

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: Philip SandersTitle: HSE DirectorSignature: [Signature]Date: 11/30/21

email: \_\_\_\_\_

Telephone: \_\_\_\_\_

### OCD Only

Received by: Chad HensleyDate: 01/14/2022

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: Chad HensleyDate: 01/14/2022Printed Name: Chad HensleyTitle: Environmental Specialist Advanced

DELINEATION AND SITE CHARACTERIZATION REPORT

**Oilfield Water Logistics SWD Operating, LLC (OWL)**

**Harrier Surface Line Produced Water Release**

**Unit Letter L2, L3, L4, Section 7, Unit Letter L1, Section 18, Township 26S, RANGE  
33E**

**Lea County, NM**

**Incident Number- NRM2028334152**

**September 17, 2021**

**Prepared by**

**Michael Alves**

**Alves Oilfield Solutions, LLC.**

**2215 West Bender**

**Hobbs, NM 88240**

**[michaelalves@alvesoilfieldsolutions.org](mailto:michaelalves@alvesoilfieldsolutions.org)**

**(575) 631-4310**



## DELINEATION AND SITE CHARACTERIZATION REPORT

**TO: Mike Bratcher**  
**Incident Supervisor**  
**Environmental Bureau**  
**EMNRD - Oil Conservation Division**  
**811S. First St.**  
**Artesia, NM 88210**

## **INTRODUCTION**

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Alves Oilfield Solutions, LLC. Was retained by BTA Oil Producers and Oilfield Water Logistics SWD Operating, LLC to delineate and remediate the site detailed herein. KJE Environmental Mgt. INC and RXSoil were also contracted to assist in the remediation of this site due to the complexity of managing three different releases. Alves Oilfield was the excavator for both companies and KJE along with RXSoil acted more as consultants on this project.

I'm writing this report as a summary to the remediation activities that took place on this release site and to clarify any miscommunication, if any was taken. This report will be able to give an informed and logical decision for backfill and any more requirements for backfill approval and closure.

## **GROUNDWATER FINDINGS**

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Initially when the groundwater search was completed by Alves Oilfield Solutions, KJE and RXSoil the only water found was 1.9 miles away and water depth was at 280'. Since groundwater results were too far away to determine groundwater levels for these releases under the rules of 19.15.11(A)(2), BTA decided to drill three wells which were left open for 72 hours to allow for reading the static water level. These readings determined groundwater to be at 81.4 feet which was the shallowest of the 3 wells. RXSoil requested the NMOCD asked for release rules fall under the 51'-100' release rule criteria.

## **RELEASE BACKGROUND**

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To simplify the complexity of this remediation the following will be a chronological point of the history of this site and what's been done. I wanted to simplify this since NMOCD, and BLM are all aware now there are multiple releases associated with this site. Below are bullet points of the release history along with remediation activities that have taken place on site.

- 5/18/2020: 1<sup>st</sup> BTA release with 276 BBL of produced water spilled & 1 BBL of crude oil with 0 BBL of any fluid recovered. The site was mapped, and the initial site assessment was completed.
- 7/13/2020: 2<sup>nd</sup> BTA release with an undetermined amount of fluid released. At the time BTA personnel in charge of reporting was out of state on another job and when notified the information was mixed up with the original release from May. The site was mapped, and the site assessment was completed.

## DELINEATION AND SITE CHARACTERIZATION REPORT

- 10/4/2020: Oilfield Water Logistics, LLC (OWL) had a release of reported 4,800 BBL of produced water with 60 BBL recovered. The site was mapped, and a site assessment was completed. This release migrated over both of BTA's releases and some paths of its own.
- 1/5/2021: KJE (environmental consultants for OWL) submitted a workplan to NMOCD. It was sent to Christina Eads.
- 3/18/2021: Alves Oilfield Solutions (AOS) submitted a workplan to Shelly Tucker with the Bureau of Land Management after realizing the releases were on a BLM right of way
- 4/15/2021: BLM authorizes BTA to combine both releases into 1 remediation project due to the miscommunication of the 2<sup>nd</sup> release.
- 4/18/21: BLM approves AOS workplan. BLM imposes conditions of approval which covered delineation of release, and requirements prior to backfill.
- 5/6/2021: BTA & OWL agreed to combine resources and both companies take a portion of remediation on shared release areas. Divided as 2' to BTA and 2' to OWL (or ft by ft in any deep spots or horizontal excavation)
- 6/1/2021: Remediation began on all 3 releases. The release area was excavated in a 20'x20'x4' grid pattern according to KJE workplan. When sidewalls were being taken field screens showed elevated chloride samples every sample to the south which made sense since the release followed an elevation drop that ran to the south. BTA soil was stockpiled on 6ml plastic while waiting for approval on RXSoil treatment. OWL's soil was taken to their disposal, Northern Delaware Basin Landfill on NM128, which is an approved NM landfill. All manifests were included in the final closure report. Clean imported soil was brought back and stockpiled for backfill.
- 6/15/2021: BLM visited site and while looking at our field samples informed OWL that the 20'x20'x4' was not going to work and the trench need to be a trench and not squares. From this date on, the excavation was one complete trench down the ROW and sidewalls were taken every 20' on the east and west side. If a side wall came back higher than regulatory limits, the sidewall, in 20' sections, was taken back foot by foot until a clean sample was obtained. This sample was then confirmed by going 1 additional foot. Then this sample was taken to a lab for confirmation. These results will be in the final closure report.
- The area of SB 11,12,13 was excavated to 6' where contamination could be completely removed.
- 7/15/2021-8/15/21: Heavy rain took place on a few different occasions. The rain caused massive flooding and erosion. The excavation doubled in size due to erosion and flooding. The clean imported soil that was stockpiled was washed down ROW or went into the trench and washed away. The lease road was washed out in two different spots which caused an issue with being able to get oil trucks or any vehicles in or out. The roads were fixed within a few days of flooding.



## DELINEATION AND SITE CHARACTERIZATION REPORT

- 9/2/2021: BLM came out at the request of AOS to evaluate the situation and hopefully give backfill approval. When BLM saw the excavation and the ergonomics of the site, BLM determined it was a safety issue but saw that all requirements were accomplished. BLM gave verbal approval and said to backfill as soon as possible
- 9/7/2021: BLM gave written approval to backfill and to remove any African Rue. All conditions of approval still were in effect.
- 9/13/2021: A 20ml liner was set in SB 8,9,10,16 & 17. The liner was bigger than normally anticipated. Due to the erosion, the liner had to be made bigger to properly set and seat it. Having the liner bigger though will ensure better protection from water migrating into this area.
- 9/16/2021: Work was halted by NMOCD due to the confusion of multiple reports, approvals and clerical issues by reporting parties.

**CONCLUSION AND REQUEST**

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On behalf of BTA and OWL, I respectfully ask for approval to backfill this excavation. I also request a variance for the 20ml liner set in the referenced SB points. A 20ml liner set at 4' BGS and seated 30' total horizontally which should be sufficient separation of the vadose zone and groundwater being at 80.4'. A layer of 4' of clean imported soil on top of liner to ground surface and an additional ft that the BLM requested in these spots will give 5' of clean soil to promote healthy vegetation and give wildlife the ability to establish the natural habitat. The liner will block rainwater from migrating contamination through the vadose zone to groundwater. Instead, it will push it out and around those spots and give other areas necessary water to thrive. Under 19.15.29.14(A), this written demonstration and information provided should be sufficient evidence to grant a variance for the 20ml liner placed at this site.

The conditions of approval the BLM imposed are as follows.

- Extra backfill for areas of water settling and loss of water flow.
- River rocks places and staggered to slow to flow of water and prevent future erosion and loss of vegetation.
- Reseed with a mix of BLM 1&2 with loam and sand mix free of noxious and intrusive weeds.
- Remove and properly dispose of all African Rue with documents of proof.

The contaminated material from the BTA portion will be hauled off to an approved landfill and when all completed a closure report documenting all activities will be submitted to NMOCD and BLM for approval.

I thank you in advance for your consideration of this request and look forward to hearing from you



Michael Alves  
Alves Oilfield Solutions  
2215 West Bender  
Hobbs NM 88240  
575-631-4310 Cell  
[michaelalves@alvesoilfieldsolutons.org](mailto:michaelalves@alvesoilfieldsolutons.org)

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# Appendix I- C-141

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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	<b>nAPP2126455144</b>
District RP	
Facility ID	
Application ID	

## Release Notification

### Responsible Party

Responsible Party: BTA Oil Producers, LLC	OGRID: 260297
Contact Name: Bob Hall	Contact Telephone: 432-682-3753
Contact email: bhall@btaoil.com	Incident # (assigned by OCD) <b>nAPP2126455144</b>
Contact mailing address: 104 S. Pecos St., Midland, TX 79701	

### Location of Release Source

Latitude: 32.05929 Longitude: -103.61722

(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Mesa B #5H Produced Water Line NORTH END	Site Type: Flowline
Date Release Discovered: 7/13/2020	API# (if applicable) Nearest well: Mesa B #001 API #30-025-30662

Unit Letter	Section	Township	Range	County
E	7	26S	33E	Lea

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) <b>Unknown</b>	Volume Recovered (bbls) <b>0 BBL</b>
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) <b>Unknown</b>	Volume Recovered (bbls) <b>0 BBL</b>
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input checked="" 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

A hole in the pipeline released produced water and negligible oil into and along the lease road, a gully, and onto a pipeline ROW. The volume released is not known.

Field and office personnel on duty at the time of the release did not report the spill but did mobilize a contractor to immediately respond on 7/13/2020 and subsequent days by excavating & disposing of impacted soil.

Form C-141

State of New Mexico  
Oil Conservation Division


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Incident ID	nAPP2126455144
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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?  The spill volume is unknown but is believed to be greater than 25 BBL due to the extent of the spill, which the NMOCD Rules define as a major release.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? No. The incident was not recognized as a new release until preparation of the work plan for remediation.	

**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: <b><u>ADDITIONAL INFORMATION</u></b> The impacted area due to the present release was identified in the submittal of the remedial work plans submitted to the BLM and NMOCD and merged into the NMOCD Incident # NRM2015756964. The area has been remediated in accordance with the approved work plans. A closure report is being prepared for submittal.
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: <b>Bob Hall</b> Title: <b>Environmental Manager</b>  Signature:  Date: <b>9/21/2021</b>  email: <b>bhall@btaoil.com</b> Telephone: <b>432-682-3753</b>
<b><u>OCD Only</u></b>  Received by: _____ Date: _____





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

Incident ID	<b>NRM2015756964</b>
District RP	
Facility ID	
Application ID	

## Release Notification

### Responsible Party

Responsible Party: BTA Oil Producers, LLC	OGRID: 260297
Contact Name: Bob Hall	Contact Telephone: 432-682-3753
Contact email: bhall@btaoil.com	Incident # (assigned by OCD) <b>NRM2015756964</b>
Contact mailing address: 104 S. Pecos St., Midland, TX 79701	

### Location of Release Source

Latitude: 32.05101° Longitude: -103.61744°

(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Mesa B 8115 JVP #5H Produced Water Line	Site Type: Flowline
Date Release Discovered: 5/18/2020	API# (if applicable) Nearest well: Mesa B #5H API #30-025-42128

Unit Letter	Section	Township	Range	County
M	7	26S	33E	Lea

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) <b>1 BBL</b>	Volume Recovered (bbls) <b>0 BBL</b>
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) <b>276 BBL</b>	Volume Recovered (bbls) <b>0 BBL (corrected)</b>
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input checked="" 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

A split in the produced water flowline released produced water into several gullies and a pipeline ROW.

The reported volume was determined by measuring the area of the "wetted" area from a drone picture. Then, using analytical data to identify an impacted depth and an estimated porosity, a calculated volume of the release was estimated to be 276 BBL of unrecovered produced water, plus negligible oil.

**(9/21/2021) Correction made above to show there was no volume of Produced Water recovered as indicated originally in the statement immediately above and on the original Spill Calculation Spreadsheet.**



Incident ID	<b>NRM2015756964</b>
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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?  The spill volume was greater than 25 BBL, which the NMOCD Rules define as a major release.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? No. The release was not believed to be greater than 25 BBL. However, evaluation of analytical data is being used to estimate a greater volume of a release.	

## 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: <b>Bob Hall</b> Title: <b>Environmental Manager</b>  Signature: _____ Date: <b>Correction 9/21/2021</b>  email: <b>bhall@btaoil.com</b> Telephone: <b>432-682-3753</b>	
<b><u>OCD Only</u></b>  Received by: _____ Date: _____	

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## Release Notification

### Responsible Party

Responsible Party: OWL SWD Operation, LLC	OGRID: 380339
Contact Name: Mr. Phillip Sanders	Contact Telephone: 210-906-3551
Contact email: <a href="mailto:psanders@oilfieldwaterlogistics.com">psanders@oilfieldwaterlogistics.com</a>	Incident # (assigned by OCD)
Contact mailing address: 8201 Preston Road, Suite 520, Dallas, Texas 75225	

### Location of Release Source

Latitude 32.059697 \_\_\_\_\_ Longitude : 103.616531 \_\_\_\_\_  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Harrier Surface Line	Site Type Pipeline Easement
Date Release Discovered 10.4.2020 9:55am	API# (if applicable): N/A

Unit Letter	Section	Township	Range	County
L2, L3, L4 L1	7 , 18	26S	33E	Lea

Surface Owner: ☐ State ☒ Federal ☐ Tribal ☐ Private (Name: BLM)

### Nature and Volume of Release

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

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls): 4,800	Volume Recovered (bbls): 60
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input checked="" 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: Unknown vehicle ran over the pipeline, causing a rupture.

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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? The release is larger than 25bbls.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Yes, KJE notified Mike Bratcher with the OCD and Jim Amos with the BLM regarding the release on October 7, 2020.	

### 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: Phillip Sanders	Title: HSE Director
Signature: 	Date: 10/5/20
email: psanders@oilfieldwaterlogistics.com	Telephone: (432) 269-3735
<b><u>OCD Only</u></b> Received by: _____ Date: _____	

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

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

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

- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☒ Field data
- ☒ Data table of soil contaminant concentration data
- ☒ Depth to water determination
- ☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☒ Boring or excavation logs
- ☒ Photographs including date and GIS information
- ☒ Topographic/Aerial maps
- ☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

## Oil Conservation Division

Incident ID	
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: Phillip Sander Title: HSE Director

Signature: [Signature] Date: 1/2/21

email: \_\_\_\_\_ Telephone: \_\_\_\_\_

**OCD Only**

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

Incident ID	
District RP	
Facility ID	
Application ID	

## Remediation Plan

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

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

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

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

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Phyllis Sander Title: HSE Director  
Signature: [Signature] Date: 1/2/20 2021  
email: \_\_\_\_\_ Telephone: \_\_\_\_\_

**OCD Only**

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

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

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

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: \_\_\_\_\_

Title: \_\_\_\_\_

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

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

email: \_\_\_\_\_

Telephone: \_\_\_\_\_

### 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: \_\_\_\_\_



# Appendix II- Sitemaps


---

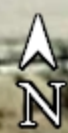


**BTA Oil Producers**

Mesa B 8115 JV-P Com 5H (Close Well)  
M-7-26S-33E  
API-30-025-42128  
32.0514 -103.6187  
5,532 SQ FT

**Legend**

 Mesa B 005 Spill Path 5,532 SQ FT




100 ft



**BTA Oil Producers**

Mesa B 8115 JV-P Com 5H (Closest Well)  
M-7 28S,33E  
API-30-025-42120  
32.0514 -103.6187  
24,756 SQ FT

**Legend**

 Spill Path





# Oilfield water Logistics (OWL)

Harrier line Release Map

Legend

 Release Area

 Spill Path





# Appendix III- Groundwater Search

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September 9, 2021

NMOCD Environmental Bureau  
1220 South St. Francis Drive  
Santa Fe, NM 87505

Re: Depth to Groundwater Determination  
BTA Oil Producers Mesa Area

To Whom it May Concern

RXSoil, Inc. is pleased to submit the determination of depth to groundwater for the areas described in the report.

Sincerely,

A handwritten signature in black ink, appearing to read "Jace Caraway".

Jace Caraway  
Chief Operating Officer  
RXSoil, Inc.  
(940) 210-2051

A handwritten signature in black ink, appearing to read "Zach Robbins".

Zach Robbins  
Technical and Engineering Analyst  
RXSoil, Inc.  
(210) 400-7645

**Table of Contents**

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II.	Findings .....	3
III.	Determinations.....	3

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## I. Background

On behalf of BTA Oil Producers, LLC, RXSoil, Inc. ("RXSoil") has prepared this document as a determination for depth to groundwater in the Mesa area (see *Figure 1*). Atkins Engineering Associates Inc. (Drilling License No. 1249) was hired for the drilling, logging, and plugging of these wells.

Assigning an approximate center point of this area to 32.0639, -103.6288, there were only two recent wells within a two-mile radius. Per the OSE POD Locations database, C 04485 POD1 is located 0.28 miles southwest of the center point and within the triangle of determination described in **Section III**. That well had a depth of 55' with no water detected and a finish date of 10/05/2020. C 04537 POD1 is located 1.90 miles northwest of the center point and outside of the determination area. That well had a depth of 500' with water detected at 280' and a finish date of 06/11/2021.

## II. Findings

Three wells were drilled and left open for 72 hours to allow for a reading of static water level. The locations of these wells, along with the proposed area of inclusion for these determinations, are included in *Figure 2*.

OSE FILE NO.	LATITUDE (N)			LONGITUDE (W)			BOREHOLE DEPTH, FT	STATIC WATER LEVEL, FT
	DEGREES <sup>4</sup>	MINUTES	SECONDS	DEGREES	MINUTES	SECONDS		
C-4547	32	3	14.34	103	36	16.96	112	89.5
C-4548	32	3	49.57	103	39	9.68	110	81.4
C-4549	32		40.92	103	37	53.68	103	N/A

## III. Determinations

RXSoil is requesting that based on the results from these water wells, all incidents within the triangle formed by the outer edges of the 0.5-mile radii from the water wells, as shown in *Figure 2*, will have a determined groundwater greater than or equal to 81.4 feet, the shallowest of the three wells. Remediation standards for locations with determined groundwater of 51' to 100' will be used for incidents in the described area.


RXSoil, Inc.

201 Main St. Ste. 1360, Fort Worth, TX 76102



Figure 1 - vicinity map

**Legend**

 Well Location

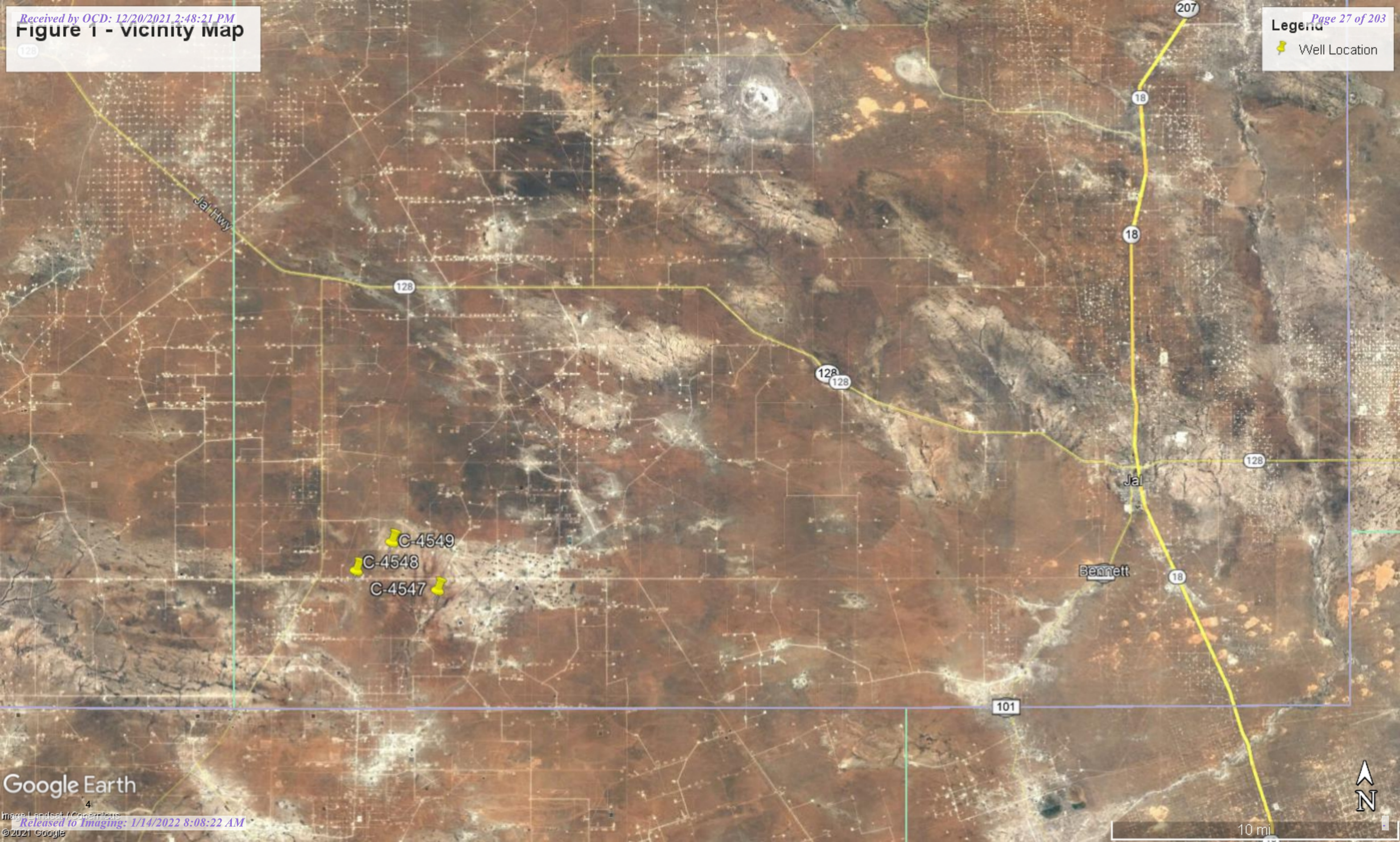


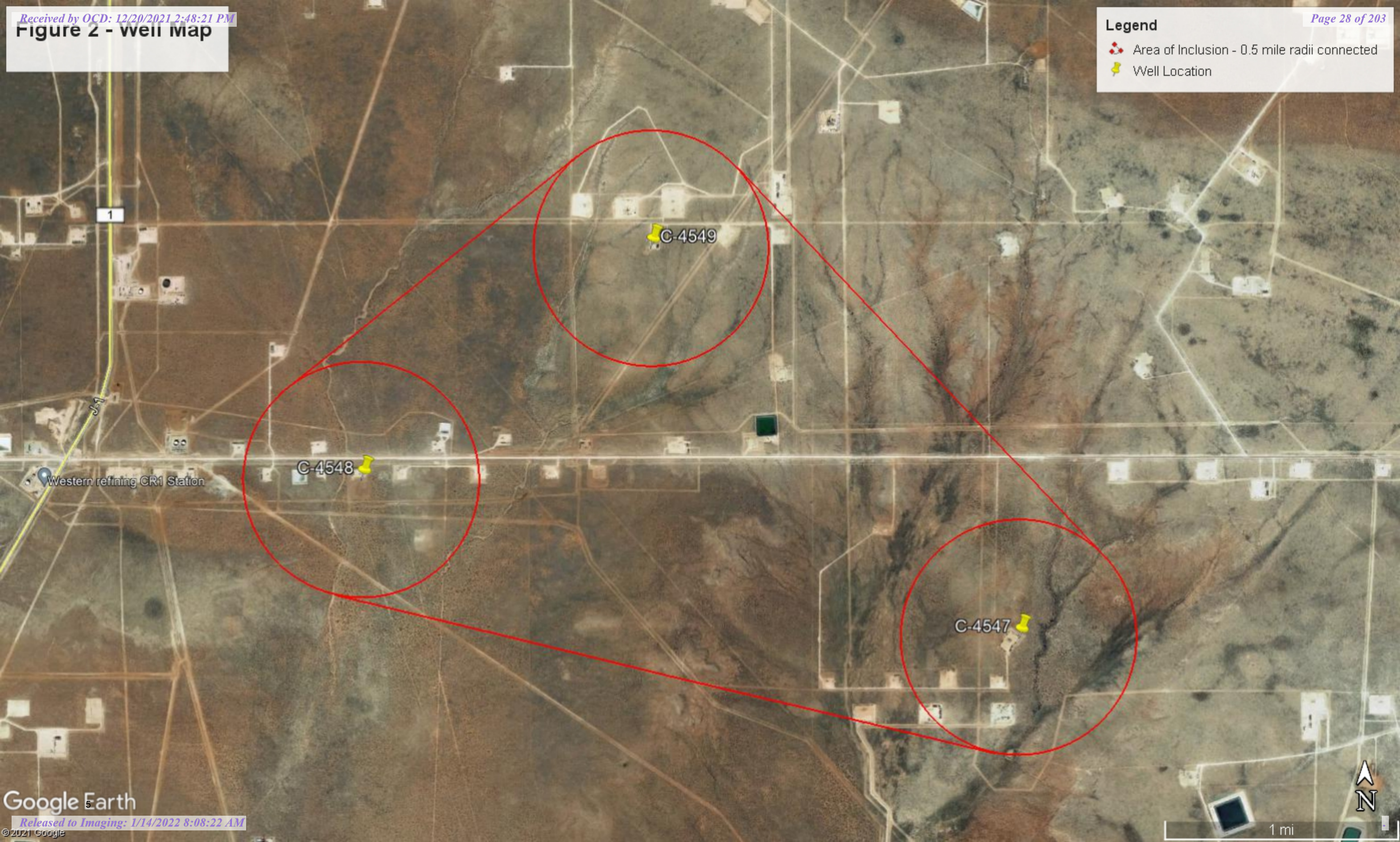




Figure 2 - well map

**Legend**

-  Area of Inclusion - 0.5 mile radii connected
-  Well Location





**APPENDIX A**  
**WELL RECORDS**

**RXSoil, Inc.**  
**201 Main St. Ste. 1360, Fort Worth, TX 76102**



2904 W 2nd St.  
Roswell, NM 88201  
voice: 575.624.2420  
fax: 575.624.2421  
www.atkinseng.com

07/29/2021

OSE DII AUG 2 2021 PM2:50

DII-NMOSE  
1900 W 2<sup>nd</sup> Street  
Roswell, NM 88201

*Hand Delivered to the DII Office of the State Engineer*

Re: Well Record C-4547 Pod1

To whom it may concern:

Attached please find a well record and a plugging record, in duplicate, for a one (1) soil borings, C-4547 Pod1. On a BTA Oil Producers well location in Lea County, NM

If you have any questions, please contact me at 575.499.9244 or [lucas@atkinseng.com](mailto:lucas@atkinseng.com).

