

**District I**

1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720

**District II**

811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720

**District III**

1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170

**District IV**

1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

QUESTIONS

Action 95063

**QUESTIONS**

Operator: AMEREDEV OPERATING, LLC 2901 Via Fortuna Austin, TX 78746	OGRID: 372224
	Action Number: 95063
	Action Type: [NOTIFY] Notification Of Release (NOR)

**QUESTIONS**

Location of Release Source	
<i>Please answer all of the questions in this group.</i>	
Site Name	Eagle Feather Federal #2 20220314-0814-prodops
Date Release Discovered	03/18/2022
Surface Owner	Private

Incident Details	
<i>Please answer all of the questions in this group.</i>	
Incident Type	Other
Did this release result in a fire or is the result of a fire	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

Nature and Volume of Release	
<i>Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.</i>	
Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Not answered.
Is the concentration of dissolved chloride in the produced water >10,000 mg/l	Not answered.
Condensate Released (bbls) Details	Cause: Other   Separator   Condensate   Released: 0 BBL (Unknown Released Amount)   Recovered: 0 BBL   Lost: 0 BBL ]
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Legacy release discovered during compliance notification remedial actions. Compliance number cBZL227525924 dated 03/03/2022.

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QUESTIONS, Page 2

Action 95063

**QUESTIONS (continued)**

Operator: AMEREDEV OPERATING, LLC 2901 Via Fortuna Austin, TX 78746	OGRID: 372224
	Action Number: 95063
	Action Type: [NOTIFY] Notification Of Release (NOR)

**QUESTIONS**

<b>Nature and Volume of Release (continued)</b>	
Is this a gas only submission (i.e. only significant Mcf values reported)	<b>No, according to supplied volumes this does not appear to be a "gas only" report.</b>
Was this a major release as defined by 19.15.29.7(A) NMAC	<b>Yes, major release.</b>
Reasons why this would be considered a submission for a notification of a major release	<ul style="list-style-type: none"> <li>Unauthorized release of an unknown volume (TBD), excluding gases, of 25 barrels or more</li> </ul>
If YES, was immediate notice given to the OCD, by whom	<a href="#">Andrew Parker with Ameredev</a>
If YES, was immediate notice given to the OCD, to whom	<a href="#">Mr. Mike Bratcher</a>
If YES, was immediate notice given to the OCD, when	<a href="#">03/30/2022</a>
If YES, was immediate notice given to the OCD, by what means (phone, email, etc.)	<a href="#">Phone discussion regarding the legacy release.</a>
<i>With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.</i>	

**Initial Response**

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

The source of the release has been stopped	<a href="#">True</a>
The impacted area has been secured to protect human health and the environment	<a href="#">True</a>
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	<a href="#">True</a>
All free liquids and recoverable materials have been removed and managed appropriately	<a href="#">True</a>
If all the actions described above have not been undertaken, explain why	<i>Not answered.</i>

*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 prepare and attach a narrative of actions to date in the follow-up C-141 submission. 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 prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.*

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ACKNOWLEDGMENTS  
  
Action 95063

ACKNOWLEDGMENTS

Operator: AMEREDEV OPERATING, LLC 2901 Via Fortuna Austin, TX 78746	OGRID: 372224
	Action Number: 95063
	Action Type: [NOTIFY] Notification Of Release (NOR)

ACKNOWLEDGMENTS

<input checked="" type="checkbox"/>	I acknowledge that I am authorized to submit notification of a releases on behalf of my operator.
<input checked="" type="checkbox"/>	I acknowledge that upon submitting this application, I will be creating a new incident file (assigned to my operator) to track the notification(s) and corrective action(s) for a release, pursuant to NMAC 19.15.29.
<input checked="" type="checkbox"/>	I acknowledge that creating a new incident file will require my operator to file subsequent submission(s) of form "C-141, Application for administrative approval of a release notification and corrective action", pursuant to NMAC 19.15.29.
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	I acknowledge the fact that 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.
<input checked="" type="checkbox"/>	I acknowledge the fact that, 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.

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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 95063

CONDITIONS

Operator: AMEREDEV OPERATING, LLC 2901 Via Fortuna Austin, TX 78746	OGRID: 372224
	Action Number: 95063
	Action Type: [NOTIFY] Notification Of Release (NOR)

CONDITIONS

Created By	Condition	Condition Date
aparker1969	When submitting future reports regarding this release, please submit the calculations used or specific justification for the volumes reported on the initial C-141.	3/31/2022

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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	nAPP2209060000
District RP	
Facility ID	
Application ID	

## Release Notification

### Responsible Party

Responsible Party: Ameredev Operating, LLC	OGRID: 372224
Contact Name: Shane M <sup>c</sup> Neely	Contact Telephone: (737) 300-4700
Contact email: smcneely@ameredev.com	Incident # (assigned by OCD) nAPP2209060000
Contact mailing address: 2901 Via Fortuna, Suite 600 Austin, Texas 78746	

### Location of Release Source

Latitude 32.0345108 \_\_\_\_\_ Longitude -103.267263 \_\_\_\_\_  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Eagle Feather Federal #2 20220314-0814-prodops	Site Type Production Pad
Date Release Discovered 03/18/2022	API# (if applicable) 30-025-38885

Unit Letter	Section	Township	Range	County
B	21	26S	36E	Lea

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (Name: Beckham Ranch LLC \_\_\_\_\_)

### 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 type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input checked="" type="checkbox"/> Condensate	Volume Released (bbls) Legacy (unknown)	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)

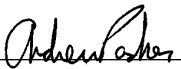
Cause of Release Legacy release discovered during compliance notification remedial actions. Compliance number cBZL227525924 dated 03/03/2022.

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Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC?  <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release? Legacy release of unknown volume
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Andrew Parker with Ameredev discussed, via phone, discovery with Mr. Bratcher after receiving confirmation sampling analytical results. On March 30, 2022 Mr. Parker and Mr. Bratcher agreed that the legacy release to be reported via a C-141.	

## Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:          	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: <u>Andrew Parker</u>	Title: <u>Env. Scientist</u>
Signature: <u></u>	Date: <u>03/31/2022</u>
email: <u>aparker@ameredev.com</u>	Telephone: <u>970-570-9535</u>
<b><u>OCD Only</u></b>  Received by: _____ Date: _____	

Incident ID	nAPP2209060000
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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? <b><u>Plate 2</u></b>	<u>&gt;100</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse? <b><u>Plate 4</u></b>	<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)? <b><u>Plate 4</u></b>	<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? <b><u>Plate 5</u></b>	<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? <b><u>Plate 4</u></b>	<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? <b><u>Plate 3</u></b>	<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? <b><u>Plate 3</u></b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland? <b><u>Plate 6</u></b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine? <b><u>Plate 7</u></b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology? <b><u>Plate 8</u></b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain? <b><u>Plate 9</u></b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

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

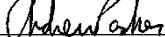
If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods,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

State of New Mexico  
Oil Conservation Division

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Incident ID	nAPP2209060000
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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: Andrew ParkerTitle: Env. ScientistSignature: Date: July 22, 2022email: aparker@ameredev.comTelephone: 970-570-9535**OCD Only**

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

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



Incident ID	nAPP2209060000
District RP	
Facility ID	
Application ID	

## Remediation Plan

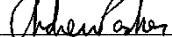
**Remediation Plan Checklist:** *Each of the following items must be included in the plan.*

- ☒ 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)

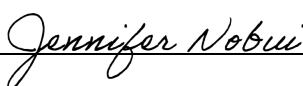
**Deferral Requests Only:** *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- ☐ 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: Andrew ParkerTitle: Env. ScientistSignature: Date: July 22, 2022email: aparker@ameredev.comTelephone: 970-570-9535**OCD Only**

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

☐ Approved ☐ Approved with Attached Conditions of Approval ☒ Denied ☐ Deferral ApprovedSignature: Date: 07/27/2022

Incident ID	nAPP2209060000
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.
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Printed Name: Andrew ParkerTitle: Env. ScientistSignature: Date: January 4, 2023email: aparker@ameredev.comTelephone: 970-570-9535**OCD Only**

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

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

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

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

Incident ID	nAPP2209060000
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## Closure

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

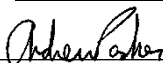
**Closure Report Attachment Checklist:** *Each of the following items must be included in the closure report.*

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

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

Printed Name: Andrew Parker

Title: Env. Scientist

Signature: 

Date: January 4, 2022

email: aparker@ameredev.com

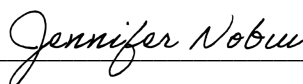
Telephone: 970-570-9535

**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: 01/30/2023

Printed Name: Jennifer Nobui

Title: Environmental Specialist A



Ameredev II, LLC

2901 Via Fortuna Suite 600 • Austin, Texas 78746 • Phone (737) 300-4700

January 4, 2023

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

RE: Closure Report  
Incident ID: nAPP2209060000  
Eagle Feather Federal #2  
AEP #: 20220314-0814-prodops

NMOCD:

Ameredev Operating submits this closure report, including remediation and restoration activities for incident number nAPP2209060000. A legacy release was discovered during compliance notification remedial actions - compliance number cBZL227525924 dated 03/03/2022. Nature and volume of release is unknown.

The release occurred within an active production facility containment on Fee Surface. The coordinates of the release point are 32.0345141, -103.2672636 (Lat, Long; NAD83). The release did not impact surface water or groundwater. Figures 1 and 2 shows source and initial remedial activity – the upper few inches of the surface was removed and hauled off-site for proper disposal.

*Figure 1: Photo of release area viewing west from the southeast corner of the containment.*

*Date/Time: 2022-03-15  
13:20:08.  
GPS: 32.0344417,  
-103.2671558.*



Incident ID #: nAPP2209060000  
Eagle Feather Federal #2  
AEP #: 20220314-0814-prodops



*Figure 2: Photo of release area viewing north from the southwest extent of the release.*

*Date/Time: 2022-03-15 13:21:00  
GPS: 32.0344425, -103.2673233*

Remediation plan was denied July 27, 2022, due to depth to groundwater not adequately determined and insufficient horizontal delineation. Communications are included in Appendix A.

To determine depth-to-water within ½-mile of the release extent, Ameredev Operating began a depth-to-water borehole program mid-September 2022:

- Boreholes are located throughout Ameredev Operating leases in New Mexico.
- Located within ½-mile of identified areas, and
- Drilled to a depth of approximately 105-feet below ground surface, left open for 72-hours, then gauged for the presence of groundwater within the upper 100-feet of ground surface.

The depth to water borehole nearest to the release area is mapped on Plate 2 rev:

1. MISC-411 (J-053 POD 1) is located 0.06-miles southeast. Depth of the water well is >101-feet. The borehole is plugged. The Well Log is presented in Appendix B.

## 1. Remediation & Restoration Activities

Ameredev II began remedial actions per 19.15.29 NMAC on March 18, 2022 with the removal of the upper 0.25-feet of impacted material within the release extent. The impacted material was hauled off-site for proper disposal. Soil sampling analytical results, below 0.25-feet, exhibited chloride and hydrocarbon concentrations above Closure Criteria concentrations for constituents of concern listed in Table 1 of 19.15.29. NMAC.

On March 29-30<sup>th</sup> excavation of impacted area to a depth of 1.5 feet commenced to remove the mass load of impacted soil. Excavation of soil below 1.5-feet, without facility deconstruction, would have created a risk to human health and the environment. Ameredev Operating delayed further remediation activities until impending decommission of the heater treater and separator.

01/04/2023



Incident ID #: nAPP2209060000

Eagle Feather Federal #2

AEP #: 20220314-0814-prodops



Figure 3: Excavation area around heater treater and separator viewing west from the east of the extent. Date/Time: 2022-03-30 12:20:17. GPS: 32.0345492, -103.2672069.



Figure 4: Excavation area around heater treater viewing northwest. Date/Time: 2022-03-30 09:28:38. GPS: 32.0344958, -103.2672678

Following removal of production equipment, Ameredev continued remediation within the release extent until the walls and bases meet Closure Criteria per Table 1 of 19.15.29 NMAC as defined below.

- For the release area on an active production site that is in use for oil and gas operations and where depth to water is > 100 ft (with NMOCD approved depth to water determination):
  - Chloride < 20,000 mg/kg
  - TPH (GRO + DRO + MRO) < 2,500 mg/kg
  - TPH (GRO + DRO) < 1,000 mg/kg
  - BTEX < 50 mg/kg
  - Benzene < 10 mg/kg

01/04/2023

Released to Imaging: 1/30/2023 3:09:11 PM

Incident ID #: nAPP2209060000

Eagle Feather Federal #2

AEP #: 20220314-0814-prodops



Figure 5: Remediation in progress facing east northeast from western extent.  
Date Taken: 2022-12-15 12:24:20. GPS: 32.0344582, -103.2673877



Figure 6: Completed remediation extent facing southwest from northeast corner. The trench within the excavation is the location of grid GS-08. Date Taken: 2022-12-16 13:42:13. GPS: 32.0345165, -103.2671988

A soil sample was collected from each grid centroid base and along excavation walls for laboratory analysis of chloride, TPH, Benzene, and BTEX. All base and wall sample grid areas were < 200 sq ft. The 48 hour sampling notification is located in Appendix A.

- Plate 10 shows the confirmation/delineation sample grid layout with square footage
- Plate 11 shows the confirmation/delineation sample locations.
- Table A shows the coordinates of the confirmation/delineation sample points.
- Table B shows the Summary of Analytical
- Appendix C contains the Certificates of Analysis

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Incident ID #: nAPP2209060000

Eagle Feather Federal #2

AEP #: 20220314-0814-prodops

The northern portion of the release extent did not require remediation as wall samples met the most stringent Closure Criteria. Wall sample GS-07 S 0-2 ft met closure criteria for on-site, as defined above, however further delineation was obtained with GS-07 S Pad to demonstrate that the release did not extend off-site. All other wall samples met most stringent Closure Criteria where depth to water is > 100 ft and therefore provide delineation as well as confirmation sampling.

An estimated 474 cu. yds. of material was excavated and hauled off-site to an approved disposal facility.



*Figure 7: Restored pad surface facing north from southern extent.  
Date Taken: 2022-12-28 14:03:38. GPS: 32.0344000, -103.2672750*

The release extent on the active production site was restored per 19.15.29.13.A-C NMAC as an active production site and will be further reclaimed per 19.15.29.13.D when the production site is no longer in-use for oil and gas operations.

