



## **SITE CHARACTERIZATION AND PROPOSED REMEDIATION PLAN**

**AMOLE AMM STATE #2  
UNIT K, SECTION 16, TOWNSHIP 19S, RANGE 25E  
EDDY COUNTY, NEW MEXICO  
32.658273, -104.491577  
RANGER REFERENCE NO. 5375**


### **PREPARED FOR:**

**EOG RESOURCES, INC.  
ARTESIA DIVISION  
105 S 4TH STREET  
ARTESIA, NEW MEXICO 88210**

### **PREPARED BY:**

**RANGER ENVIRONMENTAL SERVICES, INC.  
P.O. BOX 201179  
AUSTIN, TEXAS 78720**

**OCTOBER 28, 2021**

  
**Patrick K. Finn, P.G. (TX)  
Project Geoscientist**

  
**William Kierdorf, REM  
Project Manager**

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### FORM C-141

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## **1.0 SITE LOCATION AND BACKGROUND**

The Amole AMM State #2 (Site) is an active oil and gas well location operated by EOG Resources, Inc. (EOG). The Site is located on State land, approximately 13.7 miles south-southwest of Artesia, within Eddy County, New Mexico. The facility is situated in Unit K, Section 16, T19S-R25E at GPS coordinates 32.658273, -104.491577.

An area of a potential release was reported to EOG by representatives of the Howell Ranch Revocable Trust (Howell Ranch). The reported area was noted to be located along the southern well pad boundary and immediately south of the well pad in an EOG right-of-way.

EOG has engaged Ranger Environmental Services, Inc. (Ranger) to assist in the assessment and remediation efforts at the Site. On August 12, 2021, Ranger personnel conducted an assessment of the reported area which included the collection of soil samples for laboratory analysis. Due to the observed size of the potential release area, the area was reported to the New Mexico Oil Conservation Division (NMOCD) on August 31, 2021 (NMOCD Incident # nAPP2124435578).

The following proposed remediation work plan has been prepared to address the soil impacts at the Site.

A copy of the previously submitted Form C-141 Release Notification, as well as the Site Assessment/Characterization and Remediation Plan sections of Form C-141, are attached. A Topographic Map and Area Map noting the location of the subject Site and surrounding areas, and a Site Map illustrating the Site features and sampling locations, are provided in the Figures section.

## **2.0 SITE CHARACTERIZATION**

### **2.1 Depth-to-Groundwater**

To determine the depth-to-groundwater in the vicinity of the Site, data available from the U.S. Geological Survey (USGS) and the New Mexico Office of the State Engineer (NMOSE) was reviewed. Based upon the reviewed information, recent water well information within a half mile of the Site is limited.

During a review of adjacent sites within a half-mile radius, a location where depth-to-groundwater investigation activities were completed was identified. During remediation efforts at the Boyd X State 10, approximately 0.3 miles southeast of the Site, a temporary monitor well was installed by Talon LPE (Talon) at GPS Coordinates 32.655864, -104.487580. Based on the reviewed Talon boring log, the soil boring was completed to a depth of approximately 105 feet below ground surface (bgs) and a two-inch temporary monitor well was completed. The monitor well was then allowed to equilibrate for approximately 72 hours and a depth-to-groundwater measurement was collected utilizing a Solinst water level meter. The measurement activities documented depth-to-groundwater in the area to be at approximately 61 feet below ground surface.

Based upon the Talon temporary monitor well depth-to-groundwater information and reviewed NMOSE and USGS information, depth-to-groundwater in the area of the Site is believed to be 50 feet to 100 feet bgs.

Copies of the reviewed depth-to-groundwater information is attached.

## **2.2 Wellhead Protection Area**

Based upon the USGS and NMOSE information, no known water sources were identified within a half-mile of the Site. It should be noted that Talon's temporary monitor well was completed for investigation purposes and was not utilized as a water source.

Upon review of the National Wetland Inventory, the Site is not within 300 feet of a mapped feature.

The Site and impacted area are outside of the FEMA 100-year flood plain and fall in the area of minimal flood hazard.

