

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

**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

**QUESTIONS**

Operator: AMEREDEV OPERATING, LLC 2901 Via Fortuna Austin, TX 78746	OGRID: 372224
	Action Number: 144923
	Action Type: [NOTIFY] Notification Of Release (NOR)

**QUESTIONS**

<b>Location of Release Source</b>	
<i>Please answer all of the questions in this group.</i>	
Site Name	20220916-2040-water Redbud 4S
Date Release Discovered	09/16/2022
Surface Owner	Private

<b>Incident Details</b>	
<i>Please answer all of the questions in this group.</i>	
Incident Type	Produced Water Release
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

<b>Nature and Volume of Release</b>	
<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	Cause: Equipment Failure   Tank ( Any )   Produced Water   Released: 174 BBL   Recovered: 80 BBL   Lost: 94 BBL ]
Is the concentration of dissolved chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	Not answered.
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)	Not answered.

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Action 144923

**QUESTIONS (continued)**

Operator: AMEREDEV OPERATING, LLC 2901 Via Fortuna Austin, TX 78746	OGRID: 372224
	Action Number: 144923
	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 a volume, excluding gases, of 25 barrels or more</li> </ul>
If YES, was immediate notice given to the OCD, by whom	Andrew Parker
If YES, was immediate notice given to the OCD, to whom	OCD.Enviro@state.nm.us, mike.bratcher@state.nm.us
If YES, was immediate notice given to the OCD, when	09/17/2022
If YES, was immediate notice given to the OCD, by what means (phone, email, etc.)	email
<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>	

<b>Initial Response</b>	
<i>The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.</i>	
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	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.</i>	

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ACKNOWLEDGMENTS

Action 144923

**ACKNOWLEDGMENTS**

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	Action Number: 144923
	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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CONDITIONS

Action 144923

**CONDITIONS**

Operator: AMEREDEV OPERATING, LLC 2901 Via Fortuna Austin, TX 78746	OGRID: 372224
	Action Number: 144923
	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.	9/20/2022

Spill Dimensions to Volume of Release			
<b>Input</b>	<b>volume of affected soil</b>	<b>[feet^3]</b>	27886.34
<b>Input</b>	Porosity: typically is .35 to .40 for most soils	[ - ]	0.35
<b>Input</b>	Proportion of porosity filled with release fluid [0,1]	[ - ]	0.10
<b>Output</b>			
	volume of fluid	[feet^3]	<b>976.0</b>
		[gal]	<b>7301.2</b>
		Barrels	173.8
		Recovered	80.0
		Net	93.8

From GIS	
Sq. Ft	55773
Depth (ft)	0.5
Cu. Ft	27886

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State of New Mexico  
Energy Minerals and Natural  
Resources Department

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

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

Incident ID	nAPP2226344597
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) nAPP2226344597
Contact mailing address: 2901 Via Fortuna, Suite 600 Austin, Texas 78746	

### Location of Release Source

Latitude 32.078926 \_\_\_\_\_ Longitude -103.2902143 \_\_\_\_\_  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name 20220916-2040-water Redbud 4S	Site Type Production Site
Date Release Discovered 09/16/2022 at 20:40 hrs MST.	API# (if applicable)

Unit Letter	Section	Township	Range	County
C	5	26S	36E	Lea

Surface Owner:  State  Federal  Tribal  Private (Name: EOG Resources \_\_\_\_\_)

### Nature and Volume of Release

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

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 173.8	Volume Recovered (bbls) 80
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release Failure of containment wall liner on the Minion Fluid Storage Tank.

Oil Conservation Division

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Was this a major release as defined by 19.15.29.7(A) NMAC?  <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release? >25bbbls released
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Enviro, OCD, EMNRD < <a href="mailto:OCD.Enviro@state.nm.us">OCD.Enviro@state.nm.us</a> >; Bratcher, Mike, EMNRD < <a href="mailto:mike.bratcher@state.nm.us">mike.bratcher@state.nm.us</a> >; via email on 09/17/2022 at 10:55 am MST.	

### 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>09/20/2022</u>
email: <u>aparker@amerev.com</u>	Telephone: <u>970-570-9535</u>
<b><u>OCD Only</u></b> Received by: <u>Jocelyn Harimon</u> Date: <u>03/21/2023</u>	

Incident ID	nAPP2226344597
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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>	_>100_ (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 3</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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No

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

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

- Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- Field data
- Data table of soil contaminant concentration data
- Depth to water determination
- Determination of water sources and significant watercourses within 1/2-mile of the lateral extents of the release
- Boring or excavation logs
- Photographs including date and GIS information
- Topographic/Aerial maps
- Laboratory data including chain of custody

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

State of New Mexico  
Oil Conservation Division

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Incident ID	nAPP2226344597
District RP	
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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 Parker

Title: Env. Scientist

Signature: 

Date: March 20, 2023

email: aparker@ameredev.com

Telephone: 970-570-9535

**OCD Only**

Received by: Jocelyn Harimon

Date: 03/21/2023

Incident ID	nAPP2226344597
District RP	
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## 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)

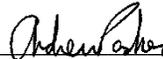
**Deferral Requests Only:** Each of the following items must be confirmed as part of any request for deferral of remediation.

- 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 Parker

Title: Env. Scientist

Signature: 

Date: March 20, 2023

email: aparker@ameredev.com

Telephone: 970-570-9535

**OCD Only**

Received by: Jocelyn Harimon Date: 03/21/2023

- Approved       Approved with Attached Conditions of Approval       Denied       Deferral Approved

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

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

Incident ID	nAPP2226344597
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Facility ID	
Application ID	

## Closure

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

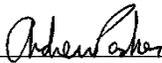
**Closure Report Attachment Checklist: Each of the following items must be included in the closure report.**

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

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

Printed Name: Andrew Parker

Title: Env. Scientist

Signature: 

Date: March 20, 2023

email: aparker@amerdev.com

Telephone: 970-570-9535

**OCD Only**

Received by: Jocelyn Harimon

Date: 03/21/2023

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: 04/26/2023

Printed Name: Jennifer Nobui

Title: Environmental Specialist A



Ameredeve II, LLC

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

March 20, 2023

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

RE: Deferral Request  
Incident #: nAPP2226344597  
AEP #: 20220916-2040-water  
Location: Redbud 4S

NMOCD:

Ameredeve II, LLC respectfully submits this characterization report and deferral request for incident number nAPP2226344597.

The release occurred on September 16, 2022 due to leak at the bottom of the on-site minion fluid storage tank and the failure of the containment liner. The calculated volume of released recycled produced water was 174 bbls with 80 bbls recovered, with a net unrecovered release volume of 94 bbls. Ameredeve provided email notification of major release to NMOCD on September 17, 2022. Communications are included in Appendix A.

The release occurred on an active production site located on Fee surface. A portion of the release migrated off-site onto a right of way (ROW) to the south of the production site and onto pasture to the west of the production site. Figures 1 and 2 show the on-site and southern off-site release extent. After the completion of drilling operations, the minion tank was deconstructed and removed from the location. The release did not impact surface or ground water.

Incident #: nAPP2226344597

AEP #: 20220916-2040-water

Location: Redbud 4S



*Figure 1: View of on-site release extent facing southwest from eastern extent.  
Date Taken: 2022-09-17 12:46:16. GPS: 32.0788061, -103.2899903*



*Figure 2: View of southern release extent facing west.  
Date Taken: 2022-09-17 12:40:53. GPS: 32.0784761, -103.2903744*

March 20, 2023

Released to Imaging: 4/26/2023 11:41:41 AM

Incident #: nAPP2226344597

AEP #: 20220916-2040-water

Location: Redbud 4S

## 1. Characterization

The following sections address items as described in 19.15.29.11.A NMAC, paragraphs 1- 5. Please refer to the C-141 characterization checklist for additional setback criteria and verification (Plates 2-9).

### 1.1. Site Map

The horizontal extent of the release was determined by visual observations on the day of the release and mapped using GPS technology with sub-meter accuracy.

Plate 1 shows the release extent relative to the Redbud/Holly 4S production site, utilities, pipelines, ROW and pasture. The coordinates of the source of the release are 32.0787015, -103.2907975. The release extent covered approximately 55,773 sq ft.

### 1.2. Depth to Ground Water

The nearest depth-to-water boring relative to the release extent is mapped on Plate 2. This borehole has been plugged. The Office of the State Engineer well logs are attached in Appendix B:

- MISC-410 (CP-1922) is located 0.33-miles southeast of the release extent with a depth to water of > 101 ft. dated 09/26/2022.

### 1.3. Wellhead Protection Area

Plate 3 shows that the release extent is:

- Not within incorporated municipal boundaries or within a defined municipal fresh water well field.
- Not within ½-mile private and domestic water sources (wells and springs).
- Not 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.
- Not within 1000 feet of any other fresh water well or spring

### 1.4. Distance to Nearest Significant Water Course

Plate 4 shows that the release extent is:

- Not within ½ mile of a significant water course. The nearest significant water course is mapped as an intermittent stream 0.97-miles east northeast from the release location.
- Not within 300 feet of a continuously flowing watercourse or any other significant watercourse.
- Not within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).

March 20, 2023

Incident #: nAPP2226344597

AEP #: 20220916-2040-water

Location: Redbud 4S

### 1.5. Soil/Waste Characteristics

The release occurred in the Pyote soils and Dune land complex with a slope of 0 – 3%<sup>1</sup>. The USDA Natural Resources Conservation Service (NRCS) soil survey describes the upper 5-feet of the Pyote soils lithology as:

- *A - 0 to 30 inches*: fine sand
- *Bt - 30 to 60 inches*: fine sandy loam

and Dune land lithology as:

- *A - 0 to 6 inches*: fine sand
- *C - 6 to 60 inches*: fine sand

The lithology as described by the NRCS is consistent with observed remediation and construction activities through the area of interest.

Characterization sampling and associated results are discussed in the Remediation Plan section, below.

## 2. Remediation Plan

On February 22 and March 13, 2023, Ameredev proceeded with comprehensive soil sampling of the release to determine remedial actions. Core samples were collected at the surface (0-2 ft) for horizontal delineation and at specified depths below the surface to evaluate the vertical extent of impacted soil.

Plate 10 shows:

- Sample points GS-01 through GS-15 and GS-28 represent horizontal delineation of the release extent.
- Sample points GS-16 through GS-27 represent initial on-site vertical delineation.
- The 100 series sample points represent additional confirmation samples.

Plate 11 shows:

- Off-site confirmation sample grids.

Table A identifies sample point coordinates.

Table B is a Summary of Analytical.

Certificates of Analysis are included in Appendix C.

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<sup>1</sup> <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>

March 20, 2023

Incident #: nAPP2226344597

AEP #: 20220916-2040-water

Location: Redbud 4S

## On-site Sampling

Analysis of constituents of concern showed that all on-site soil samples met Closure Criteria, defined below, according to Table 1 of 19.15.29 NMAC 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.

- 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

Lateral/horizontal delineation of on-site release extent to 600 mg/kg for chlorides is also demonstrated.

## Off-site Sampling

Off-site portions of the release extent were divided into sample grids with square footage of no greater than 200 square feet (Plate 11). Based on initial samples obtained off-site on February 22, Ameredev performed additional off-site sampling on March 13 of grids GS-101 – GS-114. Sample GS-23 was also used as a confirmation sample for grid G-102, and sample GS-17 was used as a confirmation sample for grid G-110.

Samples were analyzed for constituents of concern listed on Table 1 of 19.15.19 NMAC. Off-site samples met most stringent Closure Criteria, where

- Chloride < 600 mg/kg
- TPH (GRO + DRO + MRO) < 100 mg/kg
- BTEX < 50 mg/kg
- Benzene < 10 mg/kg

No remediation occurred and boreholes were backfilled. On-site surface was restored to an active production site. Off-site surface was restored and reclaimed either as a right-of-way or pastureland.

March 20, 2023

Incident #: nAPP2226344597

AEP #: 20220916-2040-water

Location: Redbud 4S

### 3. Deferral Request

Ameredev respectfully asks NMOCD for deferral of impacted areas on the active production site. This area meets the criteria for deferral request as defined in 19.15.29.12.C.(2):

- 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.

Analysis of samples obtained for horizontal and vertical delineation of the release extent on the active production site demonstrated that constituents of concern met the Closure Criteria of Table I of 19.15.29.12 NMAC, where groundwater > 100 ft below ground surface. Lateral/horizontal delineation also demonstrates that chlorides are < 600 mg/kg.

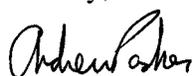
The release extent off-site met the most stringent closure criteria per Table 1 of 19.15.29 NMAC

If NMOCD determines that confirmation sample analytical results meet Closure Criteria concentrations as listed in Table 1 of 19.15.29 NMAC, a C-141 Closure Form is attached for approval.

When the production site is no longer in use for oil and gas operations, the surface shall be remediated, restored, and reclaimed per 19.15.29.13.A-D.

Please contact me with any questions.

Sincerely,



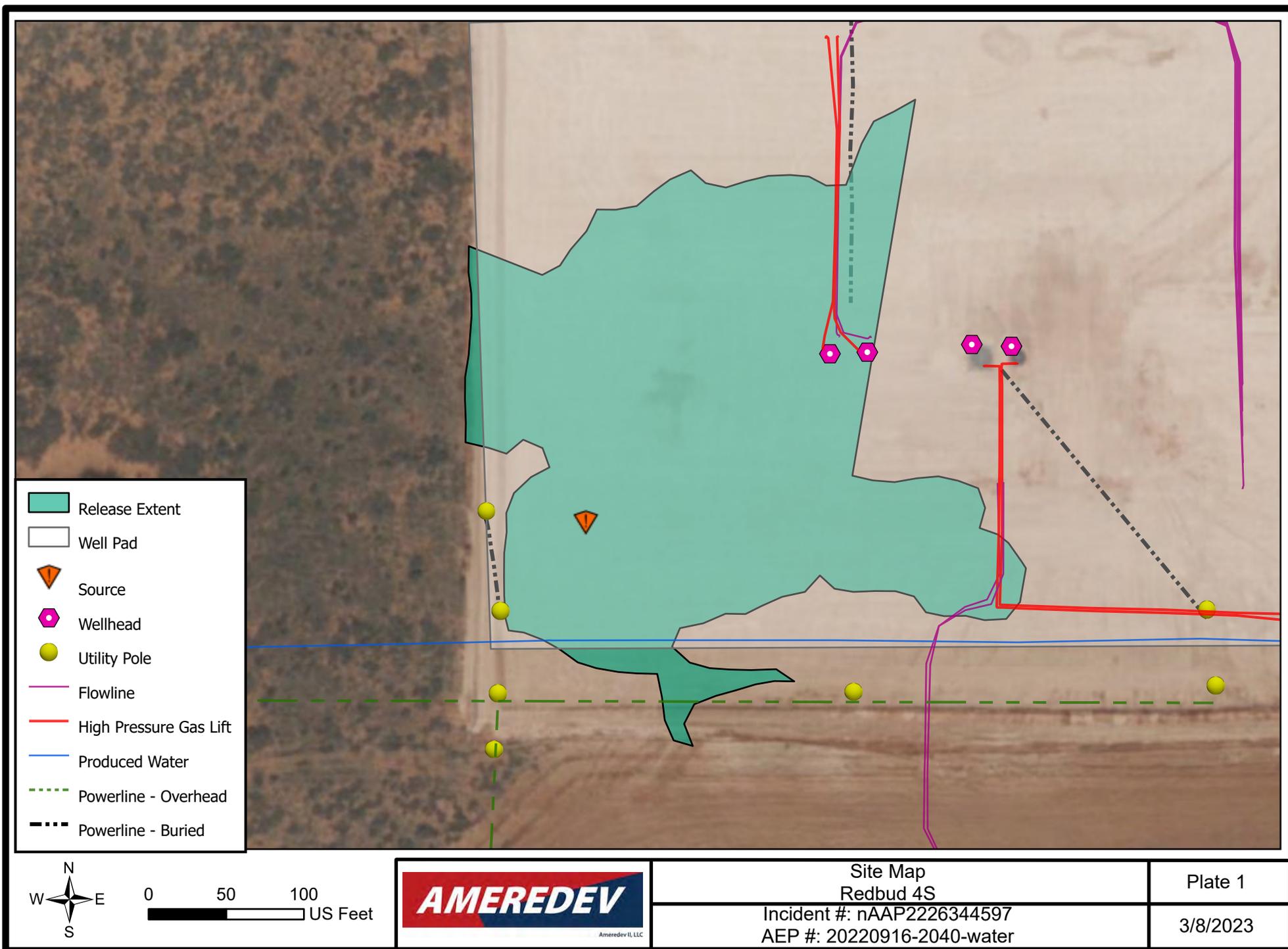
Andrew Parker  
Ameredev Operating, LLC  
Environmental Scientist

