.

Sampling Date: 04/11/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: SP 13 - SWN (H901360-09)

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	04/13/2019	ND	2.04	102	2.00	0.584	
Toluene*	<0.050	0.050	04/13/2019	ND	1.94	97.0	2.00	1.81	
Ethylbenzene*	<0.050	0.050	04/13/2019	ND	2.01	100	2.00	0.468	
Total Xylenes*	<0.150	0.150	04/13/2019	ND	6.07	101	6.00	0.157	
Total BTEX	<0.300	0.300	04/13/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 92.3 % 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	04/15/2019	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	04/13/2019	ND	194	97.0	200	4.04	
DRO >C10-C28*	14.5	10.0	04/13/2019	ND	190	95.0	200	4.16	
EXT DRO >C28-C36	<10.0	10.0	04/13/2019	ND					

Surrogate: 1-Chlorooctane 92.9 % 41-142

Surrogate: 1-Chlorooctadecane 93.6 % 37.6-147

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Analytical Results For:

WHITE BUFFALO
 JERRY MATTHEWS
 8908 YALE AVE #210
 TULSA OK, 74137
 Fax To:

Received: 04/12/2019
 Reported: 04/15/2019
 Project Name: MORRIS 26 E #1
 Project Number: NONE GIVEN
 Project Location: PERCUSSION PETRO.

Sampling Date: 04/11/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: SP 13 - COMP (H901360-10)

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	04/13/2019	ND	2.04	102	2.00	0.584	
Toluene*	<0.050	0.050	04/13/2019	ND	1.94	97.0	2.00	1.81	
Ethylbenzene*	<0.050	0.050	04/13/2019	ND	2.01	100	2.00	0.468	
Total Xylenes*	<0.150	0.150	04/13/2019	ND	6.07	101	6.00	0.157	
Total BTEX	<0.300	0.300	04/13/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 93.4 % 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	04/15/2019	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	04/13/2019	ND	205	102	200	3.08	
DRO >C10-C28*	<10.0	10.0	04/13/2019	ND	201	101	200	2.86	
EXT DRO >C28-C36	<10.0	10.0	04/13/2019	ND					

Surrogate: 1-Chlorooctane 86.4 % 41-142

Surrogate: 1-Chlorooctadecane 91.2 % 37.6-147

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Analytical Results For:

WHITE BUFFALO
 JERRY MATTHEWS
 8908 YALE AVE #210
 TULSA OK, 74137
 Fax To:

Received: 04/12/2019
 Reported: 04/15/2019
 Project Name: MORRIS 26 E #1
 Project Number: NONE GIVEN
 Project Location: PERCUSSION PETRO.

Sampling Date: 04/11/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: SP 17 - COMP (H901360-11)

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	04/13/2019	ND	2.06	103	2.00	2.25	
Toluene*	<0.050	0.050	04/13/2019	ND	1.93	96.6	2.00	1.68	
Ethylbenzene*	<0.050	0.050	04/13/2019	ND	2.05	102	2.00	1.88	
Total Xylenes*	<0.150	0.150	04/13/2019	ND	6.21	103	6.00	2.51	
Total BTEX	<0.300	0.300	04/13/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 91.8 % 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	272	16.0	04/15/2019	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	04/13/2019	ND	205	102	200	3.08	
DRO >C10-C28*	32.5	10.0	04/13/2019	ND	201	101	200	2.86	
EXT DRO >C28-C36	<10.0	10.0	04/13/2019	ND					

Surrogate: 1-Chlorooctane 80.7 % 41-142

Surrogate: 1-Chlorooctadecane 85.9 % 37.6-147

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Analytical Results For:

WHITE BUFFALO
 JERRY MATTHEWS
 8908 YALE AVE #210
 TULSA OK, 74137
 Fax To:

Received: 04/12/2019
 Reported: 04/15/2019
 Project Name: MORRIS 26 E #1
 Project Number: NONE GIVEN
 Project Location: PERCUSSION PETRO.