Sincerely,  
Ameredev II, LLC

Andrew Parker  
Env. Scientist

01/04/2023

Released to Imaging: 1/30/2023 3:09:11 PM



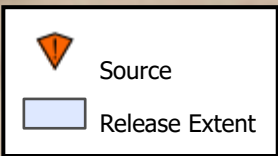
Ameredev II, LLC



# Plates

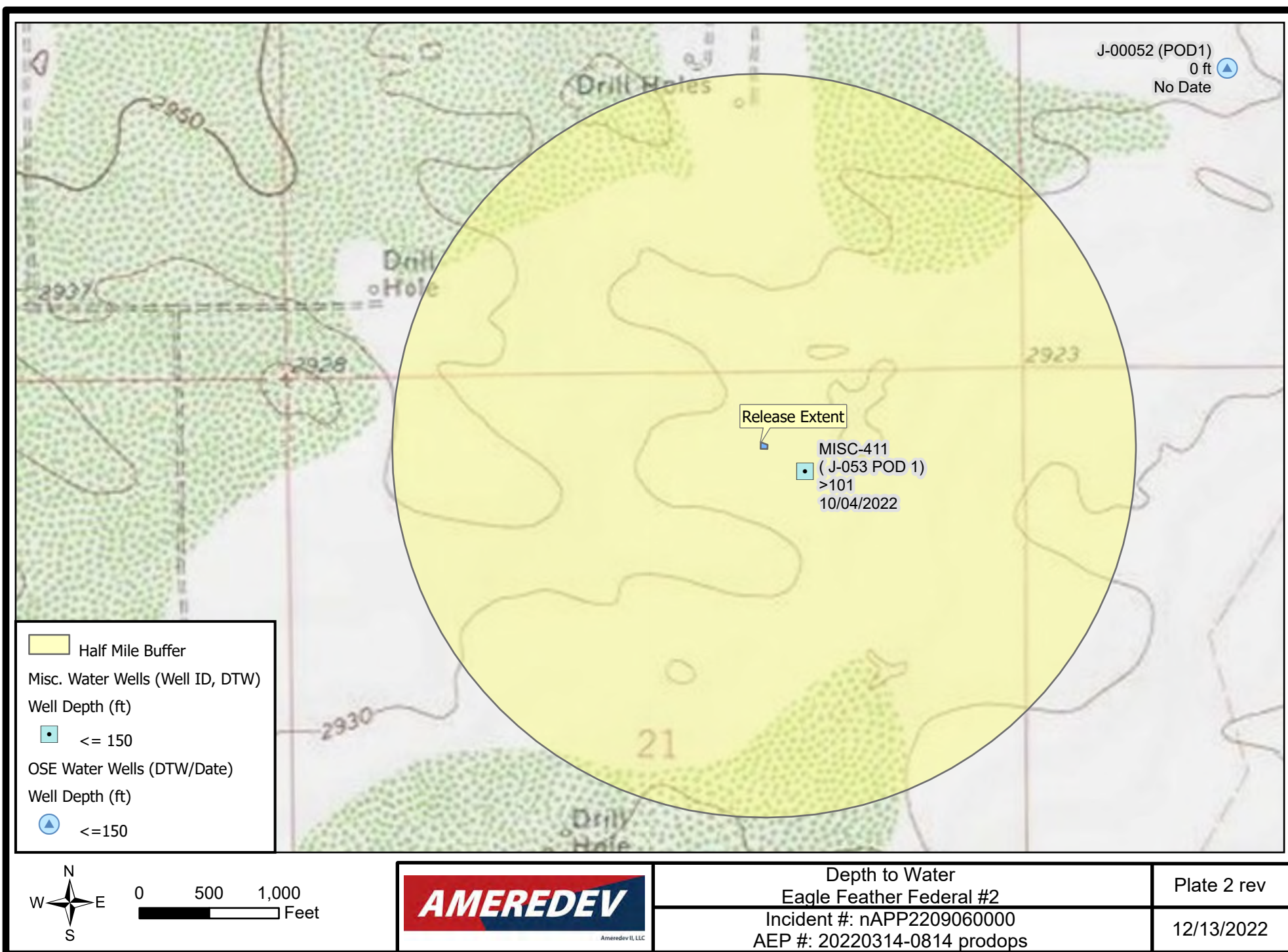


Ameredev II, LLC

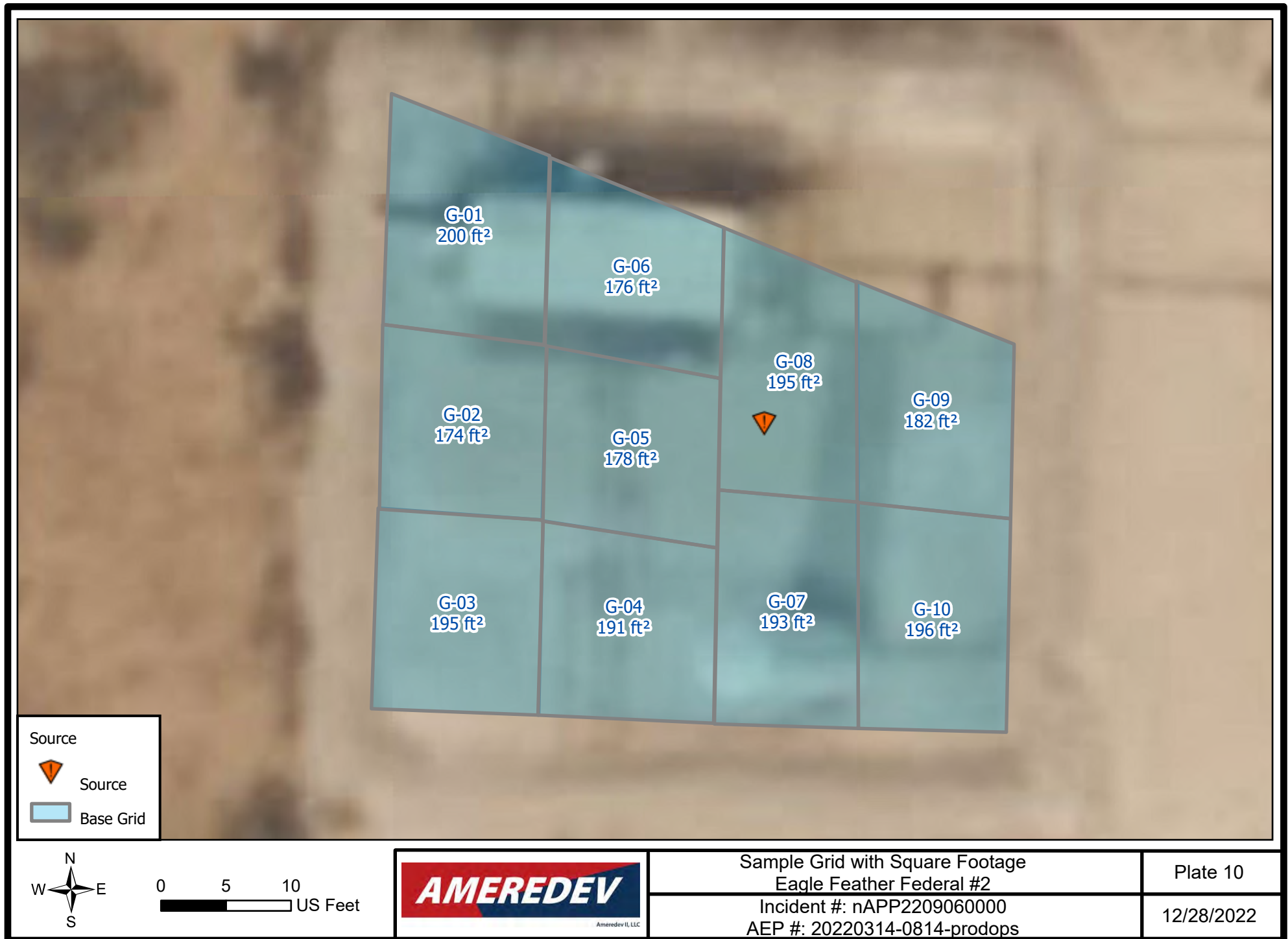


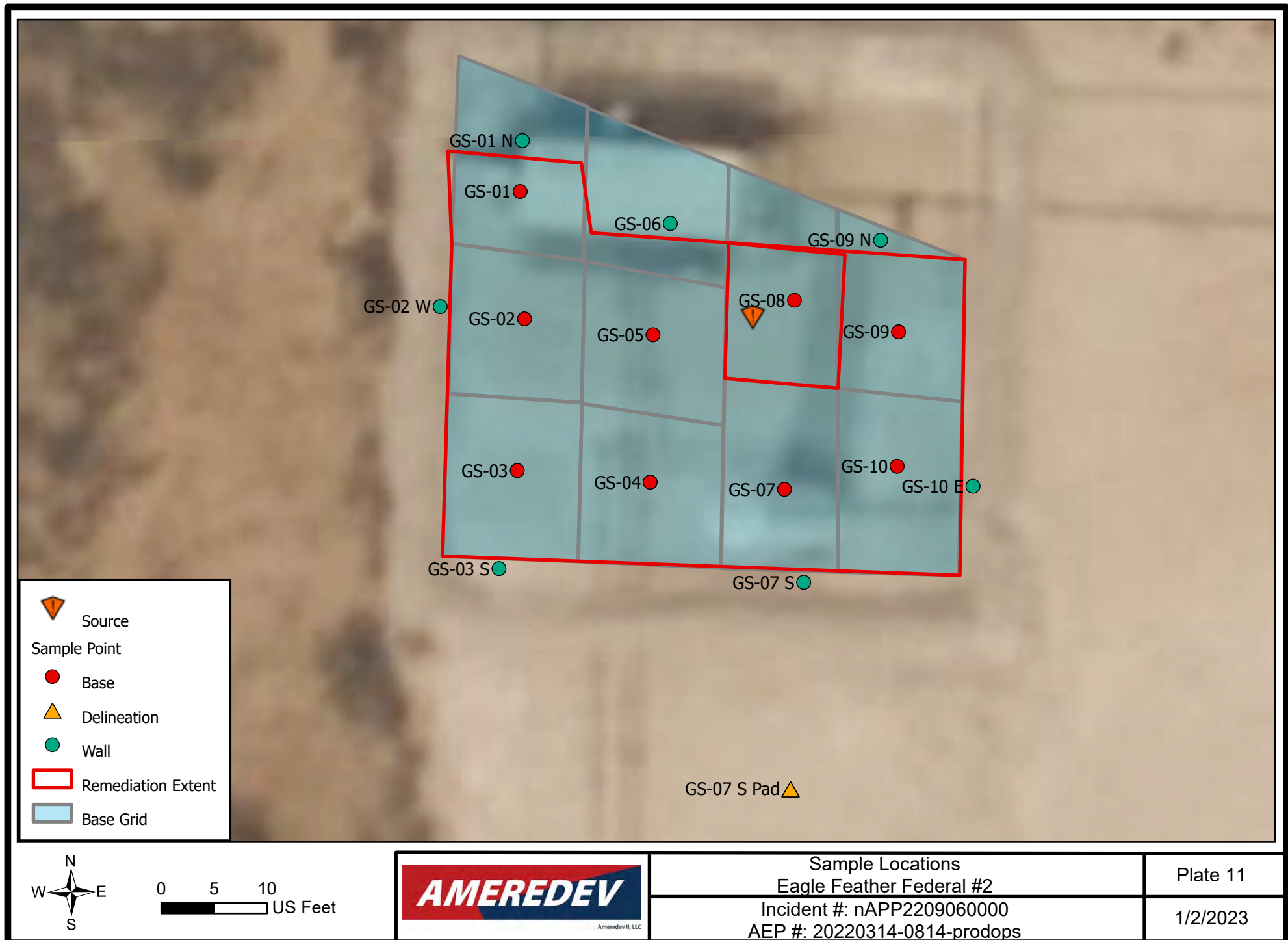
Site Map  
Eagle Feather Federal #2  
Incident #: nAPP2209060000  
AEP #: 20220314-0814 prodops

Plate 1  
07/13/2022









# Tables



Ameredev II, LLC

Sample Point	Latitude	Longitude
Source	32.03451642	-103.2672719
GS-01	32.03455069	-103.2673448
GS-01 N	32.03456391	-103.2673440
GS-02	32.03451758	-103.2673439
GS-02 W	32.03452100	-103.2673695
GS-03	32.03447818	-103.2673465
GS-03 S	32.03445275	-103.2673524
GS-04	32.03447484	-103.2673060
GS-05	32.03451312	-103.2673047
GS-06	32.03454200	-103.2672991
GS-07	32.03447261	-103.2672651
GS-07 S	32.03444842	-103.2672595
GS-07 S Pad	32.03439492	-103.2672641
GS-08	32.03452029	-103.2672628
GS-09	32.03451324	-103.2672298
GS-09 N	32.03453709	-103.2672350
GS-10	32.03447833	-103.2672306
GS-10 E	32.03447294	-103.2672075

January 2, 2023

Table B  
Summary of Analytical

Incident ID: nAPP2209060000  
Eagle Feather Federal #2  
AEP #: 20220314-0814 prodops