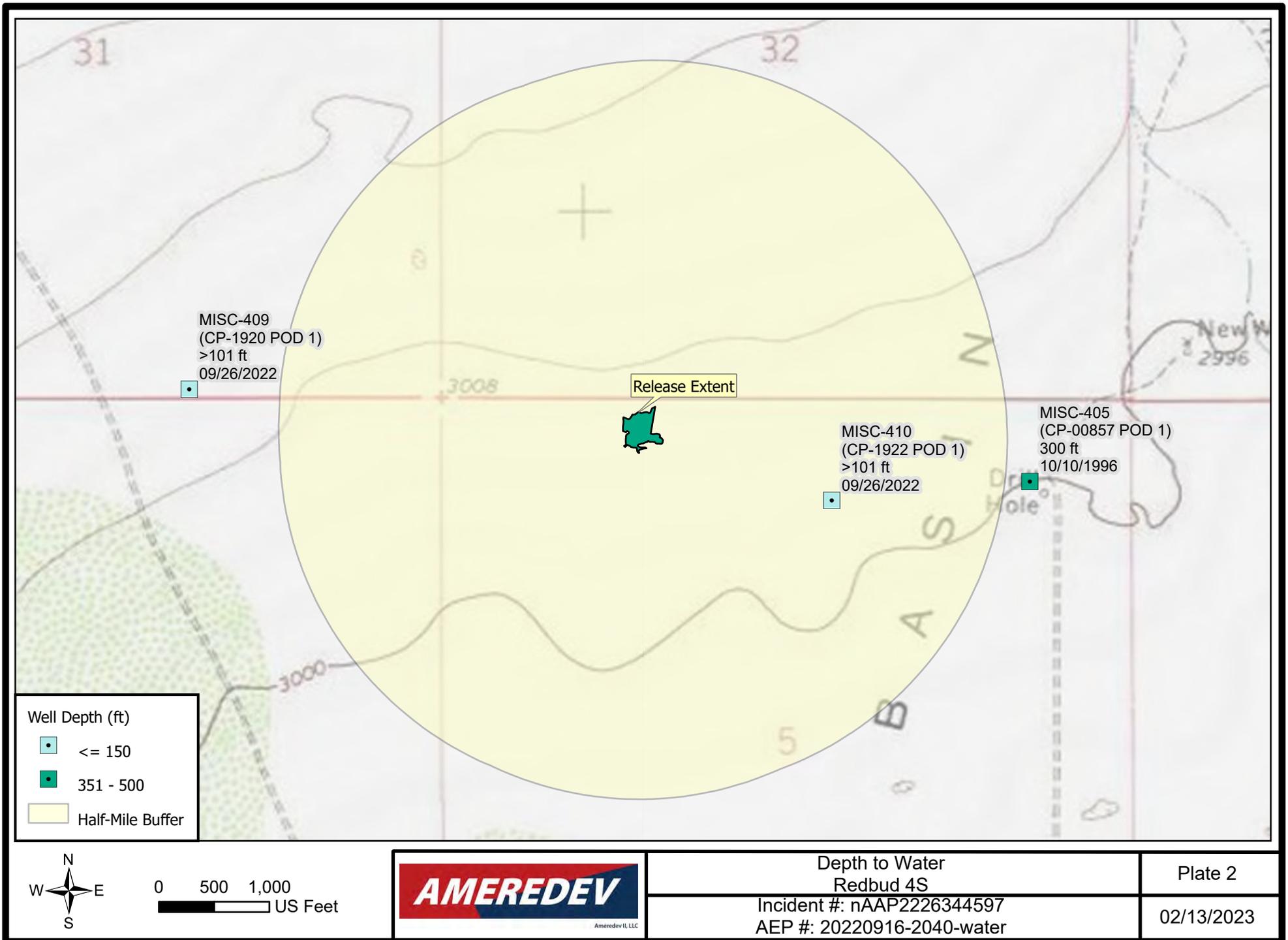
March 20, 2023

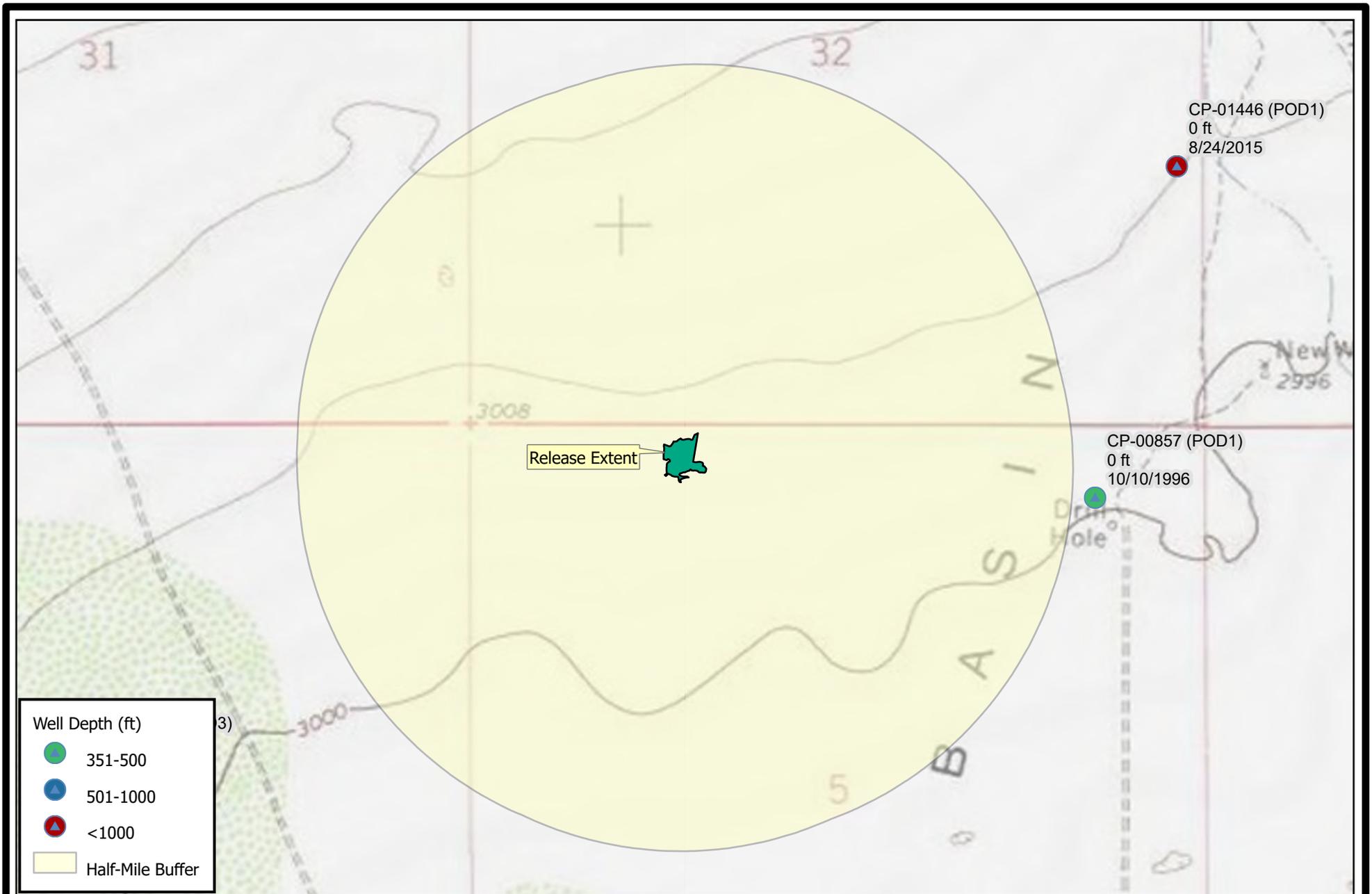
# Plates



Ameredev II, LLC





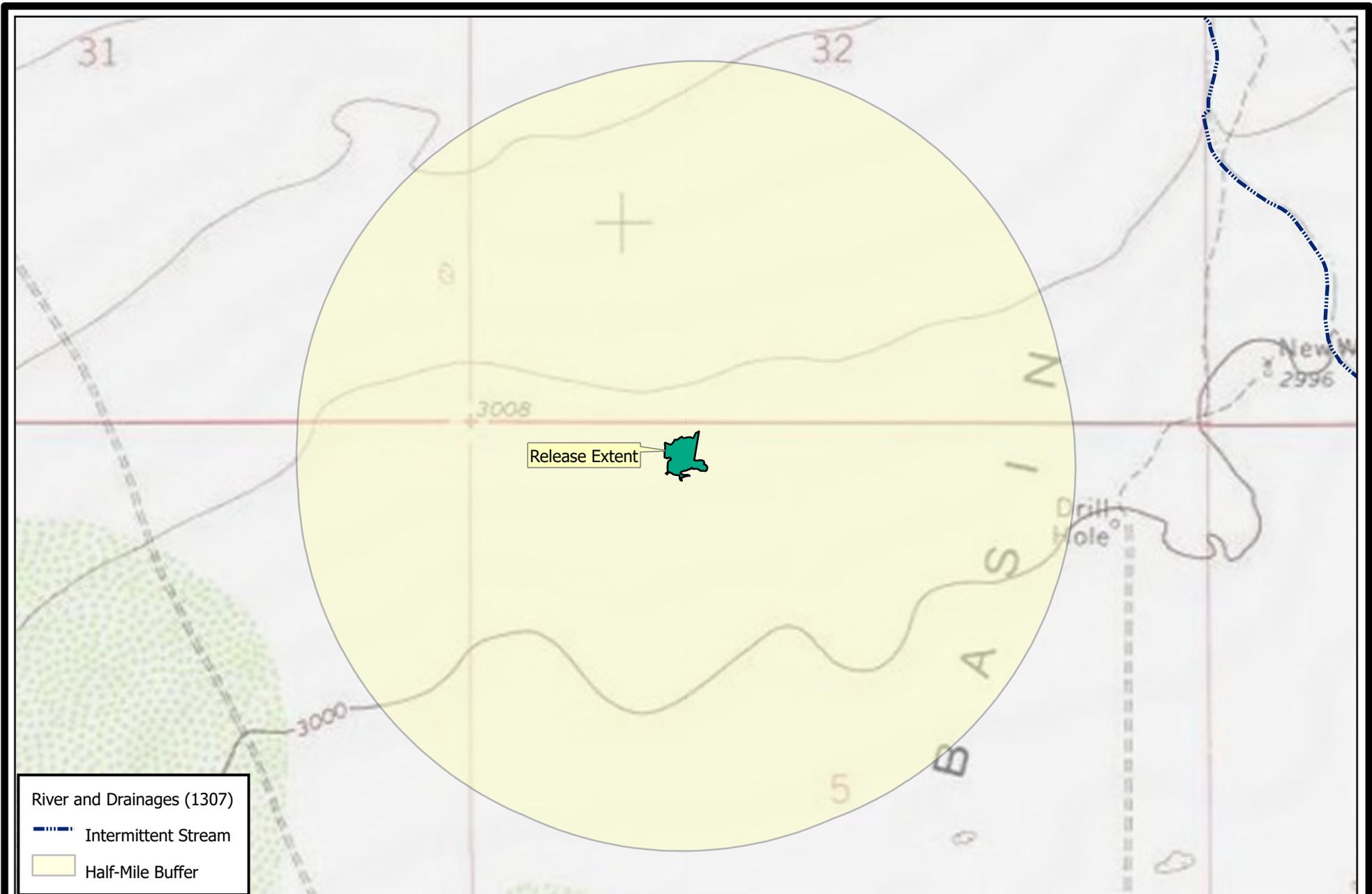


Well Depth (ft)

- 351-500
- ▲ 501-1000
- ▲ <1000
- Half-Mile Buffer



Wellhead Protection Redbud 4S	Plate 3
Incident #: nAAP2226344597 AEP #: 20220916-2040-water	02/13/2023



River and Drainages (1307)