The Site is noted to be in an area of "Medium Karst" probability.

## **2.3 Distance to Nearest Significant Watercourse**

Based upon available online resources, the closest significant watercourse is four-mile draw located approximately 525 feet north of the Site.

## **2.4 Closure Criteria**

Based upon the Site characterization details, the Site will be remediated to Table 1 19.15.29.12 NMAC (groundwater 50'-100' feet) criteria. Additionally, the remediation activities will be completed to bring the surface to four-foot depth interval into compliance with the Restoration, Reclamation and Re-Vegetation criteria detailed in 19.15.29.13 NMAC. The proposed closure criteria are detailed below:

REGULATORY STANDARD	CHLORIDE	TPH (GRO+DRO +MRO)	TPH (GRO+DRO)	BTEX	BENZENE
19.15.29.12 NMAC Table 1 Closure Criteria for Soils Impacted by a Release (GW 51'-100')	10,000	2,500	1,000	50	10
19.15.29.13 NMAC Restoration, Reclamation and Re-Vegetation (Soils 0'-4')	600	100 <sup>1</sup>	---	50 <sup>1</sup>	10 <sup>1</sup>

*All Values Presented in Parts Per Million (mg/Kg)*

1. Value derived from the State of New Mexico Energy, Minerals and Natural Resources Department document Procedures for the Implementation of the Spill Rule (19.15.29 NMAC) dated September 6, 2019.

### 3.0 SITE REMEDIATION AND CONFIRMATION SAMPLING

#### 3.1 August 12, 2021 – Initial Site Assessment and Sampling Results

On August 12, 2021, Ranger personnel and representatives for EOG mobilized to the Site to conduct assessment activities. To assess the soil impacts, a total of ten sampling locations were selected (PT-1 through PT-10). Ranger initially attempted to install test hole excavations at the PT-1 and PT-2 locations since this was the “potential reportable release” GPS location reported by the Howell Ranch. The test holes at these locations, however, were unable to be installed due to the presence of underground utilities (a water line and gas line). No similar issues were encountered at the remainder of the sampling locations and, as such, test holes were advanced at assessment locations PT-3 through PT-10.

During the assessment and test hole excavation process, Ranger personnel field screened the soils using an organic vapor monitor (OVM) and a field chloride titration kit to assist in evaluating the soil conditions and/or levels of impacts in the area. At the PT-1 and PT-2 locations, only the surface soils were field screened since test holes could not be advanced at these locations. At the remainder of the sampling locations where test holes were able to be installed (PT-3 through PT-10), field screening of the encountered soils was conducted at the surface and at 1' increments to the total test hole depth.

Test hole PT-3 was installed immediately northeast of the PT-1 and PT-2 locations at a safe distance from the underground utilities but still in immediate proximity to the “potential reportable release” GPS location reported by the Howell Ranch. Test hole PT-3 was advanced to a depth of 15 feet bgs where field readings indicated soil concentrations were within the most stringent NMAC Table 1 criteria. Based on the observed field readings, the remaining assessment/test



hole locations (PT-4 through PT-10) were completed to a maximum depth of approximately five feet bgs.

The surface soil at the PT-2 location was noted to be discolored, but there were no elevated OVM readings at this location. No discolored soils or elevated OVM readings were encountered at any of the other assessment locations. Elevated field chloride titration results were documented in the surface soil at the PT-2 location. With regard to the test hole locations, elevated field chloride titration results were documented at the PT-3, PT-4, PT-5, and PT-9 locations.

Upon completion of the test hole installation process and field screening activities, confirmatory soil samples were collected for laboratory analysis from test holes PT-3, PT-5, PT-6, PT-7, PT-8, PT-9 and PT-10. At each of these test hole locations, samples were collected at the surface (0'-1') and at total depth, plus additional samples between the surface and total depth to assist in the delineation process. At each test hole location, Ranger ensured that the intervals exhibiting the highest field chloride titration results were sampled.