Sample ID	Date	Discrete Depth (Feet)	Top Depth (Feet)	Bottom Depth (Feet)	Location	Chloride (mg/kg)	GRO+DRO (mg/kg)	TPH Ext. (mg/kg)	Benzene (mg/kg)	BTEX (mg/kg)	Comments	Lab	Lab #
												(Hall/Cardinal)	
NMOCD Closure Criteria													
0 - 4 feet & "not in-use"						600	--	100	10.00	50.00			
> 4 ft or "in-use"						20,000	1,000	2,500	10.00	50.00			
Source	3/18/2022	0.25			On-site	1,100	46,110	46,472	20.10	1920.00	Removed (GS-08)	Cardinal	H221099
Source	3/18/2022	0.5			On-site	224	23,940	24,204	5.12	514.00	Removed (GS-08)	Cardinal	H221099
Source	3/18/2022	1			On-site	144	13,500	13,603	2.25	468.00	Removed (GS-08)	Cardinal	H221099
TT (2 ft north of source)	3/30/2022	4			On-site	80	420	<420	<0.05	2.53	Removed (GS-08)	Cardinal	H221282
TT (2 ft north of source)	3/30/2022	6			On-site	80	1,693	1,727	<0.05	21.90	Removed (GS-08)	Cardinal	H221282
TT (2 ft north of source)	3/30/2022	8			On-site	2,800	2,124	2,160	0.36	114.00	Removed (GS-08)	Cardinal	H221282
GS-01	12/16/2022	4.5			On-site	112	<908	<927.9	<0.050	12.20	Confirmation	Cardinal	H225979
GS-01 N	12/16/2022		0	2	On-site	96	<29	<39	<0.050	<0.300	Confirmation/Delineation	Cardinal	H225979
GS-01 N	12/16/2022		2	4	On-site	48	<23	<33	<0.050	<0.300	Confirmation/Delineation	Cardinal	H225979
GS-01 N	12/16/2022	4.5			On-site	48	<20.5	<30.5	<0.050	<0.300	Confirmation/Delineation	Cardinal	H225979
GS-02	12/15/2022	4.5			On-site	16	<38	<48	<0.050	<0.300	Confirmation	Cardinal	H225945
GS-02 W	12/15/2022		0	2	On-site	32	<20	<30	<0.050	<0.300	Confirmation/Delineation	Cardinal	H225945
GS-02 W	12/15/2022		2	4	On-site	<16	<20	<30	<0.050	<0.300	Confirmation/Delineation	Cardinal	H225945
GS-02 W	12/15/2022	4.5			On-site	<16	<20	<30	<0.050	<0.300	Confirmation/Delineation	Cardinal	H225945
GS-03	12/15/2022	4.5			On-site	512	<443	<479.3	<0.050	<0.300	Confirmation	Cardinal	H225945
GS-03 S	12/15/2022		0	2	On-site	208	<20	<30	<0.050	<0.300	Confirmation/Delineation	Cardinal	H225945
GS-03 S	12/15/2022		2	4	On-site	208	<20	<30	<0.050	<0.300	Confirmation/Delineation	Cardinal	H225945
GS-03 S	12/15/2022	4.5			On-site	176	<20	<30	<0.050	<0.300	Confirmation/Delineation	Cardinal	H225945
GS-04	12/15/2022	4.5			On-site	288	<471	<534.8	<0.050	<0.300	Confirmation	Cardinal	H225945
GS-05	12/15/2022	4.5			On-site	32	<168.5	<179.2	<0.050	<0.300	Confirmation	Cardinal	H225945
GS-06	12/15/2022		0	2	On-site	32	<20	<30	<0.050	<0.300	Confirmation/Delineation	Cardinal	H225945
GS-06	12/15/2022		2	4	On-site	32	<20	<30	<0.050	<0.300	Confirmation/Delineation	Cardinal	H225945
GS-06	12/15/2022	4.5			On-site	32	<20	<30	<0.050	<0.300	Confirmation/Delineation	Cardinal	H225945
GS-07	12/15/2022	4.5			On-site	272	<228.4	<252.3	<0.050	<0.300	Confirmation	Cardinal	H225945
GS-07 S	12/15/2022		0	2	On-site	624	<20	<30	<0.050	<0.300	Confirmation	Cardinal	H225945
GS-07 S	12/15/2022		2	4	On-site	592	<20	<30	<0.050	<0.300	Confirmation/Delineation	Cardinal	H225945
GS-07 S	12/15/2022	4.5			On-site	592	<20	<30	<0.050	<0.300	Confirmation/Delineation	Cardinal	H225945
GS-07 S Pad	12/27/2022	0			On-site	96	<20	<30	<0.050	<0.300	Horizontal Delineation of GS-07 S	Cardinal	H226079
GS-08	12/16/2022	9			On-site	64	<484	<499.8	<0.100	30.80	Confirmation	Cardinal	H225979
GS-09	12/15/2022	4.5			On-site	1,960	<20	<30	<0.050	<0.300	Confirmation	Cardinal	H225945
GS-09 N	12/15/2022		0	2	On-site	112	<20	<30	<0.050	<0.300	Confirmation/Delineation	Cardinal	H225945
GS-09 N	12/15/2022		2	4	On-site	128	<20	<30	<0.050	<0.300	Confirmation/Delineation	Cardinal	H225945
GS-09 N	12/15/2022	4.5			On-site	112	<20	<30	<0.050	<0.300	Confirmation/Delineation	Cardinal	H225945
GS-10	12/15/2022	4.5			On-site	304	<331.7	<371.6	<0.050	<0.300	Confirmation	Cardinal	H225945
GS-10 E	12/15/2022		0	2	On-site	208	<20	<30	<0.050	<0.300	Confirmation/Delineation	Cardinal	H225945
GS-10 E	12/15/2022		2	4	On-site	224	<20	<30	<0.050	<0.300	Confirmation/Delineation	Cardinal	H225945
GS-10 E	12/15/2022	4.5			On-site	224	<20	<30	<0.050	<0.300	Confirmation/Delineation	Cardinal	H225945
Backfill 01	12/16/2022					48	<20	<30	<0.050	<0.300		Cardinal	H225979



# Appendix A

## Communications



Ameredev II, LLC

**Andrew Parker**

---

**From:** Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>  
**Sent:** Thursday, December 8, 2022 5:13 PM  
**To:** Andrew Parker  
**Cc:** Bratcher, Michael, EMNRD; Nobui, Jennifer, EMNRD  
**Subject:** RE: [EXTERNAL] nAPP2209060000 48 hour sampling notice Eagle Feather

External (ocd.enviro@emnrd.nm.gov)

[Report This Email](#) [FAQ](#) [Protection by INKY](#)

Thank you for the notification. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

**Jocelyn Harimon** • Environmental Specialist  
Environmental Bureau  
EMNRD - Oil Conservation Division  
1220 South St. Francis Drive | Santa Fe, NM 87505  
(505)469-2821 | [Jocelyn.Harimon@emnrd.nm.gov](mailto:Jocelyn.Harimon@emnrd.nm.gov)  
<http://www.emnrd.nm.gov>



---

**From:** Andrew Parker <aparker@ameredev.com>  
**Sent:** Thursday, December 8, 2022 3:39 PM  
**To:** Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>  
**Cc:** Jesus Palomares <jpalomares@ameredev.com>; Laura Parker <lparker@ameredev.com>  
**Subject:** [EXTERNAL] nAPP2209060000 48 hour sampling notice Eagle Feather

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

NMOCD,

Please accept this email as the 48 hour sampling notice for the below referenced incident. Excavation and confirmation sampling is expected to commence on 12/13/2022 and continue through the week.

Incident: nAPP2209060000  
Location: Eagle Feather Federal #2  
AEP #: 20220314-0814-prodops

Thank you,

Andrew Parker  
Environmental Scientist

970-570-9535



---

**From:** [OCDOnline@state.nm.us](mailto:OCDOnline@state.nm.us) <[OCDOnline@state.nm.us](mailto:OCDOnline@state.nm.us)>

**Sent:** Wednesday, July 27, 2022 5:10 PM

**To:** Andrew Parker <[aparker@ameredev.com](mailto:aparker@ameredev.com)>

**Subject:** [EXTERNAL] The Oil Conservation Division (OCD) has rejected the application, Application ID: 127921

To whom it may concern (c/o Andrew Parker for AMEREDEV OPERATING, LLC),

The OCD has rejected the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nAPP2209060000, for the following reasons:

- **Remediation Plan Denied.** The depth to groundwater has not been adequately determined. When nearby wells are used to determine depth to groundwater, the wells should be no further than ½ mile away from the site, and data should be no more than 25 years old, and well construction information should be provided in the submission. The responsible party may choose to remediate to the most stringent levels listed in Table 1 of 19.15.29 NMAC in lieu of drilling to determine the depth to groundwater. Release not sufficiently delineated. Horizontal extent of impact cannot be based on visual observations. Per 19.15.29.12C(1)(a) the remediation plan shall include delineation results. Please resubmit a revised Remediation Plan by September 2, 2022.

The rejected C-141 can be found in the OCD Online: Permitting - Action Status, under the Application ID: 127921.

Please review and make the required correction(s) prior to resubmitting.

If you have any questions why this application was rejected or believe it was rejected in error, please contact me prior to submitting an additional C-141.

Thank you,

Jennifer Nobui

Environmental Specialist-Advanced

505-470-3407

[Jennifer.Nobui@state.nm.us](mailto:Jennifer.Nobui@state.nm.us)

**New Mexico Energy, Minerals and Natural Resources Department**

1220 South St. Francis Drive

Santa Fe, NM 87505

# Appendix B

## Well Logs



Ameredev II, LLC



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

~~July 8, 2022~~ 10/12/2022

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 J-053

To whom it may concern:

Attached please find a well log & record and a plugging record, in duplicate, for a one (1) soil borings, J-053

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

OSE DII OCT 12 2022 PM 1:58



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

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

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD-1		WELL TAG ID NO. n/a		OSE FILE NO(S). J-053		
	WELL OWNER NAME(S) Ameredev Operating, LLC				PHONE (OPTIONAL) 737-300-4700		
	WELL OWNER MAILING ADDRESS 2901 Via Fortuna Suite 600				CITY Austin	STATE TX	ZIP 78746
	WELL LOCATION (FROM GPS)	DEGREES 32	MINUTES 2	SECONDS 2.39	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND	
		LONGITUDE 103	15	58.85	W	* DATUM REQUIRED: WGS 84	
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE SE NW NE Sec.21 T26S R36S NMPM							
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 9/27/2022		DRILLING ENDED 9/28/2022		DEPTH OF COMPLETED WELL (FT) temporary well material	BORE HOLE DEPTH (FT) ±101	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	DATE STATIC MEASURED 10/4/2022
	DRILLING FLUID: <input 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					CHECK HERE IF PITLESS ADAPTER IS INSTALLED <input type="checkbox"/>	
	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)
	0 101		±6.25"	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 01/28/2022)

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



# 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: J-053  
 Well owner: Ameredev Operating, LLC Phone No.: 737-300-4700  
 Mailing address: 2901 Via Fortuna Suite 600  
 City: Austin State: Texas Zip code: 78746

## 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
- 4) Date well plugging began: 10/4/2022 Date well plugging concluded: 10/4/2022
- 5) GPS Well Location: Latitude: 32 deg, 2 min, 2.39 sec  
 Longitude: 103 deg, 15 min, 58.85 sec, WGS 84
- 6) Depth of well confirmed at initiation of plugging as: 101 ft below ground level (bgl),  
 by the following manner: water level probe
- 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: 9/12/2022
- 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 OCT 12 2022 PM 1:58



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	9	9	Sand, Fine grained, poorly graded, Reddish Brown	Y    ✓ N	
	9	65	56	Sand, Fine grained, poorly graded, with caliche, White Tan	Y    ✓ N	
	65	101	36	Sand, Fine grained, poorly graded, Tan	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	
					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 material removed and soil boring backfilled using drill cuttings from total depth to ten feet below ground surface(bgs), then hydrated bentonite chips ten feet bgs to surface. DTW-21	
	<div style="text-align: right;">OSE DJT OCT 12 2022 PM 1:53</div> PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: Shane Eldridge, Cameron Pruitt	

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:	
	<i>Jackie D. Atkins</i> SIGNATURE OF DRILLER / PRINT SIGNEE NAME	Jackie D. Atkins DATE

FOR OSE INTERNAL USE

WR-20 WELL RECORD &amp; LOG (Version 01/28/2022)

FILE NO.

POD NO.

TRN NO.

LOCATION

WELL TAG ID NO.

PAGE 2 OF 2



- 10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

For each interval plugged, describe within the following columns:

<u>Depth</u> (ft bgl)	<u>Plugging Material Used</u> (include any additives used)	<u>Volume of Material Placed</u> (gallons)	<u>Theoretical Volume of Borehole/ Casing</u> (gallons)	<u>Placement Method</u> (tremie pipe, other)	<u>Comments</u> ("casing perforated first", "open annular space also plugged", etc.)
0-10'	Hydrated Bentonite	Approx. 15 gallons	15 gallons	Augers	
10'-101'	Drill Cuttings	Approx. 145 gallons	145 gallons	Boring	

MULTIPLY	BY	AND OBTAIN
cubic feet x 7.4805	=	gallons
cubic yards x 201.97	=	gallons

OSE DT OCT 12 2022 PM 1:53

### III. SIGNATURE:

I, Jackie D. Atkins, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.

*Jack Atkins*

Signature of Well Driller

10/5/2022

Date






# 3-J-53\_WellLog-packet-forsign-DTW-21

Final Audit Report

2022-10-05

Created:	2022-10-05
By:	Lucas Middleton (lucas@atkinseng.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAqaHsrluPl62ByWTDTPHALLQW_RpM0B96

## "3-J-53\_WellLog-packet-forsign-DTW-21" History

-  Document created by Lucas Middleton (lucas@atkinseng.com)  
2022-10-05 - 5:52:39 PM GMT- IP address: 64.17.71.25
-  Document emailed to Jack Atkins (jack@atkinseng.com) for signature  
2022-10-05 - 5:54:50 PM GMT
-  Email viewed by Jack Atkins (jack@atkinseng.com)  
2022-10-05 - 6:34:25 PM GMT- IP address: 64.90.153.232
-  Document e-signed by Jack Atkins (jack@atkinseng.com)  
Signature Date: 2022-10-05 - 6:35:05 PM GMT - Time Source: server- IP address: 64.90.153.232
-  Agreement completed.  
2022-10-05 - 6:35:05 PM GMT

DSE DT OCT 12 2022 PM 1:58



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# Appendix C

## Certificates of Analysis



Ameredeve II, LLC



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March 24, 2022

ANDREW PARKER

AMEREDEV

2901 VIA FORTUNA , SUITE 600

AUSTIN, TX 78746

RE: EAGLE FEATHER FEDERAL #2

Enclosed are the results of analyses for samples received by the laboratory on 03/18/22 16:50.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. 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".

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

AMEREDEV  
 ANDREW PARKER  
 2901 VIA FORTUNA , SUITE 600  
 AUSTIN TX, 78746  
 Fax To:

Received:	03/18/2022	Sampling Date:	03/18/2022
Reported:	03/24/2022	Sampling Type:	Soil
Project Name:	EAGLE FEATHER FEDERAL #2	Sampling Condition:	** (See Notes)
Project Number:	20220314-0814-PRODOPS	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

**Sample ID: SOURCE 0.25' (H221099-01)**

BTX 8021B		mg/kg		Analyzed By: MS\					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>20.1</b>	5.00	03/23/2022	ND	1.88	93.8	2.00	1.85	
<b>Toluene*</b>	<b>600</b>	5.00	03/23/2022	ND	1.97	98.5	2.00	0.489	
<b>Ethylbenzene*</b>	<b>120</b>	5.00	03/23/2022	ND	1.99	99.6	2.00	1.90	
<b>Total Xylenes*</b>	<b>1180</b>	15.0	03/23/2022	ND	6.17	103	6.00	1.61	
<b>Total BTX</b>	<b>1920</b>	30.0	03/23/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 119 % 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
<b>Chloride</b>	<b>1100</b>	16.0	03/21/2022	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10*</b>	<b>38600</b>	100	03/23/2022	ND	197	98.5	200	7.82		
<b>DRO &gt;C10-C28*</b>	<b>7510</b>	100	03/23/2022	ND	197	98.3	200	8.07		
<b>EXT DRO &gt;C28-C36</b>	<b>362</b>	100	03/23/2022	ND						

Surrogate: 1-Chlorooctane 741 % 66.9-136

Surrogate: 1-Chlorooctadecane 158 % 59.5-142

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:**

AMEREDEV  
 ANDREW PARKER  
 2901 VIA FORTUNA , SUITE 600  
 AUSTIN TX, 78746  
 Fax To:

Received:	03/18/2022	Sampling Date:	03/18/2022
Reported:	03/24/2022	Sampling Type:	Soil
Project Name:	EAGLE FEATHER FEDERAL #2	Sampling Condition:	** (See Notes)
Project Number:	20220314-0814-PRODOPS	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