- Intermittent Stream
- Half-Mile Buffer

0 500 1,000

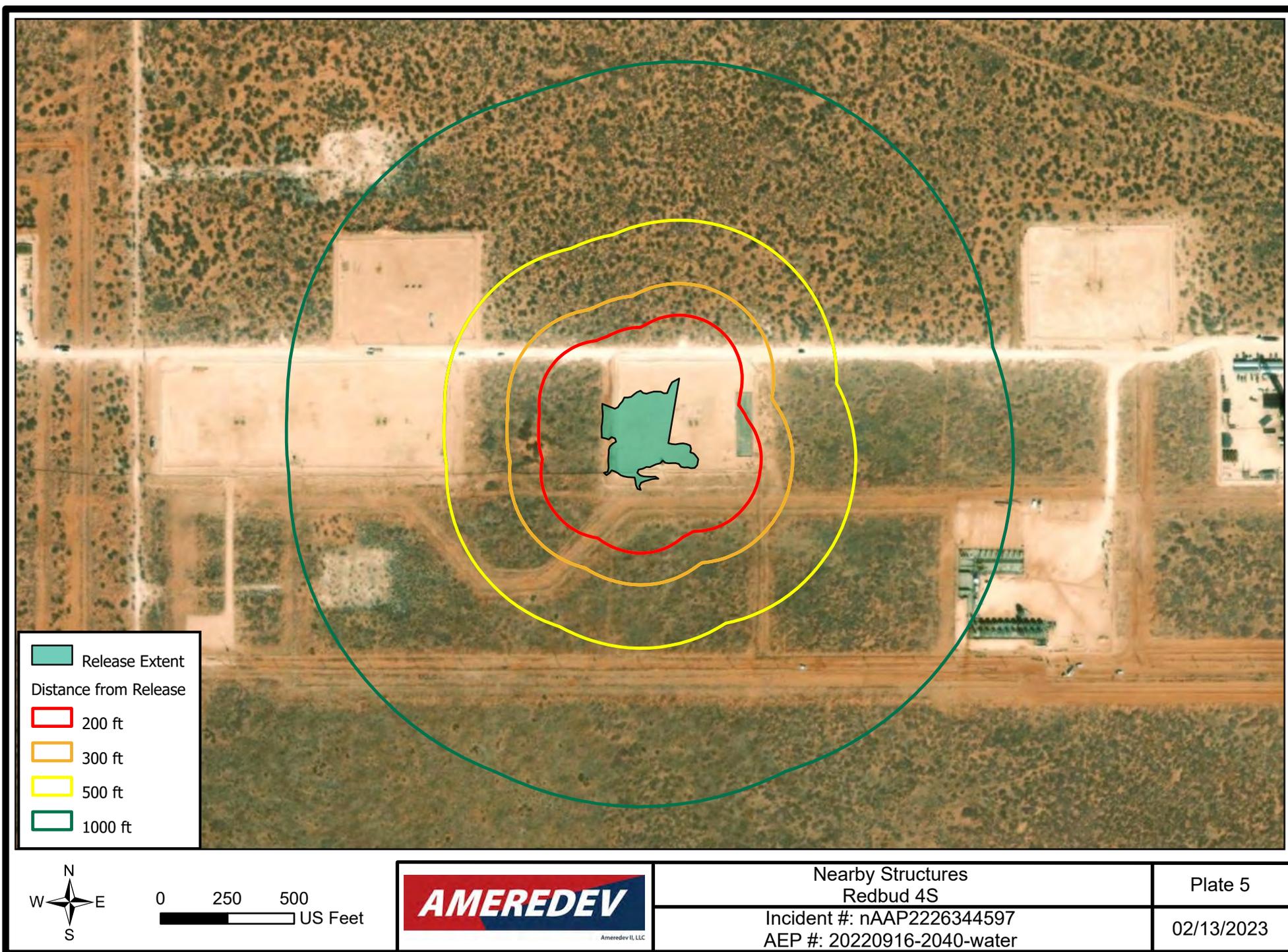


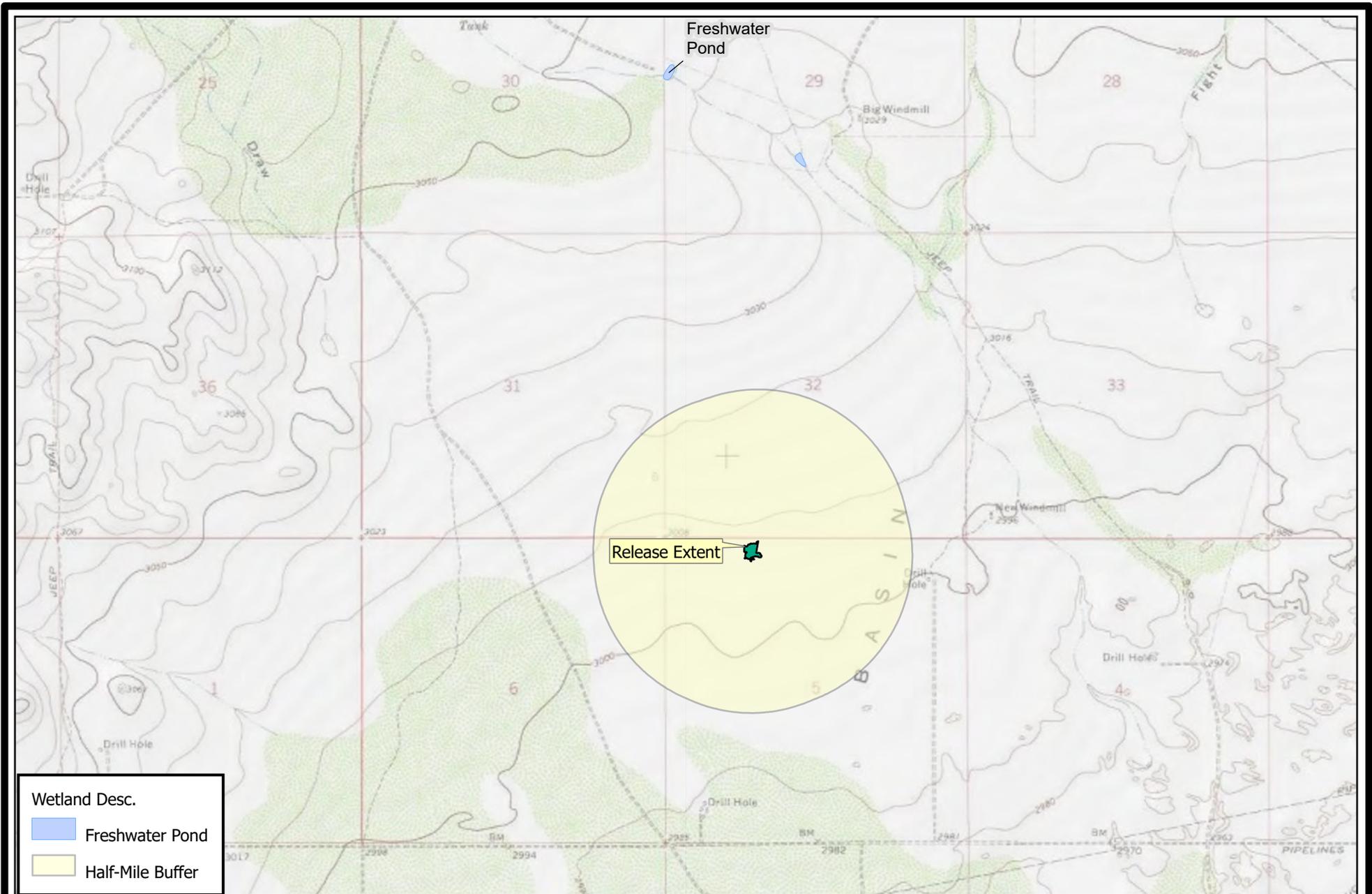
Significant Watercourses  
 Redbud 4S

Plate 4

Incident #: nAAP2226344597  
 AEP #: 20220916-2040-water

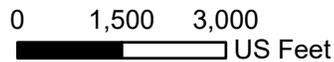
02/13/2023





**Wetland Desc.**

- Freshwater Pond
- Half-Mile Buffer

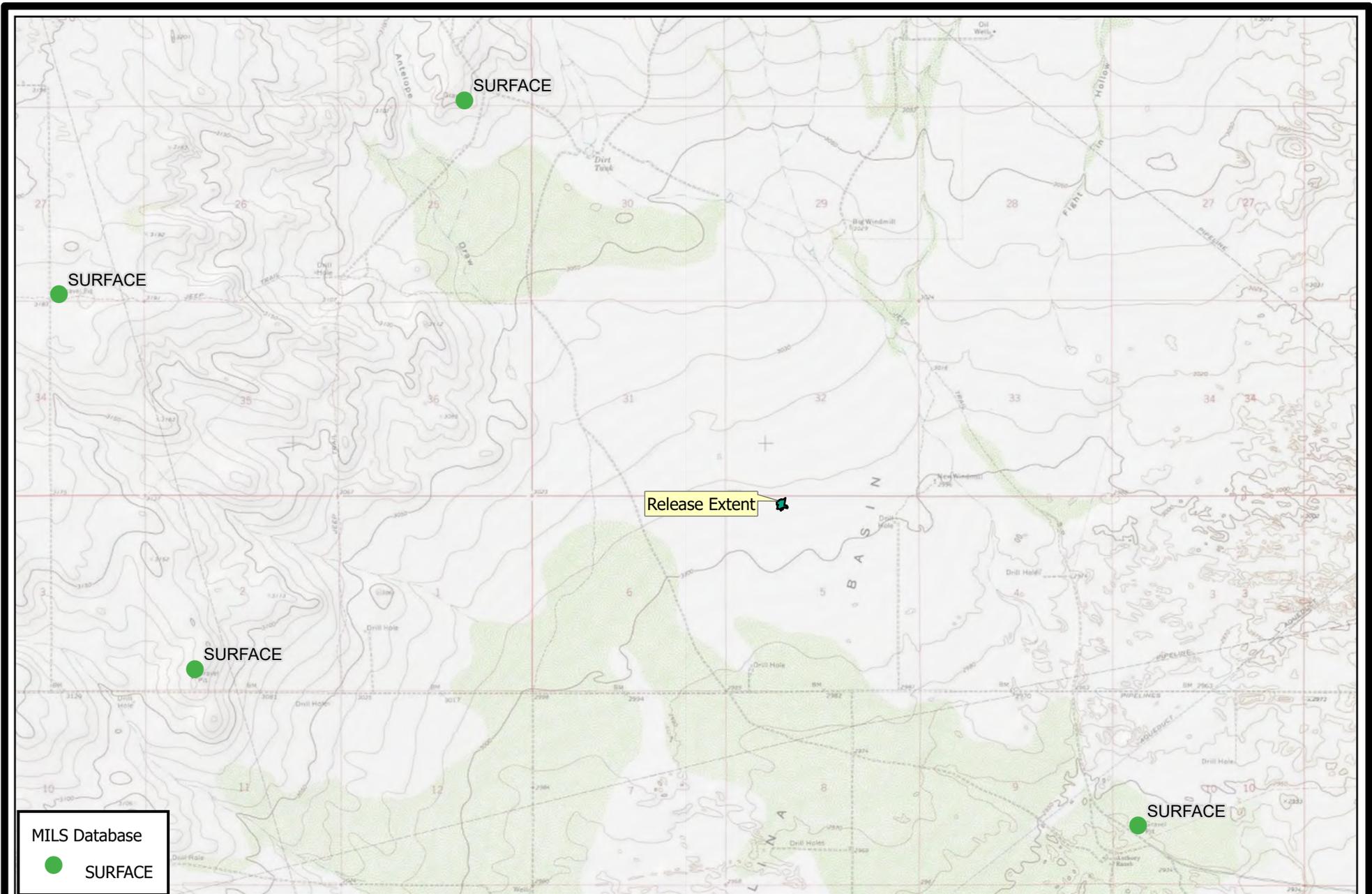


Wetlands  
Redbud 4S

Incident #: nAAP2226344597  
AEP #: 20220916-2040-water

Plate 6

02/13/2023



MILS Database

● SURFACE

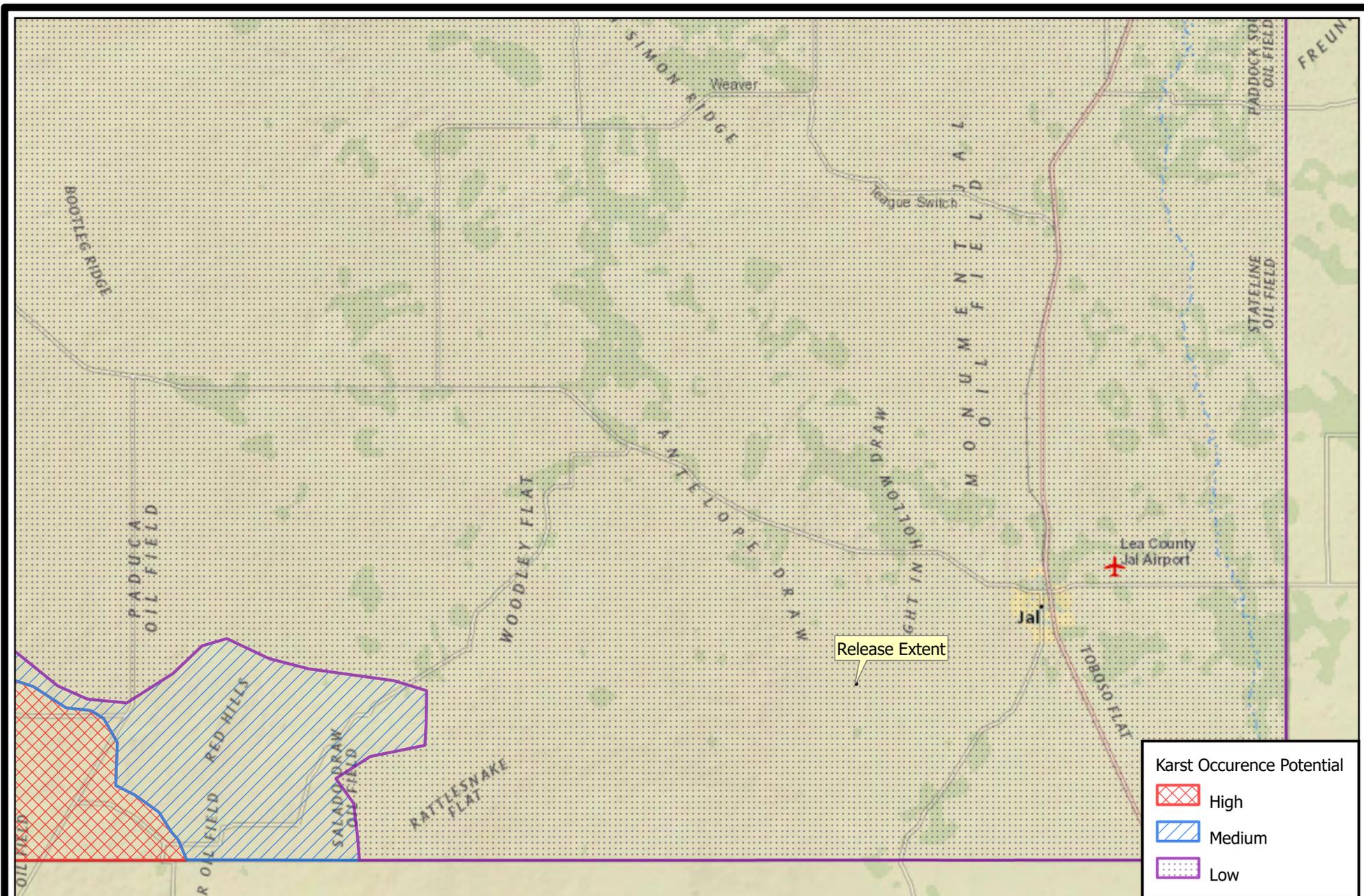
North arrow with N, S, E, W directions.

Scale bar: 0, 0.5, 1 Miles

Ameredev II, LLC

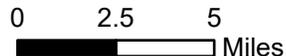
Mines and Minerals  
 Redbud 4S  
 Incident #: nAAP2226344597  
 AEP #: 20220916-2040-water

Plate 7  
 02/13/2023



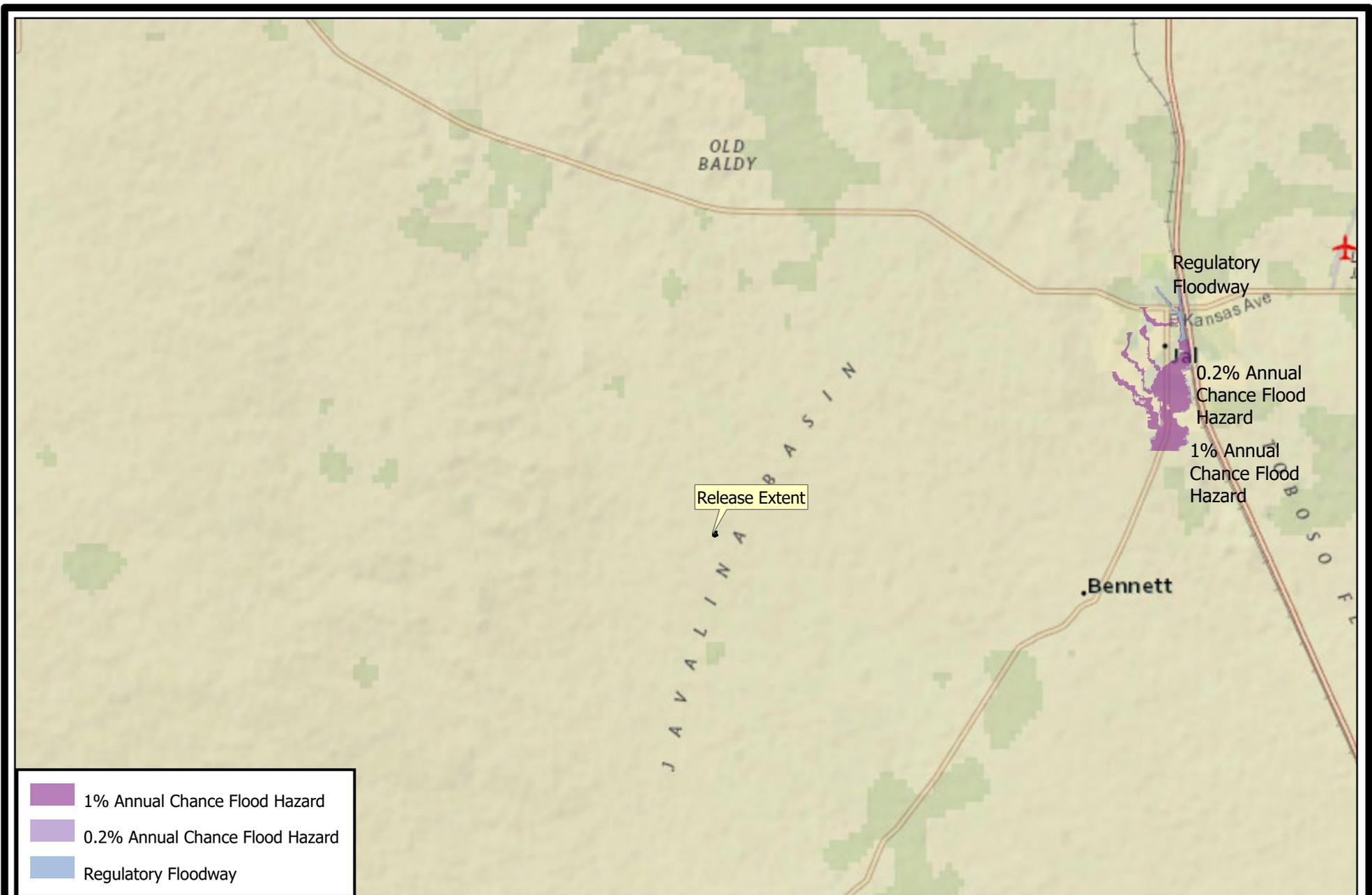
**Karst Occurrence Potential**

-  High
-  Medium
-  Low



<b>Karst Potential</b> Redbud 4S
Incident #: nAAP2226344597 AEP #: 20220916-2040-water

Plate 8  02/13/2023
---------------------------



- 1% Annual Chance Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Regulatory Floodway