Upon collection, the soil samples were submitted to Hall Environmental Laboratory, Inc. in Albuquerque, New Mexico for analysis of total petroleum hydrocarbons (TPH) using EPA Method 8015; benzene, toluene, ethylbenzene and xylenes (BTEX) using EPA Method 8021; and, total chloride using EPA Method 300. The samples were collected and managed using standard QA/QC and chain-of-custody procedures. The results of the soil analyses are summarized below:

- **BTEX:** The soil analytical results documented the absence of any detectable BTEX in the site soils.
- **TPH:** Only one sample (PT5-1) was found to contain detectable TPH concentrations, but the TPH concentration in this sample (22 mg/Kg DRO TPH) was far below the closure and reclamation criteria.
- **Chloride:** None of the samples were found to exceed the 19.15.29.12 NMAC Table 1 Closure Criteria for Soils Impacted by a Release (GW 51'-100'). However, three samples (PT3-1, PT5-1, and PT9-1) were found to exceed the 19.15.29.13 NMAC Reclamation Criteria (0'-4' Soils).

Regarding the 19.15.29.11(A)(5)(c) vertical delineation requirement (600 mg/Kg chloride) for sites where depth to ground water is greater than 50 feet and less than or equal to 100 feet, the laboratory analytical results documented attainment of the 600 mg/Kg chloride vertical delineation requirement in every test hole termination sample. Thus, the vertical extent of the site chloride impact was delineated in accordance with the rule requirements.

The soil analytical results from test holes PT-6, PT-7, PT-8 and PT-10 were successful in delineating the horizontal extent of the chloride impacts in each cardinal direction.

The soil sample analytical results are summarized in the attached soil analytical table. Copies of the laboratory analytical reports are also attached.

## **4.0 PROPOSED REMEDIATION PLAN**

### **4.1 Impacted Soil Excavation**

To address the elevated soil chloride concentrations in the 0'-4' soils at the Site, soil removal operations are proposed. Based on the concentrations documented during the site assessment and delineation process, excavation at the Site will be completed to a maximum depth of four feet bgs. The proposed excavation area will be primarily rectangular in shape and is anticipated to have maximum dimensions of approximately 45 feet wide by 75 feet long. A Proposed Soil Excavation Map is included is attached.

Based on the proposed excavation boundaries and depths it is anticipated that approximately 160 cubic yards of material will be generated during the site remediation process. The excavated material will be transported off-site for disposal at an approved disposal facility.

### **4.2 Confirmation Sampling**

In order to assess the final extent of excavation and confirm that excavated area has been completed to appropriate boundaries, it is proposed to collect samples for laboratory analysis. During the Site assessment activities no samples were documented to exceeded the proposed Table 1 cleanup criteria beyond a depth of four feet bgs. Upon completion of the excavation process, to further confirm that the excavated areas soil concentrations are within the Proposed Table 1 cleanup criteria, it is proposed to collect a total of seven grab samples from various locations from the base of the excavated area. A site map depicting the proposed sample locations is attached.

To confirm the excavation side walls are in attainment of the applicable Restoration, Reclamation and Re-Vegetation criteria, it is proposed to collect samples from the excavation walls in accordance with NMAC 19.15.29.12(D), as five-part composite samples with each sample representing no more than 200 square feet. The sample parts will collected from various locations and depths along the excavation side walls. Upon collection, the composite sample parts will be placed into a new Ziplock® bag, thoroughly mixed, and a sample for laboratory analysis was collected from the mixture.

The cleanup confirmation soil samples will be collected using standard QA/QC procedures, placed into laboratory-supplied containers, and will be immediately placed into a sample shuttle containing ice. The samples will be transported to an approved laboratory for analysis of TPH using EPA Method 8015; BTEX using EPA Method 8021; and, total chloride using EPA Method 300.

### **4.3 Excavation Backfill and Re-Vegetation**

Upon attainment of the 19.15.29.13 NMAC Reclamation Criteria, the excavated area will be backfilled with clean fill material. In the areas located off the well pad, caliche will be utilized to backfill the two-to-four-foot bgs depth interval, and the remaining surface-to-two-foot bgs depth interval will be backfilled with topsoil. The excavated areas on the well pad and access road will be backfilled from surface to four feet bgs with caliche. The off-pad remediated areas will then be re-vegetated with the Loamy Sites Seed Mixture in accordance with State Land Office guidelines.