Sincerely,

A handwritten signature in black ink, appearing to read "Lucas Middleton".

Lucas Middleton

Enclosures: as noted above





# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

OSE DIT AUG 2 2021 PM 2:50


1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD1 (MW-1)		WELL TAG ID NO. n/a		OSE FILE NO(S). C-4547			
	WELL OWNER NAME(S) BTA Oil Producers				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 104 S. Pecos St.				CITY Midland	STATE TX	ZIP 79701	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 3	SECONDS 14.34	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
		LONGITUDE 103	36	16.96	W	* DATUM REQUIRED: WGS 84		
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE NE SE SE Sec. 07 T26S R33E								
2. DRILLING & CASING INFORMATION	LICENSE NO. 1249		NAME OF LICENSED DRILLER Jackie D. Atkins			NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.		
	DRILLING STARTED 07/15/2021	DRILLING ENDED 07/15/2021	DEPTH OF COMPLETED WELL (FT) temporary well material		BORE HOLE DEPTH (FT) 112	DEPTH WATER FIRST ENCOUNTERED (FT) unknown		
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input type="checkbox"/> DRY HOLE <input checked="" type="checkbox"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) 89.5		
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input checked="" type="checkbox"/> OTHER - SPECIFY: Hollow Stem Auger							
	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	0	21	±8.5	Boring- HSA	--	--	--	--
	21	112	±3.5	Boring- Air Rotary	--	--	--	--
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/30/17)

FILE NO.	POD NO.	TRN NO.
LOCATION	WELL TAG ID NO.	PAGE 1 OF 2

05E DTI AUG 2 2021 PM2:50

4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)	
	FROM	TO					
	0	4	4	Caliche, Consolidated , White	Y    ✓ N		
	4	44	40	Sand, Fine-grained, poorly graded, with caliche gravel, Redish Brown	Y    ✓ N		
	44	51	7	Clay, Stiff, Dark Brown,	Y    ✓ N		
	51	103	52	Sandstone, Fine-grained, poorly graded, Tan Brown	✓ Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
	METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER – SPECIFY:				TOTAL ESTIMATED WELL YIELD (gpm):                      0.00		
	5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.				
		MISCELLANEOUS INFORMATION: Temporary well materials removed and the soil boring plugged using tremie pipe to total depth and landed cement slurry of <6.0 gallons of water per 94 lbs sack of Portland TYPE I/II Neat Cement. See attached Plugging Record					
PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: Shane Eldridge, Cameron Pruitt, Carmelo Trevino							
6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:						
	 Jackie D. Atkins			07/29/2021			
SIGNATURE OF DRILLER / PRINT SIGNEE NAME				DATE			

FOR USE INTERNAL USE

WR-20 WELL RECORD &amp; LOG (Version 06/30/2017)

FOR USE INTERNAL USE		WK-25 - WELL RECORD & LOG (Version 03/30/2017)	
FILE NO.	POD NO.	TRN NO.	
LOCATION		WELL TAG ID NO	PAGE 2 OF 2



# 2021-07-28\_C-4547\_POD1\_OSE\_Well Record and Log\_mesa1-for sign






Final Audit Report

2021-07-29

OSE DTI AUG 2 2021 PM 2:50

Created:	2021-07-29
By:	Lucas Middleton (lucas@atkinseng.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAA3aQOFUKeCXoHbozKpK1XeoMdl53lwclm

## "2021-07-28\_C-4547\_POD1\_OSE\_Well Record and Log\_mesa1-for sign" History

-  Document created by Lucas Middleton (lucas@atkinseng.com)  
2021-07-29 - 8:40:54 PM GMT- IP address: 69.21.248.123
-  Document emailed to Jack Atkins (jack@atkinseng.com) for signature  
2021-07-29 - 8:41:43 PM GMT
-  Email viewed by Jack Atkins (jack@atkinseng.com)  
2021-07-29 - 8:43:29 PM GMT- IP address: 64.90.153.232
-  Document e-signed by Jack Atkins (jack@atkinseng.com)  
Signature Date: 2021-07-29 - 8:44:00 PM GMT - Time Source: server- IP address: 64.90.153.232
-  Agreement completed.  
2021-07-29 - 8:44:00 PM GMT



2904 W 2nd St.  
Roswell, NM 88201  
voice: 575.624.2420  
fax: 575.624.2421  
www.atkinseng.com

07/29/2021

DII-NMOSE  
1900 W 2<sup>nd</sup> Street  
Roswell, NM 88201

DSE DIT AUG 2 2021 PM2:49

*Hand Delivered to the DII Office of the State Engineer*

Re: Well Record C-4548 Pod1

To whom it may concern:

Attached please find a well record and a plugging record, in duplicate, for a one (1) soil borings, C-4548 Pod1. On a BTA Oil Producers well location in Lea County, NM

If you have any questions, please contact me at 575.499.9244 or [lucas@atkinseng.com](mailto:lucas@atkinseng.com).

Sincerely,

A handwritten signature in black ink that reads "Lucas Middleton". The signature is written in a cursive, flowing style.

Lucas Middleton

Enclosures: as noted above



DSE DIT AUG 2 2021 PM2:49



# PLUGGING RECORD



**NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC**

## I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: C-4548-POD1

Well owner: BTA Oil Producers

Phone No.: 432.312.2203

Mailing address: 104 S. Pecos St.

City: Midland

State: Texas

Zip code: 79701

## II. WELL PLUGGING INFORMATION:

- 1) Name of well drilling company that plugged well: Jackie D. Atkins (Atkins Engineering Associates Inc.)
- 2) New Mexico Well Driller License No.: 1249 Expiration Date: 04/30/23
- 3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Shane Eldridge, Cameron Pruitt, Carmelo Trevino
- 4) Date well plugging began: 07/19/2021 Date well plugging concluded: 07/19/2021
- 5) GPS Well Location: Latitude: 32 deg, 3 min, 49.57 sec  
Longitude: 103 deg, 39 min, 9.68 sec, WGS 84
- 6) Depth of well confirmed at initiation of plugging as: 99 ft below ground level (bgl),  
by the following manner: weighted tape
- 7) Static water level measured at initiation of plugging: 81.4 ft bgl
- 8) Date well plugging plan of operations was approved by the State Engineer: 6/24/2021
- 9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):



OSE DIT AUG 2 2021 PM 2:45

# 2021-07-28\_C-4548\_POD1\_OSE\_Well Record and Log\_mesa2-forsign

Final Audit Report

2021-07-29

Created:	2021-07-29
By:	Lucas Middleton (lucas@atkinseng.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAemiJJm6dcVKIYQ9i0g-pp8LWJNXDnRqz

## "2021-07-28\_C-4548\_POD1\_OSE\_Well Record and Log\_mesa2-forsign" History



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2021-07-29 - 6:35:33 PM GMT



Email viewed by Jack Atkins (jack@atkinseng.com)  
2021-07-29 - 8:10:52 PM GMT- IP address: 64.90.153.232



Document e-signed by Jack Atkins (jack@atkinseng.com)  
Signature Date: 2021-07-29 - 8:12:07 PM GMT - Time Source: server- IP address: 64.90.153.232



Agreement completed.  
2021-07-29 - 8:12:07 PM GMT

**Adobe Sign**



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

DSE DIT AUG 2 2021 PM 2:49

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD1 (MW-1)		WELL TAG ID NO. n/a		OSE FILE NO(S). C-4548			
	WELL OWNER NAME(S) BTA Oil Producers				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 104 S. Pecos St.				CITY Midland	STATE TX	ZIP 79701	
	WELL LOCATION (FROM GPS)	DEGREES 32		MINUTES 3	SECONDS 49.57	N		
		LATITUDE		103	39	9.68	W	
* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84								
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE NW NE NW Sec. 01 T26S R32E								
2. DRILLING & CASING INFORMATION	LICENSE NO. 1249		NAME OF LICENSED DRILLER Jackie D. Atkins			NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.		
	DRILLING STARTED 07/13/2021		DRILLING ENDED 07/13/2021		DEPTH OF COMPLETED WELL (FT) temporary well material	BORE HOLE DEPTH (FT) 110	DEPTH WATER FIRST ENCOUNTERED (FT) unknown	
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input type="checkbox"/> DRY HOLE <input checked="" type="checkbox"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) 81.4		
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input checked="" type="checkbox"/> OTHER - SPECIFY: Hollow Stem Auger							
	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	0	110	±8.5	Boring- HSA	--	--	--	--
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/30/17)

FILE NO.	POD NO.	TRN NO.
LOCATION	WELL TAG ID NO.	PAGE 1 OF 2




DSE DTI AUG 2 2021 PM2:50

4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
	FROM	TO				
	0	19	19	Sand, Medium grained, poorly graded, increasing clay, Grayish Brown	Y ✓ N	
	19	24	5	Sand, Medium grained, poorly graded, with Gravel and clay, Grayish Brown	Y ✓ N	
	24	39	15	Sand, Medium -Fine grained, poorly graded, Yellowish Brown	Y ✓ N	
	39	44	5	Sand, Medium -Fine grained, poorly graded, Redish Brown	Y ✓ N	
	44	59	15	Sand, Medium -Fine grained, poorly graded, increasing clay, Redish Brown, damp	Y ✓ N	
	59	79	20	Clay, med/high Plasticity, with fine-grained sand, Dark Redish Brown	Y ✓ N	
	79	97	15	Clay, med/high Plasticity, with fine-grained sand, Dark Redish Brown, moist	✓ Y N	
	97	110	13	Clay, med Plasticity, sticky, with fine-grained sand, Dark Redish Brown, moist	✓ Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER - SPECIFY:					TOTAL ESTIMATED WELL YIELD (gpm): 0.00	

5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.
	MISCELLANEOUS INFORMATION: Temporary well materials removed and the soil boring plugged using tremie pipe to total depth and landed cement slurry of <6.0 gallons of water per 94 lbs sack of Portland TYPE I/II Neat Cement. See attached Plugging Record.	
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: Shane Eldridge, Cameron Pruitt, Carmelo Trevino	

6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:	
	 Jackie D. Atkins SIGNATURE OF DRILLER / PRINT SIGNED NAME	07/29/2021 DATE

FOR OSE INTERNAL USE

WR-20 WELL RECORD &amp; LOG (Version 06/30/2017)

FILE NO.	POD NO.	TRN NO.
LOCATION	WELL TAG ID NO.	PAGE 2 OF 2



2904 W 2nd St.  
Roswell, NM 88201  
voice: 575.624.2420  
fax: 575.624.2421  
www.atkinseng.com

07/29/2021

DII-NMOSE  
1900 W 2<sup>nd</sup> Street  
Roswell, NM 88201

DSE DTI AUG 2 2021 PM2:50

*Hand Delivered to the DII Office of the State Engineer*

Re: Well Record C-4549 Pod1

To whom it may concern:

Attached please find a well record and a plugging record, in duplicate, for a one (1) soil borings, C-4549 Pod1. On a BTA Oil Producers well location in Lea County, NM

If you have any questions, please contact me at 575.499.9244 or [lucas@atkinseng.com](mailto:lucas@atkinseng.com).

Sincerely,

A handwritten signature in black ink, appearing to read "Lucas Middleton".

Lucas Middleton

Enclosures: as noted above





# PLUGGING RECORD



**NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC**

## I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: C-4549-POD1

Well owner: BTA Oil Producers

Phone No.: 432.312.2203

Mailing address: 104 S. Pecos St.

City: Midland

State: Texas

Zip code: 79701

## II. WELL PLUGGING INFORMATION:

- 1) Name of well drilling company that plugged well: Jackie D. Atkins (Atkins Engineering Associates Inc.)
- 2) New Mexico Well Driller License No.: 1249 Expiration Date: 04/30/23
- 3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Shane Eldridge, Cameron Pruitt, Carmelo Trevino
- 4) Date well plugging began: 07/19/2021 Date well plugging concluded: 07/19/2021
- 5) GPS Well Location: Latitude: 32 deg, 4 min, 40.92 sec  
Longitude: 103 deg, 37 min, 53.68 sec, WGS 84
- 6) Depth of well confirmed at initiation of plugging as: 103 ft below ground level (bgl),  
by the following manner: weighted tape
- 7) Static water level measured at initiation of plugging: n/a ft bgl
- 8) Date well plugging plan of operations was approved by the State Engineer: 6/24/2021
- 9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):



# 2021-07-28C-4549-POD1\_Plugging Record-forsign

DSE DIT AUG 2 2021 PM 2:50

Final Audit Report

2021-07-29

Created:	2021-07-29
By:	Lucas Middleton (lucas@atkinseng.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAiFUITUMQvUeHWAgcMsacioucKnSt5mzA

## "2021-07-28C-4549-POD1\_Plugging Record-forsign" History



Document created by Lucas Middleton (lucas@atkinseng.com)

2021-07-29 - 8:42:26 PM GMT- IP address: 69.21.248.123



Document emailed to Jack Atkins (jack@atkinseng.com) for signature

2021-07-29 - 8:42:53 PM GMT



Email viewed by Jack Atkins (jack@atkinseng.com)

2021-07-29 - 8:44:10 PM GMT- IP address: 64.90.153.232



Document e-signed by Jack Atkins (jack@atkinseng.com)

Signature Date: 2021-07-29 - 8:44:29 PM GMT - Time Source: server- IP address: 64.90.153.232



Agreement completed.

2021-07-29 - 8:44:29 PM GMT



Adobe Sign



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

OSE DIT AUG 2 2021 PM 2:50

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD1 (MW-1)		WELL TAG ID NO. n/a		OSE FILE NO(S). C-4549			
	WELL OWNER NAME(S) BTA Oil Producers				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 104 S. Pecos St.				CITY Midland	STATE TX	ZIP 79701	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 4	SECONDS 40.92 N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND			
		LONGITUDE 103	37	53.68 W	* DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE NW NW NW Sec. 11 T26S R32E								
2. DRILLING & CASING INFORMATION	LICENSE NO. 1249		NAME OF LICENSED DRILLER Jackie D. Atkins			NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.		
	DRILLING STARTED 07/14/2021		DRILLING ENDED 07/14/2021		DEPTH OF COMPLETED WELL (FT) temporary well material	BORE HOLE DEPTH (FT) 103	DEPTH WATER FIRST ENCOUNTERED (FT) n/a	
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) n/a		
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input checked="" type="checkbox"/> OTHER - SPECIFY: Hollow Stem Auger							
	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM. (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	0 103		±8.5	Boring- HSA	--	--	--	--
3. ANNULAR MATERIAL	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/30/17)

FILE NO.	POD NO.	TRN NO.
LOCATION	WELL TAG ID NO.	PAGE 1 OF 2



DSE DJI AUG 2 2021 PM 2:50

	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)	
	FROM	TO					
<b>4. HYDROGEOLOGIC LOG OF WELL</b>	0	4	4	Caliche, Consolidated , White	Y    ✓ N		
	4	9	5	Caliche, Consolidated , with fine-grained, Tan	Y    ✓ N		
	9	14	5	Caliche, Consolidated , White	Y    ✓ N		
	14	19	5	Caliche, Consolidated , with fine-grained, Tan	Y    ✓ N		
	19	69	50	Sand, Fine-grained poorly graded, with caliche , Tanish Brown	Y    ✓ N		
	69	79	103	Clay, Stiff, High Plasticity, Dark Brown,	Y    ✓ N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
	METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER – SPECIFY:					TOTAL ESTIMATED WELL YIELD (gpm):	0.00
	<b>5. TEST; RIG SUPERVISION</b>	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.				
MISCELLANEOUS INFORMATION: Temporary well materials removed and the soil boring backfilled using drill cuttings from total depth to ten feet below ground surface, then hydrated bentonite chips from ten feet below ground surface to surface.							
PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: Shane Eldridge, Cameron Pruitt, Carmelo Trevino							
<b>6. SIGNATURE</b>	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:  Jack Atkins Jackie D. Atkins 07/29/2021						
SIGNATURE OF DRILLER / PRINT SIGNEE NAME					DATE		

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 06/30/2017)	
FILE NO.	POD NO.	TRN NO.	
LOCATION	WELL TAG ID NO.	PAGE 2 OF 2	

**END OF REPORT**

**RXSoil, Inc.**

**201 Main St. Ste. 1360, Fort Worth, TX 76102**



# Appendix IV- Site Photos

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## Photo Page

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Photo of the washed out road due to Heavy rain





Seating liner in excavation area



Backfilling excavation after liner installation



Sewing liner together in excavation



Liner properly seated in excavation



# Appendix V- Approvals Via Email

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Katherine Beldon <katherine@alvesoilfieldsolutions.org>

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## NRM 2015756964

5 messages

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**MICHAEL ALVES** <michaelalves@alvesoilfieldsolutions.org>

Wed, Apr 14, 2021 at 10:20 AM

To: jamos@blm.gov, Bob Hall <bhall@btaoil.com>, Michael@expertenviroservices.com, Katherine Beldon <katherine@alvesoilfieldsolutions.org>, Haylee Alves <haylee@alvesoilfieldsolutions.org>

Mr. Amos

In the above incident I need some guidance, there have been 2 different spills related to this line and only 1 c-141 was filled due to the confusion that the same line had two different spills. but to complicate things more, another company had a release right on top of the original spill all 3 were major releases. I've been tasked to remediate all 3 spills. That's the simple part but how would you like to separate the two for BTA? Since there were 2 spills i would like to do the following to simplify the report and paperwork and make it easy to understand for all parties.

Since there was not a c141 filled for the 2nd spill can we update the existing c-141 submit two maps but have the sample points in consecutive order. Spill 1 and spill 2 included and then submit 1 report in the end for BTA. on the 3rd spill for OWL since it runs directly on top of the 2nd bta spill and the 1st bta spill i will remediate the same way but just submit a second report with most of the same information just labeled as OWL not BTA ?

I've included all 3 maps for your convenience and the c-141 from BTA 1st spill.








--  
**Michael Alves**  
**Alves Oilfield Solutions**  
**575-631-4310**



*I'm a movement by myself but I'm a force when we work together*

---

 **C-141.pdf**  
757K

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**MICHAEL ALVES** <michaelalves@alvesoilfieldsolutions.org>

Thu, Apr 15, 2021 at 10:51 AM

To: Mario Exact Flo <stucker@blm.gov>, Katherine Beldon <katherine@alvesoilfieldsolutions.org>, Haylee Alves <haylee@alvesoilfieldsolutions.org>

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 **C-141.pdf**  
757K

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**Tucker, Shelly J** <stucker@blm.gov>

Thu, Apr 15, 2021 at 1:36 PM

To: MICHAEL ALVES <michaelalves@alvesoilfieldsolutions.org>, Katherine Beldon <katherine@alvesoilfieldsolutions.org>, Haylee Alves <haylee@alvesoilfieldsolutions.org>

BLM hereby authorizes you to combine the two BTA releases, since they overlap each other, into one remedial action. When the remediation action has completed, submit a single report for the BTA releases and a single report for the OWL portion of the remediation. A separate C-141 for the 2nd BTA release will not be required. Please ensure that volumes and other pertinent information is recorded separately for each release within the combined report.

If you have any questions or concerns, please do not hesitate to contact me.

Sincerely,

*Shelly J Tucker*

Environmental Protection Specialist  
Realty

Bureau of Land Management  
620 E. Greene St  
Carlsbad, NM 88220

575.234.5706 - Direct

575.200.0614

[stucker@blm.gov](mailto:stucker@blm.gov)

---

**From:** MICHAEL ALVES <[michaelalves@alvesoilfieldsolutions.org](mailto:michaelalves@alvesoilfieldsolutions.org)>**Sent:** Thursday, April 15, 2021 10:51 AM**To:** Tucker, Shelly J <[stucker@blm.gov](mailto:stucker@blm.gov)>; Katherine Beldon <[katherine@alvesoilfieldsolutions.org](mailto:katherine@alvesoilfieldsolutions.org)>; Haylee Alves <[haylee@alvesoilfieldsolutions.org](mailto:haylee@alvesoilfieldsolutions.org)>**Subject:** [EXTERNAL] Fwd: NRM 2015756964

**This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.**

[Quoted text hidden]

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**MICHAEL ALVES** <[michaelalves@alvesoilfieldsolutions.org](mailto:michaelalves@alvesoilfieldsolutions.org)>

Wed, Apr 28, 2021 at 9:07 PM

**To:** Katherine Beldon <[katherine@alvesoilfieldsolutions.org](mailto:katherine@alvesoilfieldsolutions.org)>, Haylee Alves <[haylee@alvesoilfieldsolutions.org](mailto:haylee@alvesoilfieldsolutions.org)>, Candi Alves <[candialveshkia@gmail.com](mailto:candialveshkia@gmail.com)>

----- Forwarded message -----

**From:** **Tucker, Shelly J** <[stucker@blm.gov](mailto:stucker@blm.gov)>**Date:** Wed, Apr 28, 2021, 3:20 PM**Subject:** Re: FW: [EXTERNAL] Fwd: NRM 2015756964**To:** MICHAEL ALVES <[michaelalves@alvesoilfieldsolutions.org](mailto:michaelalves@alvesoilfieldsolutions.org)>, Bob Hall <[BBHall@btaoil.com](mailto:BBHall@btaoil.com)>**Cc:** Gomez, Robert <[rgomez@blm.gov](mailto:rgomez@blm.gov)>

BLM hereby requests the following:

1. Bore hole samples to be collected every 20' (linear) to determine depth of contamination.
2. A single bore hole sample 20' from the end of each "runner" within the drainage.
3. Contact the BLM with sample results. Based on the sample concentration/depths will determine whether a liner will be installed at 4' or if additional excavation will be required.
4. Within the watershed area, extra backfill will be required due settling and loss from water flow. Backfill will need to be of like soil for the depths of the excavation.
5. River rocks can be placed within the drainage area to slow the flow of water. Stagger the rock placement.
6. Do not cut additional water diversions.
7. Delineation will need to be horizontally and vertically.

Please be aware of the following items prior to any excavation activities.

1. The release point **did not impact any known archaeological area.**
2. The point of release occurred on and off of ROW but is **covered under a previous survey**, no additional surveys will be required.
3. This area is located within a **High cave/karst zone.**
4. This site is located within an **active watershed.**
5. Area is noted to be within **0-3% slope.**
6. Soils are within the **Largo-Pajarito complex**
7. **BLM Seed Mix #1&2 Mixed (Loam and Sand mix)** will be required.

8. The site is **NOT** located in DSL habitat or LPC habitat. No other T&E species noted (animal or vegetative) within this area.
9. Site is **not** located within Potash
10. Site is **not** located within a Special Area of concern.
11. Site is **not** located within a RMP ACEC.
12. Site is **not** located within Special Status Plant Species area.

---

**From:** MICHAEL ALVES <[michaelalves@alvesoilfieldsolutions.org](mailto:michaelalves@alvesoilfieldsolutions.org)>

**Sent:** Thursday, April 15, 2021 2:57 PM

**To:** Bob Hall <[BBHall@btaoil.com](mailto:BBHall@btaoil.com)>

**Cc:** Tucker, Shelly J <[stucker@blm.gov](mailto:stucker@blm.gov)>

**Subject:** Re: FW: [EXTERNAL] Fwd: NRM 2015756964

To recap our remediation plan the entire release area will be excavated to 4' bgs. This is 2' from OWL, 2' from BTA. Remaining sampling will be conducted at time of excavation due to equipment on site and pipelines in area. A 20 ml liner will be installed where needed and sidewalls will be taken at that time to ensure vertical and horizontal is fully delineated. Clean imported soil will be used for backfill and then the area will be reseed with an approved blm mix for this area, free of noxious weeds. Then 2 reports one for each company will be submitted documenting field activities.

If your ok with this and have any COA to add please let me know and can you send a email confirming your ok with this plan?

On Thu, Apr 15, 2021, 2:45 PM Bob Hall <[BBHall@btaoil.com](mailto:BBHall@btaoil.com)> wrote:

It looks like this is approval to combine the spills, but it doesn't speak at all toward approval of the remediation plan. I think you discussed it Shelly.

Could you make a reply to her that acknowledges receipt and recaps the major points of the scope of work?

---

**From:** MICHAEL ALVES <[michaelalves@alvesoilfieldsolutions.org](mailto:michaelalves@alvesoilfieldsolutions.org)>

**Sent:** Thursday, April 15, 2021 3:25 PM

**To:** Bob Hall <[BBHall@btaoil.com](mailto:BBHall@btaoil.com)>; Ben Grimes <[BGrimes@btaoil.com](mailto:BGrimes@btaoil.com)>

**Subject:** Fwd: [EXTERNAL] Fwd: NRM 2015756964

\*\*\*\*\* EXTERNAL EMAIL - Please use caution and **DO NOT** open attachments or click links from unknown or unexpected emails. \*\*\*\*\*

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Here you go.