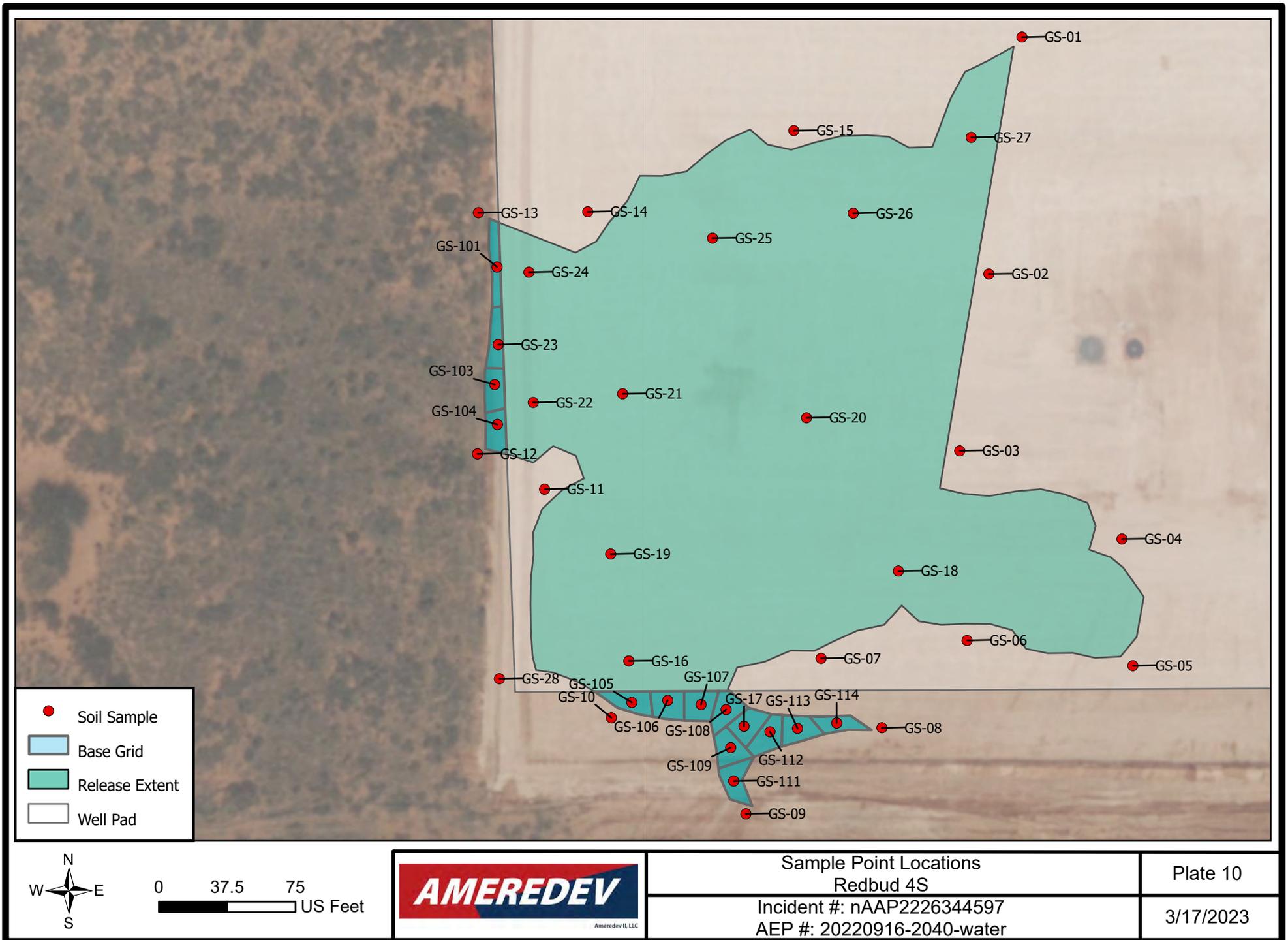


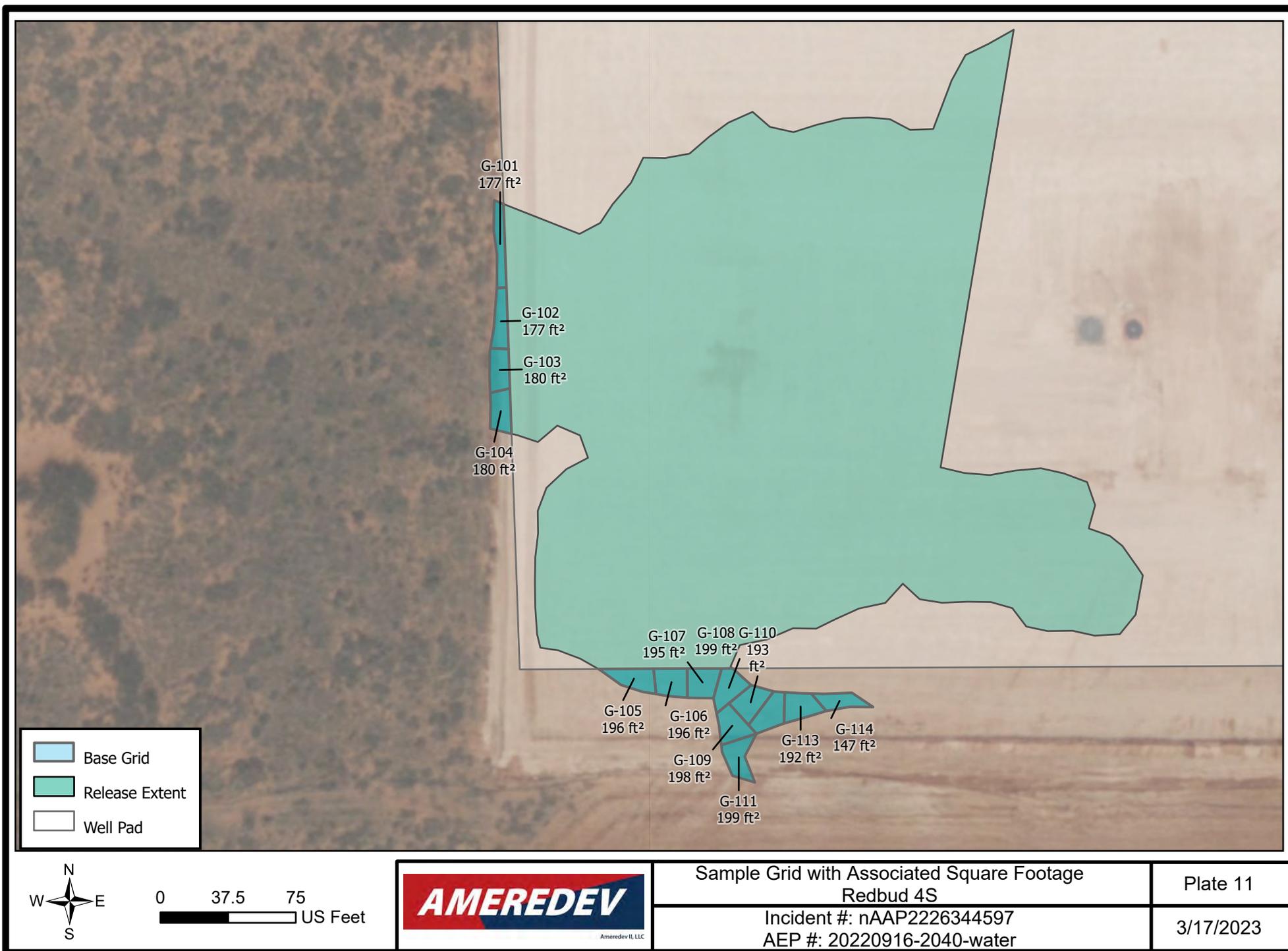
0 1.25 2.5  
Miles



Flood Hazard Redbud 4S
Incident #: nAAP2226344597 AEP #: 20220916-2040-water

Plate 9
02/13/2023





# Tables



Ameredev II, LLC

Table A  
Sample Point Coordinates

Sample Point	Latitude	Longitude
GS-01	32.07934115	-103.2902023
GS-02	32.07904002	-103.2902520
GS-03	32.07881522	-103.2902957
GS-04	32.07870315	-103.2900521
GS-05	32.07854212	-103.2900358
GS-06	32.07857415	-103.2902847
GS-07	32.07855141	-103.2905040
GS-08	32.07846326	-103.2904126
GS-09	32.07834443	-103.2906259
GS-10	32.07847581	-103.2908189
GS-11	32.07876651	-103.2909193
GS-12	32.07881133	-103.2910201
GS-13	32.07911792	-103.2910187
GS-14	32.07911914	-103.2908545
GS-15	32.07922225	-103.2905450
GS-16	32.07854813	-103.2907927
GS-17	32.07846504	-103.2906197
GS-18	32.07866239	-103.2903879
GS-19	32.07868409	-103.2908200
GS-20	32.07885721	-103.2905259
GS-21	32.07888778	-103.2908021
GS-22	32.07887674	-103.2909364
GS-23	32.07895032	-103.2909890
GS-24	32.07904229	-103.2909428
GS-25	32.07908558	-103.2906670
GS-26	32.07911728	-103.2904556
GS-27	32.07921368	-103.2902785
GS-28	32.07848648	-103.2909969
GS-101	32.07904883	-103.2909906
GS-103	32.07889945	-103.2909942
GS-104	32.07884874	-103.2909901
GS-105	32.07849534	-103.2907883
GS-106	32.07849800	-103.2907343
GS-107	32.07849268	-103.2906842
GS-108	32.07848631	-103.2906466
GS-109	32.07843797	-103.2906397
GS-111	32.07839548	-103.2906353
GS-112	32.07845816	-103.2905808
GS-113	32.07846241	-103.2905394
GS-114	32.07846931	-103.2904805

March 17, 2023

Table B  
Summary of Analytical

Incident #: nAPP2226344597  
AEP #: 20220916-2040-water  
Location: Redbud 4S

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 (Hall/Cardinal)	Lab #
NMOCD Closure Criteria													
0 - 4 feet & "not in-use"						600	--	100	10	50			
> 4 ft or "in-use"						20,000	1,000	2,500	10	50			
GS-01	2/22/2023		0	2	On Site	64	<20	<30	<0.05	<0.30	Horizontal Delineation	Cardinal	H230843
GS-02	2/22/2023		0	2	On Site	176	<20	<30	<0.05	<0.30	Horizontal Delineation	Cardinal	H230843
GS-03	2/22/2023		0	2	On Site	96	<20	<30	<0.05	<0.30	Horizontal Delineation	Cardinal	H230843
GS-04	2/22/2023		0	2	On Site	48	<20	<30	<0.05	<0.30	Horizontal Delineation	Cardinal	H230843
GS-05	2/22/2023		0	2	On Site	80	<20	<30	<0.05	<0.30	Horizontal Delineation	Cardinal	H230843
GS-06	2/22/2023		0	2	On Site	80	<20	<30	<0.05	<0.30	Horizontal Delineation	Cardinal	H230843
GS-07	2/22/2023		0	2	On Site	48	<20	<30	<0.05	<0.30	Horizontal Delineation	Cardinal	H230843
GS-08	2/22/2023		0	2	Off Site	32	<20	<30	<0.05	<0.30	Horizontal Delineation	Cardinal	H230843
GS-09	2/22/2023		0	2	Off Site	16	<20	<30	<0.05	<0.30	Horizontal Delineation	Cardinal	H230843
GS-10	2/22/2023		0	2	Off Site	32	<20	<30	<0.05	<0.30	Horizontal Delineation	Cardinal	H230843
GS-11	2/22/2023		0	2	On Site	32	<20	<30	<0.05	<0.30	Horizontal Delineation	Cardinal	H230843
GS-12	2/22/2023		0	2	Off Site	32	<20	<30	<0.05	<0.30	Horizontal Delineation	Cardinal	H230843
GS-13	2/22/2023		0	2	Off Site	64	<20	<30	<0.05	<0.30	Horizontal Delineation	Cardinal	H230843
GS-14	2/22/2023		0	2	On Site	128	<20	<30	<0.05	<0.30	Horizontal Delineation	Cardinal	H230843
GS-15	2/22/2023		0	2	On Site	160	<20	<30	<0.05	<0.30	Horizontal Delineation	Cardinal	H230843
GS-16	2/22/2023		0	2	On Site	64	<20	<30	<0.05	<0.30	Vertical Delineation	Cardinal	H230843
GS-17	2/22/2023		0	2	Off Site	64	<20	<30	<0.05	<0.30	Confirmation	Cardinal	H230843
GS-18	2/22/2023		0	2	On Site	1230	<20	<30	<0.05	<0.30	Vertical Delineation	Cardinal	H230843
GS-18	2/22/2023		2	4	On Site	160	<20	<30	<0.05	<0.30	Vertical Delineation	Cardinal	H230843
GS-19	2/22/2023		0	2	On Site	128	<20	<30	<0.05	<0.30	Vertical Delineation	Cardinal	H230843
GS-20	2/22/2023		0	2	On Site	1040	<20	<30	<0.05	<0.30	Vertical Delineation	Cardinal	H230843
GS-20	2/22/2023		2	4	On Site	1100	<20	<30	<0.05	<0.30	Vertical Delineation	Cardinal	H230843
GS-20	2/22/2023	4.5			On Site	112	<20	<30	<0.05	<0.30	Vertical Delineation	Cardinal	H230843
GS-21	2/22/2023		0	2	On Site	2480	<20	<30	<0.05	<0.30	Vertical Delineation	Cardinal	H230843
GS-21	2/22/2023		2	4	On Site	3200	<20	<30	<0.05	<0.30	Vertical Delineation	Cardinal	H230843
GS-21	2/22/2023	4.5			On Site	1480	<20	<30	<0.05	<0.30	Vertical Delineation	Cardinal	H230843
GS-22	2/22/2023		0	2	On Site	1440	<20	<30	<0.05	<0.30	Vertical Delineation	Cardinal	H230843
GS-22	2/22/2023		2	4	On Site	1520	<20	<30	<0.05	<0.30	Vertical Delineation	Cardinal	H230843
GS-22	2/22/2023	4.5			On Site	386	<20	<30	<0.05	<0.30	Vertical Delineation	Cardinal	H230843
GS-23	2/22/2023		0	2	Off Site	32	<20	<30	<0.05	<0.30	Confirmation	Cardinal	H230843
GS-24	2/22/2023		0	2	On Site	160	<20	<30	<0.05	<0.30	Vertical Delineation	Cardinal	H230843
GS-24	2/22/2023		2	4	On Site	2000	<20	<30	<0.05	<0.30	Vertical Delineation	Cardinal	H230843
GS-24	2/22/2023	4.5			On Site	1100	<20	<30	<0.05	<0.30	Vertical Delineation	Cardinal	H230843
GS-25	2/22/2023		0	2	On Site	336	<20	<30	<0.05	<0.30	Vertical Delineation	Cardinal	H230843
GS-25	2/22/2023		2	4	On Site	64	<20	<30	<0.05	<0.30	Vertical Delineation	Cardinal	H230843
GS-26	2/22/2023		0	2	On Site	80	<20	<30	<0.05	<0.30	Vertical Delineation	Cardinal	H230843
GS-27	2/22/2023		0	2	On Site	96	<20	<30	<0.05	<0.30	Vertical Delineation	Cardinal	H230843
GS-28	3/13/2023		0	2	Off Site	32	<20	<30	<0.05	<0.30	Horizontal Delineation	Cardinal	H231142
GS-101	3/13/2023		0	2	Off Site	32	<20	<30	<0.05	<0.30	Confirmation	Cardinal	H231142
GS-103	3/13/2023		0	2	Off Site	16	<20	<30	<0.05	<0.30	Confirmation	Cardinal	H231142
GS-104	3/13/2023		0	2	Off Site	48	<20	<30	<0.05	<0.30	Confirmation	Cardinal	H231142

March 17, 2023

Table B  
Summary of Analytical

Incident #: nAPP2226344597  
AEP #: 20220916-2040-water  
Location: Redbud 4S

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 (Hall/Cardinal)	Lab #
NMOCD Closure Criteria													
0 - 4 feet & "not in-use"						600	--	100	10	50			
> 4 ft or "in-use"						20,000	1,000	2,500	10	50			
GS-105	3/13/2023		0	2	Off Site	144	<20	<30	<0.05	<0.30	Confirmation	Cardinal	H231142
GS-106	3/13/2023		0	2	Off Site	224	<20	<30	<0.05	<0.30	Confirmation	Cardinal	H231142
GS-107	3/13/2023		0	2	Off Site	32	<20	<30	<0.05	<0.30	Confirmation	Cardinal	H231142
GS-108	3/13/2023		0	2	Off Site	32	<20	<30	<0.05	<0.30	Confirmation	Cardinal	H231142
GS-109	3/13/2023		0	2	Off Site	48	<20	<30	<0.05	<0.30	Confirmation	Cardinal	H231142
GS-111	3/13/2023		0	2	Off Site	112	<20	<30	<0.05	<0.30	Confirmation	Cardinal	H231142
GS-112	3/13/2023		0	2	Off Site	32	<20	<30	<0.05	<0.30	Confirmation	Cardinal	H231142
GS-113	3/13/2023		0	2	Off Site	32	<20	<30	<0.05	<0.30	Confirmation	Cardinal	H231142
GS-114	3/13/2023		0	2	Off Site	128	<20	<30	<0.05	<0.30	Confirmation	Cardinal	H231142

# Appendix A

## Communications



Ameredev II, LLC

**Andrew Parker**

---

**From:** Nobui, Jennifer, EMNRD <Jennifer.Nobui@emnrd.nm.gov>  
**Sent:** Monday, March 13, 2023 4:44 PM  
**To:** Andrew Parker  
**Cc:** Bratcher, Michael, EMNRD; Harimon, Jocelyn, EMNRD  
**Subject:** FW: [EXTERNAL] nAPP2226344597 Red Bud/Holly 4S

External (jennifer.nobui@emnrd.nm.gov)

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

Hello Andrew

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.

Notification for liner inspections and obtaining confirmation samples is two business days, not 48 hours. You may proceed with this inspection, however two business days' notice is required going forward. Inspections and confirmation samples will not be accepted without proper notification.

***19.15.29.11 A.(5)(a)(ii) at least two business days' notice to the appropriate division district office before conducting the liner inspection.***

***19.15.29.12D.(a) The responsible party must verbally notify the appropriate division district office two business days prior to conducting final sampling. If the division district office does not respond to the notice within the two business days, the responsible party may proceed with final sampling. The responsible party may request a variance from this requirement upon a showing of good cause as determined by the division.***

Please note: **Notice to [ocd.enviro@emnrd.nm.gov](mailto:ocd.enviro@emnrd.nm.gov) and/or project reviewer or Incident Supervisor is considered notice to the appropriate district office.**

Thanks,  
Jennifer Nobui

---

**From:** Andrew Parker <[aparker@ameredev.com](mailto:aparker@ameredev.com)>  
**Sent:** Monday, March 13, 2023 8:18 AM  
**To:** Enviro, OCD, EMNRD <[OCD.Enviro@emnrd.nm.gov](mailto:OCD.Enviro@emnrd.nm.gov)>  
**Cc:** Laura Parker <[lparker@ameredev.com](mailto:lparker@ameredev.com)>; Jesus Palomares <[jpalomares@ameredev.com](mailto:jpalomares@ameredev.com)>  
**Subject:** FW: [EXTERNAL] nAPP2226344597 Red Bud/Holly 4S

NMOCD,

In reference to the below email, additional off-site characterization sampling occurred on March 9<sup>th</sup>. Remaining offsite characterization/confirmation will be collected today (March 13) as we have an opening to mobilize and collect soil samples. Characterization samples may be used for confirmation samples. Per 19.15.29 NMAC, please accept this email as the 2-day confirmation sampling notice. Ameredev understands that the 2-day notice was not met per the Rule and

that NMOCD may request additional confirmation samples. A Remediation Plan will be submitted to NMOCD upon review of characterization sample analytical results.

A copy of this correspondence will be included in the forthcoming Remediation Plan.

Incident #: nAPP2226344597  
AEP #: 20220916-2040-water  
Location: Redbud/Holly 4S

Thank you,

Andrew Parker  
Environmental Scientist  
970-570-9535



---

**From:** Enviro, OCD, EMNRD <[OCD.Enviro@emnrd.nm.gov](mailto:OCD.Enviro@emnrd.nm.gov)>  
**Sent:** Friday, February 17, 2023 8:24 AM  
**To:** Andrew Parker <[aparker@ameredev.com](mailto:aparker@ameredev.com)>  
**Cc:** Nobui, Jennifer, EMNRD <[Jennifer.Nobui@emnrd.nm.gov](mailto:Jennifer.Nobui@emnrd.nm.gov)>; Bratcher, Michael, EMNRD <[mike.bratcher@emnrd.nm.gov](mailto:mike.bratcher@emnrd.nm.gov)>  
**Subject:** RE: [EXTERNAL] nAPP2226344597 Red Bud/Holly 4S

Andrew,

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.