Sampling Date: 04/11/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: SP 17 - SWW (H901360-12)

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	04/13/2019	ND	2.06	103	2.00	2.25		
Toluene*	<0.050	0.050	04/13/2019	ND	1.93	96.6	2.00	1.68		
Ethylbenzene*	<0.050	0.050	04/13/2019	ND	2.05	102	2.00	1.88		
Total Xylenes*	<0.150	0.150	04/13/2019	ND	6.21	103	6.00	2.51		
Total BTEX	<0.300	0.300	04/13/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 94.7 % 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	224	16.0	04/15/2019	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	04/13/2019	ND	205	102	200	3.08		
DRO >C10-C28*	<10.0	10.0	04/13/2019	ND	201	101	200	2.86		
EXT DRO >C28-C36	<10.0	10.0	04/13/2019	ND						

Surrogate: 1-Chlorooctane 81.4 % 41-142

Surrogate: 1-Chlorooctadecane 85.9 % 37.6-147

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Analytical Results For:

WHITE BUFFALO
 JERRY MATTHEWS
 8908 YALE AVE #210
 TULSA OK, 74137
 Fax To:

Received: 04/12/2019
 Reported: 04/15/2019
 Project Name: MORRIS 26 E #1
 Project Number: NONE GIVEN
 Project Location: PERCUSSION PETRO.

Sampling Date: 04/11/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: SP 17 - SWN (H901360-13)

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	04/13/2019	ND	2.06	103	2.00	2.25		
Toluene*	<0.050	0.050	04/13/2019	ND	1.93	96.6	2.00	1.68		
Ethylbenzene*	<0.050	0.050	04/13/2019	ND	2.05	102	2.00	1.88		
Total Xylenes*	<0.150	0.150	04/13/2019	ND	6.21	103	6.00	2.51		
Total BTEX	<0.300	0.300	04/13/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 93.4 % 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	176	16.0	04/15/2019	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	04/13/2019	ND	205	102	200	3.08		
DRO >C10-C28*	<10.0	10.0	04/13/2019	ND	201	101	200	2.86		
EXT DRO >C28-C36	<10.0	10.0	04/13/2019	ND						

Surrogate: 1-Chlorooctane 86.5 % 41-142

Surrogate: 1-Chlorooctadecane 91.4 % 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:

WHITE BUFFALO
 JERRY MATTHEWS
 8908 YALE AVE #210
 TULSA OK, 74137
 Fax To:

Received: 04/12/2019
 Reported: 04/15/2019
 Project Name: MORRIS 26 E #1
 Project Number: NONE GIVEN
 Project Location: PERCUSSION PETRO.

Sampling Date: 04/11/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: SP 17 - SWE (H901360-14)

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	04/13/2019	ND	2.06	103	2.00	2.25	
Toluene*	<0.050	0.050	04/13/2019	ND	1.93	96.6	2.00	1.68	
Ethylbenzene*	<0.050	0.050	04/13/2019	ND	2.05	102	2.00	1.88	
Total Xylenes*	<0.150	0.150	04/13/2019	ND	6.21	103	6.00	2.51	
Total BTEX	<0.300	0.300	04/13/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 93.0 % 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	04/15/2019	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	04/13/2019	ND	205	102	200	3.08	
DRO >C10-C28*	<10.0	10.0	04/13/2019	ND	201	101	200	2.86	
EXT DRO >C28-C36	<10.0	10.0	04/13/2019	ND					

Surrogate: 1-Chlorooctane 79.9 % 41-142

Surrogate: 1-Chlorooctadecane 84.1 % 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:

WHITE BUFFALO
 JERRY MATTHEWS
 8908 YALE AVE #210
 TULSA OK, 74137
 Fax To:

Received:	04/12/2019	Sampling Date:	04/11/2019
Reported:	04/15/2019	Sampling Type:	Soil
Project Name:	MORRIS 26 E #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	PERCUSSION PETRO.		