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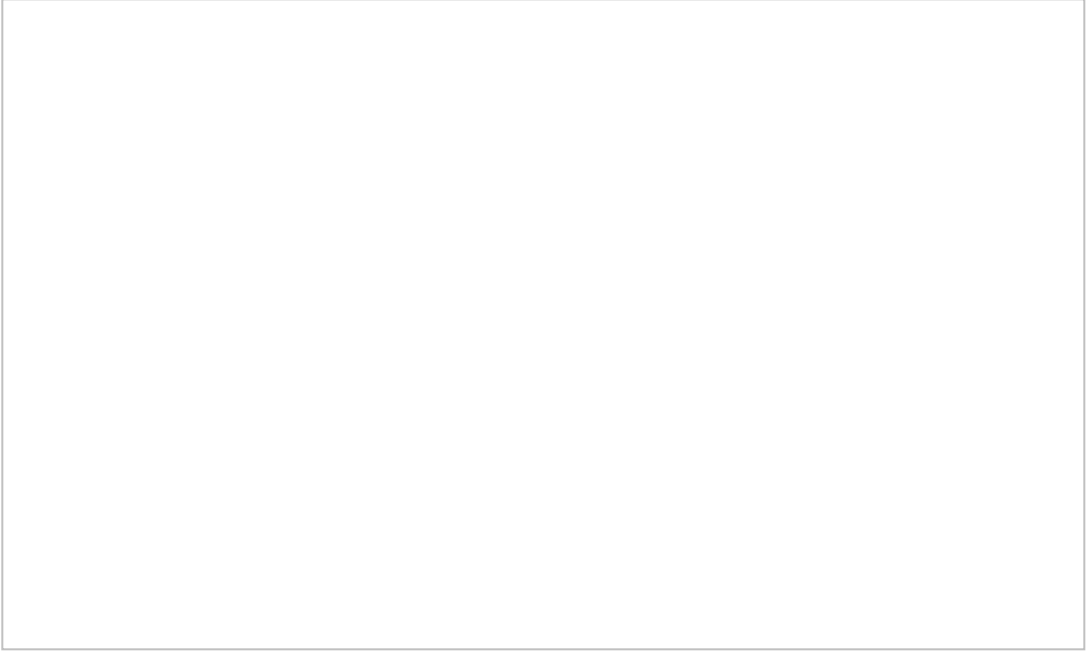
[Quoted text hidden]

[Quoted text hidden]

[Quoted text hidden]

[Quoted text hidden]





[Quoted text hidden]

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**MICHAEL ALVES** <michaelalves@alvesoilfieldsolutions.org>  
To: Katherine Beldon <katherine@alvesoilfieldsolutions.org>

Thu, Jun 10, 2021 at 6:48 AM

[Quoted text hidden]



Katherine Beldon &lt;katherine@alvesoilfieldsolutions.org&gt;

**Mesa B line/ Harrier line**

4 messages

**MICHAEL ALVES** <michaelalves@alvesoilfieldsolutions.org>

Thu, Sep 2, 2021 at 4:26 PM

To: Mario Exact Flo <stucker@blm.gov>, Bob Hall <bhall@btaoil.com>, "psanders@oilfieldwaterlogistics.com" <psanders@oilfieldwaterlogistics.com>, Katherine Beldon <katherine@alvesoilfieldsolutions.org>

Shelly,

Thank you for the time first off for meeting me today. Per our conversation just to get it in writing. you gave backfill permission with a liner set in the areas referenced in the workplan. Also all the original COA you originally imposed are still going to be done as well with the water breaks and some areas being raised up to prevent erosion. also all african rue will be removed and taken to an approved disposal. at the end of remediation activities a closure report will be submitted documenting all activities and closure

--

**Alves Oilfield Solutions**  
**575-631-4310**

*I'm a movement by myself but I'm a force when we work together*Sender notified by [Mailtrack](#)**Tucker, Shelly J** <stucker@blm.gov>

Tue, Sep 7, 2021 at 10:11 AM

To: MICHAEL ALVES <michaelalves@alvesoilfieldsolutions.org>, Bob Hall <bhall@btaoil.com>, "psanders@oilfieldwaterlogistics.com" <psanders@oilfieldwaterlogistics.com>, Katherine Beldon <katherine@alvesoilfieldsolutions.org>

BLM hereby gives authorization for backfill and requests all African rue be properly disposed of.

Shelly J Tucker  
Environmental Protection Specialist  
Realty

[stucker@blm.gov](mailto:stucker@blm.gov)

575.234.5706 desk  
575.200.0614 mobile

620 E Greene St  
Carlsbad, NM 88220



---

**From:** MICHAEL ALVES <[michaelalves@alvesoilfieldsolutions.org](mailto:michaelalves@alvesoilfieldsolutions.org)>

**Sent:** Thursday, September 2, 2021 4:26:48 PM

**To:** Tucker, Shelly J <[stucker@blm.gov](mailto:stucker@blm.gov)>; Bob Hall <[bhall@btaoil.com](mailto:bhall@btaoil.com)>; [psanders@oilfieldwaterlogistics.com](mailto:psanders@oilfieldwaterlogistics.com) <[psanders@oilfieldwaterlogistics.com](mailto:psanders@oilfieldwaterlogistics.com)>; Katherine Beldon <[katherine@alvesoilfieldsolutions.org](mailto:katherine@alvesoilfieldsolutions.org)>

**Subject:** [EXTERNAL] Mesa B line/ Harrier line

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[Quoted text hidden]

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**MICHAEL ALVES** <[michaelalves@alvesoilfieldsolutions.org](mailto:michaelalves@alvesoilfieldsolutions.org)>

Tue, Sep 7, 2021 at 10:12 AM

To: "Tucker, Shelly J" <[stucker@blm.gov](mailto:stucker@blm.gov)>

Cc: Bob Hall <[bhall@btaoil.com](mailto:bhall@btaoil.com)>, "[psanders@oilfieldwaterlogistics.com](mailto:psanders@oilfieldwaterlogistics.com)" <[psanders@oilfieldwaterlogistics.com](mailto:psanders@oilfieldwaterlogistics.com)>, Katherine Beldon <[katherine@alvesoilfieldsolutions.org](mailto:katherine@alvesoilfieldsolutions.org)>

Thank you consider it done

Michael Alves

[Quoted text hidden]

---

**MICHAEL ALVES** <[michaelalves@alvesoilfieldsolutions.org](mailto:michaelalves@alvesoilfieldsolutions.org)>

Tue, Sep 7, 2021 at 10:12 AM

To: Katherine Beldon <[katherine@alvesoilfieldsolutions.org](mailto:katherine@alvesoilfieldsolutions.org)>, Kayla Willis Prosise <[kayla@alvesoilfieldsolutions.org](mailto:kayla@alvesoilfieldsolutions.org)>

Print this out

Michael Alves

[Quoted text hidden]

# Appendix VI – Sampling and Lab Data

---

NAME OF Location & Release date  
OCD TRACKING #

Mesa B05/ Harrier Line

Location	GPS Coordinates	Sample Date	Sample Depth (feet BGS)	Field Screening		Laboratory Results										
				PID Result (PPM)	Titration Result (mg/kg)	Chloride (mg/kg)	Total TPH (mg/kg)	TPH GRO + DRO (mg/kg)	BTEX (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH Ext DRO (mg/kg)
Wall 1	N,32.05925 W,-103.61722	7/12/21			249	32	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 2	N,32.05918 W,-103.61725	7/12/21			624	176	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 3	N,32.05916 W,-103.61710	7/12/21			249	<16.0	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 4	N,32.05916 W,-103.61730	6/1/21			6,248											
Wall 4		6/1/21	2'		5,498											
Wall 4		6/2/21	4'		5,498											
Wall 4		7/12/21	5'		299	32	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 4		6/2/21	6'		249											
Wall 5	N,32.05901 W,-103.61716	7/12/21			249	32	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 6	N,32.05888 W,-103.61729	6/2/21			5,748											
Wall 6		7/12/21	5'		249	<16.0	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 7	N,32.05886 W,-103.61721	7/12/21			249	<16.0	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 8	N32.05874 W,103.61727	6/2/21			2,999											
Wall 8		6/2/21	2'		1,999											
Wall 8		6/2/21	4'		249											
Wall 8		7/12/21	5'		249	32	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 8		6/2/21	6'		249											
Wall 9	N,32.05874 W,103.61721	7/12/21			249	<16.0	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 10	N32.05860 W,103.61726	6/7/21			4,248											
Wall 10		7/12/21	3'		249	<16.0	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 11	N,32.05859 W,103.61720	7/12/21			249	32	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 12	N,32.05849 W,103.61726	7/12/21			249	128	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 13	N,32.05846 W,103.61718	7/12/21			249	32	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 14	N,32.05835 W,103.61718	7/12/21			249	<16.0	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 14		6/18/21	2'		249											
Wall 15	N,32.05837 W,103.61718	6/7/21			5,073											
Wall 15		6/16/21	2'		449											
Wall 16	N,32.05825 W,103.61722	7/12/21			249	<16.0	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 16		7/12/21	2'		449	<16.0	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 15/17	Between 15-17	7/12/21				320	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 17	N32,05824 W,103.61706	6/7/21			1,324											
Wall 17		6/16/21	2'		449											
Wall 18	N32.05813 W,103.61723	7/12/21			249	<16.0	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 19	N,32.05813 W,103.61718	7/12/21			249	176	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 20	N,32.05799 W,103.6123	6/7/21			549											
Wall 20		7/12/21	2'		249	<16.0	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 21	N,32.05803 W,103.60716	7/12/21			249	<16.0	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 22	N,32.05791 W,103.61720	7/12/21			249	<16.0	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 23	N,32.05790 W,103.61716	7/12/21			249	176	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 24	N,32.05776 W,103.61721	6/7/21			949											
Wall 24		7/12/21	2'		249	<16.0	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 25	N,32.05777 W,-103.61713	6/7/21			1,099											
Wall 25		7/12/21	2'		249	32	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 26	N,32.05768 W,103.61719	7/12/21			249	32	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 27	N,32.05768 W,103.61712	6/7/21			874											
Wall 27		7/12/21	2'		249	32	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 28	N,32.05758 W,103.61720	7/12/21			249	48	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 29	N,32.05758 W,103.61712	6/7/21			2,124											
Wall 29		7/12/21	2'		249	<16.0	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 30	N,32.05748 W,103.61722	7/12/21			249	<16.0	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0



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Wall 31	N,32.05747 W,103.61713	6/7/21			949											
Wall 31		7/12/21	2'		249	<16.0	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 32	N,32.05734 W,103.61723	7/12/21			249	<16.0	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 33	N,32.05734 W,103.61713	6/7/21			5,548											
Wall 33		7/12/21	2'		249	<16.0	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 34	N,32.05722 W,103.61723	7/12/21	2'		249	48	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 34		6/7/21			4,498											
Wall 35	N,32.05720 W,103.61714	6/7/21			2,949											
Wall 35		7/12/21	2'		249	48	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 36	N,32.05707 W,103.61723	6/7/21			1,999											
Wall 36		6/16/21	2'		2,049											
Wall 36		7/12/21	5'		249	<16.0	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 37	N,32.05707 W,103.61712	6/7/21			3,998											
Wall 37		7/12/21	2'		249	32	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 38	N,32.05696 W,103.61723	6/7/21			4,998											
Wall 38		6/16/21	2'		699											
Wall 38		7/12/21	5'		249	<16.0	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 39	N,32.05685 W,103.61716	7/12/21			249	<16.0	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 40	N,32.05685 W,103.61723	6/7/21			2,499											
Wall 40		6/16/21	2'													
Wall 40		7/12/21	2'		374	<16.0	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 41	N,32.05684 W,103.61727	7/12/21			249	48	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 42	N,32.05672 W,103.61721	6/7/21			2,399											
Wall 42		7/12/21	2'		249	32	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 42		6/16/21	2'													
Wall 43	N,32.05672 W,103.61716	7/12/21			249	96	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 44	N,32.05659 W,103.61723	6/7/21			3,548											
Wall 44		7/12/21	2'		249	<16.0	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 44		6/16/21	2'													
Wall 45	N,32.05658 W,103.61716	7/12/21			249	<16.0	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 46	N,32.05645 W,103.61721	6/7/21			4,248											
Wall 46		7/12/21	2'		249	128	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 47	N,32.05645 W,103.61715	6/7/21			4,198											
Wall 47		7/12/21	2'		249	48	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 48	N,32.05632 W,103.61720	7/12/21	2'		3,124	80	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	10.0<	10.0<	10.0<
Wall 48		6/17/21	2'		374											
Wall 49	N,32.05632 W,103.61713	6/7/21			999											
Wall 49		7/12/21	2'		249	32	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 50	N,32.05621 W,103.61720	6/8/21			1,124											
Wall 50		7/12/21	2'		449	240	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 51	N,32.0521 W,103.61715	7/12/21			449	320	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 52	N,32.05610 W,103.61722	6/8/21			949											
Wall 52		6/17/21	2'		3,898											
Wall 52		6/18/21	4'		249											
Wall 53	N,32.05609 W,103.61715	6/8/21			249											
Wall 54	N,32.05596 W,103.61720	6/8/21			6,997											
Wall 54		6/18/21	2'		249											
Wall 55		6/8/21			249											
Wall 56	N,32.05584 W,103.61720	6/8/21			3,199											
Wall 56		6/18/21	2'		324											

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Wall 57	N,32.05585 W,103.61713	6/8/21			249											
Wall 58	N,32.05572 W,103.61718	6/8/21			3,998											
Wall 58		6/18/21	2'		249											
Wall 59	N,32.05573 W,103.61711	6/8/21			4,998											
Wall 59		6/21/21	2'		249											
Wall 60		6/8/21			249											
Wall 60	N32.05560 W,103.61720	6/18/21	2'		249											
Wall 61	N,32.05561 W,103.61711	6/8/21			249											
Wall 62	N,32.05547 W,103.61719	6/8/21			1,499											
Wall 62		6/18/21	2'		249											
Wall 63	N,32.05547 W,103.61713	6/8/21			249											
Wall 64	N,32.05534 W,103.61720	6/8/21			3,323											
Wall 64		6/21/21			699											
Wall 64		6/21/21	2'		249											
Wall 65	N,32.05534 W,103.61712	6/8/21			249											
Wall 65		6/21/21			249											
Wall 66	N,32.05521 W,103.61718	6/22/21			249											
Wall 67	N,32.50521 W,103.51713	6/22/21			249											
Wall 68	N,32.05508 W,103.61719	6/22/21			249											
Wall 69	N,32.05508 W,103.61713	6/22/21			249											
Wall 70	N,32.05494 W,103.61718	6/22/21			249											
Wall 71	N,32.05494 W,103.61713	6/22/21			249											
Wall 72	N,32.05480 W,103.61718	6/22/21			249											
Wall 73	N,32.05480 W,103.61711	6/22/21			249											
Wall 74	N,32.05466 W,103.61716	6/22/21			249											
Wall 75	N,32.05466 W,103.61711	6/22/21			249											
Wall 76	N,32.05453 W,103.61718	6/22/21			249											
Wall 77	N,32.05452 W,103.61711	6/22/21			249											
Wall 78	N,32.05440 W,103.61715	6/22/21			249											
Wall 79	N,32.05440 W,103.61710	6/22/21			999											
wall 79		6/24/21			4,623											
Wall 79		6/24/21	5'		2,124											
Wall 79		6/25/21	7'		249											
Wall 80	N,32.05428 W,103.61715	6//22/21			449											
Wall 81	N,32.05427 W,103.61709	6/22/21			3,248											
wall 81		6/24/21			4,748											
Wall 81		6/24/21	5'		3,199											
Wall 81		6/25/21	7'													
Wall 82	N,32.05415 W,103.61705	6/22/21			249											
Wall 83	N,32.05418 W,103.61702	6/22/21			7,247											
wall 83		6/24/21			1,073											
Wall 83		6/25/21	7'		249											
Wall 84	N.3205407 W.103.61698	6/23/21			249											
Wall 85	N,32.05406 W,103.61696	6/23/21			449											
Wall 86	N.32.05393 W.103.61698	6/23/21			249											
Wall 87	N.32.05392 W,103.61695	6/23/19			449											
Wall 88	N.32.05378 W,103.61695	6/23/21			249											
Wall 89	N.32.05378 W,103.61694	6/23/21			249											
Wall 90	N.32.05363 W,103.61695	6/23/19			249											
Wall 91	N,32.05363 W,103.61694	6/23/19			249											

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Wall 92	N,32.05350 W,103.61696	6/23/19			249											
Wall 93	N,32.05351 W,103.61694	6/23/19			249											
Wall 94	N,32.05339 W,103.61698	6/23/19			249											
Wall 95	N,32.05339 W,103.61696	6/23/19			249											
Wall 96	N,32.05326 W,103.61702	6/23/19			249											
Wall 97	N,32.05326 W,103.61700	6/23/19			249											
Wall 98	N,32.05312 W,103.61705	6/23/19			324											
Wall 99	N,32.05312 W,103.61703	6/23/19			2,499											
Wall 100	N,32.05300 W,103.61707	6/23/19			249											
Wall 101	N,32.05299 W,103.61707	6/23/19			249											
Wall 102	N,32.05288 W,103.61715	6/23/19			1,074											
Wall 103	N,32.05286 W,103.61713	6/23/19			249											
Wall 104	N,32.05274 W,103.61719	6/23/19			249											
Wall 105	N,32.05274 W,103.61716	6/23/19			249											
Wall 106	N,32.05260 W,103.61723	6/23/19			249											
Wall 107	N,32.05259 W,103.61724	6/23/19			249											
Wall 108	N,32.05247 W,103.61726	6/23/19			249											
Wall 109	N,32.05247 W,103.61724	6/23/19			249											
Wall 110	N,32.05225 W,103.61726	6/24/21			249											
Wall 111	N,32.05229 W,103.61728	6/24/21			249											
Wall 112	N,32.05218 W,103.61733	6/24/21			249											
Wall 113	N,32.05218 W,103.61731	6/24/21			249											
Wall 114	N,32.05205 W,103.61733	6/24/21			249											
Wall 115	N,32.05204 W,103.61733	6/24/21			249											
Wall 116	N,32.05191 W,103.61732	6/24/21			1,324											
Wall 117	N,32.05191 W,103.61730	6/24/21			2,074											
Wall 118	N,32.05178 W,103.61732	6/24/21			999											
Wall 119	N,32.05178 W,103.61730	6/24/21			449											
wall 120	N,32.05164 W,103.61735	6/24/21			2,999											
Wall 120		7/16/21	10'		249											
Wall 121	N,32.05165 W,103.61732	6/24/21			449											
Wall 122	N,32.05151 W,103.61733	7/16/21	10'		249											
wall 122		6/24/21			3,124											
wall 123	N,32.05153 W,103.61729	6/24/21			249											
wall 124	N,32.05139 W,103.61734	6/24/21			249											
Wall 125	N,32.05139 W,103.61730	6/24/21			999											
Wall 126	N,32.05126 W,103.61734	6/24/21			249											
Wall 127	N,32.05125 W,103.61732	6/24/21			1,249											
wall 128	N,32.05112 W,103.61734	7/19/21	4'		2,249	48	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
wall 129	N,32.05113 W,103.61731	7/19/21	4'		3,748	32	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
wall 130	N,32.05098 W,103.61731	7/19/21	15'		1,249	112	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 131	N,32.05099 W,103.61729	7/19/21	2'		3,199	32	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 132	N,32.05067 W,103.61702	7/19/21	2'			32	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
wall 133	N,32.05067 W,103.61700	7/19/21	2'			288	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 134		7/19/21	2'			32	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 135		7/19/21				112	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
Wall 136	N,32.05038 W,103.61699															
Wall 137	N,32.05039 W,103.61694															
Wall 138	N,32.05026 W,103.61694															
Wall 139	N,32.05025 W,103.61689															



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Wall 140	N,32.05013 W,103.61691	6/25/21			6,797											
Wall 141	N,32.05013 W,103.61889	6/25/21			499											
Wall 142	N,32.05002 W,103.61687	6/25/21			749											
Wall 143	N,32.05002 W,103.61684	6/25/21			249											
BS1	N,32.05898 W.-103.61727	7/13/21			249	<16.0	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
BS2	N,32.05882 W,103.61726	6/2/21			249											
BS2		6/15/21			1,124											
BS3	N,32.05862 W,103.61725	6/2/21			1,074											
BS3		7/13/21			499	224	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
BS4	N,32.05836 W,103.61725	7/13/21	4'		624	528	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
BS5	N,32.05799 W,103.61723	7/13/21			249	32	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
BS6	N,32.05777 W,103.61720	7/13/21			249	32	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
BS7	N,32.05778 W,103.61713	7/13/21			249	32	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
BS8		7/13/21			499	288	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
BS9	N,32.05707 W,103.61723	6/16/21			2,849											
BS9		6/17/21	3'		4,048											
BS9		6/17/21	4'		4,598											
BS10	N,32.05696 W,103.61723	6/16/21			4,123											
BS10		6/17/21	4'		1,199											
BS11	N,32.05685 W,103.61721	6/17/21			1,999											
BS12	N,32.05673 W,103.61722	6/17/21			3,623											
BS13	N,32.05659 W,103.61721	6/17/21			2,499											
BS14	N,32.05645 W,103.61720	6/17/21			5,498											
BS15	N,32.05632 W,103.61719	7/13/21			749	656	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
BS15		6/16/21	4'		3,498											
BS16	N,32.05621 W,103.61718	6/17/21			1,249											
BS16		6/16/21	4'		3,498											
BS17	N,32.05610 W,103.61720	6/17/21			6,547											
BS17		6/18/21	3'		2,624											
BS17		6/16/21	4'		3,498											
BS18		7/13/21			249	<16.0	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
BS19	N,32.05767 W,103.61713	7/13/21			249	<16.0	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
BS20	N,32.05759 W,103.61713	7/13/21			249	<16.0	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
BS21	N,32.05747 W,103.61714	7/13/21			249	48	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
BS22	N,32.05734 W,103.61713	6/18/21			3,249											
BS22		6/21/21	4'		2,499											
BS23	N,32.05720 W,103.61716	6/18/21			1,499											
BS23		6/21/21	4'		2,499											
BS24	N,32.05707 W,103.61713	6/18/21			1,999											
BS24		6/21/21	4'		3,748											
BS25	N,32.05645 W,103.61716	7/13/21			249	48	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
BS26	N,32.05632 W,103.61714	7/13/21			249	<16.0	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
BS27	N,32.05596 W,103.61719	6/18/21			5,998											
BS28	N,32.05584 W,103.61719	6/18/21			5,248											
BS29	N,32.05572 W,103.61717	6/18/21			249											
BS30	N,32.05560 W,103.61718	6/18/21			249											
BS31	N,32.05547 W,103.61718	6/18/21			2,899											
BS32	N,32.05573 W,103.61713	6/21/21			249											

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				PID Result (PPM)	Titration Result (mg/kg)	Chloride (mg/kg)	Total TPH (mg/kg)	TPH GRO + DRO (mg/kg)	BTEX (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH Ext DRO (mg/kg)
BS33	N,32.05534 W,103.61716	6/21/21			5,373											
BS34	N,32.05521 W,103.61716	6/22/21			2,499											
BS35	N,32.05508 W,103.61716	6/22/21			3,373											
BS36	N,32.05494 W,103.61715	6/22/21			249											
BS37	N,32.05480 W,103.61714	6/22/21			749											
BS38	N,32.05466 W,103.61413	6/22/21			1,249											
BS39	N,32.05453 W,103.61714	6/22/21			5,998											
BS40	N,32.05440 W,103.61712	6/22/21			5,498											
BS41	N,32.05428 W,103.61712	6/22/21			374											
BS42	N,32.05416 W,103.61703	6/22/21			299											
BS43	N,32.05406 W,103.61697	6/23/21			249											
BS44	N,32.05392 W,103.61697	6/23/21			249											
BS45	N,32.05378 W,103.61695	6/23/21			249											
BS46	N,32.05364 W,103.61695	6/23/21			249											
BS47	N,32.05339 W,103.61695	6/23/21			1,374											
BS48	N,32.05338 W,103.61698	6/23/21			2,949											
BS49	N,32.05326 W,103.61700	6/23/21			1,249											
BS50	N,32.05312 W,103.61705	6/23/19			324											
BS51	N,32.05300 W,103.61708	6/23/19			249											
BS52	N,32.05287 W,103.61714	6/23/19			249											
BS53	N,32.05274 W,103.61718	6/23/19			374											
BS56		6/24/21			249											
BS57		6/24/21			249											
BS58		6/24/21			374											
BS59		6/24/21			249											
BS60		6/24/21			249											
BS61		6/24/21			449											
BS62		6/24/21			4,373											
BS63		6/24/21			249											
BS64		6/24/21			249											
BS65		6/24/21			4,448											
BS66		7/19/21			549	336	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
BS67		7/19/21			3,199	288	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
BS68		7/19/21				352	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
BS69	N,32.05038 W,103.61697															
BS70	N,32.05026 W,103.61692															
BS71	N,32.05014 W,103.61691	6/25/21			6,872											
BS72	N,32.05002 W,103.61685	6/25/21			2,249											
BS73	N,32.05915 W,103.61723	6/25/21			1,149											
BS74	N,32.05898 W,103.61723	7/13/21			549	352	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
BS75	N,32.05883 W,103.61726	7/13/21			249	<16.0	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
BS76	N,32.05867 W,103.61724	7/13/21			249	48	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
BS77	N,32.05853 W,103.61724	7/13/21			374	288	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
BS78	N,32.05842 W,103.61726	6/25/21			5,373											
BS79	N,32.05832 W,103.61724	6/25/21			1,949											
BS80	N,32.05819 W,103.61724	7/13/21			449	128	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
BS81	N,32.05808 W,103.61723	7/13/21			249	<16.0	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
BS82	N,32.05798 W,103.61723	6/25/21			7,997											
BS83	N,32.05788 W,103.61720	6/25/21			2,799											
BS84	N,32.05772 W,103.61720	6/25/21			6,497											