JH

**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](http://www.emnrd.nm.gov)



---

**From:** Andrew Parker <[aparker@ameredev.com](mailto:aparker@ameredev.com)>  
**Sent:** Thursday, February 16, 2023 12:07 PM  
**To:** Enviro, OCD, EMNRD <[OCD.Enviro@emnrd.nm.gov](mailto:OCD.Enviro@emnrd.nm.gov)>  
**Cc:** Jesus Palomares <[jpalomares@ameredev.com](mailto:jpalomares@ameredev.com)>; Dayeed Khan <[dkhan@ameredev.com](mailto:dkhan@ameredev.com)>  
**Subject:** [EXTERNAL] nAPP2226344597 Red Bud/Holly 4S

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 2 business day notice for incident nAPP2226344597 per 19.15.29 NMAC. Characterization samples may be used for confirmation samples for deferral/closure. Soil sampling is to begin on Wednesday February 22, 2023.

Please contact me with any questions.

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:** Tuesday, September 20, 2022 1:24 PM  
**To:** Andrew Parker <[aparker@ameredev.com](mailto:aparker@ameredev.com)>  
**Subject:** [EXTERNAL] The Oil Conservation Division (OCD) has accepted the application, Application ID: 144923

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

The OCD has accepted the submitted *Notification of a release* (NOR), for incident ID (n#) nAPP2226344597, with the following conditions:

- **When submitting future reports regarding this release, please submit the calculations used or specific justification for the volumes reported on the initial C-141.**

Please reference nAPP2226344597, on all subsequent C-141 submissions and communications regarding the remediation of this release.

**NOTE:** As of December 2019, NMOCD has discontinued the use of the "RP" number.

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

[ocd.enviro@state.nm.us](mailto:ocd.enviro@state.nm.us)

**New Mexico Energy, Minerals and Natural Resources Department**  
1220 South St. Francis Drive  
Santa Fe, NM 87505

**Andrew Parker**

---

**From:** Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>  
**Sent:** Friday, February 17, 2023 9:24 AM  
**To:** Andrew Parker  
**Cc:** Nobui, Jennifer, EMNRD; Bratcher, Michael, EMNRD  
**Subject:** RE: [EXTERNAL] nAPP2226344597 Red Bud/Holly 4S

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

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

Andrew,

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.

JH

**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](http://www.emnrd.nm.gov)



---

**From:** Andrew Parker <aparker@ameredev.com>  
**Sent:** Thursday, February 16, 2023 12:07 PM  
**To:** Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>  
**Cc:** Jesus Palomares <jpalomares@ameredev.com>; Dayeed Khan <dkhan@ameredev.com>  
**Subject:** [EXTERNAL] nAPP2226344597 Red Bud/Holly 4S

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 2 business day notice for incident nAPP2226344597 per 19.15.29 NMAC. Characterization samples may be used for confirmation samples for deferral/closure. Soil sampling is to begin on Wednesday February 22, 2023.

Please contact me with any questions.

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:** Tuesday, September 20, 2022 1:24 PM  
**To:** Andrew Parker <[aparker@amereDEV.com](mailto:aparker@amereDEV.com)>  
**Subject:** [EXTERNAL] The Oil Conservation Division (OCD) has accepted the application, Application ID: 144923

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

The OCD has accepted the submitted *Notification of a release* (NOR), for incident ID (n#) nAPP2226344597, with the following conditions:

- **When submitting future reports regarding this release, please submit the calculations used or specific justification for the volumes reported on the initial C-141.**

Please reference nAPP2226344597, on all subsequent C-141 submissions and communications regarding the remediation of this release.

**NOTE:** As of December 2019, NMOCD has discontinued the use of the "RP" number.

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

[ocd.enviro@state.nm.us](mailto:ocd.enviro@state.nm.us)

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

1220 South St. Francis Drive  
Santa Fe, NM 87505

**Andrew Parker**

---

**From:** Andrew Parker  
**Sent:** Saturday, September 17, 2022 11:55 AM  
**To:** Enviro, OCD, EMNRD  
**Cc:** Bratcher, Mike, EMNRD; Hansley Persad; Dayeed Khan; Shane McNeely; Laura Parker; Jacob Saenz; Jesus Palomares  
**Subject:** 24hr Major Release Notification Redbud 4S

NMOCD,

Please accept this email as the 24 hour major release notification per 19.15.29 NMAC. A C-141 NOR will be submitted via the online portal within 10-days.

Operator: Ameredev Operating  
AEP #: 20220916-2040-water  
Location: Redbud 4S production pad  
Surface: Private  
UL C; Sec. 05; T26S R36E  
Lea County  
Lat/Long: 32.078926, -103.2902143

Released volume: >25 bbls. The C-141 NOR will include final volumes.  
Recovered volume: The C-141 NOR will include final volumes.  
Source: Produced water  
Cause: Leak at the bottom of Minion Fluid Storage Tank.  
Corrective actions: vacuum trucks dispatched to recover fluid and rerouting temporary flowlines to transfer remaining fluid in tank to produced water transfer lines. Earthen containment berms constructed to control release extent.

Thank you,

Andrew Parker  
Environmental Scientist  
970-570-9535



# 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: Resubmitted Well Record CP-1922 Pod-1

To whom it may concern:

Attached please find a corrected well log & record and a plugging record that was originally filed on 9/30/2022, corrected is in duplicate, for a one (1) soil borings, CP-1922 Pod-1.

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".

Lucas Middleton

Enclosures: as noted above

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# WELL RECORD & LOG

## OFFICE OF THE STATE ENGINEER

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

<b>1. GENERAL AND WELL LOCATION</b>	OSE POD NO. (WELL NO.) <b>POD-1</b>		WELL TAG ID NO. <b>n/a</b>		OSE FILE NO(S). <b>CP-1922</b>		
	WELL OWNER NAME(S) <b>Ameredev Operating, LLC</b>				PHONE (OPTIONAL) <b>737-300-4700</b>		
	WELL OWNER MAILING ADDRESS <b>2901 Via Fortuna Suite 600</b>				CITY <b>Austin</b>	STATE <b>TX</b>	ZIP <b>78746</b>
	WELL LOCATION (FROM GPS)	DEGREES <b>32</b>	MINUTES <b>4</b>	SECONDS <b>38.51</b>	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
		LONGITUDE <b>103</b>	<b>17</b>	<b>9.02</b>	* DATUM REQUIRED: WGS 84		
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE <b>SW NW NE Sec.5 T26S R36S NMPM</b>							

<b>2. DRILLING &amp; CASING INFORMATION</b>	LICENSE NO. <b>1249</b>	NAME OF LICENSED DRILLER <b>Jackie D. Atkins</b>			NAME OF WELL DRILLING COMPANY <b>Atkins Engineering Associates, Inc.</b>			
	DRILLING STARTED <b>9/21/2022</b>	DRILLING ENDED <b>9/21/2022</b>	DEPTH OF COMPLETED WELL (FT) <b>temporary well material</b>	BORE HOLE DEPTH (FT) <b>±101</b>	DEPTH WATER FIRST ENCOUNTERED (FT) <b>n/a</b>			
	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) <b>n/a</b>	DATE STATIC MEASURED <b>9/26/2022</b>		
	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: <b>Hollow Stem Auger</b>					CHECK HERE IF PITLESS ADAPTER IS INSTALLED <input type="checkbox"/>		
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	<b>0</b>	<b>101</b>	<b>±6.25"</b>	<b>Boring-HSA</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>

<b>3. ANNULAR MATERIAL</b>	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT
	FROM	TO				

FOR OSE INTERNAL USE			WR-20 WELL RECORD & LOG (Version 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: CP-1922

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: 7/26/2022 Date well plugging concluded: 7/26/2022
- 5) GPS Well Location: Latitude: 32 deg, 4 min, 38.51 sec  
Longitude: 103 deg, 17 min, 9.02 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):

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- 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	

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

**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.

*Jackie Atkins*

Signature of Well Driller

10/4/2022

Date

# 6\_CP-1922\_WellLog-packet-forsign-DTW-16

Final Audit Report

2022-10-04

Created:	2022-10-04
By:	Lucas Middleton (lucas@atkinseng.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAzK7AaPUzEPE-3Y1tAUQrH1E(AYsYz3H5

## "6\_CP-1922\_WellLog-packet-forsign-DTW-16" History

-  Document created by Lucas Middleton (lucas@atkinseng.com)  
2022-10-04 - 2:26:57 PM GMT - IP address: 64.17.71.25
-  Document emailed to Jack Atkins (jack@atkinseng.com) for signature  
2022-10-04 - 2:27:56 PM GMT
-  Email viewed by Jack Atkins (jack@atkinseng.com)  
2022-10-04 - 2:58:39 PM GMT - IP address: 64.90.153.232
-  Document e-signed by Jack Atkins (jack@atkinseng.com)  
Signature Date: 2022-10-04 - 3:00:40 PM GMT - Time Source: server- IP address: 64.90.153.232
-  Agreement completed.  
2022-10-04 - 3:00:40 PM GMT

USE DT OCT 12 2022 PM 2:04

# Appendix C

## Certificates of Analysis



Ameredev II, LLC



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

---

February 27, 2023

ANDREW PARKER

AMEREDEV

2901 VIA FORTUNA , SUITE 600

AUSTIN, TX 78746

RE: REDBUD 4S

Enclosed are the results of analyses for samples received by the laboratory on 02/23/23 9:03.

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



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:	02/23/2023	Sampling Date:	02/22/2023
Reported:	02/27/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 01 0-2 FT (H230843-01)**

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	02/23/2023	ND	2.06	103	2.00	0.800	QR-03
Toluene*	<0.050	0.050	02/23/2023	ND	2.11	105	2.00	0.426	QM-07, QR-03
Ethylbenzene*	<0.050	0.050	02/23/2023	ND	2.06	103	2.00	0.304	QM-07, QR-03
Total Xylenes*	<0.150	0.150	02/23/2023	ND	6.32	105	6.00	1.87	QM-07, QR-03
Total BTEX	<0.300	0.300	02/23/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 89.5 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	02/23/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/23/2023	ND	198	99.2	200	3.78	
DRO >C10-C28*	<10.0	10.0	02/23/2023	ND	195	97.3	200	1.97	
EXT DRO >C28-C36	<10.0	10.0	02/23/2023	ND					

Surrogate: 1-Chlorooctane 131 % 48.2-134

Surrogate: 1-Chlorooctadecane 136 % 49.1-148

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:	02/23/2023	Sampling Date:	02/22/2023
Reported:	02/27/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 02 0-2 FT (H230843-02)**

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	02/23/2023	ND	2.06	103	2.00	0.800	
Toluene*	<0.050	0.050	02/23/2023	ND	2.11	105	2.00	0.426	
Ethylbenzene*	<0.050	0.050	02/23/2023	ND	2.06	103	2.00	0.304	
Total Xylenes*	<0.150	0.150	02/23/2023	ND	6.32	105	6.00	1.87	
Total BTEX	<0.300	0.300	02/23/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	02/23/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/23/2023	ND	198	99.2	200	3.78	
DRO >C10-C28*	<10.0	10.0	02/23/2023	ND	195	97.3	200	1.97	
EXT DRO >C28-C36	<10.0	10.0	02/23/2023	ND					

Surrogate: 1-Chlorooctane 108 % 48.2-134

Surrogate: 1-Chlorooctadecane 110 % 49.1-148

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:	02/23/2023	Sampling Date:	02/22/2023
Reported:	02/27/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 03 0-2 FT (H230843-03)**

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	02/23/2023	ND	2.06	103	2.00	0.800		
Toluene*	<0.050	0.050	02/23/2023	ND	2.11	105	2.00	0.426		
Ethylbenzene*	<0.050	0.050	02/23/2023	ND	2.06	103	2.00	0.304		
Total Xylenes*	<0.150	0.150	02/23/2023	ND	6.32	105	6.00	1.87		
Total BTEX	<0.300	0.300	02/23/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 93.5 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	02/23/2023	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/23/2023	ND	198	99.2	200	3.78		
DRO >C10-C28*	<10.0	10.0	02/23/2023	ND	195	97.3	200	1.97		
EXT DRO >C28-C36	<10.0	10.0	02/23/2023	ND						

Surrogate: 1-Chlorooctane 107 % 48.2-134

Surrogate: 1-Chlorooctadecane 109 % 49.1-148

Cardinal Laboratories

\* = Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	02/23/2023	Sampling Date:	02/22/2023
Reported:	02/27/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 04 0-2 FT (H230843-04)**

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	02/23/2023	ND	2.06	103	2.00	0.800		
Toluene*	<0.050	0.050	02/23/2023	ND	2.11	105	2.00	0.426		
Ethylbenzene*	<0.050	0.050	02/23/2023	ND	2.06	103	2.00	0.304		
Total Xylenes*	<0.150	0.150	02/23/2023	ND	6.32	105	6.00	1.87		
Total BTEX	<0.300	0.300	02/23/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 112 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	02/23/2023	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/23/2023	ND	198	99.2	200	3.78		
DRO >C10-C28*	<10.0	10.0	02/23/2023	ND	195	97.3	200	1.97		
EXT DRO >C28-C36	<10.0	10.0	02/23/2023	ND						

Surrogate: 1-Chlorooctane 114 % 48.2-134

Surrogate: 1-Chlorooctadecane 116 % 49.1-148

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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:	02/23/2023	Sampling Date:	02/22/2023
Reported:	02/27/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 05 0-2 FT (H230843-05)**

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	02/23/2023	ND	2.06	103	2.00	0.800	
Toluene*	<0.050	0.050	02/23/2023	ND	2.11	105	2.00	0.426	
Ethylbenzene*	<0.050	0.050	02/23/2023	ND	2.06	103	2.00	0.304	
Total Xylenes*	<0.150	0.150	02/23/2023	ND	6.32	105	6.00	1.87	
Total BTEX	<0.300	0.300	02/23/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 89.8 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	02/23/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/23/2023	ND	198	99.2	200	3.78	
DRO >C10-C28*	<10.0	10.0	02/23/2023	ND	195	97.3	200	1.97	
EXT DRO >C28-C36	<10.0	10.0	02/23/2023	ND					

Surrogate: 1-Chlorooctane 112 % 48.2-134

Surrogate: 1-Chlorooctadecane 114 % 49.1-148

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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:	02/23/2023	Sampling Date:	02/22/2023
Reported:	02/27/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 06 0-2 FT (H230843-06)**

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	02/23/2023	ND	2.06	103	2.00	0.800	
Toluene*	<0.050	0.050	02/23/2023	ND	2.11	105	2.00	0.426	
Ethylbenzene*	<0.050	0.050	02/23/2023	ND	2.06	103	2.00	0.304	
Total Xylenes*	<0.150	0.150	02/23/2023	ND	6.32	105	6.00	1.87	
Total BTEX	<0.300	0.300	02/23/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 113 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	02/23/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/23/2023	ND	198	99.2	200	3.78	
DRO >C10-C28*	<10.0	10.0	02/23/2023	ND	195	97.3	200	1.97	
EXT DRO >C28-C36	<10.0	10.0	02/23/2023	ND					

Surrogate: 1-Chlorooctane 111 % 48.2-134

Surrogate: 1-Chlorooctadecane 114 % 49.1-148

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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:	02/23/2023	Sampling Date:	02/22/2023
Reported:	02/27/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 07 0-2 FT (H230843-07)**

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	02/23/2023	ND	2.06	103	2.00	0.800		
Toluene*	<0.050	0.050	02/23/2023	ND	2.11	105	2.00	0.426		
Ethylbenzene*	<0.050	0.050	02/23/2023	ND	2.06	103	2.00	0.304		
Total Xylenes*	<0.150	0.150	02/23/2023	ND	6.32	105	6.00	1.87		
Total BTEX	<0.300	0.300	02/23/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 89.5 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	02/23/2023	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/23/2023	ND	198	99.2	200	3.78		
DRO >C10-C28*	<10.0	10.0	02/23/2023	ND	195	97.3	200	1.97		
EXT DRO >C28-C36	<10.0	10.0	02/23/2023	ND						

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 101 % 49.1-148

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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:	02/23/2023	Sampling Date:	02/22/2023
Reported:	02/27/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 08 0-2 FT (H230843-08)**

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	02/23/2023	ND	2.06	103	2.00	0.800		
Toluene*	<0.050	0.050	02/23/2023	ND	2.11	105	2.00	0.426		
Ethylbenzene*	<0.050	0.050	02/23/2023	ND	2.06	103	2.00	0.304		
Total Xylenes*	<0.150	0.150	02/23/2023	ND	6.32	105	6.00	1.87		
Total BTEX	<0.300	0.300	02/23/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 112 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	02/23/2023	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/23/2023	ND	198	99.2	200	3.78		
DRO >C10-C28*	<10.0	10.0	02/23/2023	ND	195	97.3	200	1.97		
EXT DRO >C28-C36	<10.0	10.0	02/23/2023	ND						

Surrogate: 1-Chlorooctane 103 % 48.2-134

Surrogate: 1-Chlorooctadecane 104 % 49.1-148

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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:	02/23/2023	Sampling Date:	02/22/2023
Reported:	02/27/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 09 0-2 FT (H230843-09)**

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	02/23/2023	ND	2.06	103	2.00	0.800		
Toluene*	<0.050	0.050	02/23/2023	ND	2.11	105	2.00	0.426		
Ethylbenzene*	<0.050	0.050	02/23/2023	ND	2.06	103	2.00	0.304		
Total Xylenes*	<0.150	0.150	02/23/2023	ND	6.32	105	6.00	1.87		
Total BTEX	<0.300	0.300	02/23/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 109 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	02/23/2023	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/23/2023	ND	198	99.2	200	3.78		
DRO >C10-C28*	<10.0	10.0	02/23/2023	ND	195	97.3	200	1.97		
EXT DRO >C28-C36	<10.0	10.0	02/23/2023	ND						

Surrogate: 1-Chlorooctane 99.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 99.8 % 49.1-148