**Sample ID: SOURCE 0.5' (H221099-02)**

BTEx 8021B		mg/kg		Analyzed By: MS\				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>5.12</b>	1.00	03/23/2022	ND	1.88	93.8	2.00	1.85	
<b>Toluene*</b>	<b>136</b>	1.00	03/23/2022	ND	1.97	98.5	2.00	0.489	
<b>Ethylbenzene*</b>	<b>27.7</b>	1.00	03/23/2022	ND	1.99	99.6	2.00	1.90	
<b>Total Xylenes*</b>	<b>345</b>	3.00	03/23/2022	ND	6.17	103	6.00	1.61	
<b>Total BTEX</b>	<b>514</b>	6.00	03/23/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 182 % 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
<b>Chloride</b>	<b>224</b>	16.0	03/21/2022	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>18500</b>	100	03/23/2022	ND	197	98.5	200	7.82	
<b>DRO &gt;C10-C28*</b>	<b>5440</b>	100	03/23/2022	ND	197	98.3	200	8.07	
<b>EXT DRO &gt;C28-C36</b>	<b>264</b>	100	03/23/2022	ND					

Surrogate: 1-Chlorooctane 492 % 66.9-136

Surrogate: 1-Chlorooctadecane 158 % 59.5-142

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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:**

AMEREDEV  
 ANDREW PARKER  
 2901 VIA FORTUNA , SUITE 600  
 AUSTIN TX, 78746  
 Fax To:

Received:	03/18/2022	Sampling Date:	03/18/2022
Reported:	03/24/2022	Sampling Type:	Soil
Project Name:	EAGLE FEATHER FEDERAL #2	Sampling Condition:	** (See Notes)
Project Number:	20220314-0814-PRODOPS	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

**Sample ID: SOURCE 1' (H221099-03)**

BTEx 8021B		mg/kg	Analyzed By: MS\					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>2.25</b>	1.00	03/23/2022	ND	1.88	93.8	2.00	1.85	
<b>Toluene*</b>	<b>126</b>	1.00	03/23/2022	ND	1.97	98.5	2.00	0.489	
<b>Ethylbenzene*</b>	<b>31.7</b>	1.00	03/23/2022	ND	1.99	99.6	2.00	1.90	
<b>Total Xylenes*</b>	<b>308</b>	3.00	03/23/2022	ND	6.17	103	6.00	1.61	
<b>Total BTEX</b>	<b>468</b>	6.00	03/23/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 149 % 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
<b>Chloride</b>	<b>144</b>	16.0	03/21/2022	ND	432	108	400	0.00	

TPH 8015M		mg/kg	Analyzed By: MS					S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>11100</b>	100	03/23/2022	ND	197	98.5	200	7.82	
<b>DRO &gt;C10-C28*</b>	<b>2400</b>	100	03/23/2022	ND	197	98.3	200	8.07	
<b>EXT DRO &gt;C28-C36</b>	<b>103</b>	100	03/23/2022	ND					

Surrogate: 1-Chlorooctane 333 % 66.9-136

Surrogate: 1-Chlorooctadecane 146 % 59.5-142

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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### Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
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





Page 6 of 6



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April 04, 2022

ANDREW PARKER

AMEREDEV

2901 VIA FORTUNA , SUITE 600

AUSTIN, TX 78746

RE: EAGLE FEATHER FEDERAL #2

Enclosed are the results of analyses for samples received by the laboratory on 03/31/22 8:20.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. 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:**

AMEREDEV  
 ANDREW PARKER  
 2901 VIA FORTUNA , SUITE 600  
 AUSTIN TX, 78746  
 Fax To:

Received:	03/31/2022	Sampling Date:	03/30/2022
Reported:	04/04/2022	Sampling Type:	Soil
Project Name:	EAGLE FEATHER FEDERAL #2	Sampling Condition:	Cool & Intact
Project Number:	20220314-0814-PRODOPS	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

**Sample ID: TT 4' (H221282-01)**

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	04/02/2022	ND	1.94	97.2	2.00	5.90	
<b>Toluene*</b>	<b>0.187</b>	0.050	04/02/2022	ND	1.97	98.4	2.00	4.93	QR-03
<b>Ethylbenzene*</b>	<b>0.185</b>	0.050	04/02/2022	ND	1.87	93.6	2.00	5.37	QR-03
<b>Total Xylenes*</b>	<b>2.16</b>	0.150	04/02/2022	ND	5.82	97.1	6.00	5.20	QR-03
<b>Total BTX</b>	<b>2.53</b>	0.300	04/02/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 138 % 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
<b>Chloride</b>	<b>80.0</b>	16.0	04/04/2022	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
<b>GRO C6-C10*</b>	<b>253</b>	10.0	04/01/2022	ND	184	92.2	200	8.22	QM-07, QR-03
<b>DRO &gt;C10-C28*</b>	<b>167</b>	10.0	04/01/2022	ND	196	98.2	200	8.28	
EXT DRO >C28-C36	<10.0	10.0	04/01/2022	ND					

Surrogate: 1-Chlorooctane 130 % 66.9-136

Surrogate: 1-Chlorooctadecane 133 % 59.5-142

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

AMEREDEV  
 ANDREW PARKER  
 2901 VIA FORTUNA , SUITE 600  
 AUSTIN TX, 78746  
 Fax To:

Received:	03/31/2022	Sampling Date:	03/30/2022
Reported:	04/04/2022	Sampling Type:	Soil
Project Name:	EAGLE FEATHER FEDERAL #2	Sampling Condition:	Cool & Intact
Project Number:	20220314-0814-PRODOPS	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

**Sample ID: TT 6' (H221282-02)**

BTX 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/02/2022	ND	1.94	97.2	2.00	5.90	
<b>Toluene*</b>	<b>1.83</b>	0.050	04/02/2022	ND	1.97	98.4	2.00	4.93	
<b>Ethylbenzene*</b>	<b>2.68</b>	0.050	04/02/2022	ND	1.87	93.6	2.00	5.37	
<b>Total Xylenes*</b>	<b>17.4</b>	0.150	04/02/2022	ND	5.82	97.1	6.00	5.20	
<b>Total BTX</b>	<b>21.9</b>	0.300	04/02/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 282 % 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
<b>Chloride</b>	<b>80.0</b>	16.0	04/04/2022	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>1160</b>	10.0	04/01/2022	ND	184	92.2	200	8.22	
<b>DRO &gt;C10-C28*</b>	<b>533</b>	10.0	04/01/2022	ND	196	98.2	200	8.28	
<b>EXT DRO &gt;C28-C36</b>	<b>33.5</b>	10.0	04/01/2022	ND					

Surrogate: 1-Chlorooctane 166 % 66.9-136

Surrogate: 1-Chlorooctadecane 145 % 59.5-142

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

AMEREDEV  
 ANDREW PARKER  
 2901 VIA FORTUNA , SUITE 600  
 AUSTIN TX, 78746  
 Fax To:

Received:	03/31/2022	Sampling Date:	03/30/2022
Reported:	04/04/2022	Sampling Type:	Soil
Project Name:	EAGLE FEATHER FEDERAL #2	Sampling Condition:	Cool & Intact
Project Number:	20220314-0814-PRODOPS	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

**Sample ID: TT 8' (H221282-03)**

BTX 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>0.362</b>	0.200	04/02/2022	ND	1.94	97.2	2.00	5.90	
<b>Toluene*</b>	<b>18.6</b>	0.200	04/02/2022	ND	1.97	98.4	2.00	4.93	
<b>Ethylbenzene*</b>	<b>7.18</b>	0.200	04/02/2022	ND	1.87	93.6	2.00	5.37	
<b>Total Xylenes*</b>	<b>88.1</b>	0.600	04/02/2022	ND	5.82	97.1	6.00	5.20	
<b>Total BTX</b>	<b>114</b>	1.20	04/02/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 173 % 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
<b>Chloride</b>	<b>2800</b>	16.0	04/04/2022	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>1590</b>	10.0	04/01/2022	ND	184	92.2	200	8.22	
<b>DRO &gt;C10-C28*</b>	<b>534</b>	10.0	04/01/2022	ND	196	98.2	200	8.28	
<b>EXT DRO &gt;C28-C36</b>	<b>35.9</b>	10.0	04/01/2022	ND					

Surrogate: 1-Chlorooctane 151 % 66.9-136

Surrogate: 1-Chlorooctadecane 130 % 59.5-142

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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

### Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

\*=Accredited Analyte

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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: Amerede

Project Manager: Andrew Parker

Address:

City: State: Zip:

Phone #: Fax #:

Project #: Project Owner:

Project Name: 20220314-0814-pradops

Project Location: Feyle Feather

Sampler Name: Shelb SAGN

FOR LAB USE ONLY

Lab I.D.

Sample I.D.

<u>H21282</u>	1	TT	4PT	6	1	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME
	2	TT	6FT	6	1												3/30/22	1:30pm
	3	TT	8FT	6	1												3/30/22	1pm

MATRIX

PRESERV.

SAMPLING

ANALYSIS REQUEST

BILL TO  
P.O. #: 20220314-0814-pradops

Company:

Attn:

Address:

City:

State: Zip:

Phone #:

Fax #:

PLEASE NOTE: Liability and Damages: Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the services. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services rendered by Cardinal, regardless of whether such claim is based upon any of the above stated remedies or otherwise.

Relinquished By:

Date: 3/31/22 Received By:

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

All Results are emailed. Please provide Email address:

Relinquished By:

Date: 3/31/22 Received By:

REMARKS:

Delivered By: (Circle One)

Observed Temp. °C 29

Sample Condition

CHECKED BY: (Initials)

Turnaround Time:

Standard

Bacteria (only) Sample Condition

Sampler - UPS - Bus - Other:

Corrected Temp. °C 8.4

Cool Intact

Thermometer ID # 97

Correction Factor +0.45C

Standard

Observed Temp. °C

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



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

---

December 21, 2022

ANDREW PARKER

AMEREDEV

2901 VIA FORTUNA , SUITE 600

AUSTIN, TX 78746

RE: EAGLE FEATHER FEDERAL #2

Enclosed are the results of analyses for samples received by the laboratory on 12/15/22 16:20.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/ga/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/ga/lab_accred_certif.html).

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

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

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

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

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

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

AMEREDEV  
2901 VIA FORTUNA , SUITE 600  
AUSTIN TX, 78746

Project: EAGLE FEATHER FEDERAL #2  
Project Number: 20220314-0814-PRODOPS  
Project Manager: ANDREW PARKER  
Fax To:

Reported:  
21-Dec-22 17:58

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GS - 02 4.5FT	H225945-01	Soil	15-Dec-22 10:27	15-Dec-22 16:20
GS - 02W 0-2FT	H225945-02	Soil	15-Dec-22 10:36	15-Dec-22 16:20
GS - 02W 2-4FT	H225945-03	Soil	15-Dec-22 10:42	15-Dec-22 16:20
GS - 02W 4.5FT	H225945-04	Soil	15-Dec-22 10:51	15-Dec-22 16:20
GS - 03 4.5FT	H225945-05	Soil	15-Dec-22 11:02	15-Dec-22 16:20
GS - 03S 0-2FT	H225945-06	Soil	15-Dec-22 11:07	15-Dec-22 16:20
GS - 03S 2-4FT	H225945-07	Soil	15-Dec-22 11:11	15-Dec-22 16:20
GS - 03S 4.5FT	H225945-08	Soil	15-Dec-22 11:15	15-Dec-22 16:20
GS - 04 4.5FT	H225945-09	Soil	15-Dec-22 11:21	15-Dec-22 16:20
GS - 05 4.5FT	H225945-10	Soil	15-Dec-22 11:33	15-Dec-22 16:20
GS - 06 0-2FT	H225945-11	Soil	15-Dec-22 11:42	15-Dec-22 16:20
GS - 06 2-4FT	H225945-12	Soil	15-Dec-22 11:51	15-Dec-22 16:20
GS - 06 4.5FT	H225945-13	Soil	15-Dec-22 11:57	15-Dec-22 16:20
GS - 07 4.5FT	H225945-14	Soil	15-Dec-22 12:08	15-Dec-22 16:20
GS - 07S 0-2FT	H225945-15	Soil	15-Dec-22 12:14	15-Dec-22 16:20
GS - 07S 2-4FT	H225945-16	Soil	15-Dec-22 12:20	15-Dec-22 16:20
GS - 07S 4.5FT	H225945-17	Soil	15-Dec-22 12:24	15-Dec-22 16:20
GS - 09 4.5FT	H225945-18	Soil	15-Dec-22 12:27	15-Dec-22 16:20
GS - 09N 0-2FT	H225945-19	Soil	15-Dec-22 12:30	15-Dec-22 16:20
GS - 09N 2-4FT	H225945-20	Soil	15-Dec-22 12:32	15-Dec-22 16:20
GS - 09N 4.5ft	H225945-21	Soil	15-Dec-22 12:37	15-Dec-22 16:20
GS - 10 4.5ft	H225945-22	Soil	15-Dec-22 12:40	15-Dec-22 16:20
GS - 10E 0-2ft	H225945-23	Soil	15-Dec-22 12:44	15-Dec-22 16:20
GS - 10E 2-4ft	H225945-24	Soil	15-Dec-22 12:47	15-Dec-22 16:20
GS - 10E 4.5ft	H225945-25	Soil	15-Dec-22 12:52	15-Dec-22 16:20

12/21/22 - Login had a typo on the sample ID for -12. This is the revised report with the corrected sample ID and replaces the one sent on earlier 12/21/22.