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				PID Result (PPM)	Titration Result (mg/kg)	Chloride (mg/kg)	Total TPH (mg/kg)	TPH GRO + DRO (mg/kg)	BTEX (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH Ext DRO (mg/kg)
BS85	N,32.05762 W,103.61720	6/25/21			8,047											
BS86	N,32.05753 W,103.61720	6/25/21			5,948											
BS87	N,32.05742 W,103.61720	6/25/21			6,023											
BS88	N,32.05729 W,103.61720	6/25/21			9,322											
BS89	N,32.05716 W,103.61720	7/13/21			374	208	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
BS90	N,32.05709 W,103.61720	7/13/21			449	240	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
BS91	N,32.05691 W,103.61721	6/25/21			3,423											
BS92	N,32.05679 W,103.61720	6/25/21			3,423											
BS93	N,32.05667 W,103.61720	6/25/21			4,098											
BS94	N,32.05653 W,103.61719	6/25/21			2,624											
BS95	N,32.05641 W,103.61718	6/25/21			5,623											
BS96	N,32.05627 W,103.61716	6/25/21			4,373											
BS97	N,32.05617 W,103.61716	6/25/21			6,248											
BS98	N,32.05606 W,103.61716	6/25/21			7,497											
BS99	N,32.05591 W,103.61716	6/25/21			7,497											
BS100		6/25/21			6,375											
BS101		6/25/21			249											
BS102		6/25/21			4,373											
BS103		6/25/21			249											
SP36NW		6/9/21			249											
SP36SW		6/9/21			1,699											
SP36EW		6/9/21			249											
SP36WW		6/9/21			249											
SP36SW		6/9/21	5'		2,874											
SP36SW		6/10/21	20'													
SP40NW		6/10/21	5'													
SP40NW		6/9/21			2,149											
SP40SW		6/9/21			249											
SP40EW		6/9/21			374											
SP40WW		6/9/21			249											
SP43SW		6/9/21	5'		624											
SP43SW		6/21/21	10'		3,923											
SP43SW		6/21/21	15'		4,573											
SP43SW		6/21/21	25'													
SP43NW		6/9/21			374											
SP43SW		6/9/21			3,174											
SP43EW		6/9/21			249											
SP43WW		6/9/21			249											
SP45NW		6/9/21			499											
SP45SW		6/9/21			249											
SP45EW		6/9/21			2,749											
SP45EW		6/9/21	5'		249											
SP45WW		6/9/21			374											
SP47NW		6/9/21			249											
SP47SW		6/9/21			374											
SP47EW		9/9/21			249											
SP47WW		9/9/21			249											
SP49NW		6/10/21			249											



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				PID Result (PPM)	Titration Result (mg/kg)	Chloride (mg/kg)	Total TPH (mg/kg)	TPH GRO + DRO (mg/kg)	BTEX (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH Ext DRO (mg/kg)
SP49SW		6/10/21			624											
SP49SW		6/21/21	5'		749											
SP49SW		6/21/21	10'		249											
SP49EW		6/10/21			374											
SP49WW		6/10/21			249											
SP51NW		6/10/21			2,999											
SP51NW		6/10/21			4,998											
SP51NM		6/10/21	15'		249											
SP51SW		6/10/21			999											
SP51EW		6/10/21			249											
SP51WWW		6/10/21			4,323											
SP51WWW		6/10/21	2'		1,149											
SP51WWW		6/10/21	8'		374											
SP51Botto		6/10/21			874											
SB1	N.32.0594 W.-103.61716	5/11/21	surf		23,367											
SB1		5/11/21	1'		474											
SB1		5/11/21	2'		224											
SB1		5/11/21	3'		224											
SB1		5/11/21	4'		224	32	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
SB2	N.32.05876 W.-103.61827	5/11/21	surf		799											
SB2		5/11/21	1'		3,823											
SB2		5/11/21	2'		3,998											
SB2		5/11/21	3'		1,074											
SB2		5/11/21	4'		374	176	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
SB3	N.3205865 W.-103.61827	5/11/21	surf		2,249											
SB3		5/11/21	1'		3,498											
SB3		5/11/21	2'		5,748											
SB3		5/11/21	3'		449											
SB3		5/11/21	4'		449	208	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
SB4	N.32.05872 W.-103.61787	5/11/21	surf		374											
SB4		5/11/2021	1'		374											
SB4		5/11/2021	2'		374											
SB4		5/11/21	3'		299											
SB4		5/11/21	4'		299	176	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
SB5	N.32.05849 W.-103.61786	5/11/21	surf		249											
SB5		5/11/21	1'		249											
SB5		5/11/21	2'		374											
SB5		5/11/21	3'		374											
SB5		5/11/21	4'		374	192	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
SB6	N.32,05948 W.-103.61665	5/11/21	surf		249											
SB6		5/11/21	1'		249											
SB6		5/11/21	2'		249											
SB6		5/11/21	3'		249											
SB6		5/11/21	4'		249	48	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
SB7	N.32,05928 W.-103.61652	5/11/21	surf		249											
SB7		5/11/21	1'		249											
SB7		5/11/21	2'		249											
SB7		5/11/21	3'		249	<16.0	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0

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				PID Result (PPM)	Titration Result (mg/kg)	Chloride (mg/kg)	Total TPH (mg/kg)	TPH GRO + DRO (mg/kg)	BTEX (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH Ext DRO (mg/kg)
SB8	N.32.05920 W.-103.61720	5/11/21	surf		3,948											
SB8		5/11/21	1'		4,173											
SB8		5/11/21	2'		1,249											
SB8		5/11/21	3'		549											
SB8		5/11/21	4'		1,424	1,150	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
SB8		5/12/21	5'		1,574											
SB8		5/12/21	6'		1,674											
SB8		5/12/21	7'		3,548											
SB8		5/12/21	8'		3,548											
SB8		5/12/21	9'		2,249											
SB8		5/12/21	10'		1,249											
SB8		5/12/21	11'		1,124											
SB8		5/12/21	12'		699											
SB8		5/12/21	13'		574											
SB8		5/12/21	14'		449											
SB8	N.32.05783	5/12/21	15'		374	208	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
SB9		5/11/21	surf		12,871											
SB9		5/11/21	1'		5,748											
SB9		5/11/21	2'		2,874											
SB9		5/11/21	3'		2,749											
SB9		5/11/21	4'		3,199	4,480	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
SB9		5/12/21	5'		3,873											
SB9		5/12/21	6'		4,997											
SB9		5/12/21	7'		2,499											
SB9		5/12/21	8'		1,574											
SB9		5/12/21	9'		1,224											
SB9		5/12/21	10'		949											
SB9		5/12/21	11'		699											
SB9		5/12/21	12'		549											
SB9		5/12/21	13'		1,049											
SB9	N.32.05602 W.103.61717	5/12/21	14'		749											
SB9		5/12/21	15'		449											
SB9		5/12/21	16'		374	224	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
SB10		5/11/21	surf		19,418											
SB10		5/11/21	1'		4,573											
SB10		5/11/21	2'		2,824											
SB10		5/11/21	3'		2,749											
SB10		5/11/21	4'		1,624	1,310	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
SB10		5/12/21	5'		999											
SB10		5/12/21	6'		1,974											
SB10		5/12/21	7'		499											
SB10		5/12/21	8'		499											
SB10		5/12/21	9'		249	64	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
SB11	N.3205426 W.103.61711	5/11/21	surf		16,569											
SB11		5/11/21	1'		4,748											
SB11		5/11/21	2'		3,074											
SB11		5/11/21	3'		949											
SB11		5/11/21	4'		499	208	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
SB11		5/12/21	5'		1,799											
SB11		5/12/21	6'		874											

NAME OF Location & Release date  
OCD TRACKING #

Mesa B05/ Harrier Line

Location	GPS Coordinates	Sample Date	Sample Depth (feet BGS)	Field Screening		Laboratory Results										
				PID Result (PPM)	Titration Result (mg/kg)	Chloride (mg/kg)	Total TPH (mg/kg)	TPH GRO + DRO (mg/kg)	BTEX (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH Ext DRO (mg/kg)
SB11	N.32.05311 W.103.61706	5/12/21	7'		499											
SB11		5/12/21	8'		449	256	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
SB12		5/12/21	surf		7,872											
SB12		5/12/21	1'		8,697											
SB12		5/12/21	2'		1,349											
SB12	N.3205238 W.103.61633	5/12/21	3'		449											
SB12		5/12/21	4'		374	96	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
SB12		5/12/21	5'		374											
SB12		5/12/21	6'		374											
SB13		5/12/21	surf		15,945											
SB13		5/12/21	1'		4,748											
SB13		5/12/21	2'		4,998											
SB13		5/12/21	3'		4,998											
SB13		5/12/21	4'		5,748	5,200	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
SB13		5/12/21	5'		4,748											
SB13		5/12/21	6'		2,249											
SB13		5/12/21	7'		999											
SB13		5/12/21	8'		2,249											
SB13		5/12/21	9'		749											
SB13	N.32.05271 W.103.61667	5/12/21	10'		624											
SB13		5/12/21	11'		499											
SB13		5/12/21	12'		449											
SB13		5/12/21	13'		324	272	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
SB14		5/12/21	surf		249											
SB14	N.32.05228 W.103.61731	5/12/21	1'		249											
SB14		5/12/21	2'		249											
SB14		5/12/21	3'		249											
SB14		5/12/21	4'		249	32	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
SB15		5/13/21	surf		1,374											
SB15	N.32.05100 W.103.61720	5/13/21	1'		449											
SB15		5/13/21	2'		249											
SB15		5/13/21	3'		249	32	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
SB16		5/13/21	surf		13,995											
SB16		5/13/21	1'		4,498											
SB16	N.3205050	5/13/21	2'		2,874											
SB16		5/13/21	3'		949											
SB16		5/13/21	4'		949	816	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
SB16		5/13/21	5'		624											
SB16		5/13/21	6'		1,124											
SB16		5/13/21	7'		1,374											
SB16		5/13/21	8'		2,124											
SB16		5/13/21	9'		2,249											
SB16		5/13/21	10'		1,874											
SB16		5/13/21	11'		1,499											
SB16		5/13/21	12'		1,499											
SB16		5/13/21	13'		1,499											
SB16		5/13/21	14'		1,499											
SB16		5/13/21	15'		999											
SB16		5/13/21	16'		749	720	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
SB17	N.3205050	5/13/21	surf		7,497											

NAME OF Location & Release date  
OCD TRACKING #

Mesa B05/ Harrier Line

Location	GPS Coordinates	Sample Date	Sample Depth (feet BGS)	Field Screening		Laboratory Results										
				PID Result (PPM)	Titration Result (mg/kg)	Chloride (mg/kg)	Total TPH (mg/kg)	TPH GRO + DRO (mg/kg)	BTEX (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH Ext DRO (mg/kg)
SB17		5/13/21	1'		5,948											
SB17		5/13/21	2'		8,897											
SB17		5/13/21	3'		2,624											
SB17		5/13/21	4'		1,749	1,520	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
SB17		5/13/21	5'		2,499											
SB18	N.32.05011 W.103.61691	5/13/21	surf		41,986											
SB18		5/13/21	1'		8,372											
SB18		5/13/21	2'		10,496											
SB18		5/13/2021	3'		7,622											
SB18		5/13/2021	4'		1,499	1,380	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
SB18		5/13/2021	5'		799											
SB19	N.32.04985 W.103.61696	5/13/2021	1'		199	48	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
SB20			1,		249	64	<10.0	<10.0	<0.300	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	<10.0
SS3Botto		6/16/2021			249											
SS3NW		6/16/2021			249											
SS3SW		6/16/2021			249											
SS3WW		6/16/2021			249											
SS3EW		6/16/2021			4,498											
SS3EW		6/16/2021	5'		249											
SS16EW		6/15/2021			699											
SS16EW		6/15/2021	2'		246											
SS16WW		6/15/2021	2'		249											
SS18EW		6/15/2021			4,748											
SS18EW		6/15/2021	2'		4,123											
SS18EW		6/15/2021	5'		699											
SS18WW		6/15/2021			249											
SS28EW		6/15/2021			249											
SS28WW		6/15/2021	2'		2,699											
SS28WW		6/15/2021	2'		3,948											
SS28SW		6/15/2021			2,499											
SS28SW		6/15/2021	20'		3,498											
SS35		7/16/2021	4'		6,547											
SS36SW		6/22/2021	4'		3,248											
SS36WE		6/22/2021	100'		749											
SS40NW		6/22/2021	10'		1,499											
SS40NW		6/22/2021	20'		4,223											

NMOCD Table 1 - Closure Criteria for Soils Impacted by a Release (19.15.29.12)

Minimum Depth to GW less than 10,000 mg/l TDS

<= 50'	600	100	-	50	10
51' - 100'	10,000	2,500	1,000	50	10
>100'	20,000	2,500	1,000	50	10

**Reporting Limits:**

Chloride: 16.0 mg/kg

Benzene, Toluene, Ethylbenzene: 0.050 mg/kg for each analyte

Total Xylenes: 0.150 mg/kg

Total BTEX: 0.300 mg/kg



NAME OF Location & Release date  
OCD TRACKING #

Mesa B05/ Harrier Line

Location	GPS Coordinates	Sample Date	Sample Depth (feet BGS)	Field Screening		Laboratory Results										
				PID Result (PPM)	Titration Result (mg/kg)	Chloride (mg/kg)	Total TPH (mg/kg)	TPH GRO + DRO (mg/kg)	BTEX (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH Ext DRO (mg/kg)

GRO (C6 - C10), DRO (>C10 - C28), Ext DRO (>C28 - C36): 10.0 mg/kg for each analyte

NAME OF Location & Release date  
OCD TRACKING #

Mesa B05/ Harrier Line

Location	GPS Coordinates	Sample Date	Sample Depth (feet BGS)	Field Screening		Laboratory Results									
				PID Result (PPM)	Titration Result (mg/kg)	Chloride (mg/kg)	Total TPH (mg/kg)	TPH GRO + DRO (mg/kg)	BTEX (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)

NAME OF Location & Release date  
OCD TRACKING #

Mesa B05/ Harrier Line

Location	GPS Coordinates	Sample Date	Sample Depth (feet BGS)	Field Screening		Laboratory Results										
				PID Result (PPM)	Titration Result (mg/kg)	Chloride (mg/kg)	Total TPH (mg/kg)	TPH GRO + DRO (mg/kg)	BTEX (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH Ext DRO (mg/kg)



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

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May 29, 2020

BOB HALL

BTA Oil Producers

103 South Pecos

Midland, TX 79701

RE: MESA B 05

Enclosed are the results of analyses for samples received by the laboratory on 05/27/20 14:20.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager





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

**Analytical Results For:**

BTA Oil Producers  
 BOB HALL  
 103 South Pecos  
 Midland TX, 79701  
 Fax To: (432) 683-0312

Received:	05/27/2020	Sampling Date:	05/26/2020
Reported:	05/29/2020	Sampling Type:	Soil
Project Name:	MESA B 05	Sampling Condition:	Cool & Intact
Project Number:	1 SAMPLES AND 1.5 SAMPLES	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO		

**Sample ID: SP 1 @ 1' (H001440-01)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	46000	16.0	05/28/2020	ND	384	96.0	400	4.08	

**Sample ID: SP 1 @ 1.5' (H001440-02)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16800	16.0	05/28/2020	ND	384	96.0	400	4.08	

**Sample ID: SP 2 @ 1' (H001440-03)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	46400	16.0	05/28/2020	ND	384	96.0	400	4.08	

**Sample ID: SP 2 @ 1.5' (H001440-04)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	12400	16.0	05/28/2020	ND	384	96.0	400	4.08	

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received:	05/27/2020	Sampling Date:	05/26/2020
Reported:	05/29/2020	Sampling Type:	Soil
Project Name:	MESA B 05	Sampling Condition:	Cool & Intact
Project Number:	1 SAMPLES AND 1.5 SAMPLES	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO		

**Sample ID: SP 3 @ 1' (H001440-05)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	20000	16.0	05/28/2020	ND	384	96.0	400	4.08		

**Sample ID: SP 3 @ 1.5' (H001440-06)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	37600	16.0	05/28/2020	ND	384	96.0	400	4.08		

**Sample ID: SP 4 @ 1' (H001440-07)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	42400	16.0	05/28/2020	ND	384	96.0	400	4.08		

**Sample ID: SP 4 @ 1.5' (H001440-08)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	36800	16.0	05/28/2020	ND	384	96.0	400	4.08		

**Sample ID: SP 5 @ 1' (H001440-09)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	72800	16.0	05/28/2020	ND	384	96.0	400	4.08	

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received:	05/27/2020	Sampling Date:	05/26/2020
Reported:	05/29/2020	Sampling Type:	Soil
Project Name:	MESA B 05	Sampling Condition:	Cool & Intact
Project Number:	1 SAMPLES AND 1.5 SAMPLES	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO		

**Sample ID: SP 5 @ 1.5' (H001440-10)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	5360	16.0	05/28/2020	ND	384	96.0	400	0.00	QM-07	

**Sample ID: SP 6 @ 1' (H001440-11)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	36000	16.0	05/28/2020	ND	384	96.0	400	0.00		

**Sample ID: SP 6 @ 1.5' (H001440-12)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	14000	16.0	05/28/2020	ND	384	96.0	400	0.00		

**Sample ID: SP 7 @ 1' (H001440-13)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	24000	16.0	05/28/2020	ND	384	96.0	400	0.00		

**Sample ID: SP 7 @ 1.5' (H001440-14)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	106000	16.0	05/28/2020	ND	384	96.0	400	0.00	

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received:	05/27/2020	Sampling Date:	05/26/2020
Reported:	05/29/2020	Sampling Type:	Soil
Project Name:	MESA B 05	Sampling Condition:	Cool & Intact
Project Number:	1 SAMPLES AND 1.5 SAMPLES	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO		

**Sample ID: SP 8 @ 1' (H001440-15)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	42000	16.0	05/28/2020	ND	384	96.0	400	0.00		

**Sample ID: SP 8 @ 1.5' (H001440-16)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	24000	16.0	05/28/2020	ND	384	96.0	400	0.00		

**Sample ID: SP 9 @ 1' (H001440-17)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	14000	16.0	05/28/2020	ND	384	96.0	400	0.00	

**Sample ID: SP 9 @ 1.5' (H001440-18)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	19600	16.0	05/28/2020	ND	384	96.0	400	0.00	

**Sample ID: SP 10 @ 1' (H001440-19)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	27200	16.0	05/28/2020	ND	384	96.0	400	0.00	

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received:	05/27/2020	Sampling Date:	05/26/2020
Reported:	05/29/2020	Sampling Type:	Soil
Project Name:	MESA B 05	Sampling Condition:	Cool & Intact
Project Number:	1 SAMPLES AND 1.5 SAMPLES	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO		

**Sample ID: SP 10 @ 1.5' (H001440-20)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	20800	16.0	05/28/2020	ND	384	96.0	400	0.00		

**Sample ID: SP 11 @ 1' (H001440-21)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	60800	16.0	05/28/2020	ND	384	96.0	400	0.00	

**Sample ID: SP 11 @ 1.5' (H001440-22)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	62400	16.0	05/28/2020	ND	384	96.0	400	0.00		

**Sample ID: SP 12 @ 1' (H001440-23)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	41200	16.0	05/28/2020	ND	384	96.0	400	0.00	

**Sample ID: SP 12 @ 1.5' (H001440-24)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	42400	16.0	05/28/2020	ND	384	96.0	400	0.00	

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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:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received:	05/27/2020	Sampling Date:	05/26/2020
Reported:	05/29/2020	Sampling Type:	Soil
Project Name:	MESA B 05	Sampling Condition:	Cool & Intact
Project Number:	1 SAMPLES AND 1.5 SAMPLES	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO		

**Sample ID: SP 13 @ 1' (H001440-25)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	43600	16.0	05/28/2020	ND	384	96.0	400	0.00	

**Sample ID: SP 13 @ 1.5' (H001440-26)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	50400	16.0	05/28/2020	ND	384	96.0	400	0.00	

**Sample ID: SP 14 @ 1' (H001440-27)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	42400	16.0	05/28/2020	ND	384	96.0	400	0.00		

**Sample ID: SP 14 @ 1.5' (H001440-28)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48800	16.0	05/28/2020	ND	384	96.0	400	0.00	

**Sample ID: SP 15 @ 1' (H001440-29)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48000	16.0	05/28/2020	ND	384	96.0	400	0.00	

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

BTA Oil Producers  
 BOB HALL  
 103 South Pecos  
 Midland TX, 79701  
 Fax To: (432) 683-0312

Received:	05/27/2020	Sampling Date:	05/26/2020
Reported:	05/29/2020	Sampling Type:	Soil
Project Name:	MESA B 05	Sampling Condition:	Cool & Intact
Project Number:	1 SAMPLES AND 1.5 SAMPLES	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO		

**Sample ID: SP 15 @ 1.5' (H001440-30)****Chloride, SM4500Cl-B****mg/kg****Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>43600</b>	16.0	05/29/2020	ND	416	104	400	3.77	QM-07

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---

### Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

---

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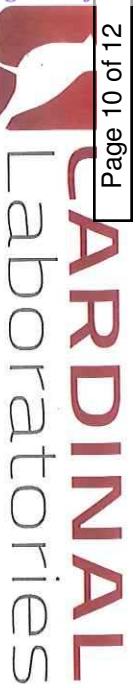
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A handwritten signature in black ink, appearing to read "Celey D. Keene".

---

Celey D. Keene, Lab Director/Quality Manager



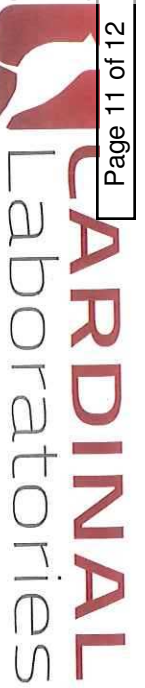


## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

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21 of 11 page



## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: <b>B7A</b>		P.O. #:		<b>BILL TO</b>																																					
Project Manager:		Company: <b>B7A</b>		<b>ANALYSIS REQUEST</b>																																					
Address:		Attn: <b>Bob Hall</b>																																							
City:		Address:																																							
State:		City:																																							
Zip:		State:																																							
Phone #:		Fax #:																																							
Project #:		Project Owner:																																							
Project Name:		City:																																							
Project Location:		State:																																							
Sample Name:		Phone #:																																							
FOR LAB USE ONLY		Fax #:																																							
Lab I.D.		(G)RAB OR (C)OMP.		# CONTAINERS		GROUNDWATER		WASTEWATER		SOIL		OIL		SLUDGE		OTHER:		ACID/BASE:		ICE / COOL		OTHER:		DATE		TIME															
Sample I.D.																																									
H001440																																									
11		56 @ 1'		1		X		X		X		X		X		X		X		X		X		X		10:20		10:25													
12		56 @ 1.5		1		X		X		X		X		X		X		X		X		X		X		10:30		10:35													
13		56 @ 1.5		1		X		X		X		X		X		X		X		X		X		X		10:40		10:45													
14		56 @ 1.5		1		X		X		X		X		X		X		X		X		X		X		10:50		10:55													
15		56 @ 1.5		1		X		X		X		X		X		X		X		X		X		X		11:00		11:05													
16		56 @ 1.5		1		X		X		X		X		X		X		X		X		X		X		11:10		11:15													
17		56 @ 1.5		1		X		X		X		X		X		X		X		X		X		X		11:20		11:25													
18		56 @ 1.5		1		X		X		X		X		X		X		X		X		X		X		11:30		11:35													
19		56 @ 1.5		1		X		X		X		X		X		X		X		X		X		X		11:40		11:45													
20		56 @ 1.5		1		X		X		X		X		X		X		X		X		X		X		11:50		11:55													

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Relinquished By: *[Signature]* Date: **3-27-20** Received By: *[Signature]* Date: **3-27-20**

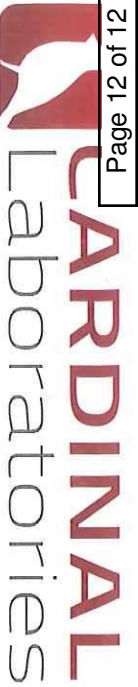
Time: **1420** Received By: *[Signature]*

Delivered By: (Circle One) **571c** **#113** Sample Condition ☒ Cool ☒ Intact ☒ Yes ☒ No ☒ Yes ☒ No ☒ No

Sampler - UPS - Bus - Other: **571c** **#113** CHECKED BY: *[Signature]* (Initials) **2-3**

REMARKS:





## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: <b>RTA</b>		P.O. #:		BILL TO		ANALYSIS REQUEST	
Project Manager:		Company: <b>RTA</b>					
Address:		Attn: <b>Bob Hall</b>					
City:		Address:					
State:		City:					
Zip:		State:					
Phone #:		Fax #:					
Project #:		Project Owner:					
Project Location: <b>Mesa D 005</b>		State:					
Sampler Name: <b>N. ANG</b>		Phone #:					
Fax #:							
FOR LAB USE ONLY		PRESERV.		SAMPLING			
Lab I.D. <b>H001446</b>		Sample I.D.					
(G)RAB OR (C)OMP.		# CONTAINERS					
GROUNDWATER		WASTEWATER					
SOIL		SLUDGE					
OTHER :		ACID/BASE:					
ICE / COOL		OTHER :					
DATE		TIME					
5/26/20		11:10					
11:15		11:20					
11:25		11:30					
11:35		11:40					
11:45		11:50					
11:55							

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Relinquished By: *[Signature]* Date: **5-27-20** Received By: *[Signature]* Date: **5/27/20**

Relinquished By: *[Signature]* Date: **5/27/20** Received By: *[Signature]* Date: **5/27/20**

Delivered By: (Circle One) **5/16** **#1/13** Sample Condition ☒ Cool ☐ Intact ☐ Yes ☐ No ☒ Yes ☐ No

Sampler - UPS - Bus - Other: **3-3**

Phone Result: ☐ Yes ☐ No ☐ Add'l Phone #: **3-3**

Fax Result: ☐ Yes ☐ No ☐ Add'l Fax #:

REMARKS:



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

---

June 04, 2020

BOB HALL

BTA Oil Producers

103 South Pecos

Midland, TX 79701

RE: MESA B 05

Enclosed are the results of analyses for samples received by the laboratory on 06/03/20 8:55.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager





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

**Analytical Results For:**

BTA Oil Producers  
 BOB HALL  
 103 South Pecos  
 Midland TX, 79701  
 Fax To: (432) 683-0312

Received: 06/03/2020  
 Reported: 06/04/2020  
 Project Name: MESA B 05  
 Project Number: 2FT SAMPLES  
 Project Location: LEA CO

Sampling Date: 06/02/2020  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Kelly Jacobson

**Sample ID: SP 1 @ 2' (H001497-01)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	10000	16.0	06/03/2020	ND	432	108	400	0.00	

**Sample ID: SP 2 @ 2' (H001497-02)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48000	16.0	06/03/2020	ND	432	108	400	0.00	

**Sample ID: SP 3 @ 2' (H001497-03)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	28400	16.0	06/03/2020	ND	432	108	400	0.00	

**Sample ID: SP 4 @ 2' (H001497-04)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	25600	16.0	06/03/2020	ND	432	108	400	0.00	

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**Analytical Results For:**

BTA Oil Producers  
 BOB HALL  
 103 South Pecos  
 Midland TX, 79701  
 Fax To: (432) 683-0312

Received: 06/03/2020  
 Reported: 06/04/2020  
 Project Name: MESA B 05  
 Project Number: 2FT SAMPLES  
 Project Location: LEA CO

Sampling Date: 06/02/2020  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Kelly Jacobson

**Sample ID: SP 5 @ 2' (H001497-05)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	560	16.0	06/03/2020	ND	432	108	400	0.00		

**Sample ID: SP 6 @ 2' (H001497-06)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	9460	16.0	06/03/2020	ND	432	108	400	0.00		

**Sample ID: SP 7 @ 2' (H001497-07)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	65600	16.0	06/03/2020	ND	432	108	400	0.00		

**Sample ID: SP 8 @ 2' (H001497-08)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	20000	16.0	06/03/2020	ND	432	108	400	0.00	

**Sample ID: SP 9 @ 2' (H001497-09)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	22400	16.0	06/03/2020	ND	432	108	400	0.00	

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 06/03/2020  
Reported: 06/04/2020  
Project Name: MESA B 05  
Project Number: 2FT SAMPLES  
Project Location: LEA CO

Sampling Date: 06/02/2020  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Kelly Jacobson

**Sample ID: SP 10 @ 2' (H001497-10)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	17200	16.0	06/03/2020	ND	432	108	400	0.00		

**Sample ID: SP 11 @ 2' (H001497-11)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	59200	16.0	06/03/2020	ND	416	104	400	3.77	QM-07

**Sample ID: SP 12 @ 2' (H001497-12)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	47600	16.0	06/03/2020	ND	416	104	400	3.77	

**Sample ID: SP 13 @ 2' (H001497-13)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	51200	16.0	06/03/2020	ND	416	104	400	3.77		

**Sample ID: SP 14 @ 2' (H001497-14)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	54400	16.0	06/03/2020	ND	416	104	400	3.77		

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
 BOB HALL  
 103 South Pecos  
 Midland TX, 79701  
 Fax To: (432) 683-0312

Received: 06/03/2020  
 Reported: 06/04/2020  
 Project Name: MESA B 05  
 Project Number: 2FT SAMPLES  
 Project Location: LEA CO

Sampling Date: 06/02/2020  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Kelly Jacobson

**Sample ID: SP 15 @ 2' (H001497-15)****Chloride, SM4500Cl-B****mg/kg****Analyzed By: GM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>50400</b>	16.0	06/03/2020	ND	416	104	400	3.77	

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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---

### Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

---

Cardinal Laboratories

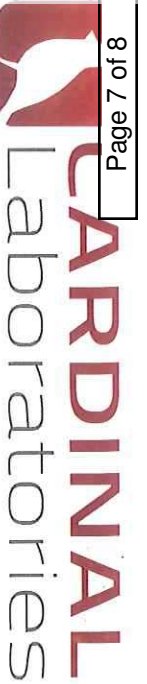
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A handwritten signature in black ink, appearing to read "Celey D. Keene".

---

Celey D. Keene, Lab Director/Quality Manager



## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: <b>BTA</b>		P.O. #:		<b>BILL TO</b>																																			
Project Manager: <b>Bob Hall</b>		Company: <b>BTA</b>		<b>ANALYSIS REQUEST</b>																																			
Address:		Attn: <b>Bob Hall</b>																																					
City:		Address:																																					
Phone #:		City:																																					
Project #:		State:																																					
Project Name: <b>2' Samples</b>		Zip:																																					
Project Location: <b>Mesa D. 05</b>		Phone #:																																					
Sample Name: <b>M. Aves.</b>		Fax #:																																					
FOR LAB USE ONLY																																							
Lab I.D. <b>1004497</b>		Sample I.D.		(G)RAB OR (C)OMP.		# CONTAINERS		GROUNDWATER		WASTEWATER		SOIL		OIL		SLUDGE		OTHER :		ACID/BASE:		ICE / COOL		OTHER :		DATE		TIME											

Page 8 of 8



## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: <b>BTA</b>		<b>BILL TO</b>		<b>ANALYSIS REQUEST</b>											
Project Manager: <b>Bob Hall</b>		P.O. #:													
Address:		Company: <b>BTA</b>													
City:		Attn: <b>Bob Hall</b>													
State:		Address:													
Phone #:		City:													
Fax #:		State:													
Project #:		Zip:													
Project Name: <b>2' Samples</b>		Phone #:													
Project Location: <b>Mesa B 05</b>		Fax #:													
Sample Name: <b>M. Alley</b>															
FOR LAB USE ONLY															
Lab I.D. <b>H001497</b>		Sample I.D.		(G)RAB OR (C)OMP.		# CONTAINERS		MATRIX				PRESERV.		SAMPLING	
								GROUNDWATER							
								WASTEWATER							
								SOIL							
								OIL							
								SLUDGE							
								OTHER :							
								ACID/BASE:							
								ICE / COOL							
								OTHER :							
								DATE				TIME			
								6/2/20				2:20		X	
								6/2/20				2:42		X	
								6/2/20				2:49		X	
								6/2/20				2:59		X	
								6/2/20				3:07		X	

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Relinquished By: <b>Wt</b>		Date: <b>6-3-20</b>		Received By: <b>[Signature]</b>		Time: <b>9:55</b>	
Relinquished By: <b>Wt</b>		Date: <b>6-3-20</b>		Received By: <b>[Signature]</b>		Time: <b>9:55</b>	
Delivered By: (Circle One) <b>-1.8c</b>		Sample Condition		CHECKED BY:			
Sampler - UPS - Bus - Other: <b>4113</b>		Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/>		(Initials) <b>ht</b>			
		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>					
		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>					
REMARKS: <b>Michael's expert services - con</b>							



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

---

June 16, 2020

BOB HALL

BTA Oil Producers

103 South Pecos

Midland, TX 79701

RE: MESA B 05

Enclosed are the results of analyses for samples received by the laboratory on 06/12/20 8:10.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is fluid and cursive, with the first name "Celey" and last name "Keene" clearly distinguishable.

Celey D. Keene

Lab Director/Quality Manager





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

**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 06/12/2020  
Reported: 06/16/2020  
Project Name: MESA B 05  
Project Number: 3FT & 4FT SAMPLES  
Project Location: LEA CO

Sampling Date: 06/05/2020  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Kelly Jacobson

**Sample ID: SP 1 @ 3' (H001571-01)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6800	16.0	06/15/2020	ND	448	112	400	0.00	

**Sample ID: SP 1 @ 4' (H001571-02)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5600	16.0	06/15/2020	ND	448	112	400	0.00	

**Sample ID: SP 2 @ 3' (H001571-03)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6000	16.0	06/15/2020	ND	448	112	400	0.00	

**Sample ID: SP 2 @ 4' (H001571-04)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6800	16.0	06/15/2020	ND	448	112	400	0.00	

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 06/12/2020  
Reported: 06/16/2020  
Project Name: MESA B 05  
Project Number: 3FT & 4FT SAMPLES  
Project Location: LEA CO

Sampling Date: 06/05/2020  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Kelly Jacobson

**Sample ID: SP 3 @ 3' (H001571-05)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	102000	16.0	06/15/2020	ND	448	112	400	0.00		

**Sample ID: SP 3 @ 4' (H001571-06)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	14800	16.0	06/15/2020	ND	448	112	400	0.00		

**Sample ID: SP 4 @ 3' (H001571-07)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	12500	16.0	06/15/2020	ND	448	112	400	0.00		

**Sample ID: SP 4 @ 4' (H001571-08)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	15300	16.0	06/15/2020	ND	448	112	400	0.00		

**Sample ID: SP 6 @ 3' (H001571-09)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	117000	16.0	06/15/2020	ND	448	112	400	0.00	

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 06/12/2020  
Reported: 06/16/2020  
Project Name: MESA B 05  
Project Number: 3FT & 4FT SAMPLES  
Project Location: LEA CO

Sampling Date: 06/05/2020  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Kelly Jacobson

**Sample ID: SP 6 @ 4' (H001571-10)**

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	120000	16.0	06/15/2020	ND	448	112	400	0.00		

**Sample ID: SP 7 @ 3' (H001571-11)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	124000	16.0	06/15/2020	ND	432	108	400	3.77	QM-07

**Sample ID: SP 7 @ 4' (H001571-12)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	22400	16.0	06/15/2020	ND	432	108	400	3.77		

**Sample ID: SP 8 @ 3' (H001571-13)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	137000	16.0	06/15/2020	ND	432	108	400	3.77	

**Sample ID: SP 8 @ 4' (H001571-14)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	125000	16.0	06/15/2020	ND	432	108	400	3.77	

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 06/12/2020  
Reported: 06/16/2020  
Project Name: MESA B 05  
Project Number: 3FT & 4FT SAMPLES  
Project Location: LEA CO

Sampling Date: 06/05/2020  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Kelly Jacobson

**Sample ID: SP 9 @ 3' (H001571-15)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	111000	16.0	06/15/2020	ND	432	108	400	3.77		

**Sample ID: SP 9 @ 4' (H001571-16)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	47200	16.0	06/15/2020	ND	432	108	400	3.77		

**Sample ID: SP 10 @ 3' (H001571-17)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48800	16.0	06/15/2020	ND	432	108	400	3.77		

**Sample ID: SP 10 @ 4' (H001571-18)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	54400	16.0	06/15/2020	ND	432	108	400	3.77		

**Sample ID: SP 11 @ 3' (H001571-19)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	121000	16.0	06/15/2020	ND	432	108	400	3.77	

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 06/12/2020  
Reported: 06/16/2020  
Project Name: MESA B 05  
Project Number: 3FT & 4FT SAMPLES  
Project Location: LEA CO

Sampling Date: 06/05/2020  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Kelly Jacobson

**Sample ID: SP 11 @ 4' (H001571-20)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	52800	16.0	06/15/2020	ND	432	108	400	3.77		

**Sample ID: SP 12 @ 3' (H001571-21)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	120000	16.0	06/15/2020	ND	432	108	400	3.77		

**Sample ID: SP 12 @ 4' (H001571-22)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	125000	16.0	06/15/2020	ND	432	108	400	3.77		

**Sample ID: SP 13 @ 3' (H001571-23)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	117000	16.0	06/15/2020	ND	432	108	400	3.77	

**Sample ID: SP 13 @ 4' (H001571-24)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	52800	16.0	06/15/2020	ND	432	108	400	3.77	

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 06/12/2020  
Reported: 06/16/2020  
Project Name: MESA B 05  
Project Number: 3FT & 4FT SAMPLES  
Project Location: LEA CO

Sampling Date: 06/05/2020  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Kelly Jacobson

**Sample ID: SP 14 @ 3' (H001571-25)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	135000	16.0	06/15/2020	ND	432	108	400	3.77		

**Sample ID: SP 14 @ 4' (H001571-26)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	47600	16.0	06/15/2020	ND	432	108	400	3.77	

**Sample ID: SP 15 @ 3' (H001571-27)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	123000	16.0	06/15/2020	ND	432	108	400	3.77		

**Sample ID: SP 15 @ 4' (H001571-28)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	127000	16.0	06/15/2020	ND	432	108	400	3.77		

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Celey D. Keene, Lab Director/Quality Manager



---

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

---

### Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

---

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

---

Celey D. Keene, Lab Director/Quality Manager



ANALYSIS REQUEST

FOR LAB USE ONLY

H001571

DATE	TIME	
11/11/2023	11:11	cc

62

Phone Result:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Add'l Phone #
---------------	------------------------------	-----------------------------	---------------

REMARKS:

8  
[  
8

Handwritten text: 1000

Relinquished By:

Date:

Received By:

Time:

Delivered By: (Circle One)

1. 100

Sample Condition	CHECKED BY:

CHECKED BY:

Sampler - UPS - Bus - Other:

5.10

4417

☒ Yes ☒ Yes

16.

+ Cardinal's annual speech Dinner for 15751 2022-2022







## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

[illegible]

FOR LAB USE ONLY									
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX				PRESERV.	SAMPLING
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :
				ACID/BASE:	ICE / COOL	OTHER :			
				DATE	TIME				
H001571									
11	SP-7	0	3'	X	X	X	X	X	X
12	SP-7	0	3'	X	X	X	X	X	X
13	SP-A	0	3'	X	X	X	X	X	X
14	SP-B	0	3'	X	X	X	X	X	X
15	SP-C	0	3'	X	X	X	X	X	X
16	SP-D	0	3'	X	X	X	X	X	X
17	SP-E	0	3'	X	X	X	X	X	X
18	SP-F	0	3'	X	X	X	X	X	X
19	SP-G	0	3'	X	X	X	X	X	X
20	SP-H	0	3'	X	X	X	X	X	X

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Relinquished By:	Date:	Received By:	Phone Result:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Add'l Phone #:
	Time:		Fax Result:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Add'l Fax #:
	8:10		REMARKS:	knappton.com		
Relinquished By:	Date:	Received By:				
	Time:					

Delivered By: (Circle One)	-5.9°C		Sample Condition	CHECKED BY: (Initials)	nicol @ experim
Sampler - UPS - Bus - Other:	#113	<input checked="" type="checkbox"/> Cool <input checked="" type="checkbox"/> Intact <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No			

+ Cardinal cannot verbalize change. Discussed for variation change in 157E1 202\_2020



## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: <b>STA</b>		<b>BILL TO</b>	
Project Manager: <b>Bob Hall</b>		P.O. #:	
Address:		Company: <b>STA</b>	
City:	State:	Attn: <b>Bob Hall</b>	
Phone #:	Fax #:	Address:	
Project #:		City:	
Project Name: <b>Sample 341</b>		State:	
Project Location: <b>Mesa B 05</b>		Zip:	
Sampler Name: <b>M. Alvar</b>		Phone #:	
FOR LAB USE ONLY		Fax #:	

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						PRESERV.	SAMPLING	DATE	TIME							
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :											ACID/BASE:
<b>H00157-1</b>																				
	21	SP 12	3'																	
	22	SP 12	3'																	
	23	SP 12	3'																	
	24	SP 13	3'																	
	25	SP 14	3'																	
	26	SP 14	3'																	
	27	SP 15	3'																	
	28	SP 15	4'																	

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Relinquished By: <b>WA</b>	Date: <b>6/12/20</b>	Received By: <b>WA</b>	Time: <b>8:10</b>
Relinquished By:	Date:	Received By:	Time:

Delivered By: (Circle One) <b>-5.9c</b>	Sample Condition	CHECKED BY: <b>WA</b>
Sampler - UPS - Bus - Other:	<input checked="" type="checkbox"/> Cool <input checked="" type="checkbox"/> Intact <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No	(Initials)

**REMARKS:**

**Phone Result:** ☐ Yes ☐ No **Add'l Phone #:**

**Fax Result:** ☐ Yes ☐ No **Add'l Fax #:**

**ANALYSIS REQUEST**

**Project:** **midval export carb summa .cor**



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

---

July 19, 2021

BOB HALL

BTA Oil Producers

103 South Pecos

Midland, TX 79701

RE: MESA B #5

Enclosed are the results of analyses for samples received by the laboratory on 07/15/21 14:50.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/12/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: WALL 48 @ 2 (H211852-01)**

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	07/16/2021	ND	1.81	90.6	2.00	3.74	
Toluene*	<0.050	0.050	07/16/2021	ND	1.95	97.7	2.00	3.97	
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	1.89	94.4	2.00	3.98	
Total Xylenes*	<0.150	0.150	07/16/2021	ND	5.67	94.5	6.00	4.27	
Total BTX	<0.300	0.300	07/16/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 69.9-140

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	07/16/2021	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/16/2021	ND	211	105	200	5.94	
DRO >C10-C28*	<10.0	10.0	07/16/2021	ND	214	107	200	3.95	
EXT DRO >C28-C36	<10.0	10.0	07/16/2021	ND					

Surrogate: 1-Chlorooctane 90.5 % 44.3-133

Surrogate: 1-Chlorooctadecane 89.3 % 38.9-142

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

BTA Oil Producers  
 BOB HALL  
 103 South Pecos  
 Midland TX, 79701  
 Fax To: (432) 683-0312

Received: 07/15/2021  
 Reported: 07/19/2021  
 Project Name: MESA B #5  
 Project Number: NOT GIVEN  
 Project Location: LEA CO

Sampling Date: 07/12/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: WALL 50 @ 2 (H211852-02)**

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	07/16/2021	ND	1.81	90.6	2.00	3.74		
Toluene*	<0.050	0.050	07/16/2021	ND	1.95	97.7	2.00	3.97		
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	1.89	94.4	2.00	3.98		
Total Xylenes*	<0.150	0.150	07/16/2021	ND	5.67	94.5	6.00	4.27		
Total BTEx	<0.300	0.300	07/16/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	07/16/2021	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/16/2021	ND	211	105	200	5.94	
DRO >C10-C28*	<10.0	10.0	07/16/2021	ND	214	107	200	3.95	
EXT DRO >C28-C36	<10.0	10.0	07/16/2021	ND					

Surrogate: 1-Chlorooctane 85.5 % 44.3-133

Surrogate: 1-Chlorooctadecane 83.6 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/12/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: WALL 27 @ 2 (H211852-03)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/16/2021	ND	1.81	90.6	2.00	3.74	
Toluene*	<0.050	0.050	07/16/2021	ND	1.95	97.7	2.00	3.97	
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	1.89	94.4	2.00	3.98	
Total Xylenes*	<0.150	0.150	07/16/2021	ND	5.67	94.5	6.00	4.27	
Total BTX	<0.300	0.300	07/16/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 69.9-140

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	07/16/2021	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/16/2021	ND	211	105	200	5.94	
DRO >C10-C28*	<10.0	10.0	07/16/2021	ND	214	107	200	3.95	
EXT DRO >C28-C36	<10.0	10.0	07/16/2021	ND					

Surrogate: 1-Chlorooctane 89.8 % 44.3-133

Surrogate: 1-Chlorooctadecane 88.1 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/12/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: WALL 29 @ 2 (H211852-04)**

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	07/16/2021	ND	1.81	90.6	2.00	3.74		
Toluene*	<0.050	0.050	07/16/2021	ND	1.95	97.7	2.00	3.97		
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	1.89	94.4	2.00	3.98		
Total Xylenes*	<0.150	0.150	07/16/2021	ND	5.67	94.5	6.00	4.27		
Total BTEx	<0.300	0.300	07/16/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 69.9-140

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	07/16/2021	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/16/2021	ND	208	104	200	2.24	
DRO >C10-C28*	<10.0	10.0	07/16/2021	ND	218	109	200	0.922	
EXT DRO >C28-C36	<10.0	10.0	07/16/2021	ND					

Surrogate: 1-Chlorooctane 104 % 44.3-133

Surrogate: 1-Chlorooctadecane 117 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/12/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: WALL 31 @ 2 (H211852-05)**

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	07/16/2021	ND	1.81	90.6	2.00	3.74	
Toluene*	<0.050	0.050	07/16/2021	ND	1.95	97.7	2.00	3.97	
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	1.89	94.4	2.00	3.98	
Total Xylenes*	<0.150	0.150	07/16/2021	ND	5.67	94.5	6.00	4.27	
Total BTX	<0.300	0.300	07/16/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	07/16/2021	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/16/2021	ND	208	104	200	2.24	
DRO >C10-C28*	<10.0	10.0	07/16/2021	ND	218	109	200	0.922	
EXT DRO >C28-C36	<10.0	10.0	07/16/2021	ND					

Surrogate: 1-Chlorooctane 101 % 44.3-133

Surrogate: 1-Chlorooctadecane 111 % 38.9-142

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/12/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: WALL 33 @ 2 (H211852-06)**

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	07/16/2021	ND	1.81	90.6	2.00	3.74		
Toluene*	<0.050	0.050	07/16/2021	ND	1.95	97.7	2.00	3.97		
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	1.89	94.4	2.00	3.98		
Total Xylenes*	<0.150	0.150	07/16/2021	ND	5.67	94.5	6.00	4.27		
Total BTEx	<0.300	0.300	07/16/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	07/16/2021	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/16/2021	ND	208	104	200	2.24	
DRO >C10-C28*	<10.0	10.0	07/16/2021	ND	218	109	200	0.922	
EXT DRO >C28-C36	<10.0	10.0	07/16/2021	ND					

Surrogate: 1-Chlorooctane 104 % 44.3-133

Surrogate: 1-Chlorooctadecane 118 % 38.9-142

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
 BOB HALL  
 103 South Pecos  
 Midland TX, 79701  
 Fax To: (432) 683-0312

Received: 07/15/2021  
 Reported: 07/19/2021  
 Project Name: MESA B #5  
 Project Number: NOT GIVEN  
 Project Location: LEA CO

Sampling Date: 07/12/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: WALL 35 @ 2 (H211852-07)**

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	07/16/2021	ND	1.81	90.6	2.00	3.74	
Toluene*	<0.050	0.050	07/16/2021	ND	1.95	97.7	2.00	3.97	
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	1.89	94.4	2.00	3.98	
Total Xylenes*	<0.150	0.150	07/16/2021	ND	5.67	94.5	6.00	4.27	
Total BTX	<0.300	0.300	07/16/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 69.9-140

Chloride, SM4500CI-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	07/16/2021	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/16/2021	ND	208	104	200	2.24	
DRO >C10-C28*	<10.0	10.0	07/16/2021	ND	218	109	200	0.922	
EXT DRO >C28-C36	<10.0	10.0	07/16/2021	ND					

Surrogate: 1-Chlorooctane 102 % 44.3-133

Surrogate: 1-Chlorooctadecane 117 % 38.9-142

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
 BOB HALL  
 103 South Pecos  
 Midland TX, 79701  
 Fax To: (432) 683-0312

Received: 07/15/2021  
 Reported: 07/19/2021  
 Project Name: MESA B #5  
 Project Number: NOT GIVEN  
 Project Location: LEA CO

Sampling Date: 07/12/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: WALL 37 @ 2 (H211852-08)**

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	07/16/2021	ND	1.81	90.6	2.00	3.74	
Toluene*	<0.050	0.050	07/16/2021	ND	1.95	97.7	2.00	3.97	
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	1.89	94.4	2.00	3.98	
Total Xylenes*	<0.150	0.150	07/16/2021	ND	5.67	94.5	6.00	4.27	
Total BTX	<0.300	0.300	07/16/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 69.9-140

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	07/16/2021	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/16/2021	ND	208	104	200	2.24	
DRO >C10-C28*	<10.0	10.0	07/16/2021	ND	218	109	200	0.922	
EXT DRO >C28-C36	<10.0	10.0	07/16/2021	ND					

Surrogate: 1-Chlorooctane 105 % 44.3-133

Surrogate: 1-Chlorooctadecane 114 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/12/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: WALL 47 @ 2 (H211852-09)**

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	07/16/2021	ND	1.81	90.6	2.00	3.74	
Toluene*	<0.050	0.050	07/16/2021	ND	1.95	97.7	2.00	3.97	
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	1.89	94.4	2.00	3.98	
Total Xylenes*	<0.150	0.150	07/16/2021	ND	5.67	94.5	6.00	4.27	
Total BTX	<0.300	0.300	07/16/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 69.9-140

Chloride, SM4500CI-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	07/16/2021	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/16/2021	ND	208	104	200	2.24	
DRO >C10-C28*	<10.0	10.0	07/16/2021	ND	218	109	200	0.922	
EXT DRO >C28-C36	<10.0	10.0	07/16/2021	ND					

Surrogate: 1-Chlorooctane 105 % 44.3-133

Surrogate: 1-Chlorooctadecane 117 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

BTA Oil Producers  
 BOB HALL  
 103 South Pecos  
 Midland TX, 79701  
 Fax To: (432) 683-0312

Received: 07/15/2021  
 Reported: 07/19/2021  
 Project Name: MESA B #5  
 Project Number: NOT GIVEN  
 Project Location: LEA CO

Sampling Date: 07/12/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: WALL 49 @ 2 (H211852-10)**

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	07/16/2021	ND	1.81	90.6	2.00	3.74		
Toluene*	<0.050	0.050	07/16/2021	ND	1.95	97.7	2.00	3.97		
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	1.89	94.4	2.00	3.98		
Total Xylenes*	<0.150	0.150	07/16/2021	ND	5.67	94.5	6.00	4.27		
Total BTEx	<0.300	0.300	07/16/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 69.9-140

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	07/16/2021	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/16/2021	ND	208	104	200	2.24	
DRO >C10-C28*	<10.0	10.0	07/16/2021	ND	218	109	200	0.922	
EXT DRO >C28-C36	<10.0	10.0	07/16/2021	ND					