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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:	02/23/2023	Sampling Date:	02/22/2023
Reported:	02/27/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 10 0-2 FT (H230843-10)**

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	02/23/2023	ND	2.06	103	2.00	0.800		
Toluene*	<0.050	0.050	02/23/2023	ND	2.11	105	2.00	0.426		
Ethylbenzene*	<0.050	0.050	02/23/2023	ND	2.06	103	2.00	0.304		
Total Xylenes*	<0.150	0.150	02/23/2023	ND	6.32	105	6.00	1.87		
Total BTEX	<0.300	0.300	02/23/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 109 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	02/23/2023	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/23/2023	ND	198	99.2	200	3.78		
DRO >C10-C28*	<10.0	10.0	02/23/2023	ND	195	97.3	200	1.97		
EXT DRO >C28-C36	<10.0	10.0	02/23/2023	ND						

Surrogate: 1-Chlorooctane 95.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 98.6 % 49.1-148

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**Analytical Results For:**

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

Received:	02/23/2023	Sampling Date:	02/22/2023
Reported:	02/27/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 11 0-2 FT (H230843-11)**

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	02/23/2023	ND	2.06	103	2.00	0.800		
Toluene*	<0.050	0.050	02/23/2023	ND	2.11	105	2.00	0.426		
Ethylbenzene*	<0.050	0.050	02/23/2023	ND	2.06	103	2.00	0.304		
Total Xylenes*	<0.150	0.150	02/23/2023	ND	6.32	105	6.00	1.87		
Total BTEX	<0.300	0.300	02/23/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 83.9 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	02/23/2023	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/23/2023	ND	198	99.2	200	3.78		
DRO >C10-C28*	<10.0	10.0	02/23/2023	ND	195	97.3	200	1.97		
EXT DRO >C28-C36	<10.0	10.0	02/23/2023	ND						

Surrogate: 1-Chlorooctane 90.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 92.9 % 49.1-148

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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:	02/23/2023	Sampling Date:	02/22/2023
Reported:	02/27/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 12 0-2 FT (H230843-12)**

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	02/23/2023	ND	2.06	103	2.00	0.800		
Toluene*	<0.050	0.050	02/23/2023	ND	2.11	105	2.00	0.426		
Ethylbenzene*	<0.050	0.050	02/23/2023	ND	2.06	103	2.00	0.304		
Total Xylenes*	<0.150	0.150	02/23/2023	ND	6.32	105	6.00	1.87		
Total BTEX	<0.300	0.300	02/23/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 113 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	02/23/2023	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/23/2023	ND	198	99.2	200	3.78		
DRO >C10-C28*	<10.0	10.0	02/23/2023	ND	195	97.3	200	1.97		
EXT DRO >C28-C36	<10.0	10.0	02/23/2023	ND						

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 103 % 49.1-148

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**Analytical Results For:**

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

Received:	02/23/2023	Sampling Date:	02/22/2023
Reported:	02/27/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 13 0-2 FT (H230843-13)**

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	02/23/2023	ND	2.06	103	2.00	0.800		
Toluene*	<0.050	0.050	02/23/2023	ND	2.11	105	2.00	0.426		
Ethylbenzene*	<0.050	0.050	02/23/2023	ND	2.06	103	2.00	0.304		
Total Xylenes*	<0.150	0.150	02/23/2023	ND	6.32	105	6.00	1.87		
Total BTEX	<0.300	0.300	02/23/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 113 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	02/23/2023	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/23/2023	ND	198	99.2	200	3.78		
DRO >C10-C28*	<10.0	10.0	02/23/2023	ND	195	97.3	200	1.97		
EXT DRO >C28-C36	<10.0	10.0	02/23/2023	ND						

Surrogate: 1-Chlorooctane 130 % 48.2-134

Surrogate: 1-Chlorooctadecane 134 % 49.1-148

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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:	02/23/2023	Sampling Date:	02/22/2023
Reported:	02/27/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 14 0-2 FT (H230843-14)**

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	02/23/2023	ND	2.03	102	2.00	8.14		
Toluene*	<0.050	0.050	02/23/2023	ND	2.08	104	2.00	11.8		
Ethylbenzene*	<0.050	0.050	02/23/2023	ND	2.02	101	2.00	10.7		
Total Xylenes*	<0.150	0.150	02/23/2023	ND	6.14	102	6.00	11.0		
Total BTEX	<0.300	0.300	02/23/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	02/23/2023	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/23/2023	ND	198	99.2	200	3.78		
DRO >C10-C28*	<10.0	10.0	02/23/2023	ND	195	97.3	200	1.97		
EXT DRO >C28-C36	<10.0	10.0	02/23/2023	ND						

Surrogate: 1-Chlorooctane 107 % 48.2-134

Surrogate: 1-Chlorooctadecane 108 % 49.1-148

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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:	02/23/2023	Sampling Date:	02/22/2023
Reported:	02/27/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 15 0-2 FT (H230843-15)**

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	02/23/2023	ND	2.03	102	2.00	8.14	
Toluene*	<0.050	0.050	02/23/2023	ND	2.08	104	2.00	11.8	
Ethylbenzene*	<0.050	0.050	02/23/2023	ND	2.02	101	2.00	10.7	
Total Xylenes*	<0.150	0.150	02/23/2023	ND	6.14	102	6.00	11.0	
Total BTEX	<0.300	0.300	02/23/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	02/23/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/23/2023	ND	198	99.2	200	3.78	
DRO >C10-C28*	<10.0	10.0	02/23/2023	ND	195	97.3	200	1.97	
EXT DRO >C28-C36	<10.0	10.0	02/23/2023	ND					

Surrogate: 1-Chlorooctane 97.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 98.8 % 49.1-148

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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:	02/23/2023	Sampling Date:	02/22/2023
Reported:	02/27/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 16 0-2 FT (H230843-16)**

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	02/23/2023	ND	2.03	102	2.00	8.14		
Toluene*	<0.050	0.050	02/23/2023	ND	2.08	104	2.00	11.8		
Ethylbenzene*	<0.050	0.050	02/23/2023	ND	2.02	101	2.00	10.7		
Total Xylenes*	<0.150	0.150	02/23/2023	ND	6.14	102	6.00	11.0		
Total BTEX	<0.300	0.300	02/23/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	02/23/2023	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/23/2023	ND	196	98.2	200	4.23		
DRO >C10-C28*	<10.0	10.0	02/23/2023	ND	173	86.4	200	3.84		
EXT DRO >C28-C36	<10.0	10.0	02/23/2023	ND						

Surrogate: 1-Chlorooctane 83.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 88.2 % 49.1-148

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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:	02/23/2023	Sampling Date:	02/22/2023
Reported:	02/27/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 17 0-2 FT (H230843-17)**

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	02/23/2023	ND	2.03	102	2.00	8.14	
Toluene*	<0.050	0.050	02/23/2023	ND	2.08	104	2.00	11.8	
Ethylbenzene*	<0.050	0.050	02/23/2023	ND	2.02	101	2.00	10.7	
Total Xylenes*	<0.150	0.150	02/23/2023	ND	6.14	102	6.00	11.0	
Total BTEX	<0.300	0.300	02/23/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	02/23/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/23/2023	ND	196	98.2	200	4.23	
DRO >C10-C28*	<10.0	10.0	02/23/2023	ND	173	86.4	200	3.84	
EXT DRO >C28-C36	<10.0	10.0	02/23/2023	ND					

Surrogate: 1-Chlorooctane 95.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 101 % 49.1-148

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**Analytical Results For:**

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

Received:	02/23/2023	Sampling Date:	02/22/2023
Reported:	02/27/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 18 0-2 FT (H230843-18)**

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	02/23/2023	ND	2.03	102	2.00	8.14	
Toluene*	<0.050	0.050	02/23/2023	ND	2.08	104	2.00	11.8	
Ethylbenzene*	<0.050	0.050	02/23/2023	ND	2.02	101	2.00	10.7	
Total Xylenes*	<0.150	0.150	02/23/2023	ND	6.14	102	6.00	11.0	
Total BTEX	<0.300	0.300	02/23/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1230	16.0	02/23/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/23/2023	ND	196	98.2	200	4.23	
DRO >C10-C28*	<10.0	10.0	02/23/2023	ND	173	86.4	200	3.84	
EXT DRO >C28-C36	<10.0	10.0	02/23/2023	ND					

Surrogate: 1-Chlorooctane 89.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 94.9 % 49.1-148

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**Analytical Results For:**

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

Received:	02/23/2023	Sampling Date:	02/22/2023
Reported:	02/27/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 18 2-4 FT (H230843-19)**

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	02/23/2023	ND	2.03	102	2.00	8.14	
Toluene*	<0.050	0.050	02/23/2023	ND	2.08	104	2.00	11.8	
Ethylbenzene*	<0.050	0.050	02/23/2023	ND	2.02	101	2.00	10.7	
Total Xylenes*	<0.150	0.150	02/23/2023	ND	6.14	102	6.00	11.0	
Total BTEX	<0.300	0.300	02/23/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	02/23/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/23/2023	ND	196	98.2	200	4.23	
DRO >C10-C28*	<10.0	10.0	02/23/2023	ND	173	86.4	200	3.84	
EXT DRO >C28-C36	<10.0	10.0	02/23/2023	ND					

Surrogate: 1-Chlorooctane 82.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 87.0 % 49.1-148

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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:	02/23/2023	Sampling Date:	02/22/2023
Reported:	02/27/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 19 0-2 FT (H230843-20)**

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	02/23/2023	ND	2.03	102	2.00	8.14		
Toluene*	<0.050	0.050	02/23/2023	ND	2.08	104	2.00	11.8		
Ethylbenzene*	<0.050	0.050	02/23/2023	ND	2.02	101	2.00	10.7		
Total Xylenes*	<0.150	0.150	02/23/2023	ND	6.14	102	6.00	11.0		
Total BTEX	<0.300	0.300	02/23/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.5 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	02/23/2023	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/23/2023	ND	196	98.2	200	4.23		
DRO >C10-C28*	<10.0	10.0	02/23/2023	ND	173	86.4	200	3.84		
EXT DRO >C28-C36	<10.0	10.0	02/23/2023	ND						

Surrogate: 1-Chlorooctane 90.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 95.1 % 49.1-148

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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:	02/23/2023	Sampling Date:	02/22/2023
Reported:	02/27/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 20 0-2 FT (H230843-21)**

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	02/23/2023	ND	2.03	102	2.00	8.14	
Toluene*	<0.050	0.050	02/23/2023	ND	2.08	104	2.00	11.8	
Ethylbenzene*	<0.050	0.050	02/23/2023	ND	2.02	101	2.00	10.7	
Total Xylenes*	<0.150	0.150	02/23/2023	ND	6.14	102	6.00	11.0	
Total BTEX	<0.300	0.300	02/23/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1040	16.0	02/23/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/23/2023	ND	196	98.2	200	4.23	
DRO >C10-C28*	<10.0	10.0	02/23/2023	ND	173	86.4	200	3.84	
EXT DRO >C28-C36	<10.0	10.0	02/23/2023	ND					

Surrogate: 1-Chlorooctane 85.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 90.4 % 49.1-148

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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:	02/23/2023	Sampling Date:	02/22/2023
Reported:	02/27/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 20 2-4 FT (H230843-22)**

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	02/23/2023	ND	2.03	102	2.00	8.14	
Toluene*	<0.050	0.050	02/23/2023	ND	2.08	104	2.00	11.8	
Ethylbenzene*	<0.050	0.050	02/23/2023	ND	2.02	101	2.00	10.7	
Total Xylenes*	<0.150	0.150	02/23/2023	ND	6.14	102	6.00	11.0	
Total BTEX	<0.300	0.300	02/23/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1100	16.0	02/23/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/23/2023	ND	196	98.2	200	4.23	
DRO >C10-C28*	<10.0	10.0	02/23/2023	ND	173	86.4	200	3.84	
EXT DRO >C28-C36	<10.0	10.0	02/23/2023	ND					

Surrogate: 1-Chlorooctane 85.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 90.7 % 49.1-148

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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:	02/23/2023	Sampling Date:	02/22/2023
Reported:	02/27/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 20 4.5 FT (H230843-23)**

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	02/23/2023	ND	2.03	102	2.00	8.14	
Toluene*	<0.050	0.050	02/23/2023	ND	2.08	104	2.00	11.8	
Ethylbenzene*	<0.050	0.050	02/23/2023	ND	2.02	101	2.00	10.7	
Total Xylenes*	<0.150	0.150	02/23/2023	ND	6.14	102	6.00	11.0	
Total BTEX	<0.300	0.300	02/23/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	02/23/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/23/2023	ND	196	98.2	200	4.23	
DRO >C10-C28*	<10.0	10.0	02/23/2023	ND	173	86.4	200	3.84	
EXT DRO >C28-C36	<10.0	10.0	02/23/2023	ND					

Surrogate: 1-Chlorooctane 81.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 85.8 % 49.1-148

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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:	02/23/2023	Sampling Date:	02/22/2023
Reported:	02/27/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 21 0-2 FT (H230843-24)**

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	02/23/2023	ND	2.03	102	2.00	8.14	
Toluene*	<0.050	0.050	02/23/2023	ND	2.08	104	2.00	11.8	
Ethylbenzene*	<0.050	0.050	02/23/2023	ND	2.02	101	2.00	10.7	
Total Xylenes*	<0.150	0.150	02/23/2023	ND	6.14	102	6.00	11.0	
Total BTEX	<0.300	0.300	02/23/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2480	16.0	02/23/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/23/2023	ND	196	98.2	200	4.23	
DRO >C10-C28*	<10.0	10.0	02/23/2023	ND	173	86.4	200	3.84	
EXT DRO >C28-C36	<10.0	10.0	02/23/2023	ND					

Surrogate: 1-Chlorooctane 87.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 91.6 % 49.1-148

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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:	02/23/2023	Sampling Date:	02/22/2023
Reported:	02/27/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 21 2-4 FT (H230843-25)**

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	02/23/2023	ND	2.03	102	2.00	8.14	
Toluene*	<0.050	0.050	02/23/2023	ND	2.08	104	2.00	11.8	
Ethylbenzene*	<0.050	0.050	02/23/2023	ND	2.02	101	2.00	10.7	
Total Xylenes*	<0.150	0.150	02/23/2023	ND	6.14	102	6.00	11.0	
Total BTEX	<0.300	0.300	02/23/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3200	16.0	02/23/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/23/2023	ND	196	98.2	200	4.23	
DRO >C10-C28*	<10.0	10.0	02/23/2023	ND	173	86.4	200	3.84	
EXT DRO >C28-C36	<10.0	10.0	02/23/2023	ND					

Surrogate: 1-Chlorooctane 86.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 90.9 % 49.1-148

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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:	02/23/2023	Sampling Date:	02/22/2023
Reported:	02/27/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 21 4.5 FT (H230843-26)**

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	02/23/2023	ND	2.03	102	2.00	8.14	
Toluene*	<0.050	0.050	02/23/2023	ND	2.08	104	2.00	11.8	
Ethylbenzene*	<0.050	0.050	02/23/2023	ND	2.02	101	2.00	10.7	
Total Xylenes*	<0.150	0.150	02/23/2023	ND	6.14	102	6.00	11.0	
Total BTEX	<0.300	0.300	02/23/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1480	16.0	02/23/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/23/2023	ND	196	98.2	200	4.23	
DRO >C10-C28*	<10.0	10.0	02/23/2023	ND	173	86.4	200	3.84	
EXT DRO >C28-C36	<10.0	10.0	02/23/2023	ND					

Surrogate: 1-Chlorooctane 82.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 86.3 % 49.1-148

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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:	02/23/2023	Sampling Date:	02/22/2023
Reported:	02/27/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 22 0-2 FT (H230843-27)**

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	02/23/2023	ND	2.03	102	2.00	8.14	
Toluene*	<0.050	0.050	02/23/2023	ND	2.08	104	2.00	11.8	
Ethylbenzene*	<0.050	0.050	02/23/2023	ND	2.02	101	2.00	10.7	
Total Xylenes*	<0.150	0.150	02/23/2023	ND	6.14	102	6.00	11.0	
Total BTEX	<0.300	0.300	02/23/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>1440</b>	16.0	02/23/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/23/2023	ND	196	98.2	200	4.23	
DRO >C10-C28*	<10.0	10.0	02/23/2023	ND	173	86.4	200	3.84	
EXT DRO >C28-C36	<10.0	10.0	02/23/2023	ND					

Surrogate: 1-Chlorooctane 89.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 94.1 % 49.1-148

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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:	02/23/2023	Sampling Date:	02/22/2023
Reported:	02/27/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 22 2-4 FT (H230843-28)**

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	02/23/2023	ND	2.03	102	2.00	8.14		
Toluene*	<0.050	0.050	02/23/2023	ND	2.08	104	2.00	11.8		
Ethylbenzene*	<0.050	0.050	02/23/2023	ND	2.02	101	2.00	10.7		
Total Xylenes*	<0.150	0.150	02/23/2023	ND	6.14	102	6.00	11.0		
Total BTEX	<0.300	0.300	02/23/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1520	16.0	02/23/2023	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/23/2023	ND	196	98.2	200	4.23		
DRO >C10-C28*	<10.0	10.0	02/23/2023	ND	173	86.4	200	3.84		
EXT DRO >C28-C36	<10.0	10.0	02/23/2023	ND						

Surrogate: 1-Chlorooctane 83.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 88.1 % 49.1-148

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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:	02/23/2023	Sampling Date:	02/22/2023
Reported:	02/27/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 22 4.5 FT (H230843-29)**