Sample ID: SP 17 - SWS (H901360-15)

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	04/13/2019	ND	2.06	103	2.00	2.25	
Toluene*	<0.050	0.050	04/13/2019	ND	1.93	96.6	2.00	1.68	
Ethylbenzene*	<0.050	0.050	04/13/2019	ND	2.05	102	2.00	1.88	
Total Xylenes*	<0.150	0.150	04/13/2019	ND	6.21	103	6.00	2.51	
Total BTEX	<0.300	0.300	04/13/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 92.1 % 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	224	16.0	04/15/2019	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	04/13/2019	ND	205	102	200	3.08	
DRO >C10-C28*	<10.0	10.0	04/13/2019	ND	201	101	200	2.86	
EXT DRO >C28-C36	<10.0	10.0	04/13/2019	ND					

Surrogate: 1-Chlorooctane 87.0 % 41-142

Surrogate: 1-Chlorooctadecane 91.0 % 37.6-147

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Notes and Definitions

- S-06 The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND Analyte NOT DETECTED at or above the reporting limit
RPD Relative Percent Difference
** Samples not received at proper temperature of 6°C or below.
*** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

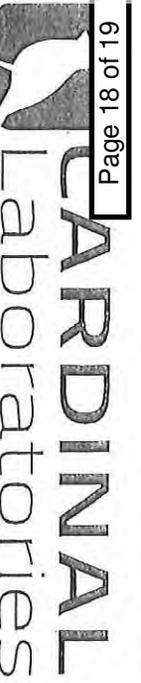
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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



* BUSH

1021

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Percussion Petroleum		P.O. #:		ANALYSIS REQUEST	
Project Manager: Perry Matthews		Company: White Buffalo Env.			
Address:		Attn:			
City:		Address: 401 E. Broadway			
Phone #:		City: Hobbs			
Project #:		State: NM Zip: 88240			
Project Name:		Phone #: 515-738-0424			
Project Location: MORRIS ALE # E H I		Fax #: 515-738-0430			
Sampler Name: GUYB PIONEER		DATE		TIME	
FOR LAB USE ONLY		DATE		TIME	
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER
H901360	1 SPID Comp	9 1	9 1	X	X
	2 SPID SW1	9 1	8:32	X	X
	3 SPID SW2	9 1	8:45	X	X
	4 SPID SW3	9 1	8:56	X	X
	5 SPID SW4	9 1	9:03	X	X
	6 SP13-SW3	9 1	9:20	X	X
	7 SP13-SWE	9 1	9:16	X	X
	8 SP13-SUN	9 1	9:17	X	X
	9 SP13-SUN	9 1	9:34	X	X
	10 SP13 COMP	9 1	9:49	X	X
			9:56	X	X

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Relinquished By: *[Signature]* Date: 4/2-19 Received By: *[Signature]* Date: 4/2-19
 Relinquished By: *[Signature]* Time: 4:55 Received By: *[Signature]* Time: 4:55

Delivered By: (Circle One) UPS Bus Other: -10.46 #47
 Sample Condition: Cool Intact Yes No
 CHECKED BY: *[Signature]* (Initials) YES