Surrogate: 1-Chlorooctane 92.7 % 44.3-133

Surrogate: 1-Chlorooctadecane 103 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/12/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: WALL 20 @ 2 (H211852-11)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/16/2021	ND	1.81	90.6	2.00	3.74	
Toluene*	<0.050	0.050	07/16/2021	ND	1.95	97.7	2.00	3.97	
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	1.89	94.4	2.00	3.98	
Total Xylenes*	<0.150	0.150	07/16/2021	ND	5.67	94.5	6.00	4.27	
Total BTX	<0.300	0.300	07/16/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	07/16/2021	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/16/2021	ND	208	104	200	2.24	
DRO >C10-C28*	<10.0	10.0	07/16/2021	ND	218	109	200	0.922	
EXT DRO >C28-C36	<10.0	10.0	07/16/2021	ND					

Surrogate: 1-Chlorooctane 104 % 44.3-133

Surrogate: 1-Chlorooctadecane 114 % 38.9-142

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**Analytical Results For:**

BTA Oil Producers  
 BOB HALL  
 103 South Pecos  
 Midland TX, 79701  
 Fax To: (432) 683-0312

Received: 07/15/2021  
 Reported: 07/19/2021  
 Project Name: MESA B #5  
 Project Number: NOT GIVEN  
 Project Location: LEA CO

Sampling Date: 07/12/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: WALL 25 @ 2 (H211852-12)**

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	07/16/2021	ND	1.81	90.6	2.00	3.74	
Toluene*	<0.050	0.050	07/16/2021	ND	1.95	97.7	2.00	3.97	
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	1.89	94.4	2.00	3.98	
Total Xylenes*	<0.150	0.150	07/16/2021	ND	5.67	94.5	6.00	4.27	
Total BTX	<0.300	0.300	07/16/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.6 % 69.9-140

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	07/16/2021	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/16/2021	ND	208	104	200	2.24	
DRO >C10-C28*	<10.0	10.0	07/16/2021	ND	218	109	200	0.922	
EXT DRO >C28-C36	<10.0	10.0	07/16/2021	ND					

Surrogate: 1-Chlorooctane 97.0 % 44.3-133

Surrogate: 1-Chlorooctadecane 105 % 38.9-142

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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/12/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: WALL 24 @ 2 (H211852-13)**

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	07/16/2021	ND	1.81	90.6	2.00	3.74	
Toluene*	<0.050	0.050	07/16/2021	ND	1.95	97.7	2.00	3.97	
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	1.89	94.4	2.00	3.98	
Total Xylenes*	<0.150	0.150	07/16/2021	ND	5.67	94.5	6.00	4.27	
Total BTEx	<0.300	0.300	07/16/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	07/16/2021	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/16/2021	ND	208	104	200	2.24	
DRO >C10-C28*	<10.0	10.0	07/16/2021	ND	218	109	200	0.922	
EXT DRO >C28-C36	<10.0	10.0	07/16/2021	ND					

Surrogate: 1-Chlorooctane 102 % 44.3-133

Surrogate: 1-Chlorooctadecane 112 % 38.9-142

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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/12/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: WALL 34 @ 2 (H211852-14)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/16/2021	ND	1.81	90.6	2.00	3.74	
Toluene*	<0.050	0.050	07/16/2021	ND	1.95	97.7	2.00	3.97	
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	1.89	94.4	2.00	3.98	
Total Xylenes*	<0.150	0.150	07/16/2021	ND	5.67	94.5	6.00	4.27	
Total BTX	<0.300	0.300	07/16/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 69.9-140

Chloride, SM4500CI-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	07/16/2021	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/16/2021	ND	208	104	200	2.24	
DRO >C10-C28*	<10.0	10.0	07/16/2021	ND	218	109	200	0.922	
EXT DRO >C28-C36	<10.0	10.0	07/16/2021	ND					

Surrogate: 1-Chlorooctane 106 % 44.3-133

Surrogate: 1-Chlorooctadecane 117 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/12/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: WALL 36 @ 5 (H211852-15)**

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	07/16/2021	ND	2.13	106	2.00	4.39		
Toluene*	<0.050	0.050	07/16/2021	ND	2.19	110	2.00	6.52		
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	2.10	105	2.00	8.95		
Total Xylenes*	<0.150	0.150	07/16/2021	ND	6.39	106	6.00	9.58		
Total BTEx	<0.300	0.300	07/16/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	07/16/2021	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/16/2021	ND	208	104	200	2.24	
DRO >C10-C28*	<10.0	10.0	07/16/2021	ND	218	109	200	0.922	
EXT DRO >C28-C36	<10.0	10.0	07/16/2021	ND					

Surrogate: 1-Chlorooctane 105 % 44.3-133

Surrogate: 1-Chlorooctadecane 118 % 38.9-142

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/12/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: WALL 38 @ 5 (H211852-16)**

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	07/16/2021	ND	2.13	106	2.00	4.39	
Toluene*	<0.050	0.050	07/16/2021	ND	2.19	110	2.00	6.52	
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	2.10	105	2.00	8.95	
Total Xylenes*	<0.150	0.150	07/16/2021	ND	6.39	106	6.00	9.58	
Total BTX	<0.300	0.300	07/16/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.4 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	07/16/2021	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/16/2021	ND	208	104	200	2.24	
DRO >C10-C28*	<10.0	10.0	07/16/2021	ND	218	109	200	0.922	
EXT DRO >C28-C36	<10.0	10.0	07/16/2021	ND					

Surrogate: 1-Chlorooctane 107 % 44.3-133

Surrogate: 1-Chlorooctadecane 119 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/12/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: WALL 40 @ 2 (H211852-17)**

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	07/16/2021	ND	2.13	106	2.00	4.39	
Toluene*	<0.050	0.050	07/16/2021	ND	2.19	110	2.00	6.52	
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	2.10	105	2.00	8.95	
Total Xylenes*	<0.150	0.150	07/16/2021	ND	6.39	106	6.00	9.58	
Total BTX	<0.300	0.300	07/16/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	07/16/2021	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/16/2021	ND	208	104	200	2.24	
DRO >C10-C28*	<10.0	10.0	07/16/2021	ND	218	109	200	0.922	
EXT DRO >C28-C36	<10.0	10.0	07/16/2021	ND					

Surrogate: 1-Chlorooctane 103 % 44.3-133

Surrogate: 1-Chlorooctadecane 114 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/12/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: WALL 42 @ 2 (H211852-18)**

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	07/16/2021	ND	2.13	106	2.00	4.39		
Toluene*	<0.050	0.050	07/16/2021	ND	2.19	110	2.00	6.52		
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	2.10	105	2.00	8.95		
Total Xylenes*	<0.150	0.150	07/16/2021	ND	6.39	106	6.00	9.58		
Total BTEx	<0.300	0.300	07/16/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.1 % 69.9-140

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	07/16/2021	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/16/2021	ND	208	104	200	2.24	
DRO >C10-C28*	<10.0	10.0	07/16/2021	ND	218	109	200	0.922	
EXT DRO >C28-C36	<10.0	10.0	07/16/2021	ND					

Surrogate: 1-Chlorooctane 106 % 44.3-133

Surrogate: 1-Chlorooctadecane 119 % 38.9-142

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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/12/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: WALL 44 @ 2 (H211852-19)**

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	07/16/2021	ND	2.13	106	2.00	4.39	
Toluene*	<0.050	0.050	07/16/2021	ND	2.19	110	2.00	6.52	
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	2.10	105	2.00	8.95	
Total Xylenes*	<0.150	0.150	07/16/2021	ND	6.39	106	6.00	9.58	
Total BTX	<0.300	0.300	07/16/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.1 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	07/16/2021	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/16/2021	ND	208	104	200	2.24	
DRO >C10-C28*	<10.0	10.0	07/16/2021	ND	218	109	200	0.922	
EXT DRO >C28-C36	<10.0	10.0	07/16/2021	ND					

Surrogate: 1-Chlorooctane 94.2 % 44.3-133

Surrogate: 1-Chlorooctadecane 104 % 38.9-142

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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/12/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: WALL 46 @ 2 (H211852-20)**

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/16/2021	ND	2.13	106	2.00	4.39	
Toluene*	<0.050	0.050	07/16/2021	ND	2.19	110	2.00	6.52	
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	2.10	105	2.00	8.95	
Total Xylenes*	<0.150	0.150	07/16/2021	ND	6.39	106	6.00	9.58	
Total BTEx	<0.300	0.300	07/16/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.5 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	07/16/2021	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/16/2021	ND	208	104	200	2.24	
DRO >C10-C28*	<10.0	10.0	07/16/2021	ND	218	109	200	0.922	
EXT DRO >C28-C36	<10.0	10.0	07/16/2021	ND					

Surrogate: 1-Chlorooctane 109 % 44.3-133

Surrogate: 1-Chlorooctadecane 122 % 38.9-142

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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/12/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: WALL 39 (H211852-21)**

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	07/16/2021	ND	2.13	106	2.00	4.39	
Toluene*	<0.050	0.050	07/16/2021	ND	2.19	110	2.00	6.52	
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	2.10	105	2.00	8.95	
Total Xylenes*	<0.150	0.150	07/16/2021	ND	6.39	106	6.00	9.58	
Total BTEx	<0.300	0.300	07/16/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.7 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	07/16/2021	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/16/2021	ND	208	104	200	2.24	
DRO >C10-C28*	<10.0	10.0	07/16/2021	ND	218	109	200	0.922	
EXT DRO >C28-C36	<10.0	10.0	07/16/2021	ND					

Surrogate: 1-Chlorooctane 103 % 44.3-133

Surrogate: 1-Chlorooctadecane 116 % 38.9-142

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**Analytical Results For:**

BTA Oil Producers  
 BOB HALL  
 103 South Pecos  
 Midland TX, 79701  
 Fax To: (432) 683-0312

Received: 07/15/2021  
 Reported: 07/19/2021  
 Project Name: MESA B #5  
 Project Number: NOT GIVEN  
 Project Location: LEA CO

Sampling Date: 07/12/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: WALL 41 (H211852-22)**

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	07/16/2021	ND	2.13	106	2.00	4.39		
Toluene*	<0.050	0.050	07/16/2021	ND	2.19	110	2.00	6.52		
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	2.10	105	2.00	8.95		
Total Xylenes*	<0.150	0.150	07/16/2021	ND	6.39	106	6.00	9.58		
Total BTEx	<0.300	0.300	07/16/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 69.9-140

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	07/16/2021	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/16/2021	ND	208	104	200	2.24	
DRO >C10-C28*	<10.0	10.0	07/16/2021	ND	218	109	200	0.922	
EXT DRO >C28-C36	<10.0	10.0	07/16/2021	ND					

Surrogate: 1-Chlorooctane 105 % 44.3-133

Surrogate: 1-Chlorooctadecane 118 % 38.9-142

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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/12/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: WALL 43 (H211852-23)**

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	07/16/2021	ND	2.13	106	2.00	4.39		
Toluene*	<0.050	0.050	07/16/2021	ND	2.19	110	2.00	6.52		
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	2.10	105	2.00	8.95		
Total Xylenes*	<0.150	0.150	07/16/2021	ND	6.39	106	6.00	9.58		
Total BTEx	<0.300	0.300	07/16/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	07/16/2021	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/16/2021	ND	208	104	200	2.24	
DRO >C10-C28*	<10.0	10.0	07/16/2021	ND	218	109	200	0.922	
EXT DRO >C28-C36	<10.0	10.0	07/16/2021	ND					

Surrogate: 1-Chlorooctane 107 % 44.3-133

Surrogate: 1-Chlorooctadecane 121 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/12/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: WALL 45 (H211852-24)**

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/16/2021	ND	2.13	106	2.00	4.39		
Toluene*	<0.050	0.050	07/16/2021	ND	2.19	110	2.00	6.52		
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	2.10	105	2.00	8.95		
Total Xylenes*	<0.150	0.150	07/16/2021	ND	6.39	106	6.00	9.58		
Total BTEx	<0.300	0.300	07/16/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	07/16/2021	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/16/2021	ND	218	109	200	4.22	
DRO >C10-C28*	<10.0	10.0	07/16/2021	ND	210	105	200	4.09	
EXT DRO >C28-C36	<10.0	10.0	07/16/2021	ND					

Surrogate: 1-Chlorooctane 93.8 % 44.3-133

Surrogate: 1-Chlorooctadecane 89.5 % 38.9-142

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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:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/12/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: WALL 51 (H211852-25)**

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/16/2021	ND	2.13	106	2.00	4.39		
Toluene*	<0.050	0.050	07/16/2021	ND	2.19	110	2.00	6.52		
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	2.10	105	2.00	8.95		
Total Xylenes*	<0.150	0.150	07/16/2021	ND	6.39	106	6.00	9.58		
Total BTX	<0.300	0.300	07/16/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	320	16.0	07/16/2021	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/16/2021	ND	218	109	200	4.22	
DRO >C10-C28*	<10.0	10.0	07/16/2021	ND	210	105	200	4.09	
EXT DRO >C28-C36	<10.0	10.0	07/16/2021	ND					

Surrogate: 1-Chlorooctane 95.0 % 44.3-133

Surrogate: 1-Chlorooctadecane 90.2 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/12/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: WALL 4 @ 5 (H211852-26)**

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	07/16/2021	ND	2.13	106	2.00	4.39	
Toluene*	<0.050	0.050	07/16/2021	ND	2.19	110	2.00	6.52	
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	2.10	105	2.00	8.95	
Total Xylenes*	<0.150	0.150	07/16/2021	ND	6.39	106	6.00	9.58	
Total BTX	<0.300	0.300	07/16/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 69.9-140

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	07/16/2021	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/16/2021	ND	218	109	200	4.22	
DRO >C10-C28*	<10.0	10.0	07/16/2021	ND	210	105	200	4.09	
EXT DRO >C28-C36	<10.0	10.0	07/16/2021	ND					

Surrogate: 1-Chlorooctane 90.7 % 44.3-133

Surrogate: 1-Chlorooctadecane 85.5 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/12/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: WALL 6 @ 5 (H211852-27)**

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	07/16/2021	ND	2.13	106	2.00	4.39	
Toluene*	<0.050	0.050	07/16/2021	ND	2.19	110	2.00	6.52	
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	2.10	105	2.00	8.95	
Total Xylenes*	<0.150	0.150	07/16/2021	ND	6.39	106	6.00	9.58	
Total BTX	<0.300	0.300	07/16/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 93.5 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	07/16/2021	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/16/2021	ND	218	109	200	4.22	
DRO >C10-C28*	<10.0	10.0	07/16/2021	ND	210	105	200	4.09	
EXT DRO >C28-C36	<10.0	10.0	07/16/2021	ND					

Surrogate: 1-Chlorooctane 91.4 % 44.3-133

Surrogate: 1-Chlorooctadecane 86.5 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/12/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: WALL 8 @ 5 (H211852-28)**

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	07/16/2021	ND	2.13	106	2.00	4.39	
Toluene*	<0.050	0.050	07/16/2021	ND	2.19	110	2.00	6.52	
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	2.10	105	2.00	8.95	
Total Xylenes*	<0.150	0.150	07/16/2021	ND	6.39	106	6.00	9.58	
Total BTX	<0.300	0.300	07/16/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.6 % 69.9-140

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	07/16/2021	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/16/2021	ND	218	109	200	4.22	
DRO >C10-C28*	<10.0	10.0	07/16/2021	ND	210	105	200	4.09	
EXT DRO >C28-C36	<10.0	10.0	07/16/2021	ND					

Surrogate: 1-Chlorooctane 89.9 % 44.3-133

Surrogate: 1-Chlorooctadecane 84.5 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/12/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: WALL 10 @ 3 (H211852-29)**

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	07/16/2021	ND	2.13	106	2.00	4.39	
Toluene*	<0.050	0.050	07/16/2021	ND	2.19	110	2.00	6.52	
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	2.10	105	2.00	8.95	
Total Xylenes*	<0.150	0.150	07/16/2021	ND	6.39	106	6.00	9.58	
Total BTX	<0.300	0.300	07/16/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	07/16/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/16/2021	ND	218	109	200	4.22	
DRO >C10-C28*	<10.0	10.0	07/16/2021	ND	210	105	200	4.09	
EXT DRO >C28-C36	<10.0	10.0	07/16/2021	ND					

Surrogate: 1-Chlorooctane 90.8 % 44.3-133

Surrogate: 1-Chlorooctadecane 85.4 % 38.9-142

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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/12/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: WALL BETWEEN 15 - 17 (H211852-30)**

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	07/16/2021	ND	2.13	106	2.00	4.39		
Toluene*	<0.050	0.050	07/16/2021	ND	2.19	110	2.00	6.52		
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	2.10	105	2.00	8.95		
Total Xylenes*	<0.150	0.150	07/16/2021	ND	6.39	106	6.00	9.58		
Total BTEx	<0.300	0.300	07/16/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.2 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	320	16.0	07/16/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/16/2021	ND	218	109	200	4.22	
DRO >C10-C28*	<10.0	10.0	07/16/2021	ND	210	105	200	4.09	
EXT DRO >C28-C36	<10.0	10.0	07/16/2021	ND					

Surrogate: 1-Chlorooctane 92.4 % 44.3-133

Surrogate: 1-Chlorooctadecane 87.0 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/12/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: WALL 1 (H211852-31)**

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	07/16/2021	ND	2.13	106	2.00	4.39	
Toluene*	<0.050	0.050	07/16/2021	ND	2.19	110	2.00	6.52	
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	2.10	105	2.00	8.95	
Total Xylenes*	<0.150	0.150	07/16/2021	ND	6.39	106	6.00	9.58	
Total BTEx	<0.300	0.300	07/16/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 69.9-140

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	07/16/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/16/2021	ND	218	109	200	4.22	
DRO >C10-C28*	<10.0	10.0	07/16/2021	ND	210	105	200	4.09	
EXT DRO >C28-C36	<10.0	10.0	07/16/2021	ND					

Surrogate: 1-Chlorooctane 92.6 % 44.3-133

Surrogate: 1-Chlorooctadecane 87.2 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/12/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: WALL 2 (H211852-32)**

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	07/16/2021	ND	2.13	106	2.00	4.39	
Toluene*	<0.050	0.050	07/16/2021	ND	2.19	110	2.00	6.52	
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	2.10	105	2.00	8.95	
Total Xylenes*	<0.150	0.150	07/16/2021	ND	6.39	106	6.00	9.58	
Total BTX	<0.300	0.300	07/16/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	07/16/2021	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/16/2021	ND	218	109	200	4.22	
DRO >C10-C28*	<10.0	10.0	07/16/2021	ND	210	105	200	4.09	
EXT DRO >C28-C36	<10.0	10.0	07/16/2021	ND					

Surrogate: 1-Chlorooctane 90.6 % 44.3-133

Surrogate: 1-Chlorooctadecane 86.1 % 38.9-142

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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:**

BTA Oil Producers  
 BOB HALL  
 103 South Pecos  
 Midland TX, 79701  
 Fax To: (432) 683-0312

Received: 07/15/2021  
 Reported: 07/19/2021  
 Project Name: MESA B #5  
 Project Number: NOT GIVEN  
 Project Location: LEA CO

Sampling Date: 07/12/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: WALL 3 (H211852-33)**

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	07/16/2021	ND	2.13	106	2.00	4.39	
Toluene*	<0.050	0.050	07/16/2021	ND	2.19	110	2.00	6.52	
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	2.10	105	2.00	8.95	
Total Xylenes*	<0.150	0.150	07/16/2021	ND	6.39	106	6.00	9.58	
Total BTEx	<0.300	0.300	07/16/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	07/16/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/16/2021	ND	218	109	200	4.22	
DRO >C10-C28*	<10.0	10.0	07/16/2021	ND	210	105	200	4.09	
EXT DRO >C28-C36	<10.0	10.0	07/16/2021	ND					

Surrogate: 1-Chlorooctane 92.9 % 44.3-133

Surrogate: 1-Chlorooctadecane 88.5 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/12/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: WALL 5 (H211852-34)**

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	07/16/2021	ND	2.13	106	2.00	4.39	
Toluene*	<0.050	0.050	07/16/2021	ND	2.19	110	2.00	6.52	
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	2.10	105	2.00	8.95	
Total Xylenes*	<0.150	0.150	07/16/2021	ND	6.39	106	6.00	9.58	
Total BTEx	<0.300	0.300	07/16/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.1 % 69.9-140

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	07/16/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/16/2021	ND	218	109	200	4.22	
DRO >C10-C28*	<10.0	10.0	07/16/2021	ND	210	105	200	4.09	
EXT DRO >C28-C36	<10.0	10.0	07/16/2021	ND					

Surrogate: 1-Chlorooctane 94.9 % 44.3-133

Surrogate: 1-Chlorooctadecane 91.4 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/12/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: WALL 7 (H211852-35)**

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	07/16/2021	ND	1.85	92.5	2.00	4.48		
Toluene*	<0.050	0.050	07/16/2021	ND	2.00	99.9	2.00	4.58		
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	1.94	96.8	2.00	4.18		
Total Xylenes*	<0.150	0.150	07/16/2021	ND	5.83	97.2	6.00	3.58		
Total BTEx	<0.300	0.300	07/16/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 69.9-140

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	07/16/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/16/2021	ND	218	109	200	4.22	
DRO >C10-C28*	<10.0	10.0	07/16/2021	ND	210	105	200	4.09	
EXT DRO >C28-C36	<10.0	10.0	07/16/2021	ND					

Surrogate: 1-Chlorooctane 91.0 % 44.3-133

Surrogate: 1-Chlorooctadecane 86.5 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/12/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: WALL 9 (H211852-36)**

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	07/16/2021	ND	1.85	92.5	2.00	4.48		
Toluene*	<0.050	0.050	07/16/2021	ND	2.00	99.9	2.00	4.58		
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	1.94	96.8	2.00	4.18		
Total Xylenes*	<0.150	0.150	07/16/2021	ND	5.83	97.2	6.00	3.58		
Total BTEx	<0.300	0.300	07/16/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 69.9-140

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	07/16/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/16/2021	ND	218	109	200	4.22	
DRO >C10-C28*	<10.0	10.0	07/16/2021	ND	210	105	200	4.09	
EXT DRO >C28-C36	<10.0	10.0	07/16/2021	ND					

Surrogate: 1-Chlorooctane 97.1 % 44.3-133

Surrogate: 1-Chlorooctadecane 92.2 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/12/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: WALL 11 (H211852-37)**

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	07/16/2021	ND	1.85	92.5	2.00	4.48		
Toluene*	<0.050	0.050	07/16/2021	ND	2.00	99.9	2.00	4.58		
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	1.94	96.8	2.00	4.18		
Total Xylenes*	<0.150	0.150	07/16/2021	ND	5.83	97.2	6.00	3.58		
Total BTEx	<0.300	0.300	07/16/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 69.9-140

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	07/16/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/16/2021	ND	218	109	200	4.22	
DRO >C10-C28*	<10.0	10.0	07/16/2021	ND	210	105	200	4.09	
EXT DRO >C28-C36	<10.0	10.0	07/16/2021	ND					

Surrogate: 1-Chlorooctane 93.5 % 44.3-133

Surrogate: 1-Chlorooctadecane 89.7 % 38.9-142

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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/12/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: WALL 12 (H211852-38)**

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	07/16/2021	ND	1.85	92.5	2.00	4.48		
Toluene*	<0.050	0.050	07/16/2021	ND	2.00	99.9	2.00	4.58		
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	1.94	96.8	2.00	4.18		
Total Xylenes*	<0.150	0.150	07/16/2021	ND	5.83	97.2	6.00	3.58		
Total BTX	<0.300	0.300	07/16/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	07/16/2021	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/16/2021	ND	218	109	200	4.22	
DRO >C10-C28*	<10.0	10.0	07/16/2021	ND	210	105	200	4.09	
EXT DRO >C28-C36	<10.0	10.0	07/16/2021	ND					

Surrogate: 1-Chlorooctane 81.6 % 44.3-133

Surrogate: 1-Chlorooctadecane 77.9 % 38.9-142

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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/12/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: WALL 13 (H211852-39)**

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	07/16/2021	ND	1.85	92.5	2.00	4.48		
Toluene*	<0.050	0.050	07/16/2021	ND	2.00	99.9	2.00	4.58		
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	1.94	96.8	2.00	4.18		
Total Xylenes*	<0.150	0.150	07/16/2021	ND	5.83	97.2	6.00	3.58		
Total BTX	<0.300	0.300	07/16/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.4 % 69.9-140

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	07/16/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/16/2021	ND	218	109	200	4.22	
DRO >C10-C28*	<10.0	10.0	07/16/2021	ND	210	105	200	4.09	
EXT DRO >C28-C36	<10.0	10.0	07/16/2021	ND					

Surrogate: 1-Chlorooctane 86.2 % 44.3-133

Surrogate: 1-Chlorooctadecane 81.5 % 38.9-142

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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/12/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: WALL 14 (H211852-40)**

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	07/16/2021	ND	1.85	92.5	2.00	4.48		
Toluene*	<0.050	0.050	07/16/2021	ND	2.00	99.9	2.00	4.58		
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	1.94	96.8	2.00	4.18		
Total Xylenes*	<0.150	0.150	07/16/2021	ND	5.83	97.2	6.00	3.58		
Total BTEx	<0.300	0.300	07/16/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	07/16/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/16/2021	ND	218	109	200	4.22	
DRO >C10-C28*	<10.0	10.0	07/16/2021	ND	210	105	200	4.09	
EXT DRO >C28-C36	<10.0	10.0	07/16/2021	ND					

Surrogate: 1-Chlorooctane 88.1 % 44.3-133

Surrogate: 1-Chlorooctadecane 84.1 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/12/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: WALL 16 (H211852-41)**

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	07/16/2021	ND	1.85	92.5	2.00	4.48		
Toluene*	<0.050	0.050	07/16/2021	ND	2.00	99.9	2.00	4.58		
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	1.94	96.8	2.00	4.18		
Total Xylenes*	<0.150	0.150	07/16/2021	ND	5.83	97.2	6.00	3.58		
Total BTX	<0.300	0.300	07/16/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 69.9-140