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	02/23/2023	ND	2.03	102	2.00	8.14	
Toluene*	<0.050	0.050	02/23/2023	ND	2.08	104	2.00	11.8	
Ethylbenzene*	<0.050	0.050	02/23/2023	ND	2.02	101	2.00	10.7	
Total Xylenes*	<0.150	0.150	02/23/2023	ND	6.14	102	6.00	11.0	
Total BTEX	<0.300	0.300	02/23/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.8 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	368	16.0	02/23/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/23/2023	ND	196	98.2	200	4.23	
DRO >C10-C28*	<10.0	10.0	02/23/2023	ND	173	86.4	200	3.84	
EXT DRO >C28-C36	<10.0	10.0	02/23/2023	ND					

Surrogate: 1-Chlorooctane 83.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 87.8 % 49.1-148

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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:	02/23/2023	Sampling Date:	02/22/2023
Reported:	02/27/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 23 0-2 FT (H230843-30)**

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	02/23/2023	ND	2.03	102	2.00	8.14	
Toluene*	<0.050	0.050	02/23/2023	ND	2.08	104	2.00	11.8	
Ethylbenzene*	<0.050	0.050	02/23/2023	ND	2.02	101	2.00	10.7	
Total Xylenes*	<0.150	0.150	02/23/2023	ND	6.14	102	6.00	11.0	
Total BTEX	<0.300	0.300	02/23/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	02/23/2023	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/23/2023	ND	196	98.2	200	4.23	
DRO >C10-C28*	<10.0	10.0	02/23/2023	ND	173	86.4	200	3.84	
EXT DRO >C28-C36	<10.0	10.0	02/23/2023	ND					

Surrogate: 1-Chlorooctane 81.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 85.9 % 49.1-148

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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:	02/23/2023	Sampling Date:	02/22/2023
Reported:	02/27/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 24 0-2 FT (H230843-31)**

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	02/23/2023	ND	2.03	102	2.00	8.14	
Toluene*	<0.050	0.050	02/23/2023	ND	2.08	104	2.00	11.8	
Ethylbenzene*	<0.050	0.050	02/23/2023	ND	2.02	101	2.00	10.7	
Total Xylenes*	<0.150	0.150	02/23/2023	ND	6.14	102	6.00	11.0	
Total BTEX	<0.300	0.300	02/23/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.2 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	02/23/2023	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/23/2023	ND	196	98.2	200	4.23	
DRO >C10-C28*	<10.0	10.0	02/23/2023	ND	173	86.4	200	3.84	
EXT DRO >C28-C36	<10.0	10.0	02/23/2023	ND					

Surrogate: 1-Chlorooctane 80.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 86.3 % 49.1-148

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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:	02/23/2023	Sampling Date:	02/22/2023
Reported:	02/27/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 24 2-4 FT (H230843-32)**

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	02/23/2023	ND	2.03	102	2.00	8.14	
Toluene*	<0.050	0.050	02/23/2023	ND	2.08	104	2.00	11.8	
Ethylbenzene*	<0.050	0.050	02/23/2023	ND	2.02	101	2.00	10.7	
Total Xylenes*	<0.150	0.150	02/23/2023	ND	6.14	102	6.00	11.0	
Total BTEX	<0.300	0.300	02/23/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2000	16.0	02/23/2023	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/23/2023	ND	196	98.2	200	4.23	
DRO >C10-C28*	<10.0	10.0	02/23/2023	ND	173	86.4	200	3.84	
EXT DRO >C28-C36	<10.0	10.0	02/23/2023	ND					

Surrogate: 1-Chlorooctane 79.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 84.7 % 49.1-148

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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:	02/23/2023	Sampling Date:	02/22/2023
Reported:	02/27/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 24 4.5 FT (H230843-33)**

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	02/23/2023	ND	2.03	102	2.00	8.14	
Toluene*	<0.050	0.050	02/23/2023	ND	2.08	104	2.00	11.8	
Ethylbenzene*	<0.050	0.050	02/23/2023	ND	2.02	101	2.00	10.7	
Total Xylenes*	<0.150	0.150	02/23/2023	ND	6.14	102	6.00	11.0	
Total BTEX	<0.300	0.300	02/23/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1100	16.0	02/23/2023	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/24/2023	ND	237	118	200	19.7	
DRO >C10-C28*	<10.0	10.0	02/24/2023	ND	218	109	200	17.1	
EXT DRO >C28-C36	<10.0	10.0	02/24/2023	ND					

Surrogate: 1-Chlorooctane 90.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 94.1 % 49.1-148

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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:	02/23/2023	Sampling Date:	02/22/2023
Reported:	02/27/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 25 0-2 FT (H230843-34)**

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	02/24/2023	ND	2.08	104	2.00	1.39		
Toluene*	<0.050	0.050	02/24/2023	ND	2.01	100	2.00	1.79		
Ethylbenzene*	<0.050	0.050	02/24/2023	ND	1.94	97.2	2.00	1.73		
Total Xylenes*	<0.150	0.150	02/24/2023	ND	5.95	99.1	6.00	1.52		
Total BTEX	<0.300	0.300	02/24/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.4 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	336	16.0	02/23/2023	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/24/2023	ND	237	118	200	19.7		
DRO >C10-C28*	<10.0	10.0	02/24/2023	ND	218	109	200	17.1		
EXT DRO >C28-C36	<10.0	10.0	02/24/2023	ND						

Surrogate: 1-Chlorooctane 102 % 48.2-134

Surrogate: 1-Chlorooctadecane 107 % 49.1-148

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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:	02/23/2023	Sampling Date:	02/22/2023
Reported:	02/27/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 25 2-4 FT (H230843-35)**

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	02/24/2023	ND	2.08	104	2.00	1.39	
Toluene*	<0.050	0.050	02/24/2023	ND	2.01	100	2.00	1.79	
Ethylbenzene*	<0.050	0.050	02/24/2023	ND	1.94	97.2	2.00	1.73	
Total Xylenes*	<0.150	0.150	02/24/2023	ND	5.95	99.1	6.00	1.52	
Total BTEX	<0.300	0.300	02/24/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	02/23/2023	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/24/2023	ND	237	118	200	19.7	
DRO >C10-C28*	<10.0	10.0	02/24/2023	ND	218	109	200	17.1	
EXT DRO >C28-C36	<10.0	10.0	02/24/2023	ND					

Surrogate: 1-Chlorooctane 91.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 94.1 % 49.1-148

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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:	02/23/2023	Sampling Date:	02/22/2023
Reported:	02/27/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 26 0-2 FT (H230843-36)**

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	02/24/2023	ND	2.08	104	2.00	1.39	
Toluene*	<0.050	0.050	02/24/2023	ND	2.01	100	2.00	1.79	
Ethylbenzene*	<0.050	0.050	02/24/2023	ND	1.94	97.2	2.00	1.73	
Total Xylenes*	<0.150	0.150	02/24/2023	ND	5.95	99.1	6.00	1.52	
Total BTEX	<0.300	0.300	02/24/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	02/23/2023	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/24/2023	ND	237	118	200	19.7	
DRO >C10-C28*	<10.0	10.0	02/24/2023	ND	218	109	200	17.1	
EXT DRO >C28-C36	<10.0	10.0	02/24/2023	ND					

Surrogate: 1-Chlorooctane 86.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 91.8 % 49.1-148

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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:	02/23/2023	Sampling Date:	02/22/2023
Reported:	02/27/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 27 0-2 FT (H230843-37)**

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	02/24/2023	ND	2.08	104	2.00	1.39		
Toluene*	<0.050	0.050	02/24/2023	ND	2.01	100	2.00	1.79		
Ethylbenzene*	<0.050	0.050	02/24/2023	ND	1.94	97.2	2.00	1.73		
Total Xylenes*	<0.150	0.150	02/24/2023	ND	5.95	99.1	6.00	1.52		
Total BTEX	<0.300	0.300	02/24/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

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	02/23/2023	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/24/2023	ND	237	118	200	19.7		
DRO >C10-C28*	<10.0	10.0	02/24/2023	ND	218	109	200	17.1		
EXT DRO >C28-C36	<10.0	10.0	02/24/2023	ND						

Surrogate: 1-Chlorooctane 83.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 88.0 % 49.1-148

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Notes and Definitions

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

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Celey D. Keene

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**

Company Name: <u>Amerelder</u> Project Manager: <u>Andrew Parker</u> Address: <u>On file</u> City: _____ State: _____ Zip: _____ Phone #: _____ Fax #: _____ Project #: _____ Project Owner: _____ Project Name: <u>20220916-2040-water</u> Project Location: <u>Redbud 45</u> Sampler Name: <u>Jesus Palomares</u>		<b>BILL TO</b> P.O. #: <u>20220916-2040-water</u> Company: <u>Amerelder</u> Attn: <u>aparker@amerelder.com</u> Address: _____ City: _____ State: _____ Zip: _____ Phone #: _____ Fax #: _____		<b>ANALYSIS REQUEST</b>	
Lab I.D. <u>H230843</u> Sample I.D. _____		(G)RAB OR (C)OMP. _____ # CONTAINERS _____ MATRIX: GROUNDWATER _____ WASTEWATER _____ SOIL _____ OIL _____ SLUDGE _____ OTHER: _____ ACID/BASE: _____ ICE / COOL _____ OTHER: _____ PRESERV. _____ SAMPLING _____		DATE _____ TIME _____ DATE _____ TIME _____	
Relinquished By: _____ Date: <u>02-23-2023</u> Time: <u>0903</u>		Received By: <u>Quiana Webster</u> Date: _____ Time: _____		REMARKS: <u>Cooler Temp Blanks 0.2:</u>	
Delivered By: (Circle One) Sampler - UPS - Bus - Other: _____ Observed Temp. °C <u>9.4</u> Corrected Temp. °C <u>-10.0</u>		Sample Condition Cool Intact <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"/> <b>Rush</b> Bacteria (only) <input type="checkbox"/> Sample Condition Cool Intact <input type="checkbox"/> Yes <input type="checkbox"/> No Corrected Temp. °C _____ Corrected Temp. °C _____	



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**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

Company Name: <u>Amereder</u> Project Manager: <u>Andrew Parker</u> Address: <u>On File</u> City: _____ State: _____ Zip: _____ Phone #: _____ Fax #: _____ Project #: _____ Project Owner: _____ Project Name: <u>2022 0916-2040-water</u> Project Location: <u>Redbud 45</u> Sampler Name: <u>Jesus Palomares</u>		<b>BILL TO</b> P.O. #: <u>2022 0916-2040-water</u> Company: <u>Amereder</u> Attn: <u>aparker@amereder.com</u> Address: _____ City: _____ State: _____ Zip: _____ Phone #: _____ Fax #: _____	
FOR LAB USE ONLY Lab I.D. _____ Sample I.D. _____		MATRIX GROUNDWATER _____ WASTEWATER _____ SOIL _____ OIL _____ SLUDGE _____ OTHER: _____ ACID/BASE: _____ ICE / COOL _____ OTHER: _____	
(G)RAB OR (C)OMP. _____ # CONTAINERS _____		PRESERV. _____ SAMPLING _____	
DATE _____ TIME _____		ANALYSIS REQUEST	
11 05-11 0-2ft 1 1 12 05-12 0-2ft 1 1 13 05-13 0-2ft 1 1 14 05-14 0-2ft 1 1 15 05-15 0-2ft 1 1 16 05-16 0-2ft 1 1 17 05-17 0-2ft 1 1 18 05-18 0-2ft 1 1 19 05-18 2-4ft 1 1 20 05-19 0-2ft 1 1		Chloride ✓ TPH (GRO+DRO+MRO) ✓ BTEX (Benzene) ✓	

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Relinquished By: \_\_\_\_\_ Date: 02-23-2023 Received By: \_\_\_\_\_ Date: 02-23-2023

Delivered By: (Circle One) Observed Temp. °C 9.4 Corrected Temp. °C 10.0  
 Sampler - UPS - Bus - Other: \_\_\_\_\_

Turnaround Time: \_\_\_\_\_ Standard  Bacteria (only) Sample Condition  
 Thermometer ID #113  Cool Intact Observed Temp. °C  
 Correction Factor -0.5°C  No  Yes Corrected Temp. °C

REMARKS: \_\_\_\_\_

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

Checked By: (Initials) \_\_\_\_\_



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**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

Company Name: <u>Amerceder</u> Project Manager: <u>Andrew Parler</u> Address: <u>On-File</u> City: _____ State: _____ Zip: _____ Phone #: _____ Fax #: _____ Project #: _____ Project Owner: _____ Project Name: <u>20220916-2040-water</u> Project Location: <u>Redbud 45</u> Sampler Name: <u>Jesus Palermas</u>		<b>BILL TO</b> P.O. #: <u>20220916-2040-water</u> Company: <u>Amerceder</u> Attn: <u>apalermas@amerceder.com</u> Address: _____ City: _____ State: _____ Zip: _____ Phone #: _____ Fax #: _____		<b>ANALYSIS REQUEST</b>	
Lab I.D. <u>H230843</u> Sample I.D. _____ (G)RAB OR (C)OMP. <input type="checkbox"/> <input checked="" type="checkbox"/> # CONTAINERS _____ MATRIX: <input type="checkbox"/> GROUNDWATER <input type="checkbox"/> WASTEWATER <input checked="" type="checkbox"/> SOIL <input type="checkbox"/> OIL <input type="checkbox"/> SLUDGE <input type="checkbox"/> OTHER: _____ PRESERV: <input type="checkbox"/> ACID/BASE: _____ <input checked="" type="checkbox"/> ICE / COOL <input type="checkbox"/> OTHER: _____ DATE: _____ TIME: _____ SAMPLED: _____		Turnaround Time: _____ Standard <input type="checkbox"/> Rush <input checked="" type="checkbox"/> Thermometer ID #113 Correction Factor -0.6°C Bacteria (only) Sample Condition Cool Intact <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Observed Temp. °C _____ Corrected Temp. °C _____		Turnaround Time: _____ Standard <input type="checkbox"/> Rush <input checked="" type="checkbox"/> Thermometer ID #113 Correction Factor -0.6°C Bacteria (only) Sample Condition Cool Intact <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Observed Temp. °C _____ Corrected Temp. °C _____	
Relinquished By: _____ Date: <u>02-23-2023</u> Relinquished By: _____ Date: _____ Received By: <u>Yvonne Ochoa</u> Received By: _____ Date: _____ Time: <u>09:03</u> Time: _____		Turnaround Time: _____ Standard <input type="checkbox"/> Rush <input checked="" type="checkbox"/> Thermometer ID #113 Correction Factor -0.6°C Bacteria (only) Sample Condition Cool Intact <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Observed Temp. °C _____ Corrected Temp. °C _____		Turnaround Time: _____ Standard <input type="checkbox"/> Rush <input checked="" type="checkbox"/> Thermometer ID #113 Correction Factor -0.6°C Bacteria (only) Sample Condition Cool Intact <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Observed Temp. °C _____ Corrected Temp. °C _____	
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Delivered By: (Circle One) <input type="checkbox"/> UPS - Bus - Other: _____ Observed Temp. °C <u>-9.4</u> Corrected Temp. °C <u>-10.0</u> Sampler - UPS - Bus - Other: _____					

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**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

**BILL TO**

**ANALYSIS REQUEST**

Company Name: Amerder P.O. #: 20220916-2040-water  
 Project Manager: Andrew Parker Company: Amerder  
 Address: On File Attn: aparker@amerder.com  
 City: State: Zip: Address:  
 Phone #: Fax #: City: Address:  
 Project #: Project Owner: State: Zip:  
 Project Name: 20220916-2040-water Phone #: Zip:  
 Project Location: Redbud 45 Phone #: Zip:  
 Sampler Name: Jesus Palomares Fax #:

Lab I.D.	Sample I.D.	FOR LAB USE ONLY		MATRIX	PRESERV.	SAMPLING	ANALYSIS REQUEST
		(G)RAB OR (C)OMP.	# CONTAINERS				
<u>H230843</u>	<u>G5-24</u>	<u>0-2ft</u>	<u>1</u>	<u>GROUNDWATER</u>	<u>✓</u>	<u>01-22</u>	<u>Chloride</u>
	<u>G5-24</u>	<u>2-4ft</u>	<u>1</u>	<u>WASTEWATER</u>	<u>✓</u>	<u>14:09</u>	<u>TPH (GRO + DRD + MRO)</u>
	<u>G5-24</u>	<u>4.5ft</u>	<u>1</u>	<u>SOIL</u>	<u>✓</u>	<u>14:34</u>	<u>BTEX (Benzene)</u>
	<u>G5-25</u>	<u>0-2ft</u>	<u>1</u>	<u>OIL</u>	<u>✓</u>	<u>14:41</u>	
	<u>G5-25</u>	<u>2-4ft</u>	<u>1</u>	<u>SLUDGE</u>	<u>✓</u>	<u>15:01</u>	
	<u>G5-26</u>	<u>0-2ft</u>	<u>1</u>	<u>OTHER :</u>	<u>✓</u>	<u>15:13</u>	
	<u>G5-27</u>	<u>0-2ft</u>	<u>1</u>	<u>ACID/BASE:</u>	<u>✓</u>		
				<u>ICE / COOL</u>	<u>✓</u>		
				<u>OTHER :</u>	<u>✓</u>		

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Relinquished By: [Signature] Date: 01-23-2023 Received By: [Signature]  
 Time: 0903 Date: 01-23-2023 Received By: [Signature]  
 Relinquished By: [Signature] Date: 0903 Received By: [Signature]  
 Time: \_\_\_\_\_ Date: \_\_\_\_\_ Received By: \_\_\_\_\_

Delivered By: (Circle One) Observed Temp. °C -94 Sample Condition: Cool Intact CHECKED BY: [Signature]  
 Sampler - UPS - Bus - Other: Corrected Temp. °C -10.0  Yes  No  Yes  No  
 Turnaround Time: \_\_\_\_\_ Standard  Rush   
 Thermometer ID #113 Bacteria (only) Sample Condition  Cool Intact Observed Temp. °C \_\_\_\_\_  
 Correction Factor .06°C  Yes  No  Yes  No Corrected Temp. °C \_\_\_\_\_

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March 16, 2023

ANDREW PARKER

AMEREDEV

2901 VIA FORTUNA , SUITE 600

AUSTIN, TX 78746

RE: REDBUD 4S

Enclosed are the results of analyses for samples received by the laboratory on 03/13/23 16:15.