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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:**

AMEREDEV  
2901 VIA FORTUNA , SUITE 600  
AUSTIN TX, 78746

Project: EAGLE FEATHER FEDERAL #2  
Project Number: 20220314-0814-PRODOPS  
Project Manager: ANDREW PARKER  
Fax To:

Reported:  
21-Dec-22 17:58

**GS - 02 4.5FT****H225945-01 (Soil)**

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

Chloride	16.0		16.0	mg/kg	4	2121931	GM	19-Dec-22	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	2121627	JH/	20-Dec-22	8021B	
Toluene*	<0.050		0.050	mg/kg	50	2121627	JH/	20-Dec-22	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	2121627	JH/	20-Dec-22	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	2121627	JH/	20-Dec-22	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	2121627	JH/	20-Dec-22	8021B	

Surrogate: 4-Bromofluorobenzene (PID) 110 % 69.9-140 2121627 JH/ 20-Dec-22 8021B

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	2121908	MS	20-Dec-22	8015B	
DRO >C10-C28*	28.0		10.0	mg/kg	1	2121908	MS	20-Dec-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2121908	MS	20-Dec-22	8015B	

Surrogate: 1-Chlorooctane 90.0 % 45.3-161 2121908 MS 20-Dec-22 8015B

Surrogate: 1-Chlorooctadecane 92.0 % 46.3-178 2121908 MS 20-Dec-22 8015B

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

AMEREDEV  
2901 VIA FORTUNA , SUITE 600  
AUSTIN TX, 78746

Project: EAGLE FEATHER FEDERAL #2  
Project Number: 20220314-0814-PRODOPS  
Project Manager: ANDREW PARKER  
Fax To:

Reported:  
21-Dec-22 17:58

**GS - 02W 0-2FT****H225945-02 (Soil)**

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

Chloride	32.0		16.0	mg/kg	4	2121931	GM	19-Dec-22	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	2121627	JH/	20-Dec-22	8021B	
Toluene*	<0.050		0.050	mg/kg	50	2121627	JH/	20-Dec-22	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	2121627	JH/	20-Dec-22	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	2121627	JH/	20-Dec-22	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	2121627	JH/	20-Dec-22	8021B	

Surrogate: 4-Bromofluorobenzene (PID) 112 % 69.9-140 2121627 JH/ 20-Dec-22 8021B

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	2121908	MS	20-Dec-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2121908	MS	20-Dec-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2121908	MS	20-Dec-22	8015B	

Surrogate: 1-Chlorooctane 93.1 % 45.3-161 2121908 MS 20-Dec-22 8015B

Surrogate: 1-Chlorooctadecane 94.5 % 46.3-178 2121908 MS 20-Dec-22 8015B

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

AMEREDEV  
2901 VIA FORTUNA , SUITE 600  
AUSTIN TX, 78746

Project: EAGLE FEATHER FEDERAL #2  
Project Number: 20220314-0814-PRODOPS  
Project Manager: ANDREW PARKER  
Fax To:

Reported:  
21-Dec-22 17:58

**GS - 02W 2-4FT**  
**H225945-03 (Soil)**

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

Chloride	<16.0		16.0	mg/kg	4	2121931	GM	19-Dec-22	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Toluene*	<0.050		0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	2121911	JH/	20-Dec-22	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			110 %	69.9-140		2121911	JH/	20-Dec-22	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	2121908	MS	20-Dec-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2121908	MS	20-Dec-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2121908	MS	20-Dec-22	8015B	

Surrogate: 1-Chlorooctane			97.7 %	45.3-161		2121908	MS	20-Dec-22	8015B	
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Surrogate: 1-Chlorooctadecane			98.6 %	46.3-178		2121908	MS	20-Dec-22	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

AMEREDEV  
2901 VIA FORTUNA , SUITE 600  
AUSTIN TX, 78746

Project: EAGLE FEATHER FEDERAL #2  
Project Number: 20220314-0814-PRODOPS  
Project Manager: ANDREW PARKER  
Fax To:

Reported:  
21-Dec-22 17:58

**GS - 02W 4.5FT****H225945-04 (Soil)**

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

Chloride	<16.0		16.0	mg/kg	4	2121931	GM	19-Dec-22	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Toluene*	<0.050		0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	2121911	JH/	20-Dec-22	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			110 %	69.9-140		2121911	JH/	20-Dec-22	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	2121908	MS	20-Dec-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2121908	MS	20-Dec-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2121908	MS	20-Dec-22	8015B	

Surrogate: 1-Chlorooctane			97.1 %	45.3-161		2121908	MS	20-Dec-22	8015B	
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Surrogate: 1-Chlorooctadecane			99.1 %	46.3-178		2121908	MS	20-Dec-22	8015B	
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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

AMEREDEV  
2901 VIA FORTUNA , SUITE 600  
AUSTIN TX, 78746

Project: EAGLE FEATHER FEDERAL #2  
Project Number: 20220314-0814-PRODOPS  
Project Manager: ANDREW PARKER  
Fax To:

Reported:  
21-Dec-22 17:58

**GS - 03 4.5FT****H225945-05 (Soil)**

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

Chloride	512		16.0	mg/kg	4	2121931	GM	19-Dec-22	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Toluene*	<0.050		0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	GC-NC
Total Xylenes*	<0.150		0.150	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	2121911	JH/	20-Dec-22	8021B	

Surrogate: 4-Bromofluorobenzene (PID) 133 % 69.9-140 2121911 JH/ 20-Dec-22 8021B

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	2121908	MS	20-Dec-22	8015B	
DRO >C10-C28*	433		10.0	mg/kg	1	2121908	MS	20-Dec-22	8015B	
EXT DRO >C28-C36	36.3		10.0	mg/kg	1	2121908	MS	20-Dec-22	8015B	

Surrogate: 1-Chlorooctane 95.8 % 45.3-161 2121908 MS 20-Dec-22 8015B

Surrogate: 1-Chlorooctadecane 105 % 46.3-178 2121908 MS 20-Dec-22 8015B

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

AMEREDEV  
2901 VIA FORTUNA , SUITE 600  
AUSTIN TX, 78746

Project: EAGLE FEATHER FEDERAL #2  
Project Number: 20220314-0814-PRODOPS  
Project Manager: ANDREW PARKER  
Fax To:

Reported:  
21-Dec-22 17:58

**GS - 03S 0-2FT**  
**H225945-06 (Soil)**

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

<b>Chloride</b>	<b>208</b>		16.0	mg/kg	4	2121931	GM	19-Dec-22	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050	0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Toluene*	<0.050	0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Ethylbenzene*	<0.050	0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Total Xylenes*	<0.150	0.150	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Total BTEX	<0.300	0.300	mg/kg	50	2121911	JH/	20-Dec-22	8021B	

Surrogate: 4-Bromofluorobenzene (PID)	108 %	69.9-140	2121911	JH/	20-Dec-22	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0	10.0	mg/kg	1	2121908	MS	20-Dec-22	8015B	
DRO >C10-C28*	<10.0	10.0	mg/kg	1	2121908	MS	20-Dec-22	8015B	
EXT DRO >C28-C36	<10.0	10.0	mg/kg	1	2121908	MS	20-Dec-22	8015B	

Surrogate: 1-Chlorooctane	92.3 %	45.3-161	2121908	MS	20-Dec-22	8015B	
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Surrogate: 1-Chlorooctadecane	94.4 %	46.3-178	2121908	MS	20-Dec-22	8015B	
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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

AMEREDEV  
2901 VIA FORTUNA , SUITE 600  
AUSTIN TX, 78746

Project: EAGLE FEATHER FEDERAL #2  
Project Number: 20220314-0814-PRODOPS  
Project Manager: ANDREW PARKER  
Fax To:

Reported:  
21-Dec-22 17:58

**GS - 03S 2-4FT**  
**H225945-07 (Soil)**

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

<b>Chloride</b>	<b>208</b>		16.0	mg/kg	4	2121931	GM	19-Dec-22	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050	0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Toluene*	<0.050	0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Ethylbenzene*	<0.050	0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Total Xylenes*	<0.150	0.150	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Total BTEX	<0.300	0.300	mg/kg	50	2121911	JH/	20-Dec-22	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>		111 %		69.9-140	2121911	JH/	20-Dec-22	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0	10.0	mg/kg	1	2121908	MS	20-Dec-22	8015B	
DRO >C10-C28*	<10.0	10.0	mg/kg	1	2121908	MS	20-Dec-22	8015B	
EXT DRO >C28-C36	<10.0	10.0	mg/kg	1	2121908	MS	20-Dec-22	8015B	

<i>Surrogate: 1-Chlorooctane</i>		94.4 %		45.3-161	2121908	MS	20-Dec-22	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>		94.7 %		46.3-178	2121908	MS	20-Dec-22	8015B	
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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

AMEREDEV  
2901 VIA FORTUNA , SUITE 600  
AUSTIN TX, 78746

Project: EAGLE FEATHER FEDERAL #2  
Project Number: 20220314-0814-PRODOPS  
Project Manager: ANDREW PARKER  
Fax To:

Reported:  
21-Dec-22 17:58

**GS - 03S 4.5FT**  
**H225945-08 (Soil)**

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

<b>Chloride</b>	<b>176</b>		16.0	mg/kg	4	2121932	GM	19-Dec-22	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050	0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Toluene*	<0.050	0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Ethylbenzene*	<0.050	0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Total Xylenes*	<0.150	0.150	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Total BTEX	<0.300	0.300	mg/kg	50	2121911	JH/	20-Dec-22	8021B	

Surrogate: 4-Bromofluorobenzene (PID)	111 %	69.9-140	2121911	JH/	20-Dec-22	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0	10.0	mg/kg	1	2121908	MS	20-Dec-22	8015B	
DRO >C10-C28*	<10.0	10.0	mg/kg	1	2121908	MS	20-Dec-22	8015B	
EXT DRO >C28-C36	<10.0	10.0	mg/kg	1	2121908	MS	20-Dec-22	8015B	

Surrogate: 1-Chlorooctane	96.0 %	45.3-161	2121908	MS	20-Dec-22	8015B	
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Surrogate: 1-Chlorooctadecane	97.4 %	46.3-178	2121908	MS	20-Dec-22	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

AMEREDEV  
2901 VIA FORTUNA , SUITE 600  
AUSTIN TX, 78746

Project: EAGLE FEATHER FEDERAL #2  
Project Number: 20220314-0814-PRODOPS  
Project Manager: ANDREW PARKER  
Fax To:

Reported:  
21-Dec-22 17:58

**GS - 04 4.5FT****H225945-09 (Soil)**

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

Chloride	288		16.0	mg/kg	4	2121932	GM	19-Dec-22	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Toluene*	<0.050		0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	2121911	JH/	20-Dec-22	8021B	

Surrogate: 4-Bromofluorobenzene (PID) 110 % 69.9-140 2121911 JH/ 20-Dec-22 8021B

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	2121908	MS	20-Dec-22	8015B	
DRO >C10-C28*	461		10.0	mg/kg	1	2121908	MS	20-Dec-22	8015B	
EXT DRO >C28-C36	63.8		10.0	mg/kg	1	2121908	MS	20-Dec-22	8015B	

Surrogate: 1-Chlorooctane 93.1 % 45.3-161 2121908 MS 20-Dec-22 8015B

Surrogate: 1-Chlorooctadecane 108 % 46.3-178 2121908 MS 20-Dec-22 8015B

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

AMEREDEV  
2901 VIA FORTUNA , SUITE 600  
AUSTIN TX, 78746

Project: EAGLE FEATHER FEDERAL #2  
Project Number: 20220314-0814-PRODOPS  
Project Manager: ANDREW PARKER  
Fax To:

Reported:  
21-Dec-22 17:58

**GS - 05 4.5FT****H225945-10 (Soil)**

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

Chloride	32.0		16.0	mg/kg	4	2121932	GM	19-Dec-22	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Toluene*	<0.050		0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	2121911	JH/	20-Dec-22	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			133 %	69.9-140		2121911	JH/	20-Dec-22	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	15.5		10.0	mg/kg	1	2121908	MS	20-Dec-22	8015B	
DRO >C10-C28*	153		10.0	mg/kg	1	2121908	MS	20-Dec-22	8015B	
EXT DRO >C28-C36	10.7		10.0	mg/kg	1	2121908	MS	20-Dec-22	8015B	

Surrogate: 1-Chlorooctane			94.1 %	45.3-161		2121908	MS	20-Dec-22	8015B	
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Surrogate: 1-Chlorooctadecane			96.1 %	46.3-178		2121908	MS	20-Dec-22	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

AMEREDEV  
2901 VIA FORTUNA , SUITE 600  
AUSTIN TX, 78746

Project: EAGLE FEATHER FEDERAL #2  
Project Number: 20220314-0814-PRODOPS  
Project Manager: ANDREW PARKER  
Fax To:

Reported:  
21-Dec-22 17:58

**GS - 06 0-2FT****H225945-11 (Soil)**

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

Chloride	32.0		16.0	mg/kg	4	2121932	GM	19-Dec-22	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Toluene*	<0.050		0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	2121911	JH/	20-Dec-22	8021B	

Surrogate: 4-Bromofluorobenzene (PID)		112 %		69.9-140		2121911	JH/	20-Dec-22	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	2121908	MS	20-Dec-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2121908	MS	20-Dec-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2121908	MS	20-Dec-22	8015B	

Surrogate: 1-Chlorooctane		93.3 %		45.3-161		2121908	MS	20-Dec-22	8015B	
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Surrogate: 1-Chlorooctadecane		94.4 %		46.3-178		2121908	MS	20-Dec-22	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

AMEREDEV  
2901 VIA FORTUNA , SUITE 600  
AUSTIN TX, 78746

Project: EAGLE FEATHER FEDERAL #2  
Project Number: 20220314-0814-PRODOPS  
Project Manager: ANDREW PARKER  
Fax To:

Reported:  
21-Dec-22 17:58

**GS - 06 2-4FT****H225945-12 (Soil)**

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

Chloride	32.0		16.0	mg/kg	4	2121932	GM	19-Dec-22	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Toluene*	<0.050		0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	2121911	JH/	20-Dec-22	8021B	

Surrogate: 4-Bromofluorobenzene (PID)		109 %		69.9-140		2121911	JH/	20-Dec-22	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	2121908	MS	20-Dec-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2121908	MS	20-Dec-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2121908	MS	20-Dec-22	8015B	

Surrogate: 1-Chlorooctane		93.4 %		45.3-161		2121908	MS	20-Dec-22	8015B	
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Surrogate: 1-Chlorooctadecane		93.4 %		46.3-178		2121908	MS	20-Dec-22	8015B	
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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

AMEREDEV  
2901 VIA FORTUNA , SUITE 600  
AUSTIN TX, 78746

Project: EAGLE FEATHER FEDERAL #2  
Project Number: 20220314-0814-PRODOPS  
Project Manager: ANDREW PARKER  
Fax To:

Reported:  
21-Dec-22 17:58

**GS - 06 4.5FT****H225945-13 (Soil)**

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

Chloride	32.0		16.0	mg/kg	4	2121932	GM	19-Dec-22	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Toluene*	<0.050		0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	2121911	JH/	20-Dec-22	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			110 %	69.9-140		2121911	JH/	20-Dec-22	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	2121908	MS	20-Dec-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2121908	MS	20-Dec-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2121908	MS	20-Dec-22	8015B	

Surrogate: 1-Chlorooctane			94.6 %	45.3-161		2121908	MS	20-Dec-22	8015B	
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Surrogate: 1-Chlorooctadecane			95.9 %	46.3-178		2121908	MS	20-Dec-22	8015B	
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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

AMEREDEV  
2901 VIA FORTUNA , SUITE 600  
AUSTIN TX, 78746

Project: EAGLE FEATHER FEDERAL #2  
Project Number: 20220314-0814-PRODOPS  
Project Manager: ANDREW PARKER  
Fax To:

Reported:  
21-Dec-22 17:58

**GS - 07 4.5FT****H225945-14 (Soil)**

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

Chloride	272		16.0	mg/kg	4	2121932	GM	19-Dec-22	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Toluene*	<0.050		0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	2121911	JH/	20-Dec-22	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			133 %	69.9-140		2121911	JH/	20-Dec-22	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	18.4		10.0	mg/kg	1	2121908	MS	20-Dec-22	8015B	
DRO >C10-C28*	210		10.0	mg/kg	1	2121908	MS	20-Dec-22	8015B	
EXT DRO >C28-C36	23.9		10.0	mg/kg	1	2121908	MS	20-Dec-22	8015B	

Surrogate: 1-Chlorooctane			97.6 %	45.3-161		2121908	MS	20-Dec-22	8015B	
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Surrogate: 1-Chlorooctadecane			102 %	46.3-178		2121908	MS	20-Dec-22	8015B	
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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:**

AMEREDEV  
2901 VIA FORTUNA , SUITE 600  
AUSTIN TX, 78746

Project: EAGLE FEATHER FEDERAL #2  
Project Number: 20220314-0814-PRODOPS  
Project Manager: ANDREW PARKER  
Fax To:

Reported:  
21-Dec-22 17:58

**GS - 07S 0-2FT**  
**H225945-15 (Soil)**

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

<b>Chloride</b>	<b>624</b>		16.0	mg/kg	4	2121932	GM	19-Dec-22	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Toluene*	<0.050		0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	2121911	JH/	20-Dec-22	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			112 %		69.9-140	2121911	JH/	20-Dec-22	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	2121909	MS	19-Dec-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2121909	MS	19-Dec-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2121909	MS	19-Dec-22	8015B	

<i>Surrogate: 1-Chlorooctane</i>			88.9 %		45.3-161	2121909	MS	19-Dec-22	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>			99.1 %		46.3-178	2121909	MS	19-Dec-22	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

AMEREDEV  
2901 VIA FORTUNA , SUITE 600  
AUSTIN TX, 78746

Project: EAGLE FEATHER FEDERAL #2  
Project Number: 20220314-0814-PRODOPS  
Project Manager: ANDREW PARKER  
Fax To:

Reported:  
21-Dec-22 17:58

**GS - 07S 2-4FT****H225945-16 (Soil)**

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

Chloride	592		16.0	mg/kg	4	2121932	GM	19-Dec-22	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Toluene*	<0.050		0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	2121911	JH/	20-Dec-22	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			109 %	69.9-140		2121911	JH/	20-Dec-22	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	2121909	MS	19-Dec-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2121909	MS	19-Dec-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2121909	MS	19-Dec-22	8015B	

Surrogate: 1-Chlorooctane			90.3 %	45.3-161		2121909	MS	19-Dec-22	8015B	
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Surrogate: 1-Chlorooctadecane			100 %	46.3-178		2121909	MS	19-Dec-22	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

AMEREDEV  
2901 VIA FORTUNA , SUITE 600  
AUSTIN TX, 78746

Project: EAGLE FEATHER FEDERAL #2  
Project Number: 20220314-0814-PRODOPS  
Project Manager: ANDREW PARKER  
Fax To:

Reported:  
21-Dec-22 17:58

**GS - 07S 4.5FT**  
**H225945-17 (Soil)**

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

<b>Chloride</b>	<b>592</b>		16.0	mg/kg	4	2121932	GM	19-Dec-22	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Toluene*	<0.050		0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	2121911	JH/	20-Dec-22	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			109 %	69.9-140		2121911	JH/	20-Dec-22	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	2121909	MS	19-Dec-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2121909	MS	19-Dec-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2121909	MS	19-Dec-22	8015B	

<i>Surrogate: 1-Chlorooctane</i>			82.7 %	45.3-161		2121909	MS	19-Dec-22	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>			91.5 %	46.3-178		2121909	MS	19-Dec-22	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

AMEREDEV  
2901 VIA FORTUNA , SUITE 600  
AUSTIN TX, 78746

Project: EAGLE FEATHER FEDERAL #2  
Project Number: 20220314-0814-PRODOPS  
Project Manager: ANDREW PARKER  
Fax To:

Reported:  
21-Dec-22 17:58

**GS - 09 4.5FT****H225945-18 (Soil)**

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

Chloride	1960		16.0	mg/kg	4	2121932	GM	19-Dec-22	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Toluene*	<0.050		0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	2121911	JH/	20-Dec-22	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	2121911	JH/	20-Dec-22	8021B	

Surrogate: 4-Bromofluorobenzene (PID) 109 % 69.9-140 2121911 JH/ 20-Dec-22 8021B

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	2121909	MS	19-Dec-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2121909	MS	19-Dec-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2121909	MS	19-Dec-22	8015B	

Surrogate: 1-Chlorooctane 87.6 % 45.3-161 2121909 MS 19-Dec-22 8015B

Surrogate: 1-Chlorooctadecane 96.3 % 46.3-178 2121909 MS 19-Dec-22 8015B

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

AMEREDEV  
2901 VIA FORTUNA , SUITE 600  
AUSTIN TX, 78746

Project: EAGLE FEATHER FEDERAL #2  
Project Number: 20220314-0814-PRODOPS  
Project Manager: ANDREW PARKER  
Fax To:

Reported:  
21-Dec-22 17:58

**GS - 09N 0-2FT**  
**H225945-19 (Soil)**

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

Chloride	112		16.0	mg/kg	4	2121932	GM	19-Dec-22	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	2121912	JH	19-Dec-22	8021B	
Toluene*	<0.050		0.050	mg/kg	50	2121912	JH	19-Dec-22	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	2121912	JH	19-Dec-22	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	2121912	JH	19-Dec-22	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	2121912	JH	19-Dec-22	8021B	

Surrogate: 4-Bromofluorobenzene (PID) 108 % 69.9-140 2121912 JH 19-Dec-22 8021B

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	2121909	MS	19-Dec-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2121909	MS	19-Dec-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2121909	MS	19-Dec-22	8015B	

Surrogate: 1-Chlorooctane 85.9 % 45.3-161 2121909 MS 19-Dec-22 8015B

Surrogate: 1-Chlorooctadecane 94.2 % 46.3-178 2121909 MS 19-Dec-22 8015B

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

AMEREDEV  
2901 VIA FORTUNA , SUITE 600  
AUSTIN TX, 78746

Project: EAGLE FEATHER FEDERAL #2  
Project Number: 20220314-0814-PRODOPS  
Project Manager: ANDREW PARKER  
Fax To:

Reported:  
21-Dec-22 17:58

**GS - 09N 2-4FT**  
**H225945-20 (Soil)**

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

Chloride	128		16.0	mg/kg	4	2121932	GM	19-Dec-22	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	2121912	JH	19-Dec-22	8021B	
Toluene*	<0.050		0.050	mg/kg	50	2121912	JH	19-Dec-22	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	2121912	JH	19-Dec-22	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	2121912	JH	19-Dec-22	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	2121912	JH	19-Dec-22	8021B	

Surrogate: 4-Bromofluorobenzene (PID) 107 % 69.9-140 2121912 JH 19-Dec-22 8021B

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	2121909	MS	19-Dec-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2121909	MS	19-Dec-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2121909	MS	19-Dec-22	8015B	

Surrogate: 1-Chlorooctane 107 % 45.3-161 2121909 MS 19-Dec-22 8015B

Surrogate: 1-Chlorooctadecane 118 % 46.3-178 2121909 MS 19-Dec-22 8015B

Cardinal Laboratories

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

AMEREDEV  
2901 VIA FORTUNA , SUITE 600  
AUSTIN TX, 78746

Project: EAGLE FEATHER FEDERAL #2  
Project Number: 20220314-0814-PRODOPS  
Project Manager: ANDREW PARKER  
Fax To:

Reported:  
21-Dec-22 17:58

**GS - 09N 4.5ft****H225945-21 (Soil)**

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

Chloride	112		16.0	mg/kg	4	2121932	GM	19-Dec-22	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	2121912	JH	19-Dec-22	8021B	
Toluene*	<0.050		0.050	mg/kg	50	2121912	JH	19-Dec-22	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	2121912	JH	19-Dec-22	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	2121912	JH	19-Dec-22	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	2121912	JH	19-Dec-22	8021B	

Surrogate: 4-Bromofluorobenzene (PID) 106 % 69.9-140 2121912 JH 19-Dec-22 8021B

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	2121909	MS	19-Dec-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2121909	MS	19-Dec-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2121909	MS	19-Dec-22	8015B	

Surrogate: 1-Chlorooctane 85.4 % 45.3-161 2121909 MS 19-Dec-22 8015B

Surrogate: 1-Chlorooctadecane 92.9 % 46.3-178 2121909 MS 19-Dec-22 8015B

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

AMEREDEV  
2901 VIA FORTUNA , SUITE 600  
AUSTIN TX, 78746

Project: EAGLE FEATHER FEDERAL #2  
Project Number: 20220314-0814-PRODOPS  
Project Manager: ANDREW PARKER  
Fax To:

Reported:  
21-Dec-22 17:58

**GS - 10 4.5ft**  
**H225945-22 (Soil)**

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

<b>Chloride</b>	<b>304</b>		16.0	mg/kg	4	2121932	GM	19-Dec-22	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021****S-04**

Benzene*	<0.050		0.050	mg/kg	50	2121912	JH	19-Dec-22	8021B	
Toluene*	<0.050		0.050	mg/kg	50	2121912	JH	19-Dec-22	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	2121912	JH	19-Dec-22	8021B	GC-NC
Total Xylenes*	<0.150		0.150	mg/kg	50	2121912	JH	19-Dec-22	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	2121912	JH	19-Dec-22	8021B	

Surrogate: 4-Bromofluorobenzene (PID) 169 % 69.9-140 2121912 JH 19-Dec-22 8021B

**Petroleum Hydrocarbons by GC FID**

<b>GRO C6-C10*</b>	<b>22.7</b>		10.0	mg/kg	1	2121909	MS	19-Dec-22	8015B	
<b>DRO &gt;C10-C28*</b>	<b>309</b>		10.0	mg/kg	1	2121909	MS	19-Dec-22	8015B	
<b>EXT DRO &gt;C28-C36</b>	<b>39.9</b>		10.0	mg/kg	1	2121909	MS	19-Dec-22	8015B	

Surrogate: 1-Chlorooctane 85.8 % 45.3-161 2121909 MS 19-Dec-22 8015B

Surrogate: 1-Chlorooctadecane 107 % 46.3-178 2121909 MS 19-Dec-22 8015B

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

AMEREDEV  
2901 VIA FORTUNA , SUITE 600  
AUSTIN TX, 78746

Project: EAGLE FEATHER FEDERAL #2  
Project Number: 20220314-0814-PRODOPS  
Project Manager: ANDREW PARKER  
Fax To:

Reported:  
21-Dec-22 17:58

**GS - 10E 0-2ft****H225945-23 (Soil)**

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

<b>Chloride</b>	<b>208</b>		16.0	mg/kg	4	2121932	GM	19-Dec-22	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	2121912	JH	20-Dec-22	8021B	
Toluene*	<0.050		0.050	mg/kg	50	2121912	JH	20-Dec-22	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	2121912	JH	20-Dec-22	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	2121912	JH	20-Dec-22	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	2121912	JH	20-Dec-22	8021B	

Surrogate: 4-Bromofluorobenzene (PID) 107 % 69.9-140 2121912 JH 20-Dec-22 8021B

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	2121909	MS	20-Dec-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2121909	MS	20-Dec-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2121909	MS	20-Dec-22	8015B	

Surrogate: 1-Chlorooctane 74.8 % 45.3-161 2121909 MS 20-Dec-22 8015B

Surrogate: 1-Chlorooctadecane 82.7 % 46.3-178 2121909 MS 20-Dec-22 8015B

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

AMEREDEV  
2901 VIA FORTUNA , SUITE 600  
AUSTIN TX, 78746

Project: EAGLE FEATHER FEDERAL #2  
Project Number: 20220314-0814-PRODOPS  
Project Manager: ANDREW PARKER  
Fax To:

Reported:  
21-Dec-22 17:58

**GS - 10E 2-4ft****H225945-24 (Soil)**

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

<b>Chloride</b>	<b>224</b>		16.0	mg/kg	4	2121932	GM	19-Dec-22	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050	0.050	mg/kg	50	2121912	JH	20-Dec-22	8021B	
Toluene*	<0.050	0.050	mg/kg	50	2121912	JH	20-Dec-22	8021B	
Ethylbenzene*	<0.050	0.050	mg/kg	50	2121912	JH	20-Dec-22	8021B	
Total Xylenes*	<0.150	0.150	mg/kg	50	2121912	JH	20-Dec-22	8021B	
Total BTEX	<0.300	0.300	mg/kg	50	2121912	JH	20-Dec-22	8021B	

Surrogate: 4-Bromofluorobenzene (PID)	107 %	69.9-140	2121912	JH	20-Dec-22	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0	10.0	mg/kg	1	2121909	MS	20-Dec-22	8015B	
DRO >C10-C28*	<10.0	10.0	mg/kg	1	2121909	MS	20-Dec-22	8015B	
EXT DRO >C28-C36	<10.0	10.0	mg/kg	1	2121909	MS	20-Dec-22	8015B	

Surrogate: 1-Chlorooctane	87.8 %	45.3-161	2121909	MS	20-Dec-22	8015B	
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Surrogate: 1-Chlorooctadecane	95.9 %	46.3-178	2121909	MS	20-Dec-22	8015B	
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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

AMEREDEV  
2901 VIA FORTUNA , SUITE 600  
AUSTIN TX, 78746

Project: EAGLE FEATHER FEDERAL #2  
Project Number: 20220314-0814-PRODOPS  
Project Manager: ANDREW PARKER  
Fax To:

Reported:  
21-Dec-22 17:58

**GS - 10E 4.5ft****H225945-25 (Soil)**

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

<b>Chloride</b>	<b>224</b>		16.0	mg/kg	4	2121932	GM	19-Dec-22	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050	0.050	mg/kg	50	2121912	JH	20-Dec-22	8021B	
Toluene*	<0.050	0.050	mg/kg	50	2121912	JH	20-Dec-22	8021B	
Ethylbenzene*	<0.050	0.050	mg/kg	50	2121912	JH	20-Dec-22	8021B	
Total Xylenes*	<0.150	0.150	mg/kg	50	2121912	JH	20-Dec-22	8021B	
Total BTEX	<0.300	0.300	mg/kg	50	2121912	JH	20-Dec-22	8021B	

Surrogate: 4-Bromofluorobenzene (PID)	108 %	69.9-140	2121912	JH	20-Dec-22	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0	10.0	mg/kg	1	2121909	MS	20-Dec-22	8015B	
DRO >C10-C28*	<10.0	10.0	mg/kg	1	2121909	MS	20-Dec-22	8015B	
EXT DRO >C28-C36	<10.0	10.0	mg/kg	1	2121909	MS	20-Dec-22	8015B	

Surrogate: 1-Chlorooctane	83.5 %	45.3-161	2121909	MS	20-Dec-22	8015B	
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Surrogate: 1-Chlorooctadecane	90.9 %	46.3-178	2121909	MS	20-Dec-22	8015B	
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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

AMEREDEV  
2901 VIA FORTUNA , SUITE 600  
AUSTIN TX, 78746

Project: EAGLE FEATHER FEDERAL #2  
Project Number: 20220314-0814-PRODOPS  
Project Manager: ANDREW PARKER  
Fax To:

Reported:  
21-Dec-22 17:58

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 2121931 - 1:4 DI Water****Blank (2121931-BLK1)**

Prepared &amp; Analyzed: 19-Dec-22

Chloride	ND	16.0	mg/kg							
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**LCS (2121931-BS1)**

Prepared &amp; Analyzed: 19-Dec-22

Chloride	416	16.0	mg/kg	400		104	80-120			
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**LCS Dup (2121931-BSD1)**

Prepared &amp; Analyzed: 19-Dec-22

Chloride	432	16.0	mg/kg	400		108	80-120	3.77	20	
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**Batch 2121932 - 1:4 DI Water****Blank (2121932-BLK1)**