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	07/16/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/16/2021	ND	218	109	200	4.22	
DRO >C10-C28*	<10.0	10.0	07/16/2021	ND	210	105	200	4.09	
EXT DRO >C28-C36	<10.0	10.0	07/16/2021	ND					

Surrogate: 1-Chlorooctane 88.0 % 44.3-133

Surrogate: 1-Chlorooctadecane 83.6 % 38.9-142

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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:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/12/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: WALL 18 (H211852-42)**

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	07/16/2021	ND	1.85	92.5	2.00	4.48		
Toluene*	<0.050	0.050	07/16/2021	ND	2.00	99.9	2.00	4.58		
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	1.94	96.8	2.00	4.18		
Total Xylenes*	<0.150	0.150	07/16/2021	ND	5.83	97.2	6.00	3.58		
Total BTX	<0.300	0.300	07/16/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	07/16/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/16/2021	ND	218	109	200	4.22	
DRO >C10-C28*	<10.0	10.0	07/16/2021	ND	210	105	200	4.09	
EXT DRO >C28-C36	<10.0	10.0	07/16/2021	ND					

Surrogate: 1-Chlorooctane 82.4 % 44.3-133

Surrogate: 1-Chlorooctadecane 78.5 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
 BOB HALL  
 103 South Pecos  
 Midland TX, 79701  
 Fax To: (432) 683-0312

Received: 07/15/2021  
 Reported: 07/19/2021  
 Project Name: MESA B #5  
 Project Number: NOT GIVEN  
 Project Location: LEA CO

Sampling Date: 07/12/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: WALL 19 (H211852-43)**

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	07/16/2021	ND	1.85	92.5	2.00	4.48		
Toluene*	<0.050	0.050	07/16/2021	ND	2.00	99.9	2.00	4.58		
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	1.94	96.8	2.00	4.18		
Total Xylenes*	<0.150	0.150	07/16/2021	ND	5.83	97.2	6.00	3.58		
Total BTEx	<0.300	0.300	07/16/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	176	16.0	07/16/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/16/2021	ND	218	109	200	4.22	
DRO >C10-C28*	<10.0	10.0	07/16/2021	ND	210	105	200	4.09	
EXT DRO >C28-C36	<10.0	10.0	07/16/2021	ND					

Surrogate: 1-Chlorooctane 76.9 % 44.3-133

Surrogate: 1-Chlorooctadecane 72.8 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/12/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: WALL 21 (H211852-44)**

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	07/16/2021	ND	1.85	92.5	2.00	4.48		
Toluene*	<0.050	0.050	07/16/2021	ND	2.00	99.9	2.00	4.58		
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	1.94	96.8	2.00	4.18		
Total Xylenes*	<0.150	0.150	07/16/2021	ND	5.83	97.2	6.00	3.58		
Total BTEx	<0.300	0.300	07/16/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.9 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	07/16/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/17/2021	ND	209	104	200	1.93	
DRO >C10-C28*	<10.0	10.0	07/17/2021	ND	223	111	200	1.24	
EXT DRO >C28-C36	<10.0	10.0	07/17/2021	ND					

Surrogate: 1-Chlorooctane 80.6 % 44.3-133

Surrogate: 1-Chlorooctadecane 87.8 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/12/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: WALL 22 (H211852-45)**

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	07/16/2021	ND	1.85	92.5	2.00	4.48		
Toluene*	<0.050	0.050	07/16/2021	ND	2.00	99.9	2.00	4.58		
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	1.94	96.8	2.00	4.18		
Total Xylenes*	<0.150	0.150	07/16/2021	ND	5.83	97.2	6.00	3.58		
Total BTEx	<0.300	0.300	07/16/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	07/16/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/17/2021	ND	209	104	200	1.93	
DRO >C10-C28*	<10.0	10.0	07/17/2021	ND	223	111	200	1.24	
EXT DRO >C28-C36	<10.0	10.0	07/17/2021	ND					

Surrogate: 1-Chlorooctane 93.1 % 44.3-133

Surrogate: 1-Chlorooctadecane 105 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/12/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: WALL 23 (H211852-46)**

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	07/16/2021	ND	1.85	92.5	2.00	4.48		
Toluene*	<0.050	0.050	07/16/2021	ND	2.00	99.9	2.00	4.58		
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	1.94	96.8	2.00	4.18		
Total Xylenes*	<0.150	0.150	07/16/2021	ND	5.83	97.2	6.00	3.58		
Total BTEx	<0.300	0.300	07/16/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	176	16.0	07/16/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/17/2021	ND	209	104	200	1.93	
DRO >C10-C28*	<10.0	10.0	07/17/2021	ND	223	111	200	1.24	
EXT DRO >C28-C36	<10.0	10.0	07/17/2021	ND					

Surrogate: 1-Chlorooctane 95.6 % 44.3-133

Surrogate: 1-Chlorooctadecane 105 % 38.9-142

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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/12/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: WALL 26 (H211852-47)**

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	07/16/2021	ND	1.85	92.5	2.00	4.48		
Toluene*	<0.050	0.050	07/16/2021	ND	2.00	99.9	2.00	4.58		
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	1.94	96.8	2.00	4.18		
Total Xylenes*	<0.150	0.150	07/16/2021	ND	5.83	97.2	6.00	3.58		
Total BTX	<0.300	0.300	07/16/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 69.9-140

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	07/16/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/17/2021	ND	209	104	200	1.93	
DRO >C10-C28*	<10.0	10.0	07/17/2021	ND	223	111	200	1.24	
EXT DRO >C28-C36	<10.0	10.0	07/17/2021	ND					

Surrogate: 1-Chlorooctane 99.8 % 44.3-133

Surrogate: 1-Chlorooctadecane 112 % 38.9-142

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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/12/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: WALL 28 (H211852-48)**

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	07/16/2021	ND	1.85	92.5	2.00	4.48		
Toluene*	<0.050	0.050	07/16/2021	ND	2.00	99.9	2.00	4.58		
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	1.94	96.8	2.00	4.18		
Total Xylenes*	<0.150	0.150	07/16/2021	ND	5.83	97.2	6.00	3.58		
Total BTX	<0.300	0.300	07/16/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 69.9-140

Chloride, SM4500CI-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	07/16/2021	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/17/2021	ND	209	104	200	1.93	
DRO >C10-C28*	<10.0	10.0	07/17/2021	ND	223	111	200	1.24	
EXT DRO >C28-C36	<10.0	10.0	07/17/2021	ND					

Surrogate: 1-Chlorooctane 102 % 44.3-133

Surrogate: 1-Chlorooctadecane 113 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/12/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: WALL 30 (H211852-49)**

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	07/16/2021	ND	1.85	92.5	2.00	4.48		
Toluene*	<0.050	0.050	07/16/2021	ND	2.00	99.9	2.00	4.58		
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	1.94	96.8	2.00	4.18		
Total Xylenes*	<0.150	0.150	07/16/2021	ND	5.83	97.2	6.00	3.58		
Total BTX	<0.300	0.300	07/16/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	07/16/2021	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/17/2021	ND	209	104	200	1.93	
DRO >C10-C28*	<10.0	10.0	07/17/2021	ND	223	111	200	1.24	
EXT DRO >C28-C36	<10.0	10.0	07/17/2021	ND					

Surrogate: 1-Chlorooctane 95.0 % 44.3-133

Surrogate: 1-Chlorooctadecane 104 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/12/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: WALL 32 (H211852-50)**

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	07/16/2021	ND	1.85	92.5	2.00	4.48		
Toluene*	<0.050	0.050	07/16/2021	ND	2.00	99.9	2.00	4.58		
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	1.94	96.8	2.00	4.18		
Total Xylenes*	<0.150	0.150	07/16/2021	ND	5.83	97.2	6.00	3.58		
Total BTEx	<0.300	0.300	07/16/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	07/16/2021	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/17/2021	ND	209	104	200	1.93	
DRO >C10-C28*	<10.0	10.0	07/17/2021	ND	223	111	200	1.24	
EXT DRO >C28-C36	<10.0	10.0	07/17/2021	ND					

Surrogate: 1-Chlorooctane 100 % 44.3-133

Surrogate: 1-Chlorooctadecane 109 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
 BOB HALL  
 103 South Pecos  
 Midland TX, 79701  
 Fax To: (432) 683-0312

Received: 07/15/2021  
 Reported: 07/19/2021  
 Project Name: MESA B #5  
 Project Number: NOT GIVEN  
 Project Location: LEA CO

Sampling Date: 07/13/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: BS - 19 (H211852-51)**

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	07/16/2021	ND	1.85	92.5	2.00	4.48	
Toluene*	<0.050	0.050	07/16/2021	ND	2.00	99.9	2.00	4.58	
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	1.94	96.8	2.00	4.18	
Total Xylenes*	<0.150	0.150	07/16/2021	ND	5.83	97.2	6.00	3.58	
Total BTX	<0.300	0.300	07/16/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	07/16/2021	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/17/2021	ND	209	104	200	1.93	
DRO >C10-C28*	<10.0	10.0	07/17/2021	ND	223	111	200	1.24	
EXT DRO >C28-C36	<10.0	10.0	07/17/2021	ND					

Surrogate: 1-Chlorooctane 97.5 % 44.3-133

Surrogate: 1-Chlorooctadecane 105 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/13/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: BS - 20 (H211852-52)**

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	07/16/2021	ND	1.85	92.5	2.00	4.48	
Toluene*	<0.050	0.050	07/16/2021	ND	2.00	99.9	2.00	4.58	
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	1.94	96.8	2.00	4.18	
Total Xylenes*	<0.150	0.150	07/16/2021	ND	5.83	97.2	6.00	3.58	
Total BTEx	<0.300	0.300	07/16/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.3 % 69.9-140

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	07/16/2021	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/17/2021	ND	209	104	200	1.93	
DRO >C10-C28*	<10.0	10.0	07/17/2021	ND	223	111	200	1.24	
EXT DRO >C28-C36	<10.0	10.0	07/17/2021	ND					

Surrogate: 1-Chlorooctane 98.8 % 44.3-133

Surrogate: 1-Chlorooctadecane 107 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/13/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: BS - 21 (H211852-53)**

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	07/16/2021	ND	1.85	92.5	2.00	4.48	
Toluene*	<0.050	0.050	07/16/2021	ND	2.00	99.9	2.00	4.58	
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	1.94	96.8	2.00	4.18	
Total Xylenes*	<0.150	0.150	07/16/2021	ND	5.83	97.2	6.00	3.58	
Total BTEx	<0.300	0.300	07/16/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 69.9-140

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	07/16/2021	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/17/2021	ND	209	104	200	1.93	
DRO >C10-C28*	<10.0	10.0	07/17/2021	ND	223	111	200	1.24	
EXT DRO >C28-C36	<10.0	10.0	07/17/2021	ND					

Surrogate: 1-Chlorooctane 97.1 % 44.3-133

Surrogate: 1-Chlorooctadecane 104 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/13/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: BS - 25 (H211852-54)**

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	07/16/2021	ND	1.85	92.5	2.00	4.48	
Toluene*	<0.050	0.050	07/16/2021	ND	2.00	99.9	2.00	4.58	
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	1.94	96.8	2.00	4.18	
Total Xylenes*	<0.150	0.150	07/16/2021	ND	5.83	97.2	6.00	3.58	
Total BTX	<0.300	0.300	07/16/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 69.9-140

Chloride, SM4500CI-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	07/16/2021	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/17/2021	ND	209	104	200	1.93	
DRO >C10-C28*	<10.0	10.0	07/17/2021	ND	223	111	200	1.24	
EXT DRO >C28-C36	<10.0	10.0	07/17/2021	ND					

Surrogate: 1-Chlorooctane 99.2 % 44.3-133

Surrogate: 1-Chlorooctadecane 108 % 38.9-142

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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/13/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: BS - 26 (H211852-55)**

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	07/16/2021	ND	2.02	101	2.00	1.39		
Toluene*	<0.050	0.050	07/16/2021	ND	2.15	107	2.00	1.01		
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	2.05	102	2.00	0.562		
Total Xylenes*	<0.150	0.150	07/16/2021	ND	6.23	104	6.00	1.35		
Total BTEx	<0.300	0.300	07/16/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	07/16/2021	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/17/2021	ND	209	104	200	1.93	
DRO >C10-C28*	<10.0	10.0	07/17/2021	ND	223	111	200	1.24	
EXT DRO >C28-C36	<10.0	10.0	07/17/2021	ND					

Surrogate: 1-Chlorooctane 100 % 44.3-133

Surrogate: 1-Chlorooctadecane 111 % 38.9-142

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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/13/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: BS - 1 (H211852-56)**

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	07/16/2021	ND	2.02	101	2.00	1.39	
Toluene*	<0.050	0.050	07/16/2021	ND	2.15	107	2.00	1.01	
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	2.05	102	2.00	0.562	
Total Xylenes*	<0.150	0.150	07/16/2021	ND	6.23	104	6.00	1.35	
Total BTEx	<0.300	0.300	07/16/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	07/16/2021	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/17/2021	ND	209	104	200	1.93	
DRO >C10-C28*	<10.0	10.0	07/17/2021	ND	223	111	200	1.24	
EXT DRO >C28-C36	<10.0	10.0	07/17/2021	ND					

Surrogate: 1-Chlorooctane 97.2 % 44.3-133

Surrogate: 1-Chlorooctadecane 107 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
 BOB HALL  
 103 South Pecos  
 Midland TX, 79701  
 Fax To: (432) 683-0312

Received: 07/15/2021  
 Reported: 07/19/2021  
 Project Name: MESA B #5  
 Project Number: NOT GIVEN  
 Project Location: LEA CO

Sampling Date: 07/13/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: BS - 3 (H211852-57)**

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	07/16/2021	ND	2.02	101	2.00	1.39	
Toluene*	<0.050	0.050	07/16/2021	ND	2.15	107	2.00	1.01	
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	2.05	102	2.00	0.562	
Total Xylenes*	<0.150	0.150	07/16/2021	ND	6.23	104	6.00	1.35	
Total BTX	<0.300	0.300	07/16/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	07/16/2021	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/17/2021	ND	209	104	200	1.93	
DRO >C10-C28*	<10.0	10.0	07/17/2021	ND	223	111	200	1.24	
EXT DRO >C28-C36	<10.0	10.0	07/17/2021	ND					

Surrogate: 1-Chlorooctane 101 % 44.3-133

Surrogate: 1-Chlorooctadecane 114 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/13/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: BS - 4 @ 4 (H211852-58)**

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	07/16/2021	ND	2.02	101	2.00	1.39	
Toluene*	<0.050	0.050	07/16/2021	ND	2.15	107	2.00	1.01	
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	2.05	102	2.00	0.562	
Total Xylenes*	<0.150	0.150	07/16/2021	ND	6.23	104	6.00	1.35	
Total BTX	<0.300	0.300	07/16/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	528	16.0	07/16/2021	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/17/2021	ND	209	104	200	1.93	
DRO >C10-C28*	<10.0	10.0	07/17/2021	ND	223	111	200	1.24	
EXT DRO >C28-C36	<10.0	10.0	07/17/2021	ND					

Surrogate: 1-Chlorooctane 101 % 44.3-133

Surrogate: 1-Chlorooctadecane 116 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/13/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: BS - 5 (H211852-59)**

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	07/16/2021	ND	2.02	101	2.00	1.39	
Toluene*	<0.050	0.050	07/16/2021	ND	2.15	107	2.00	1.01	
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	2.05	102	2.00	0.562	
Total Xylenes*	<0.150	0.150	07/16/2021	ND	6.23	104	6.00	1.35	
Total BTEx	<0.300	0.300	07/16/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.8 % 69.9-140

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	07/16/2021	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/17/2021	ND	209	104	200	1.93	
DRO >C10-C28*	<10.0	10.0	07/17/2021	ND	223	111	200	1.24	
EXT DRO >C28-C36	<10.0	10.0	07/17/2021	ND					

Surrogate: 1-Chlorooctane 95.1 % 44.3-133

Surrogate: 1-Chlorooctadecane 107 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/13/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: BS - 74 (H211852-60)**

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	07/16/2021	ND	2.02	101	2.00	1.39	
Toluene*	<0.050	0.050	07/16/2021	ND	2.15	107	2.00	1.01	
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	2.05	102	2.00	0.562	
Total Xylenes*	<0.150	0.150	07/16/2021	ND	6.23	104	6.00	1.35	
Total BTEx	<0.300	0.300	07/16/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 69.9-140

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	07/16/2021	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/17/2021	ND	209	104	200	1.93	
DRO >C10-C28*	<10.0	10.0	07/17/2021	ND	223	111	200	1.24	
EXT DRO >C28-C36	<10.0	10.0	07/17/2021	ND					

Surrogate: 1-Chlorooctane 100 % 44.3-133

Surrogate: 1-Chlorooctadecane 113 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/13/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: BS - 75 (H211852-61)**

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	07/16/2021	ND	2.02	101	2.00	1.39	
Toluene*	<0.050	0.050	07/16/2021	ND	2.15	107	2.00	1.01	
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	2.05	102	2.00	0.562	
Total Xylenes*	<0.150	0.150	07/16/2021	ND	6.23	104	6.00	1.35	
Total BTEx	<0.300	0.300	07/16/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	07/16/2021	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/17/2021	ND	209	104	200	1.93	
DRO >C10-C28*	<10.0	10.0	07/17/2021	ND	223	111	200	1.24	
EXT DRO >C28-C36	<10.0	10.0	07/17/2021	ND					

Surrogate: 1-Chlorooctane 90.0 % 44.3-133

Surrogate: 1-Chlorooctadecane 103 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/13/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: BS - 76 (H211852-62)**

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	07/16/2021	ND	2.02	101	2.00	1.39	
Toluene*	<0.050	0.050	07/16/2021	ND	2.15	107	2.00	1.01	
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	2.05	102	2.00	0.562	
Total Xylenes*	<0.150	0.150	07/16/2021	ND	6.23	104	6.00	1.35	
Total BTEx	<0.300	0.300	07/16/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 69.9-140

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	07/16/2021	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/17/2021	ND	209	104	200	1.93	
DRO >C10-C28*	<10.0	10.0	07/17/2021	ND	223	111	200	1.24	
EXT DRO >C28-C36	<10.0	10.0	07/17/2021	ND					

Surrogate: 1-Chlorooctane 91.9 % 44.3-133

Surrogate: 1-Chlorooctadecane 102 % 38.9-142

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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/13/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: BS - 77 (H211852-63)**

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	07/16/2021	ND	2.02	101	2.00	1.39		
Toluene*	<0.050	0.050	07/16/2021	ND	2.15	107	2.00	1.01		
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	2.05	102	2.00	0.562		
Total Xylenes*	<0.150	0.150	07/16/2021	ND	6.23	104	6.00	1.35		
Total BTEx	<0.300	0.300	07/16/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	288	16.0	07/16/2021	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/17/2021	ND	209	104	200	1.93	
DRO >C10-C28*	<10.0	10.0	07/17/2021	ND	223	111	200	1.24	
EXT DRO >C28-C36	<10.0	10.0	07/17/2021	ND					

Surrogate: 1-Chlorooctane 101 % 44.3-133

Surrogate: 1-Chlorooctadecane 114 % 38.9-142

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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/13/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: BS - 80 (H211852-64)**

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	07/16/2021	ND	2.02	101	2.00	1.39	
Toluene*	<0.050	0.050	07/16/2021	ND	2.15	107	2.00	1.01	
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	2.05	102	2.00	0.562	
Total Xylenes*	<0.150	0.150	07/16/2021	ND	6.23	104	6.00	1.35	
Total BTEx	<0.300	0.300	07/16/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.1 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	07/16/2021	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/17/2021	ND	228	114	200	1.01	
DRO >C10-C28*	<10.0	10.0	07/17/2021	ND	225	112	200	2.27	
EXT DRO >C28-C36	<10.0	10.0	07/17/2021	ND					

Surrogate: 1-Chlorooctane 88.8 % 44.3-133

Surrogate: 1-Chlorooctadecane 86.2 % 38.9-142

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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/13/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: BS - 81 (H211852-65)**

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	07/16/2021	ND	2.02	101	2.00	1.39		
Toluene*	<0.050	0.050	07/16/2021	ND	2.15	107	2.00	1.01		
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	2.05	102	2.00	0.562		
Total Xylenes*	<0.150	0.150	07/16/2021	ND	6.23	104	6.00	1.35		
Total BTEx	<0.300	0.300	07/16/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	07/16/2021	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/17/2021	ND	228	114	200	1.01	
DRO >C10-C28*	<10.0	10.0	07/17/2021	ND	225	112	200	2.27	
EXT DRO >C28-C36	<10.0	10.0	07/17/2021	ND					

Surrogate: 1-Chlorooctane 90.9 % 44.3-133

Surrogate: 1-Chlorooctadecane 88.4 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/13/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: BS - 89 (H211852-66)**

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	07/16/2021	ND	2.02	101	2.00	1.39	
Toluene*	<0.050	0.050	07/16/2021	ND	2.15	107	2.00	1.01	
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	2.05	102	2.00	0.562	
Total Xylenes*	<0.150	0.150	07/16/2021	ND	6.23	104	6.00	1.35	
Total BTX	<0.300	0.300	07/16/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	208	16.0	07/16/2021	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/17/2021	ND	228	114	200	1.01	
DRO >C10-C28*	<10.0	10.0	07/17/2021	ND	225	112	200	2.27	
EXT DRO >C28-C36	<10.0	10.0	07/17/2021	ND					

Surrogate: 1-Chlorooctane 89.6 % 44.3-133

Surrogate: 1-Chlorooctadecane 88.1 % 38.9-142

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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:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/13/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: BS - 90 (H211852-67)**

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	07/16/2021	ND	2.02	101	2.00	1.39	
Toluene*	<0.050	0.050	07/16/2021	ND	2.15	107	2.00	1.01	
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	2.05	102	2.00	0.562	
Total Xylenes*	<0.150	0.150	07/16/2021	ND	6.23	104	6.00	1.35	
Total BTEx	<0.300	0.300	07/16/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	07/16/2021	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/17/2021	ND	228	114	200	1.01	
DRO >C10-C28*	<10.0	10.0	07/17/2021	ND	225	112	200	2.27	
EXT DRO >C28-C36	<10.0	10.0	07/17/2021	ND					

Surrogate: 1-Chlorooctane 87.1 % 44.3-133

Surrogate: 1-Chlorooctadecane 85.2 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/13/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: BS - 15 (H211852-68)**

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	07/16/2021	ND	2.02	101	2.00	1.39	
Toluene*	<0.050	0.050	07/16/2021	ND	2.15	107	2.00	1.01	
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	2.05	102	2.00	0.562	
Total Xylenes*	<0.150	0.150	07/16/2021	ND	6.23	104	6.00	1.35	
Total BTEx	<0.300	0.300	07/16/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.4 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	656	16.0	07/16/2021	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/17/2021	ND	228	114	200	1.01	
DRO >C10-C28*	<10.0	10.0	07/17/2021	ND	225	112	200	2.27	
EXT DRO >C28-C36	<10.0	10.0	07/17/2021	ND					

Surrogate: 1-Chlorooctane 94.2 % 44.3-133

Surrogate: 1-Chlorooctadecane 93.1 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/13/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: BS - 18 (H211852-69)**

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	07/16/2021	ND	2.02	101	2.00	1.39		
Toluene*	<0.050	0.050	07/16/2021	ND	2.15	107	2.00	1.01		
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	2.05	102	2.00	0.562		
Total Xylenes*	<0.150	0.150	07/16/2021	ND	6.23	104	6.00	1.35		
Total BTX	<0.300	0.300	07/16/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 69.9-140

Chloride, SM4500CI-B			mg/kg							
			Analyzed By: AC							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	07/16/2021	ND	416	104	400	0.00		

TPH 8015M			mg/kg							
			Analyzed By: MS							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	07/17/2021	ND	228	114	200	1.01		
DRO >C10-C28*	<10.0	10.0	07/17/2021	ND	225	112	200	2.27		
EXT DRO >C28-C36	<10.0	10.0	07/17/2021	ND						

Surrogate: 1-Chlorooctane 90.7 % 44.3-133

Surrogate: 1-Chlorooctadecane 89.4 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/13/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: BS - 6 (H211852-70)**

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	07/16/2021	ND	2.02	101	2.00	1.39	
Toluene*	<0.050	0.050	07/16/2021	ND	2.15	107	2.00	1.01	
Ethylbenzene*	<0.050	0.050	07/16/2021	ND	2.05	102	2.00	0.562	
Total Xylenes*	<0.150	0.150	07/16/2021	ND	6.23	104	6.00	1.35	
Total BTEx	<0.300	0.300	07/16/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	07/16/2021	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/17/2021	ND	228	114	200	1.01	
DRO >C10-C28*	<10.0	10.0	07/17/2021	ND	225	112	200	2.27	
EXT DRO >C28-C36	<10.0	10.0	07/17/2021	ND					

Surrogate: 1-Chlorooctane 80.5 % 44.3-133

Surrogate: 1-Chlorooctadecane 78.0 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/13/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: BS - 7 (H211852-71)**

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	07/17/2021	ND	2.02	101	2.00	1.39	
Toluene*	<0.050	0.050	07/17/2021	ND	2.15	107	2.00	1.01	
Ethylbenzene*	<0.050	0.050	07/17/2021	ND	2.05	102	2.00	0.562	
Total Xylenes*	<0.150	0.150	07/17/2021	ND	6.23	104	6.00	1.35	
Total BTEx	<0.300	0.300	07/17/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 69.9-140

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	07/16/2021	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/17/2021	ND	228	114	200	1.01	
DRO >C10-C28*	<10.0	10.0	07/17/2021	ND	225	112	200	2.27	
EXT DRO >C28-C36	<10.0	10.0	07/17/2021	ND					

Surrogate: 1-Chlorooctane 88.9 % 44.3-133

Surrogate: 1-Chlorooctadecane 87.2 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/15/2021  
Reported: 07/19/2021  
Project Name: MESA B #5  
Project Number: NOT GIVEN  
Project Location: LEA CO