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". The signature is written in a cursive style.

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	03/13/2023	Sampling Date:	03/13/2023
Reported:	03/16/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 28 0-2FT (H231142-01)**

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	03/15/2023	ND	1.79	89.4	2.00	14.0	
Toluene*	<0.050	0.050	03/15/2023	ND	1.79	89.3	2.00	12.6	
Ethylbenzene*	<0.050	0.050	03/15/2023	ND	1.78	89.0	2.00	12.3	
Total Xylenes*	<0.150	0.150	03/15/2023	ND	5.33	88.9	6.00	11.2	
Total BTEX	<0.300	0.300	03/15/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	03/15/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/14/2023	ND	174	86.8	200	3.86	
DRO >C10-C28*	<10.0	10.0	03/14/2023	ND	164	82.2	200	0.181	
EXT DRO >C28-C36	<10.0	10.0	03/14/2023	ND					

Surrogate: 1-Chlorooctane 83.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 83.1 % 49.1-148

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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:	03/13/2023	Sampling Date:	03/13/2023
Reported:	03/16/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 101 0-2FT (H231142-02)**

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	03/15/2023	ND	1.79	89.4	2.00	14.0	
Toluene*	<0.050	0.050	03/15/2023	ND	1.79	89.3	2.00	12.6	
Ethylbenzene*	<0.050	0.050	03/15/2023	ND	1.78	89.0	2.00	12.3	
Total Xylenes*	<0.150	0.150	03/15/2023	ND	5.33	88.9	6.00	11.2	
Total BTEX	<0.300	0.300	03/15/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	03/15/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/15/2023	ND	174	86.8	200	3.86	
DRO >C10-C28*	<10.0	10.0	03/15/2023	ND	164	82.2	200	0.181	
EXT DRO >C28-C36	<10.0	10.0	03/15/2023	ND					

Surrogate: 1-Chlorooctane 89.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 90.0 % 49.1-148

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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:	03/13/2023	Sampling Date:	03/13/2023
Reported:	03/16/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 103 0-2FT (H231142-03)**

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	03/15/2023	ND	1.79	89.4	2.00	14.0		
Toluene*	<0.050	0.050	03/15/2023	ND	1.79	89.3	2.00	12.6		
Ethylbenzene*	<0.050	0.050	03/15/2023	ND	1.78	89.0	2.00	12.3		
Total Xylenes*	<0.150	0.150	03/15/2023	ND	5.33	88.9	6.00	11.2		
Total BTEX	<0.300	0.300	03/15/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	03/15/2023	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	03/15/2023	ND	174	86.8	200	3.86		
DRO >C10-C28*	<10.0	10.0	03/15/2023	ND	164	82.2	200	0.181		
EXT DRO >C28-C36	<10.0	10.0	03/15/2023	ND						

Surrogate: 1-Chlorooctane 88.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 88.9 % 49.1-148

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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:	03/13/2023	Sampling Date:	03/13/2023
Reported:	03/16/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 104 0-2FT (H231142-04)**

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	03/15/2023	ND	1.79	89.4	2.00	14.0		
Toluene*	<0.050	0.050	03/15/2023	ND	1.79	89.3	2.00	12.6		
Ethylbenzene*	<0.050	0.050	03/15/2023	ND	1.78	89.0	2.00	12.3		
Total Xylenes*	<0.150	0.150	03/15/2023	ND	5.33	88.9	6.00	11.2		
Total BTEX	<0.300	0.300	03/15/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

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	03/15/2023	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	03/15/2023	ND	174	86.8	200	3.86		
DRO >C10-C28*	<10.0	10.0	03/15/2023	ND	164	82.2	200	0.181		
EXT DRO >C28-C36	<10.0	10.0	03/15/2023	ND						

Surrogate: 1-Chlorooctane 94.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 93.4 % 49.1-148

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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:	03/13/2023	Sampling Date:	03/13/2023
Reported:	03/16/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 105 0-2FT (H231142-05)**

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	03/15/2023	ND	1.79	89.4	2.00	14.0		
Toluene*	<0.050	0.050	03/15/2023	ND	1.79	89.3	2.00	12.6		
Ethylbenzene*	<0.050	0.050	03/15/2023	ND	1.78	89.0	2.00	12.3		
Total Xylenes*	<0.150	0.150	03/15/2023	ND	5.33	88.9	6.00	11.2		
Total BTEX	<0.300	0.300	03/15/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<b>144</b>	16.0	03/15/2023	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	03/15/2023	ND	174	86.8	200	3.86		
DRO >C10-C28*	<10.0	10.0	03/15/2023	ND	164	82.2	200	0.181		
EXT DRO >C28-C36	<10.0	10.0	03/15/2023	ND						

Surrogate: 1-Chlorooctane 83.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 85.2 % 49.1-148

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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:	03/13/2023	Sampling Date:	03/13/2023
Reported:	03/16/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 106 0-2FT (H231142-06)**

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	03/15/2023	ND	1.79	89.4	2.00	14.0	
Toluene*	<0.050	0.050	03/15/2023	ND	1.79	89.3	2.00	12.6	
Ethylbenzene*	<0.050	0.050	03/15/2023	ND	1.78	89.0	2.00	12.3	
Total Xylenes*	<0.150	0.150	03/15/2023	ND	5.33	88.9	6.00	11.2	
Total BTEX	<0.300	0.300	03/15/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	03/15/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/15/2023	ND	174	86.8	200	3.86	
DRO >C10-C28*	<10.0	10.0	03/15/2023	ND	164	82.2	200	0.181	
EXT DRO >C28-C36	<10.0	10.0	03/15/2023	ND					

Surrogate: 1-Chlorooctane 89.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 90.7 % 49.1-148

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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:	03/13/2023	Sampling Date:	03/13/2023
Reported:	03/16/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 107 0-2FT (H231142-07)**

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	03/15/2023	ND	1.79	89.4	2.00	14.0		
Toluene*	<0.050	0.050	03/15/2023	ND	1.79	89.3	2.00	12.6		
Ethylbenzene*	<0.050	0.050	03/15/2023	ND	1.78	89.0	2.00	12.3		
Total Xylenes*	<0.150	0.150	03/15/2023	ND	5.33	88.9	6.00	11.2		
Total BTEX	<0.300	0.300	03/15/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	03/15/2023	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	03/15/2023	ND	174	86.8	200	3.86		
DRO >C10-C28*	<10.0	10.0	03/15/2023	ND	164	82.2	200	0.181		
EXT DRO >C28-C36	<10.0	10.0	03/15/2023	ND						

Surrogate: 1-Chlorooctane 85.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 89.1 % 49.1-148

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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:	03/13/2023	Sampling Date:	03/13/2023
Reported:	03/16/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 108 0-2FT (H231142-08)**

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	03/15/2023	ND	1.79	89.4	2.00	14.0	
Toluene*	<0.050	0.050	03/15/2023	ND	1.79	89.3	2.00	12.6	
Ethylbenzene*	<0.050	0.050	03/15/2023	ND	1.78	89.0	2.00	12.3	
Total Xylenes*	<0.150	0.150	03/15/2023	ND	5.33	88.9	6.00	11.2	
Total BTEX	<0.300	0.300	03/15/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	03/15/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/15/2023	ND	174	86.8	200	3.86	
DRO >C10-C28*	<10.0	10.0	03/15/2023	ND	164	82.2	200	0.181	
EXT DRO >C28-C36	<10.0	10.0	03/15/2023	ND					

Surrogate: 1-Chlorooctane 89.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 93.7 % 49.1-148

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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:	03/13/2023	Sampling Date:	03/13/2023
Reported:	03/16/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 109 0-2FT (H231142-09)**

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	03/15/2023	ND	2.19	109	2.00	4.48	
Toluene*	<0.050	0.050	03/15/2023	ND	2.14	107	2.00	2.78	
Ethylbenzene*	<0.050	0.050	03/15/2023	ND	2.17	108	2.00	3.52	
Total Xylenes*	<0.150	0.150	03/15/2023	ND	6.80	113	6.00	3.70	
Total BTEX	<0.300	0.300	03/15/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 120 % 71.5-134

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	03/15/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/15/2023	ND	174	86.8	200	3.86	
DRO >C10-C28*	<10.0	10.0	03/15/2023	ND	164	82.2	200	0.181	
EXT DRO >C28-C36	<10.0	10.0	03/15/2023	ND					

Surrogate: 1-Chlorooctane 85.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 88.5 % 49.1-148

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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:	03/13/2023	Sampling Date:	03/13/2023
Reported:	03/16/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 111 0-2FT (H231142-10)**

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	03/15/2023	ND	2.19	109	2.00	4.48		
Toluene*	<0.050	0.050	03/15/2023	ND	2.14	107	2.00	2.78		
Ethylbenzene*	<0.050	0.050	03/15/2023	ND	2.17	108	2.00	3.52		
Total Xylenes*	<0.150	0.150	03/15/2023	ND	6.80	113	6.00	3.70		
Total BTEX	<0.300	0.300	03/15/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 119 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	03/15/2023	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	03/15/2023	ND	174	86.8	200	3.86		
DRO >C10-C28*	<10.0	10.0	03/15/2023	ND	164	82.2	200	0.181		
EXT DRO >C28-C36	<10.0	10.0	03/15/2023	ND						

Surrogate: 1-Chlorooctane 86.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 88.3 % 49.1-148

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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:	03/13/2023	Sampling Date:	03/13/2023
Reported:	03/16/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 112 0-2FT (H231142-11)**

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	03/15/2023	ND	2.19	109	2.00	4.48		
Toluene*	<0.050	0.050	03/15/2023	ND	2.14	107	2.00	2.78		
Ethylbenzene*	<0.050	0.050	03/15/2023	ND	2.17	108	2.00	3.52		
Total Xylenes*	<0.150	0.150	03/15/2023	ND	6.80	113	6.00	3.70		
Total BTEX	<0.300	0.300	03/15/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 119 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	03/15/2023	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	03/15/2023	ND	174	86.8	200	3.86		
DRO >C10-C28*	<10.0	10.0	03/15/2023	ND	164	82.2	200	0.181		
EXT DRO >C28-C36	<10.0	10.0	03/15/2023	ND						

Surrogate: 1-Chlorooctane 89.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 89.7 % 49.1-148

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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:	03/13/2023	Sampling Date:	03/13/2023
Reported:	03/16/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 113 0-2FT (H231142-12)**

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	03/15/2023	ND	2.19	109	2.00	4.48	
Toluene*	<0.050	0.050	03/15/2023	ND	2.14	107	2.00	2.78	
Ethylbenzene*	<0.050	0.050	03/15/2023	ND	2.17	108	2.00	3.52	
Total Xylenes*	<0.150	0.150	03/15/2023	ND	6.80	113	6.00	3.70	
Total BTEX	<0.300	0.300	03/15/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 118 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	03/15/2023	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	03/15/2023	ND	174	86.8	200	3.86	
DRO >C10-C28*	<10.0	10.0	03/15/2023	ND	164	82.2	200	0.181	
EXT DRO >C28-C36	<10.0	10.0	03/15/2023	ND					

Surrogate: 1-Chlorooctane 82.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 83.9 % 49.1-148

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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:	03/13/2023	Sampling Date:	03/13/2023
Reported:	03/16/2023	Sampling Type:	Soil
Project Name:	REDBUD 4S	Sampling Condition:	Cool & Intact
Project Number:	20220916-2040-WATER	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: GS - 114 0-2FT (H231142-13)**

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	03/15/2023	ND	2.19	109	2.00	4.48	
Toluene*	<0.050	0.050	03/15/2023	ND	2.14	107	2.00	2.78	
Ethylbenzene*	<0.050	0.050	03/15/2023	ND	2.17	108	2.00	3.52	
Total Xylenes*	<0.150	0.150	03/15/2023	ND	6.80	113	6.00	3.70	
Total BTEX	<0.300	0.300	03/15/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 123 % 71.5-134

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>128</b>	16.0	03/15/2023	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	03/15/2023	ND	174	86.8	200	3.86	
DRO >C10-C28*	<10.0	10.0	03/15/2023	ND	164	82.2	200	0.181	
EXT DRO >C28-C36	<10.0	10.0	03/15/2023	ND					

Surrogate: 1-Chlorooctane 82.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 84.4 % 49.1-148

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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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*Celey D. Keene*

Celey D. Keene, Lab Director/Quality Manager



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**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

Company Name: <u>Amevelder</u> Project Manager: <u>Andrew Parker</u> Address: <u>On-File</u> State: _____ Zip: _____ City: _____ State: _____ Zip: _____ Phone #: _____ Fax #: _____ Project #: _____ Project Owner: _____ Project Name: <u>20220916-2040-water</u> Project Location: <u>Rebuild 45</u> Sampler Name: <u>Jesus Palomares</u>		<b>BILL TO</b> P.O. #: <u>20220916-2040-water</u> Company: <u>Amevelder</u> Attn: <u>aparker@amevelder.com</u> Address: _____ City: _____ State: _____ Zip: _____ Phone #: _____ Fax #: _____		<b>ANALYSIS REQUEST</b>	
FOR LAB USE ONLY Lab I.D. _____ Sample I.D. _____ H231142		(G)RAB OR (C)OMP. _____ # CONTAINERS _____ GROUNDWATER _____ WASTEWATER _____ MATRIX: SOIL _____ OIL _____ SLUDGE _____ OTHER: _____ ACID/BASE: _____ ICE / COOL _____ OTHER: _____		PRESERV _____ SAMPLING DATE _____ TIME _____ 03-13 9:17 9:40 9:52 10:03 10:20 10:28 10:51 10:59 11:27 11:51	
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Delivered By: (Circle One) Sampler - UPS - Bus - Other: _____ Observed Temp. °C <u>2.8</u> Corrected Temp. °C <u>2.2</u> Sample Condition: <input checked="" type="checkbox"/> Intact <input type="checkbox"/> Cool <input type="checkbox"/> Yes <input type="checkbox"/> No		CHECKED BY: _____ (Initials) Turndown Time: _____ Thermometer ID #113 Correction Factor -0.6°C		Standard <input checked="" type="checkbox"/> <input type="checkbox"/> Add'l Phone #: _____ Bacteria (only) <input type="checkbox"/> <input type="checkbox"/> Sample Condition: <input type="checkbox"/> Intact <input type="checkbox"/> Observed Temp. °C _____ Corrected Temp. °C _____	



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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO

ANALYSIS REQUEST

Company Name: <i>Amerdel</i>		P.O. #: <i>20220916-2040-water</i>	
Project Manager: <i>Andrew Parker</i>		Company: <i>Amerdel</i>	
Address: <i>On-File</i>		Attn: <i>aparker@amerdel.com</i>	
City:	State:	Zip:	
Phone #:	Fax #:	Project Owner:	
Project #:		Project Name: <i>20220916-2040-water</i>	
		Project Location: <i>Redbud 45</i>	
Sampler Name: <i>Jesus Palomares</i>		State:	Zip:
		Phone #:	
		Fax #:	

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						PRESERV.		SAMPLING		DATE	TIME					
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :								
<i>H23142</i>																				
<i>11</i>	<i>GS-112</i>		<i>1</i>			<i>✓</i>					<i>✓</i>			<i>03-13</i>	<i>12:11</i>	<i>↓</i>	<i>✓</i>	<i>Chloride</i>		
<i>12</i>	<i>GS-113</i>		<i>1</i>			<i>✓</i>									<i>12:33</i>	<i>↓</i>	<i>✓</i>	<i>TPH (GRO+DRO+MRO)</i>		
<i>13</i>	<i>GS-114</i>														<i>12:57</i>	<i>↓</i>	<i>✓</i>	<i>BTEX (Benzene)</i>		

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Relinquished By: *[Signature]* Date: *3-13-23* Received By: *[Signature]* Date: *3-13-23*

Relinquished By: *[Signature]* Date: *3-13-23* Received By: *[Signature]* Date: *3-13-23*

Delivered By: (Circle One) Observed Temp. °C: *28* Sample Condition:  Cool  Intact  Yes  No

Sampler - UPS - Bus - Other: Corrected Temp. °C: *22* CHECKED BY: (Initials) *[Signature]*

Turnaround Time: Standard  Rush  Add'l Phone #:  Bacteria (only)  Sample Condition:  Cool  Intact  Yes  No

Thermometer ID #113 Correction Factor -0.6°C Corrected Temp. °C: *22*

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

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 811 S. First St., Artesia, NM 88210  
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**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 199265

**CONDITIONS**

Operator: AMEREDEV OPERATING, LLC 2901 Via Fortuna Austin, TX 78746	OGRID: 372224
	Action Number: 199265
	Action Type: [C-141] Release Corrective Action (C-141)

**CONDITIONS**

Created By	Condition	Condition Date
jnobui	Closure Approved. Please implement 19.15.29.13 NMAC when completing P&A.	4/26/2023