Prepared &amp; Analyzed: 19-Dec-22

Chloride	ND	16.0	mg/kg							
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**LCS (2121932-BS1)**

Prepared &amp; Analyzed: 19-Dec-22

Chloride	432	16.0	mg/kg	400		108	80-120			
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**LCS Dup (2121932-BSD1)**

Prepared &amp; Analyzed: 19-Dec-22

Chloride	432	16.0	mg/kg	400		108	80-120	0.00	20	
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**Analytical Results For:**

AMEREDEV  
2901 VIA FORTUNA , SUITE 600  
AUSTIN TX, 78746

Project: EAGLE FEATHER FEDERAL #2  
Project Number: 20220314-0814-PRODOPS  
Project Manager: ANDREW PARKER  
Fax To:

Reported:  
21-Dec-22 17:58

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 2121627 - Volatiles****Blank (2121627-BLK1)**

Prepared: 16-Dec-22 Analyzed: 20-Dec-22

Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	0.0553		mg/kg	0.0500		111	69.9-140			

**LCS (2121627-BS1)**

Prepared: 16-Dec-22 Analyzed: 20-Dec-22

Benzene	2.16	0.050	mg/kg	2.00		108	83.4-122			
Toluene	2.25	0.050	mg/kg	2.00		112	84.2-126			
Ethylbenzene	2.29	0.050	mg/kg	2.00		115	84.2-121			
m,p-Xylene	4.69	0.100	mg/kg	4.00		117	89.9-126			
o-Xylene	2.25	0.050	mg/kg	2.00		112	84.3-123			
Total Xylenes	6.94	0.150	mg/kg	6.00		116	89.1-124			
Surrogate: 4-Bromofluorobenzene (PID)	0.0535		mg/kg	0.0500		107	69.9-140			

**LCS Dup (2121627-BS1)**

Prepared: 16-Dec-22 Analyzed: 20-Dec-22

Benzene	2.06	0.050	mg/kg	2.00		103	83.4-122	5.09	12.6	
Toluene	2.14	0.050	mg/kg	2.00		107	84.2-126	4.74	13.3	
Ethylbenzene	2.18	0.050	mg/kg	2.00		109	84.2-121	4.92	13.9	
m,p-Xylene	4.45	0.100	mg/kg	4.00		111	89.9-126	5.25	13.6	
o-Xylene	2.13	0.050	mg/kg	2.00		107	84.3-123	5.22	14.1	
Total Xylenes	6.58	0.150	mg/kg	6.00		110	89.1-124	5.24	13.4	
Surrogate: 4-Bromofluorobenzene (PID)	0.0534		mg/kg	0.0500		107	69.9-140			

**Batch 2121911 - Volatiles****Blank (2121911-BLK1)**

Prepared: 19-Dec-22 Analyzed: 20-Dec-22

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

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

AMEREDEV  
2901 VIA FORTUNA , SUITE 600  
AUSTIN TX, 78746

Project: EAGLE FEATHER FEDERAL #2  
Project Number: 20220314-0814-PRODOPS  
Project Manager: ANDREW PARKER  
Fax To:

Reported:  
21-Dec-22 17:58

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 2121911 - Volatiles****Blank (2121911-BLK1)**

Prepared: 19-Dec-22 Analyzed: 20-Dec-22

Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	0.0536		mg/kg	0.0500		107	69.9-140			

**LCS (2121911-BS1)**

Prepared: 19-Dec-22 Analyzed: 20-Dec-22

Benzene	2.19	0.050	mg/kg	2.00		109	83.4-122			
Toluene	2.24	0.050	mg/kg	2.00		112	84.2-126			
Ethylbenzene	2.22	0.050	mg/kg	2.00		111	84.2-121			
m,p-Xylene	4.66	0.100	mg/kg	4.00		116	89.9-126			
o-Xylene	2.17	0.050	mg/kg	2.00		109	84.3-123			
Total Xylenes	6.83	0.150	mg/kg	6.00		114	89.1-124			
Surrogate: 4-Bromofluorobenzene (PID)	0.0545		mg/kg	0.0500		109	69.9-140			

**LCS Dup (2121911-BS1)**

Prepared: 19-Dec-22 Analyzed: 20-Dec-22

Benzene	2.09	0.050	mg/kg	2.00		105	83.4-122	4.59	12.6	
Toluene	2.17	0.050	mg/kg	2.00		109	84.2-126	3.04	13.3	
Ethylbenzene	2.14	0.050	mg/kg	2.00		107	84.2-121	3.86	13.9	
m,p-Xylene	4.49	0.100	mg/kg	4.00		112	89.9-126	3.61	13.6	
o-Xylene	2.08	0.050	mg/kg	2.00		104	84.3-123	4.33	14.1	
Total Xylenes	6.57	0.150	mg/kg	6.00		110	89.1-124	3.84	13.4	
Surrogate: 4-Bromofluorobenzene (PID)	0.0544		mg/kg	0.0500		109	69.9-140			

**Batch 2121912 - Volatiles****Blank (2121912-BLK1)**

Prepared &amp; Analyzed: 19-Dec-22

Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	0.0535		mg/kg	0.0500		107	69.9-140			

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

AMEREDEV  
2901 VIA FORTUNA , SUITE 600  
AUSTIN TX, 78746

Project: EAGLE FEATHER FEDERAL #2  
Project Number: 20220314-0814-PRODOPS  
Project Manager: ANDREW PARKER  
Fax To:

Reported:  
21-Dec-22 17:58

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 2121912 - Volatiles****LCS (2121912-BS1)**

Prepared &amp; Analyzed: 19-Dec-22

Benzene	2.14	0.050	mg/kg	2.00		107	83.4-122			
Toluene	2.31	0.050	mg/kg	2.00		115	84.2-126			
Ethylbenzene	2.27	0.050	mg/kg	2.00		113	84.2-121			
m,p-Xylene	4.70	0.100	mg/kg	4.00		118	89.9-126			
o-Xylene	2.24	0.050	mg/kg	2.00		112	84.3-123			
Total Xylenes	6.94	0.150	mg/kg	6.00		116	89.1-124			
Surrogate: 4-Bromofluorobenzene (PID)	0.0518		mg/kg	0.0500		104	69.9-140			

**LCS Dup (2121912-BSD1)**

Prepared &amp; Analyzed: 19-Dec-22

Benzene	2.06	0.050	mg/kg	2.00		103	83.4-122	3.86	12.6	
Toluene	2.21	0.050	mg/kg	2.00		110	84.2-126	4.39	13.3	
Ethylbenzene	2.19	0.050	mg/kg	2.00		110	84.2-121	3.23	13.9	
m,p-Xylene	4.60	0.100	mg/kg	4.00		115	89.9-126	2.19	13.6	
o-Xylene	2.20	0.050	mg/kg	2.00		110	84.3-123	1.72	14.1	
Total Xylenes	6.80	0.150	mg/kg	6.00		113	89.1-124	2.04	13.4	
Surrogate: 4-Bromofluorobenzene (PID)	0.0517		mg/kg	0.0500		103	69.9-140			

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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:**

AMEREDEV  
2901 VIA FORTUNA , SUITE 600  
AUSTIN TX, 78746

Project: EAGLE FEATHER FEDERAL #2  
Project Number: 20220314-0814-PRODOPS  
Project Manager: ANDREW PARKER  
Fax To:

Reported:  
21-Dec-22 17:58

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

**Batch 2121908 - General Prep - Organics****Blank (2121908-BLK1)**

Prepared &amp; Analyzed: 19-Dec-22

GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	48.1		mg/kg	50.0		96.2	45.3-161			
Surrogate: 1-Chlorooctadecane	49.2		mg/kg	50.0		98.4	46.3-178			

**LCS (2121908-BS1)**

Prepared &amp; Analyzed: 19-Dec-22

GRO C6-C10	230	10.0	mg/kg	200		115	76.8-124			
DRO >C10-C28	242	10.0	mg/kg	200		121	74.9-127			
Total TPH C6-C28	472	10.0	mg/kg	400		118	77.5-124			
Surrogate: 1-Chlorooctane	59.5		mg/kg	50.0		119	45.3-161			
Surrogate: 1-Chlorooctadecane	58.5		mg/kg	50.0		117	46.3-178			

**LCS Dup (2121908-BS1)**

Prepared &amp; Analyzed: 19-Dec-22

GRO C6-C10	220	10.0	mg/kg	200		110	76.8-124	4.20	17.2	
DRO >C10-C28	232	10.0	mg/kg	200		116	74.9-127	4.09	18.6	
Total TPH C6-C28	452	10.0	mg/kg	400		113	77.5-124	4.14	17.6	
Surrogate: 1-Chlorooctane	55.4		mg/kg	50.0		111	45.3-161			
Surrogate: 1-Chlorooctadecane	55.1		mg/kg	50.0		110	46.3-178			

**Batch 2121909 - General Prep - Organics****Blank (2121909-BLK1)**

Prepared &amp; Analyzed: 19-Dec-22

GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	46.4		mg/kg	50.0		92.8	45.3-161			
Surrogate: 1-Chlorooctadecane	52.1		mg/kg	50.0		104	46.3-178			

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**Analytical Results For:**

AMEREDEV  
2901 VIA FORTUNA , SUITE 600  
AUSTIN TX, 78746

Project: EAGLE FEATHER FEDERAL #2  
Project Number: 20220314-0814-PRODOPS  
Project Manager: ANDREW PARKER  
Fax To:

Reported:  
21-Dec-22 17:58

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	----------------	-----	--------------	-------

**Batch 2121909 - General Prep - Organics****LCS (2121909-BS1)**

Prepared &amp; Analyzed: 19-Dec-22

GRO C6-C10	213	10.0	mg/kg	200		106	76.8-124		
DRO >C10-C28	187	10.0	mg/kg	200		93.3	74.9-127		
Total TPH C6-C28	400	10.0	mg/kg	400		99.9	77.5-124		
Surrogate: 1-Chlorooctane	58.0		mg/kg	50.0		116	45.3-161		
Surrogate: 1-Chlorooctadecane	63.1		mg/kg	50.0		126	46.3-178		

**LCS Dup (2121909-BS1)**

Prepared &amp; Analyzed: 19-Dec-22

GRO C6-C10	224	10.0	mg/kg	200		112	76.8-124	5.10	17.2
DRO >C10-C28	193	10.0	mg/kg	200		96.5	74.9-127	3.36	18.6
Total TPH C6-C28	417	10.0	mg/kg	400		104	77.5-124	4.29	17.6
Surrogate: 1-Chlorooctane	61.4		mg/kg	50.0		123	45.3-161		
Surrogate: 1-Chlorooctadecane	68.0		mg/kg	50.0		136	46.3-178		

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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.
GC-NC	8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are reported as ND.
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

Page 35 of 37





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

### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Amerceder						BILL TO P.O.#: 20220314-0814-prodops																	
Project Manager: Andrew Parker						Company: Amerceder																	
Address: On - File						Attn: aparker@amerceder.com																	
City:						State: Zip:																	
Phone #:						Address:																	
Project #: Project Owner:						City: State: Zip:																	
Project Location: Eagle Feather Federal #A						Phone #:																	
Sampler Name: Jesus Palomares						Fax #:																	
FOR LAB USE ONLY																							
Lab I.D.						Sample I.D.																	
H225945						(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX	PRESERV	SAMPLING													
GROUNDWATER																							
WASTEWATER																							
SOIL																							
OIL																							
SLUDGE																							
OTHER :																							
ACID/BASE:																							
ICE / COOL																							
OTHER :																							
DATE						TIME																	
11						12-15																	
GS-06						0-2ft																	
12 GS-06						2-4ft																	
13 GS-06						4.5ft																	
14 GS-07						4.5ft																	
15 GS-07 S						0-2ft																	
16 GS-07 S						2-4ft																	
17 GS-07 S						4.5ft																	
18 GS-09 N						4.5ft																	
19 GS-09 N						0-2ft																	
20 GS-09 N						2-4ft																	
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Relinquished By: [Signature]						Received By: [Signature]																	
Date: 12-15-22						Time: 12:20																	
Reinquinshed By: [Signature]						Received By: [Signature]																	
Date: 12-20						Time: 12:20																	
Delivered By: (Circle One)						Observed Temp. °C						Corrected Temp. °C											
Sampler - UPS - Bus - Other:						Cool Intact Yes No						CHECKED BY: (Initials)											
						Turnaround Time:						Standard Rush											
						Thermometer ID #113						Bacteria (only) Sample Condition Cool Intact Observed Temp. °C Corrected Temp. °C											
						Correction Factor -0.6°C																	





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

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <b>Amerceder</b>		<b>BILL TO</b>		ANALYSIS REQUEST	
Project Manager: <b>Andrew Parker</b>		P.O. #: <b>20220314-0814-products</b>			
Address: <b>On-File</b>		Company: <b>Amerceder</b>			
City: _____		Attn: <b>aparker@amerceder.com</b>			
State: _____ Zip: _____		Address: _____			
Phone #: _____ Fax #: _____		City: _____			
Project #: _____ Project Owner: _____		State: _____ Zip: _____			
Project Location: <b>Eagle Feather Federal #2</b>		Phone #: _____			
Sampler Name: <b>Jesus Palomares</b>		Fax #: _____			
FOR LAB USE ONLY					
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP			
		# CONTAINERS			
<b>H25945</b> 21 GS-09 N 22 GS-10 23 GS-10 E 24 GS-10 E 25 GS-10 E	91 ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	GROUNDWATER			
		WASTEWATER			
		SOIL			
		OIL			
		SLUDGE			
		OTHER :			
		ACID/BASE:			
		ICE / COOL			
		OTHER :			
		DATE	TIME		
12-15	12:37	Chloride			
12:40	12:44	TPH (GRO+DRO+MRO)			
12:47	12:52	BTEX (Benzene)			
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Relinquished By: _____	Date: <b>12-15-22</b>	Received By: _____	Date: <b>12-15-22</b>		
Relinquished By: _____	Date: <b>12-15-22</b>	Received By: _____	Date: <b>12-15-22</b>		
Delivered By: (Circle One)		Observed Temp. °C	Corrected Temp. °C	Sample Condition	CHECKED BY: (Initials)
Sampler - UPS - Bus - Other:		3.9	3.3	<input checked="" type="checkbox"/> Cool <input type="checkbox"/> Intact <input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
T turnaround Time:		Standard	Rush	Bacteria (only)	Sample Condition
				<input type="checkbox"/> Cool <input type="checkbox"/> Intact <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Observed Temp. °C <input type="checkbox"/> Corrected Temp. °C
REMARKS: <b>Cooler Temp 3.7°C</b>					
Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #: _____ All Results are emailed. Please provide Email address: _____					

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



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December 22, 2022

ANDREW PARKER

AMEREDEV

2901 VIA FORTUNA , SUITE 600

AUSTIN, TX 78746

RE: EAGLE FEATHER FEDERAL #2

Enclosed are the results of analyses for samples received by the laboratory on 12/16/22 15:20.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Coley 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:**