#### **4.4 Remediation Schedule**

Upon approval of the proposed remediation plan, all field activities will be scheduled as soon as reasonably possible. It is anticipated that the soil removal operations and cleanup confirmation soil sampling activities will be completed within 120 days of initiation.

Appropriate notification to the NMOCD will be provided prior to the performance of the cleanup confirmation soil sampling activities.

#### **5.0 SITE CLOSURE**

Upon completion of the remedial and backfilling activities at the Site, a C-141 Closure Report will be submitted to the NMOCD, and site closure will be requested. The Closure Report will be completed in accordance with the closure reporting criteria detailed in NMAC 19.15.29.12(E).



FORM C-141

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

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

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

Incident ID	nAPP2124435578
District RP	
Facility ID	
Application ID	

## Release Notification

### Responsible Party

Responsible Party EOG Resources, Inc.	OGRID 7377
Contact Name Chase Settle	Contact Telephone 575-748-1471
Contact email Chase_Settle@eogresources.com	Incident # (assigned by OCD) nAPP2124435578
Contact mailing address 104 S. 4th Street, Artesia, NM 88210	

### Location of Release Source

Latitude 32.65827 Longitude -104.49157  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Amole AMM State Com #2	Site Type Well Pad
Date Release Discovered 08/24/2021	API# 30-015-28424

Unit Letter	Section	Township	Range	County
K	16	19S	25E	Eddy

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

### Nature and Volume of Release

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

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) Unknown	Volume Recovered (bbls) 0
	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)

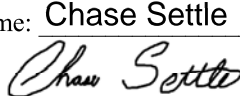
Cause of Release Historical impacts discovered on the well pad, no known volume released can be determined. The environmental consultant investigating the impacted area determined on 8/24/21 based on the impacted area footprint that it most likely crossed the threshold for being a reportable volume.

Incident ID	NAPP2124435578
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Application ID	

<p>Was this a major release as defined by 19.15.29.7(A) NMAC?</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>If YES, for what reason(s) does the responsible party consider this a major release?</p>
<p>If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?</p>	

## 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>Chase Settle</u>	Title: <u>Rep Safety &amp; Environmental Sr</u>
Signature: <u></u>	Date: <u>08/31/2021</u>
email: <u>Chase_Settle@eogresources.com</u>	Telephone: <u>575-748-1471</u>
<b><u>OCD Only</u></b>	
Received by: <u>Ramona Marcus</u>	Date: <u>9/1/2021</u>

Incident ID	nAPP2124435578
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Application ID	

## Site Assessment/Characterization

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

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

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

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

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

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

State of New Mexico  
Oil Conservation Division

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

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

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

**OCD Only**

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

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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: \_\_\_\_\_ Title: \_\_\_\_\_  
Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
email: \_\_\_\_\_ Telephone: \_\_\_\_\_

**OCD Only**

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

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

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

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## Closure

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

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

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

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

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

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

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

**OCD Only**

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

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

Closure Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

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

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

CONDITIONS  
  
Action 45823

CONDITIONS

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 45823
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
marcus	When submitting future reports regarding this release, please submit the calculations used or specific justification for the volumes reported on the initial C-141	9/1/2021



Incident ID	nAPP2124435578
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Application ID	

## Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	_____~61_____ (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

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

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

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


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

State of New Mexico  
Oil Conservation Division

Page 4

Incident ID	nAPP2124435578
District RP	
Facility ID	
Application ID	

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

Printed Name: Chase Settle Title: Rep Safety & Environmental Sr  
Signature:  Date: 11/05/2021  
email: Chase\_Settle@eogresources.com Telephone: 575-748-1471