REMARKS: Email: natalie.glaeden@whitebuffalo.com
 monique.dueto@whitebuffalo.com



X RUSH 10/29

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Percepsion Petroleum		P.O. #:		ANALYSIS REQUEST																																																																							
Project Manager: Devy Matthews		Company: White Buffalo Env.																																																																									
Address:		Attn:																																																																									
City:		Address: 401 E. Broadway																																																																									
Phone #:		City: Hobbs																																																																									
Project #:		State: NM Zip: 88240																																																																									
Project Name:		Phone #: 575-738-0424																																																																									
Project Location: MORRIS ZEE E #1		Fax #: 575-738-0430																																																																									
Sampler Name: COLLEEN PILNER		FOR LAB USE ONLY																																																																									
Lab I.D. H901360		Sample I.D.																																																																									
<table border="1"> <tr> <th rowspan="2">Lab I.D.</th> <th rowspan="2">Sample I.D.</th> <th rowspan="2">(G)RAB OR (C)OMP.</th> <th rowspan="2"># CONTAINERS</th> <th colspan="7">MATRIX</th> <th rowspan="2">DATE</th> <th rowspan="2">TIME</th> <th rowspan="2">ANALYSIS</th> </tr> <tr> <th>GROUNDWATER</th> <th>WASTEWATER</th> <th>SOIL</th> <th>OIL</th> <th>SLUDGE</th> <th>OTHER :</th> <th>ACID/BASE:</th> <th>ICE / COOL</th> <th>OTHER :</th> </tr> </table>		Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX							DATE	TIME	ANALYSIS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :																																																			
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		GROUNDWATER	WASTEWATER	SOIL	OIL			SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :																																																															
<table border="1"> <tr> <td>11</td> <td>SP17 COMP</td> <td></td> <td>5</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>4/11/19</td> <td>8:57</td> <td>X</td> <td>Chlorides</td> </tr> <tr> <td>12</td> <td>SP17 SUBV</td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>9:20</td> <td>9:07</td> <td>X</td> <td>BTEX</td> </tr> <tr> <td>13</td> <td>SP17 SUBN</td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>9:11</td> <td>9:11</td> <td>X</td> <td>TPH</td> </tr> <tr> <td>14</td> <td>SP17 SUB E</td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>9:16</td> <td>9:16</td> <td>X</td> <td></td> </tr> <tr> <td>15</td> <td>SP17 SUB S</td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> </tr> </table>		11	SP17 COMP		5							4/11/19	8:57	X	Chlorides	12	SP17 SUBV		1							9:20	9:07	X	BTEX	13	SP17 SUBN		1							9:11	9:11	X	TPH	14	SP17 SUB E		1							9:16	9:16	X		15	SP17 SUB S		1									X					
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Relinquished By: **KATHY MORRIS** Date: **4-12-19** Time: **14:55**

Received By: **Jessica White Buffalo**

Delivered By: (Circle One) **UPS** - Bus - Other: **-10.4e #99**

Sample Condition: Cool Intact Yes No

CHECKED BY: **JP**

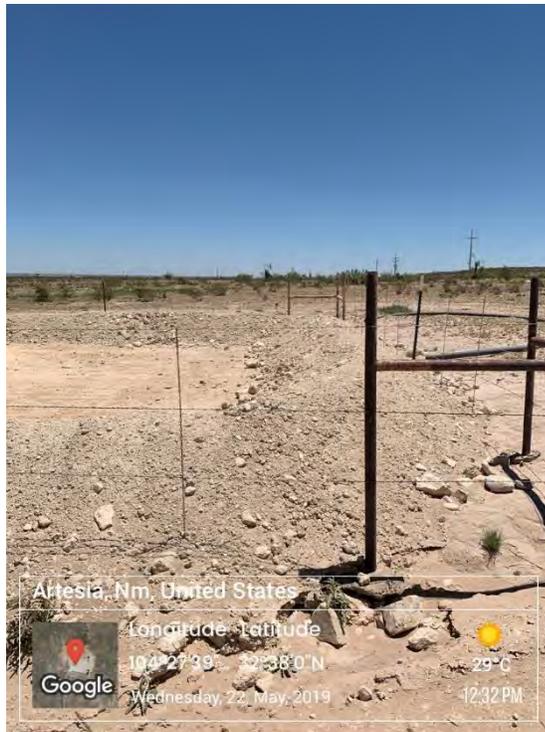
REMARKS: **Email: natalie.gadden@whitebuffalo.com monique.dueto@whitebuffalo.com**

Phone Result: Yes No Add'l Phone #:

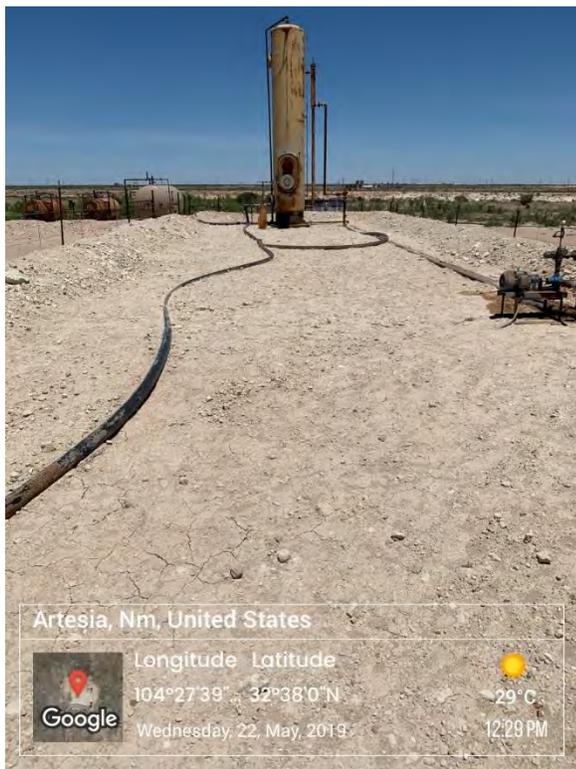
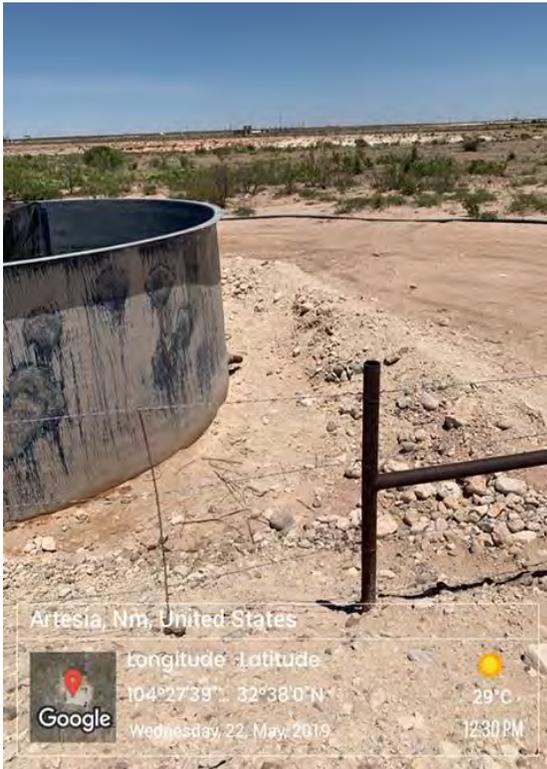
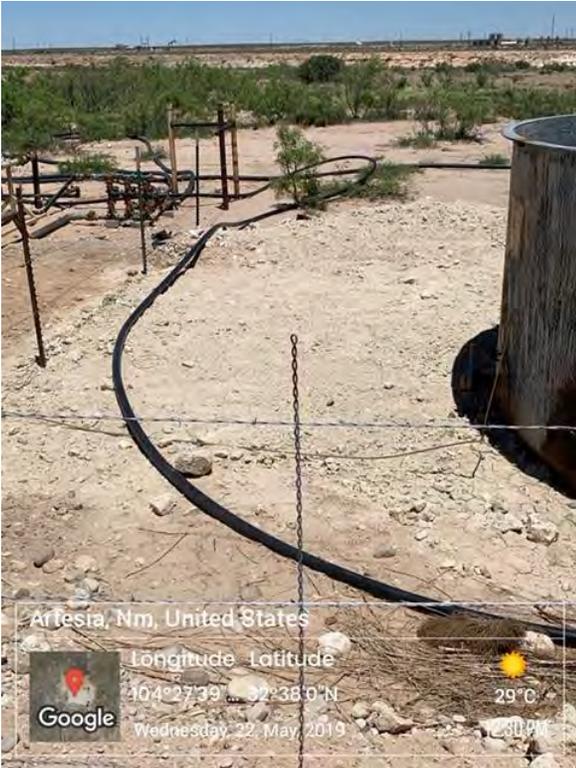
Fax Result: Yes No Add'l Fax #:

Final Site Photographs

PERCUSSION PETROLEUM – MORRIS 26 E #1 BATTERY AFTER PHOTOS



PERCUSSION PETROLEUM – MORRIS 26 E #1 BATTERY AFTER PHOTOS



PERCUSSION PETROLEUM – MORRIS 26 E #1 BATTERY AFTER PHOTOS