AMEREDEV  
 ANDREW PARKER  
 2901 VIA FORTUNA , SUITE 600  
 AUSTIN TX, 78746  
 Fax To:

Received:	12/16/2022	Sampling Date:	12/16/2022
Reported:	12/22/2022	Sampling Type:	Soil
Project Name:	EAGLE FEATHER FEDERAL #2	Sampling Condition:	Cool & Intact
Project Number:	20220314-0814-PRODOPS	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

**Sample ID: GS - 01 4.5FT (H225979-01)**

BTX 8021B		mg/kg		Analyzed By: JH				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/21/2022	ND	2.05	102	2.00	0.0851	
<b>Toluene*</b>	<b>0.403</b>	0.050	12/21/2022	ND	2.24	112	2.00	0.0397	GC-NC1
Ethylbenzene*	<0.050	0.050	12/21/2022	ND	2.20	110	2.00	4.07	
<b>Total Xylenes*</b>	<b>11.8</b>	0.150	12/21/2022	ND	6.75	113	6.00	4.41	GC-NC1
<b>Total BTX</b>	<b>12.2</b>	0.300	12/21/2022	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID) 460 % 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
<b>Chloride</b>	<b>112</b>	16.0	12/21/2022	ND	384	96.0	400	11.8	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>476</b>	10.0	12/21/2022	ND	197	98.7	200	5.21	
<b>DRO &gt;C10-C28*</b>	<b>432</b>	10.0	12/21/2022	ND	176	88.1	200	3.82	
<b>EXT DRO &gt;C28-C36</b>	<b>19.9</b>	10.0	12/21/2022	ND					

Surrogate: 1-Chlorooctane 125 % 45.3-161

Surrogate: 1-Chlorooctadecane 113 % 46.3-178

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

AMEREDEV  
 ANDREW PARKER  
 2901 VIA FORTUNA , SUITE 600  
 AUSTIN TX, 78746  
 Fax To:

Received:	12/16/2022	Sampling Date:	12/16/2022
Reported:	12/22/2022	Sampling Type:	Soil
Project Name:	EAGLE FEATHER FEDERAL #2	Sampling Condition:	Cool & Intact
Project Number:	20220314-0814-PRODOPS	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

**Sample ID: GS - 01N 0-2FT (H225979-02)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/21/2022	ND	2.05	102	2.00	0.0851		
Toluene*	<0.050	0.050	12/21/2022	ND	2.24	112	2.00	0.0397		
Ethylbenzene*	<0.050	0.050	12/21/2022	ND	2.20	110	2.00	4.07		
Total Xylenes*	<0.150	0.150	12/21/2022	ND	6.75	113	6.00	4.41		
Total BTEX	<0.300	0.300	12/21/2022	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	96.0	16.0	12/21/2022	ND	384	96.0	400	11.8		

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	12/21/2022	ND	197	98.7	200	5.21	
DRO >C10-C28*	19.0	10.0	12/21/2022	ND	176	88.1	200	3.82	
EXT DRO >C28-C36	<10.0	10.0	12/21/2022	ND					

Surrogate: 1-Chlorooctane 97.1 % 45.3-161

Surrogate: 1-Chlorooctadecane 106 % 46.3-178

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

AMEREDEV  
 ANDREW PARKER  
 2901 VIA FORTUNA , SUITE 600  
 AUSTIN TX, 78746  
 Fax To:

Received:	12/16/2022	Sampling Date:	12/16/2022
Reported:	12/22/2022	Sampling Type:	Soil
Project Name:	EAGLE FEATHER FEDERAL #2	Sampling Condition:	Cool & Intact
Project Number:	20220314-0814-PRODOPS	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

**Sample ID: GS - 01N 2-4FT (H225979-03)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/21/2022	ND	2.05	102	2.00	0.0851	
Toluene*	<0.050	0.050	12/21/2022	ND	2.24	112	2.00	0.0397	
Ethylbenzene*	<0.050	0.050	12/21/2022	ND	2.20	110	2.00	4.07	
Total Xylenes*	<0.150	0.150	12/21/2022	ND	6.75	113	6.00	4.41	
Total BTEX	<0.300	0.300	12/21/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 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	48.0	16.0	12/21/2022	ND	384	96.0	400	11.8	

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	12/21/2022	ND	197	98.7	200	5.21	
DRO >C10-C28*	13.0	10.0	12/21/2022	ND	176	88.1	200	3.82	
EXT DRO >C28-C36	<10.0	10.0	12/21/2022	ND					

Surrogate: 1-Chlorooctane 93.2 % 45.3-161

Surrogate: 1-Chlorooctadecane 102 % 46.3-178

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

AMEREDEV  
ANDREW PARKER  
2901 VIA FORTUNA , SUITE 600  
AUSTIN TX, 78746  
Fax To:

Received:	12/16/2022	Sampling Date:	12/16/2022
Reported:	12/22/2022	Sampling Type:	Soil
Project Name:	EAGLE FEATHER FEDERAL #2	Sampling Condition:	Cool & Intact
Project Number:	20220314-0814-PRODOPS	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

**Sample ID: GS - 01N 4.5FT (H225979-04)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/21/2022	ND	2.05	102	2.00	0.0851		
Toluene*	<0.050	0.050	12/21/2022	ND	2.24	112	2.00	0.0397		
Ethylbenzene*	<0.050	0.050	12/21/2022	ND	2.20	110	2.00	4.07		
Total Xylenes*	<0.150	0.150	12/21/2022	ND	6.75	113	6.00	4.41		
Total BTEX	<0.300	0.300	12/21/2022	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	12/21/2022	ND	384	96.0	400	11.8		

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	12/21/2022	ND	197	98.7	200	5.21	
<b>DRO &gt;C10-C28*</b>	<b>10.5</b>	10.0	12/21/2022	ND	176	88.1	200	3.82	
EXT DRO >C28-C36	<10.0	10.0	12/21/2022	ND					

Surrogate: 1-Chlorooctane 89.9 % 45.3-161

Surrogate: 1-Chlorooctadecane 101 % 46.3-178

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

AMEREDEV  
 ANDREW PARKER  
 2901 VIA FORTUNA , SUITE 600  
 AUSTIN TX, 78746  
 Fax To:

Received:	12/16/2022	Sampling Date:	12/16/2022
Reported:	12/22/2022	Sampling Type:	Soil
Project Name:	EAGLE FEATHER FEDERAL #2	Sampling Condition:	Cool & Intact
Project Number:	20220314-0814-PRODOPS	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

**Sample ID: GS - 08 9FT (H225979-05)**

BTEx 8021B		mg/kg		Analyzed By: JH				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.100	0.100	12/21/2022	ND	2.05	102	2.00	0.0851	GC-NC
Toluene*	<b>1.08</b>	0.100	12/21/2022	ND	2.24	112	2.00	0.0397	GC-NC1
Ethylbenzene*	<b>2.16</b>	0.100	12/21/2022	ND	2.20	110	2.00	4.07	GC-NC1
Total Xylenes*	<b>27.6</b>	0.300	12/21/2022	ND	6.75	113	6.00	4.41	GC-NC1
Total BTEX	<b>30.8</b>	0.600	12/21/2022	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID) 288 % 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	<b>64.0</b>	16.0	12/21/2022	ND	384	96.0	400	11.8	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<b>230</b>	10.0	12/21/2022	ND	197	98.7	200	5.21	
DRO >C10-C28*	<b>254</b>	10.0	12/21/2022	ND	176	88.1	200	3.82	
EXT DRO >C28-C36	<b>15.8</b>	10.0	12/21/2022	ND					

Surrogate: 1-Chlorooctane 103 % 45.3-161

Surrogate: 1-Chlorooctadecane 105 % 46.3-178

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

AMEREDEV  
 ANDREW PARKER  
 2901 VIA FORTUNA , SUITE 600  
 AUSTIN TX, 78746  
 Fax To:

Received:	12/16/2022	Sampling Date:	12/16/2022
Reported:	12/22/2022	Sampling Type:	Soil
Project Name:	EAGLE FEATHER FEDERAL #2	Sampling Condition:	Cool & Intact
Project Number:	20220314-0814-PRODOPS	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

**Sample ID: BACKFILL 01 (H225979-06)**

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/21/2022	ND	2.05	102	2.00	0.0851	
Toluene*	<0.050	0.050	12/21/2022	ND	2.24	112	2.00	0.0397	
Ethylbenzene*	<0.050	0.050	12/21/2022	ND	2.20	110	2.00	4.07	
Total Xylenes*	<0.150	0.150	12/21/2022	ND	6.75	113	6.00	4.41	
Total BTEX	<0.300	0.300	12/21/2022	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	12/21/2022	ND	384	96.0	400	11.8		

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	12/21/2022	ND	197	98.7	200	5.21	
DRO >C10-C28*	<10.0	10.0	12/21/2022	ND	176	88.1	200	3.82	
EXT DRO >C28-C36	<10.0	10.0	12/21/2022	ND					

Surrogate: 1-Chlorooctane 76.9 % 45.3-161

Surrogate: 1-Chlorooctadecane 84.9 % 46.3-178

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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### Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
GC-NC1	8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are biased high with interfering compounds.
GC-NC	8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are reported as ND.
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



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

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

<b>Company Name:</b> Amereder <b>Project Manager:</b> Andrew Parker <b>Address:</b> On-File <b>City:</b> <b>State:</b> <b>Zip:</b> <b>Phone #:</b> <b>Fax #:</b> <b>Project #:</b> <b>Project Name:</b> 2022 0314-0814-Prodops <b>Project Location:</b> Eagle Feather Federal #2 <b>Sampler Name:</b> Jesus Palomares				<b>BILL TO</b> <b>P.O. #:</b> 20220314-0814-Prodops <b>Company:</b> Amereder <b>Attn:</b> aparker@amereder.com <b>Address:</b> <b>City:</b> <b>State:</b> <b>Zip:</b> <b>Phone #:</b> <b>Fax #:</b>				<b>ANALYSIS REQUEST</b>			
<b>FOR LAB USE ONLY</b>				<b>LAB I.D.</b>				<b>Sample I.D.</b>			
H25979 1 GS-01 4.5H 2 GS-01N 0-2H 3 GS-01N 2-4H 4 GS-01N 4.5H 5 GS-08 9H 6 Backfill 01				(G)RAB OR (C)OMP. # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER : ACID/BASE: ICE / COOL OTHER :				MATRIX PRESERV SAMPLING			
DATE 12-16-22 TIME 12:30 RECEIVED BY:				DATE 12-16 TIME 11:47 11:52 11:55 11:59 12:09 12:37				Chloride TPH (GRO+DRO+MRO) BTEX (Benzene)			
<b>Relinquished By:</b> Date: 12-16-22 Time: 12:30 Received By:				Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Add'l Phone #: All Results are emailed. Please provide Email address:				REMARKS: Cooler Temp Blank 0.3°C			
<b>Delivered By:</b> (Circle One) Observed Temp. °C 23 Corrected Temp. °C 1.7 Sample Condition Cool <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No CHECKED BY: (Initials) Turnaround Time: Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/> Thermometer ID #113 Correction Factor -0.6°C Bacteria (only) Sample Condition Cool Intact <input type="checkbox"/> Yes <input type="checkbox"/> No Observed Temp. °C Corrected Temp. °C				Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com				Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com			





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December 30, 2022

ANDREW PARKER

AMEREDEV

2901 VIA FORTUNA , SUITE 600

AUSTIN, TX 78746

RE: EAGLE FEATHER FEDERAL #2

Enclosed are the results of analyses for samples received by the laboratory on 12/27/22 15:06.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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**Analytical Results For:**

AMEREDEV  
 ANDREW PARKER  
 2901 VIA FORTUNA , SUITE 600  
 AUSTIN TX, 78746  
 Fax To:

Received:	12/27/2022	Sampling Date:	12/27/2022
Reported:	12/30/2022	Sampling Type:	Soil
Project Name:	EAGLE FEATHER FEDERAL #2	Sampling Condition:	Cool & Intact
Project Number:	20220314-0814-PRODOPS	Sample Received By:	Shalyn Rodriguez
Project Location:	NONE GIVEN		

**Sample ID: GS - 07 S PAD OFT (H226079-01)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/28/2022	ND	2.11	106	2.00	1.09		
Toluene*	<0.050	0.050	12/28/2022	ND	2.21	111	2.00	0.780		
Ethylbenzene*	<0.050	0.050	12/28/2022	ND	2.14	107	2.00	0.957		
Total Xylenes*	<0.150	0.150	12/28/2022	ND	6.59	110	6.00	1.05		
Total BTEX	<0.300	0.300	12/28/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 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	96.0	16.0	12/28/2022	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	12/28/2022	ND	189	94.7	200	2.61	
DRO >C10-C28*	<10.0	10.0	12/28/2022	ND	175	87.7	200	9.50	
EXT DRO >C28-C36	<10.0	10.0	12/28/2022	ND					

Surrogate: 1-Chlorooctane 85.6 % 45.3-161

Surrogate: 1-Chlorooctadecane 95.2 % 46.3-178

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager





---

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### Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

---

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

---

Celey D. Keene, Lab Director/Quality Manager



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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO

ANALYSIS REQUEST

Company Name: Ameador

Project Manager: Andrew Parker

Address: Oh-File

City: State: Zip:

Phone #: Fax #:

Project #: Project Owner:

Project Name: 20220314-0814-Prelops

Project Location: Eagle Feather Federal #2

Sampler Name: Jesus Palomares

FOR LAB USE ONLY

Lab I.D.

Sample I.D.

15220079

GS-075 Pad Off

(G)RAB OR (C)OMP.

# CONTAINERS

GROUNDWATER

WASTEWATER

SOIL

OIL

SLUDGE

OTHER :

ACID/BASE:

ICE / COOL

OTHER :

DATE

TIME

Chloride  
TPH (GRO+DRO+MRO)  
BTEX (Benzene)

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Relinquished By: [Signature]

Date: 12/22/22 Received By: [Signature]

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

All Results are emailed. Please provide Email address:

Relinquished By: [Signature]

Date: 12/22/22 Received By: [Signature]

REMARKS:

TEMP BATH: 1.10c

Delivered By: (Circle One)

Observed Temp. °C: 4.8c

Sample Condition

CHECKED BY: (Initials) [Signature]

Turnaround Time:

Standard ☒ Rush ☐

Bacteria (only) ☐

Sample Condition

Sampler - UPS - Bus - Other:

Corrected Temp. °C: 4.2c

Cool ☒ Intact ☐

Thermometer ID #113

Correction Factor -0.6°C

Cool ☐ Intact ☐

Observed Temp. °C

FORM-0007 N-3-3-0711/18/22

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

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720  
**District II**  
811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720  
**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170  
**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico  
Energy, Minerals and Natural Resources  
Oil Conservation Division  
1220 S. St Francis Dr.  
Santa Fe, NM 87505

CONDITIONS  
  
Action 172014

CONDITIONS

Operator: AMEREDEV OPERATING, LLC 2901 Via Fortuna Austin, TX 78746	OGRID: 372224
	Action Number: 172014
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Closure Report Approved.	1/30/2023