Sampling Date: 07/13/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: BS - 8 (H211852-72)**

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	07/17/2021	ND	2.02	101	2.00	1.39	
Toluene*	<0.050	0.050	07/17/2021	ND	2.15	107	2.00	1.01	
Ethylbenzene*	<0.050	0.050	07/17/2021	ND	2.05	102	2.00	0.562	
Total Xylenes*	<0.150	0.150	07/17/2021	ND	6.23	104	6.00	1.35	
Total BTEx	<0.300	0.300	07/17/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	288	16.0	07/16/2021	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/17/2021	ND	228	114	200	1.01	
DRO >C10-C28*	<10.0	10.0	07/17/2021	ND	225	112	200	2.27	
EXT DRO >C28-C36	<10.0	10.0	07/17/2021	ND					

Surrogate: 1-Chlorooctane 93.1 % 44.3-133

Surrogate: 1-Chlorooctadecane 91.7 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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### Notes and Definitions

QR-04	The RPD for the BS/BSD was outside of historical limits.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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

---

Celey D. Keene, Lab Director/Quality Manager





## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

pg 1 of 8

Company Name: <b>BTA Oil Producer</b>		P.O. #:		<b>BILL TO</b>		ANALYSIS REQUEST	
Project Manager:		Company: <b>BTA</b>					
Address:		Attn: <b>Bob Hall</b>					
City:	State:	Zip:	Address:				
Phone #:	Fax #:	Project Owner:	City:	State:	Zip:		
Project #:	Project Location: <b>Mesa B 5</b>		Phone #:	Fax #:			
Sample Name: <b>Mesa B 5</b>		FOR LAB USE ONLY					
Lab I.D.		Sample I.D.					
H211852-							
01	Wall 4802	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL
02	Wall 5002						
03	Wall 3702						
04	Wall 3902						
05	Wall 3102						
06	Wall 3302						
07	Wall 3502						
08	Wall 3702						
09	Wall 4702						
10	Wall 4902						
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Relinquished By: <b>[Signature]</b>		Date: <b>7-15-21</b>		Time: <b>3:20</b>		TPH	
Relinquished By: <b>[Signature]</b>		Date: <b>7-15-21</b>		Time: <b>4:07</b>		BTEX	
Relinquished By: <b>[Signature]</b>		Date: <b>7-15-21</b>		Time: <b>10:57</b>			
Relinquished By: <b>[Signature]</b>		Date: <b>7-15-21</b>		Time: <b>11:03</b>			
Relinquished By: <b>[Signature]</b>		Date: <b>7-15-21</b>		Time: <b>11:23</b>			
Relinquished By: <b>[Signature]</b>		Date: <b>7-15-21</b>		Time: <b>11:35</b>			
Relinquished By: <b>[Signature]</b>		Date: <b>7-15-21</b>		Time: <b>11:41</b>			
Relinquished By: <b>[Signature]</b>		Date: <b>7-15-21</b>		Time: <b>11:50</b>			
Relinquished By: <b>[Signature]</b>		Date: <b>7-15-21</b>		Time: <b>12:10</b>			
Relinquished By: <b>[Signature]</b>		Date: <b>7-15-21</b>		Time: <b>12:17</b>			
Delivered By: (Circle One)		Sample Condition		CHECKED BY: <b>[Signature]</b>			
Sampler - UPS - Bus - Other: <b>-1.30 / #113</b>		Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/>					
		No <input type="checkbox"/> Yes <input type="checkbox"/>					
Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326		REMARKS:		Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>		Add'l Phone #:	
		Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>		Add'l Fax #:			
		REMARKS: <b>Michael Alvas@alvasoilfieldsolutions.org</b>					



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## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

p93028

Company Name: <b>BTA Oil Producers</b>		P.O. #:		BILL TO																															
Project Manager:		City:		State:		Zip:		Company: <b>BTA</b>		ANALYSIS REQUEST																									
Phone #:		Fax #:		Project Owner:		City:		State:		Zip:		P.O. #:																							
Project Name:		Project Location: <b>Mesa B 5</b>		Sample Name: <b>Michael Calves</b>		Fax #:																													
FOR LAB USE ONLY																																			
Lab I.D.		Sample I.D.		(G)RAB OR (C)OMP.		# CONTAINERS		GROUNDWATER		WASTEWATER		SOIL		OIL		SLUDGE		OTHER :		ACID/BASE:		ICE / COOL		OTHER :		DATE		TIME		CL		TPH		BTEX	
21 Wall 39		1		1		1		1		1		1		1		1		1		1		1		1		7-13-21		2:35		X		X		X	
22 Wall 41		1		1		1		1		1		1		1		1		1		1		1		1		3:14		X		X		X		X	
23 Wall 43		1		1		1		1		1		1		1		1		1		1		1		1		3:16		X		X		X		X	
24 Wall 45		1		1		1		1		1		1		1		1		1		1		1		1		3:18		X		X		X		X	
25 Wall 51		1		1		1		1		1		1		1		1		1		1		1		1		3:26		X		X		X		X	
26 Wall 405		1		1		1		1		1		1		1		1		1		1		1		1		3:36		X		X		X		X	
27 Wall 605		1		1		1		1		1		1		1		1		1		1		1		1		3:44		X		X		X		X	
28 Wall 805		1		1		1		1		1		1		1		1		1		1		1		1		3:57		X		X		X		X	
29 Wall 1003		1		1		1		1		1		1		1		1		1		1		1		1		3:58		X		X		X		X	
30 Wall Between 15-19		1		1		1		1		1		1		1		1		1		1		1		1		8:50		X		X		X		X	

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Relinquished By: **Michael Calves** Date: **7-15-21** Time: **14:50** Received By: **Michael Anderson**

Delivered By: (Circle One) **-1.30/14113** Sample Condition: ☒ Intact ☐ Cool ☐ Yes ☐ No ☐ No ☐ No CHECKED BY: **Michael Calves**

Phone Result: ☐ Yes ☐ No Add'l Phone #: **Michael Calves@calvesoilfieldsolution.org**

Fax Result: ☐ Yes ☐ No Add'l Fax #: **Michael Calves@calvesoilfieldsolution.org**

REMARKS: **Michael Calves@calvesoilfieldsolution.org**

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89428

Page 78 of 82





## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

PS 5 of 8

<b>Company Name:</b> BTA Oil Producer						<b>BILL TO</b>						<b>ANALYSIS REQUEST</b>											
<b>Project Manager:</b>						<b>P.O. #:</b>																	
<b>Address:</b>						<b>Company:</b> BTA																	
<b>City:</b>						<b>Attn:</b> Bob Hall																	
<b>Phone #:</b>						<b>Address:</b>																	
<b>Fax #:</b>						<b>City:</b>																	
<b>Project Owner:</b>						<b>State:</b>						<b>Zip:</b>											
<b>Project Location:</b> Mesa B 5						<b>Phone #:</b>																	
<b>Sample Name:</b> Miguel Gainer						<b>Fax #:</b>																	
<b>FOR LAB USE ONLY</b>						<b>MATRIX</b>						<b>SAMPLING</b>											
						<b>(G)RAB OR (C)OMP.</b>																	
						<b># CONTAINERS</b>																	
						<b>GROUNDWATER</b>																	
						<b>WASTEWATER</b>																	
						<b>SOIL</b>																	
						<b>OIL</b>																	
						<b>SLUDGE</b>																	
						<b>OTHER :</b>																	
						<b>ACID/BASE:</b>																	
						<b>ICE / COOL</b>																	
						<b>OTHER :</b>																	
						<b>DATE</b>						<b>TIME</b>											
Lab I.D.						Sample I.D.																	
41 wall lb												CL											
42 wall lg												TPH											
43 wall 19												BTEX											
44 wall 21																							
45 wall 22																							
46 wall 23																							
47 wall 26																							
48 wall 28																							
49 wall 30																							
50 wall 32																							

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<b>Relinquished By:</b> [Signature]				<b>Date:</b> 7-15-21				<b>Received By:</b> [Signature]				<b>Date:</b> 7-15-21			
<b>Relinquished By:</b>				<b>Date:</b>				<b>Received By:</b>				<b>Date:</b>			
<b>Time:</b>				<b>Time:</b>				<b>Time:</b>				<b>Time:</b>			

<b>Delivered By: (Circle One)</b>				<b>Sample Condition</b>				<b>CHECKED BY:</b>			
Sampler - UPS - Bus - Other: -1.32/#113				Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/>				[Signature]			
				Yes <input type="checkbox"/> No <input type="checkbox"/>							

**REMARKS:** Michael alms@alms oilfield solutions, org

**Phone Result:** Yes ☐ No ☐    **Add'l Phone #:**

**Fax Result:** Yes ☐ No ☐    **Add'l Fax #:**







# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

<b>Company Name:</b> BTA Oil Producer		<b>BILL TO</b>		<b>ANALYSIS REQUEST</b>															
<b>Project Manager:</b>		<b>P.O. #:</b>																	
<b>Address:</b>		<b>Company:</b>	BTA																
<b>City:</b>		<b>State:</b>		<b>Zip:</b>															
<b>Phone #:</b>		<b>Fax #:</b>		<b>Attn:</b>	Bob Hall														
<b>Project #:</b>		<b>Project Owner:</b>		<b>Address:</b>															
<b>Project Name:</b>		<b>City:</b>		<b>State:</b>		<b>Zip:</b>													
<b>Project Location:</b>	Mesa B5	<b>Phone #:</b>																	
<b>Sample Name:</b>	Miguel Gomez	<b>Fax #:</b>																	
<small>FOR LAB USE ONLY</small>				<b>PRESERV.</b>	<b>SAMPLING</b>														
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX					DATE	TIME	CL	TpH	Btex						
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :							
60	B5-74	G	1	X		X					X		7-13-21	11:40	X	X	X		
61	B5-75	G	1	X		X					X		7-13-21	11:42	X	X	X		
62	B5-76	G	1	X		X					X		7-13-21	11:45	X	X	X		
63	B5-77	G	1	X		X					X		7-13-21	11:47	X	X	X		
64	B5-80	G	1	X		X					X		7-13-21	11:55	X	X	X		
65	B5-81	G	1	X		X					X		7-13-21	11:59	X	X	X		
66	B5-89	G	1	X		X					X		7-13-21	12:03	X	X	X		
67	B5-90	G	1	X		X					X		7-13-21	12:05	X	X	X		
68	B5-15	G	1	X		X					X		7-13-21	3:22	X	X	X		
69	B5-18	G	1	X		X					X		7-13-21	9:55	X	X	X		

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<b>Relinquished By:</b>	<b>Date:</b> 7-15-21 <b>Time:</b> 14:50	<b>Received By:</b> Scott Spencer	<b>Phone Result:</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<b>Add'l Phone #:</b>
<b>Relinquished By:</b>	<b>Date:</b>	<b>Received By:</b>	<b>Fax Result:</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<b>Add'l Fax #:</b>
<b>REMARKS:</b>				

**Delivered By: (Circle One)** ☒ Cool ☐ Intact ☐ Yes ☒ No

**Sampler - UPS - Bus - Other:** -1.32c/#113

**CHECKED BY:** [Signature]

**Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326**

**Michael Jones & Associates LLC solutions.org**



## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: BTA oil products  
Project Manager:

P.O. #: BTA

ANALYSIS REQUEST

Address:

Company:

City:

State: Zip:

Attn: Bob Hays

Phone #:

Fax #:

Address:

Project #:

Project Owner:

City:

Project Name:

State: Zip:

Project Location: in case B5

Phone #:

Sample Name: Michael Gomez

Fax #:

FOR LAB USE ONLY

MATRIX

PRESERV

SAMPLING

Lab I.D.

Sample I.D.

70 BS-6  
71 BS-7  
72 BS-8

(G)RAB OR (C)OMP.

# CONTAINERS

GROUNDWATER

WASTEWATER

SOIL

OIL

SLUDGE

OTHER :

ACID/BASE:

ICE / COOL

OTHER :

DATE

TIME

CL  
TPH  
BTEX

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Relinquished By:

Date: 7-15-21

Received By:

Time: 14:50

Phone Result:

Yes No

Add'l Phone #:

Fax Result:

Yes No

Add'l Fax #:

Relinquished By:

Date: 7-15-21

Received By:

Time: 14:50

Phone Result:

Yes No

Add'l Phone #:

Fax Result:

Yes No

Add'l Fax #:

Delivered By: (Circle One)

Sampler - UPS - Bus - Other:

-1.32 / #113

Sample Condition

CHECKED BY:

Initials

Yes No

Add'l Phone #:

Fax Result:

Yes No

Add'l Fax #:

† Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326

Michael Alvarez alvarez@btaoil.com



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

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July 26, 2021

BOB HALL

BTA Oil Producers

103 South Pecos

Midland, TX 79701

RE: MESA B #5

Enclosed are the results of analyses for samples received by the laboratory on 07/23/21 8:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager





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

**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/23/2021  
Reported: 07/26/2021  
Project Name: MESA B #5  
Project Number: NONE GIVEN  
Project Location: LEA CO

Sampling Date: 07/19/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: BS 67 (H211935-01)**

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	07/23/2021	ND	1.91	95.7	2.00	6.25	
Toluene*	<0.050	0.050	07/23/2021	ND	2.05	102	2.00	7.08	
Ethylbenzene*	<0.050	0.050	07/23/2021	ND	1.97	98.4	2.00	6.00	
Total Xylenes*	<0.150	0.150	07/23/2021	ND	5.85	97.5	6.00	6.93	
Total BTX	<0.300	0.300	07/23/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	288	16.0	07/23/2021	ND	400	100	400	7.69	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/24/2021	ND	218	109	200	2.44	
DRO >C10-C28*	<10.0	10.0	07/24/2021	ND	205	103	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	07/24/2021	ND					

Surrogate: 1-Chlorooctane 76.1 % 44.3-133

Surrogate: 1-Chlorooctadecane 74.8 % 38.9-142

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:**

BTA Oil Producers  
 BOB HALL  
 103 South Pecos  
 Midland TX, 79701  
 Fax To: (432) 683-0312

Received: 07/23/2021  
 Reported: 07/26/2021  
 Project Name: MESA B #5  
 Project Number: NONE GIVEN  
 Project Location: LEA CO

Sampling Date: 07/19/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: BS 68 (H211935-02)**

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	07/23/2021	ND	1.91	95.7	2.00	6.25		
Toluene*	<0.050	0.050	07/23/2021	ND	2.05	102	2.00	7.08		
Ethylbenzene*	<0.050	0.050	07/23/2021	ND	1.97	98.4	2.00	6.00		
Total Xylenes*	<0.150	0.150	07/23/2021	ND	5.85	97.5	6.00	6.93		
Total BTEx	<0.300	0.300	07/23/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	352	16.0	07/23/2021	ND	400	100	400	7.69	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/24/2021	ND	218	109	200	2.44	
DRO >C10-C28*	<10.0	10.0	07/24/2021	ND	205	103	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	07/24/2021	ND					

Surrogate: 1-Chlorooctane 83.0 % 44.3-133

Surrogate: 1-Chlorooctadecane 78.8 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/23/2021  
Reported: 07/26/2021  
Project Name: MESA B #5  
Project Number: NONE GIVEN  
Project Location: LEA CO

Sampling Date: 07/19/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: BS 66 (H211935-03)**

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	07/23/2021	ND	1.91	95.7	2.00	6.25		
Toluene*	<0.050	0.050	07/23/2021	ND	2.05	102	2.00	7.08		
Ethylbenzene*	<0.050	0.050	07/23/2021	ND	1.97	98.4	2.00	6.00		
Total Xylenes*	<0.150	0.150	07/23/2021	ND	5.85	97.5	6.00	6.93		
Total BTEx	<0.300	0.300	07/23/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	336	16.0	07/23/2021	ND	400	100	400	7.69	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/24/2021	ND	218	109	200	2.44	
DRO >C10-C28*	<10.0	10.0	07/24/2021	ND	205	103	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	07/24/2021	ND					

Surrogate: 1-Chlorooctane 77.3 % 44.3-133

Surrogate: 1-Chlorooctadecane 75.3 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/23/2021  
Reported: 07/26/2021  
Project Name: MESA B #5  
Project Number: NONE GIVEN  
Project Location: LEA CO

Sampling Date: 07/19/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: WALL 135 (H211935-04)**

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	07/23/2021	ND	1.91	95.7	2.00	6.25		
Toluene*	<0.050	0.050	07/23/2021	ND	2.05	102	2.00	7.08		
Ethylbenzene*	<0.050	0.050	07/23/2021	ND	1.97	98.4	2.00	6.00		
Total Xylenes*	<0.150	0.150	07/23/2021	ND	5.85	97.5	6.00	6.93		
Total BTEx	<0.300	0.300	07/23/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	07/23/2021	ND	400	100	400	7.69	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/24/2021	ND	218	109	200	2.44	
DRO >C10-C28*	<10.0	10.0	07/24/2021	ND	205	103	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	07/24/2021	ND					

Surrogate: 1-Chlorooctane 100 % 44.3-133

Surrogate: 1-Chlorooctadecane 93.6 % 38.9-142

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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:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/23/2021  
Reported: 07/26/2021  
Project Name: MESA B #5  
Project Number: NONE GIVEN  
Project Location: LEA CO

Sampling Date: 07/19/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: WALL 128 @ 4' (H211935-05)**

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	07/23/2021	ND	1.91	95.7	2.00	6.25		
Toluene*	<0.050	0.050	07/23/2021	ND	2.05	102	2.00	7.08		
Ethylbenzene*	<0.050	0.050	07/23/2021	ND	1.97	98.4	2.00	6.00		
Total Xylenes*	<0.150	0.150	07/23/2021	ND	5.85	97.5	6.00	6.93		
Total BTX	<0.300	0.300	07/23/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	07/23/2021	ND	400	100	400	7.69		

TPH 8015M		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/24/2021	ND	218	109	200	2.44	
DRO >C10-C28*	<10.0	10.0	07/24/2021	ND	205	103	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	07/24/2021	ND					

Surrogate: 1-Chlorooctane 134 % 44.3-133

Surrogate: 1-Chlorooctadecane 134 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
 BOB HALL  
 103 South Pecos  
 Midland TX, 79701  
 Fax To: (432) 683-0312

Received: 07/23/2021  
 Reported: 07/26/2021  
 Project Name: MESA B #5  
 Project Number: NONE GIVEN  
 Project Location: LEA CO

Sampling Date: 07/19/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: WALL 129 @ 4' (H211935-06)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/23/2021	ND	1.91	95.7	2.00	6.25	
Toluene*	<0.050	0.050	07/23/2021	ND	2.05	102	2.00	7.08	
Ethylbenzene*	<0.050	0.050	07/23/2021	ND	1.97	98.4	2.00	6.00	
Total Xylenes*	<0.150	0.150	07/23/2021	ND	5.85	97.5	6.00	6.93	
Total BTX	<0.300	0.300	07/23/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	07/23/2021	ND	400	100	400	7.69	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/24/2021	ND	218	109	200	2.44	
DRO >C10-C28*	<10.0	10.0	07/24/2021	ND	205	103	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	07/24/2021	ND					

Surrogate: 1-Chlorooctane 84.2 % 44.3-133

Surrogate: 1-Chlorooctadecane 79.7 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
 BOB HALL  
 103 South Pecos  
 Midland TX, 79701  
 Fax To: (432) 683-0312

Received: 07/23/2021  
 Reported: 07/26/2021  
 Project Name: MESA B #5  
 Project Number: NONE GIVEN  
 Project Location: LEA CO

Sampling Date: 07/19/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: WALL 131 @ 2' (H211935-07)**

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	07/23/2021	ND	1.91	95.7	2.00	6.25		
Toluene*	<0.050	0.050	07/23/2021	ND	2.05	102	2.00	7.08		
Ethylbenzene*	<0.050	0.050	07/23/2021	ND	1.97	98.4	2.00	6.00		
Total Xylenes*	<0.150	0.150	07/23/2021	ND	5.85	97.5	6.00	6.93		
Total BTX	<0.300	0.300	07/23/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	07/23/2021	ND	400	100	400	7.69		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/24/2021	ND	218	109	200	2.44	
DRO >C10-C28*	<10.0	10.0	07/24/2021	ND	205	103	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	07/24/2021	ND					

Surrogate: 1-Chlorooctane 75.6 % 44.3-133

Surrogate: 1-Chlorooctadecane 74.3 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/23/2021  
Reported: 07/26/2021  
Project Name: MESA B #5  
Project Number: NONE GIVEN  
Project Location: LEA CO

Sampling Date: 07/19/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: WALL 132 @ 2' (H211935-08)**

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	07/23/2021	ND	1.91	95.7	2.00	6.25		
Toluene*	<0.050	0.050	07/23/2021	ND	2.05	102	2.00	7.08		
Ethylbenzene*	<0.050	0.050	07/23/2021	ND	1.97	98.4	2.00	6.00		
Total Xylenes*	<0.150	0.150	07/23/2021	ND	5.85	97.5	6.00	6.93		
Total BTX	<0.300	0.300	07/23/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	07/23/2021	ND	400	100	400	7.69		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/24/2021	ND	218	109	200	2.44	
DRO >C10-C28*	<10.0	10.0	07/24/2021	ND	205	103	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	07/24/2021	ND					

Surrogate: 1-Chlorooctane 77.4 % 44.3-133

Surrogate: 1-Chlorooctadecane 75.3 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/23/2021  
Reported: 07/26/2021  
Project Name: MESA B #5  
Project Number: NONE GIVEN  
Project Location: LEA CO

Sampling Date: 07/19/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: WALL 133 @ 2' (H211935-09)**

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	07/23/2021	ND	1.91	95.7	2.00	6.25		
Toluene*	<0.050	0.050	07/23/2021	ND	2.05	102	2.00	7.08		
Ethylbenzene*	<0.050	0.050	07/23/2021	ND	1.97	98.4	2.00	6.00		
Total Xylenes*	<0.150	0.150	07/23/2021	ND	5.85	97.5	6.00	6.93		
Total BTX	<0.300	0.300	07/23/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	288	16.0	07/23/2021	ND	432	108	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	07/24/2021	ND	218	109	200	2.44	
DRO >C10-C28*	<10.0	10.0	07/24/2021	ND	205	103	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	07/24/2021	ND					

Surrogate: 1-Chlorooctane 75.1 % 44.3-133

Surrogate: 1-Chlorooctadecane 70.7 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/23/2021  
Reported: 07/26/2021  
Project Name: MESA B #5  
Project Number: NONE GIVEN  
Project Location: LEA CO

Sampling Date: 07/19/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: WALL 134 @ 2' (H211935-10)**

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	07/23/2021	ND	1.91	95.7	2.00	6.25		
Toluene*	<0.050	0.050	07/23/2021	ND	2.05	102	2.00	7.08		
Ethylbenzene*	<0.050	0.050	07/23/2021	ND	1.97	98.4	2.00	6.00		
Total Xylenes*	<0.150	0.150	07/23/2021	ND	5.85	97.5	6.00	6.93		
Total BTEx	<0.300	0.300	07/23/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	07/23/2021	ND	432	108	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	07/24/2021	ND	218	109	200	2.44	
DRO >C10-C28*	<10.0	10.0	07/24/2021	ND	205	103	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	07/24/2021	ND					

Surrogate: 1-Chlorooctane 75.1 % 44.3-133

Surrogate: 1-Chlorooctadecane 69.5 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

BTA Oil Producers  
BOB HALL  
103 South Pecos  
Midland TX, 79701  
Fax To: (432) 683-0312

Received: 07/23/2021  
Reported: 07/26/2021  
Project Name: MESA B #5  
Project Number: NONE GIVEN  
Project Location: LEA CO

Sampling Date: 07/19/2021  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: WALL 130 @ 15' (H211935-11)**

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/23/2021	ND	1.91	95.7	2.00	6.25		
Toluene*	<0.050	0.050	07/23/2021	ND	2.05	102	2.00	7.08		
Ethylbenzene*	<0.050	0.050	07/23/2021	ND	1.97	98.4	2.00	6.00		
Total Xylenes*	<0.150	0.150	07/23/2021	ND	5.85	97.5	6.00	6.93		
Total BTX	<0.300	0.300	07/23/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	07/23/2021	ND	432	108	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	07/24/2021	ND	218	109	200	2.44	
DRO >C10-C28*	<10.0	10.0	07/24/2021	ND	205	103	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	07/24/2021	ND					

Surrogate: 1-Chlorooctane 80.9 % 44.3-133

Surrogate: 1-Chlorooctadecane 76.5 % 38.9-142

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### Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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

---

Celey D. Keene, Lab Director/Quality Manager



## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: BTA Oil Producer  
Project Manager:

P.O. #:  
Company: BTA  
Attn: Bob Hg 11  
Address:  
City:  
State: Zip:

ANALYSIS REQUEST

Address:

City:

State:

Zip:

Phone #:

Fax #:

Project #:

Project Owner:

Project Name:

Project Location:

State: Zip:

Sample Name:

Phone #:

Fax #:

FOR LAB USE ONLY

Lab I.D.

Sample I.D.

H211935

B567

B568

B566

Wall 135

Wall 12804

Wall 12904

Wall 13102

Wall 13202

Wall 13302

Wall 13402

Wall 13402

Wall 13402

Wall 13402

Wall 13402

Wall 13402

Wall 13402

Wall 13402

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**CARDINAL**  
Laboratories

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240  
(505) 398-0000 FAX (505) 398-0000

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

[illegible]

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
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**District II**  
811 S. First St., Artesia, NM 88210  
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**District III**  
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**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
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State of New Mexico  
Energy, Minerals and Natural Resources  
Oil Conservation Division  
1220 S. St Francis Dr.  
Santa Fe, NM 87505

CONDITIONS  
  
Action 68056

CONDITIONS

Operator: OWL SWD OPERATING, LLC 8201 Preston Road Dallas, TX 75225	OGRID: 308339
	Action Number: 68056
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
chensley	None	1/14/2022