**OCD Only**

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

Incident ID	nAPP2124435578
District RP	
Facility ID	
Application ID	

## Remediation Plan

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

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

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

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

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

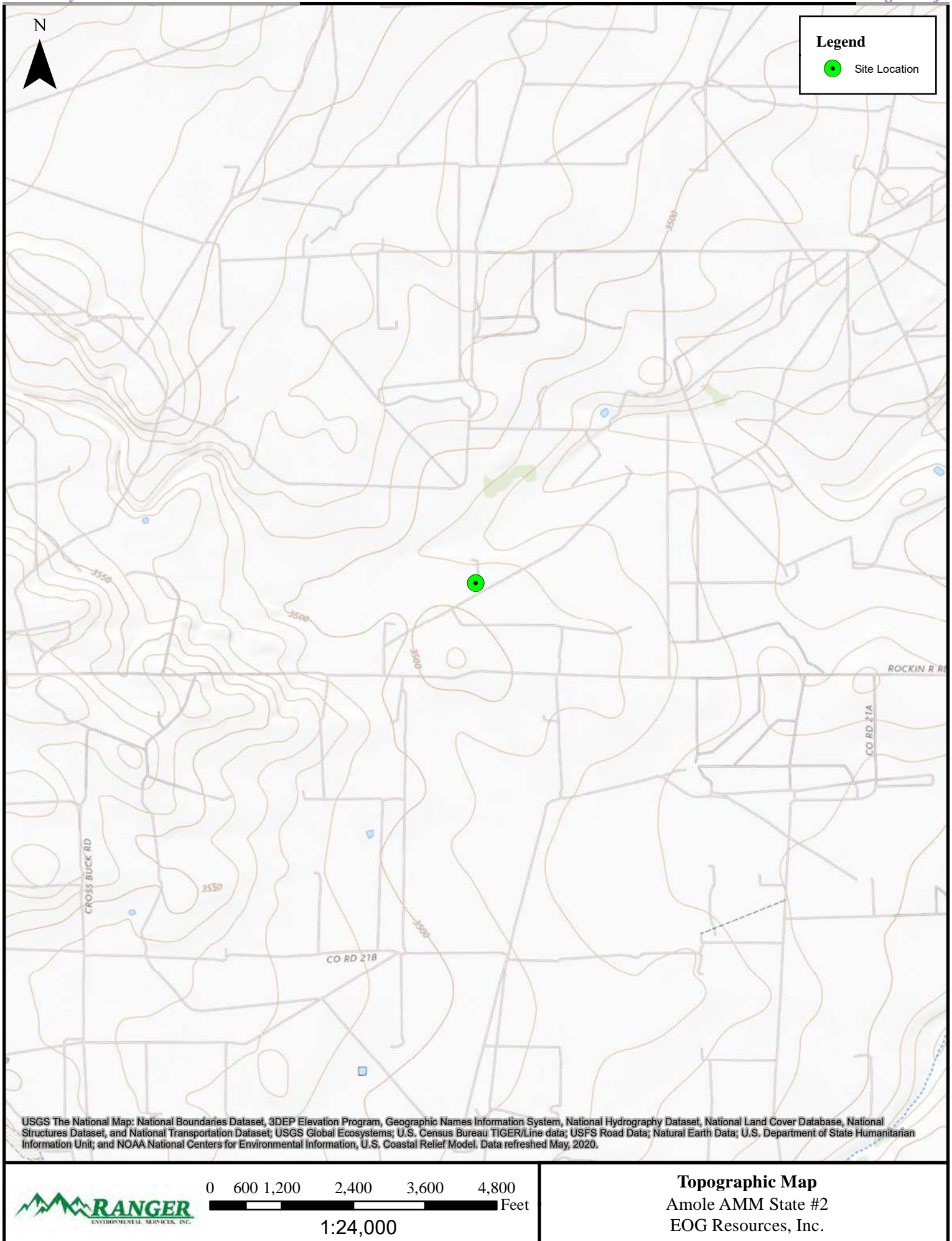
Printed Name: Chase SettleTitle: Rep Safety & Environmental SrSignature: Date: 11/05/2021email: Chase\_Settle@eogresources.comTelephone: 575-748-1471**OCD Only**

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

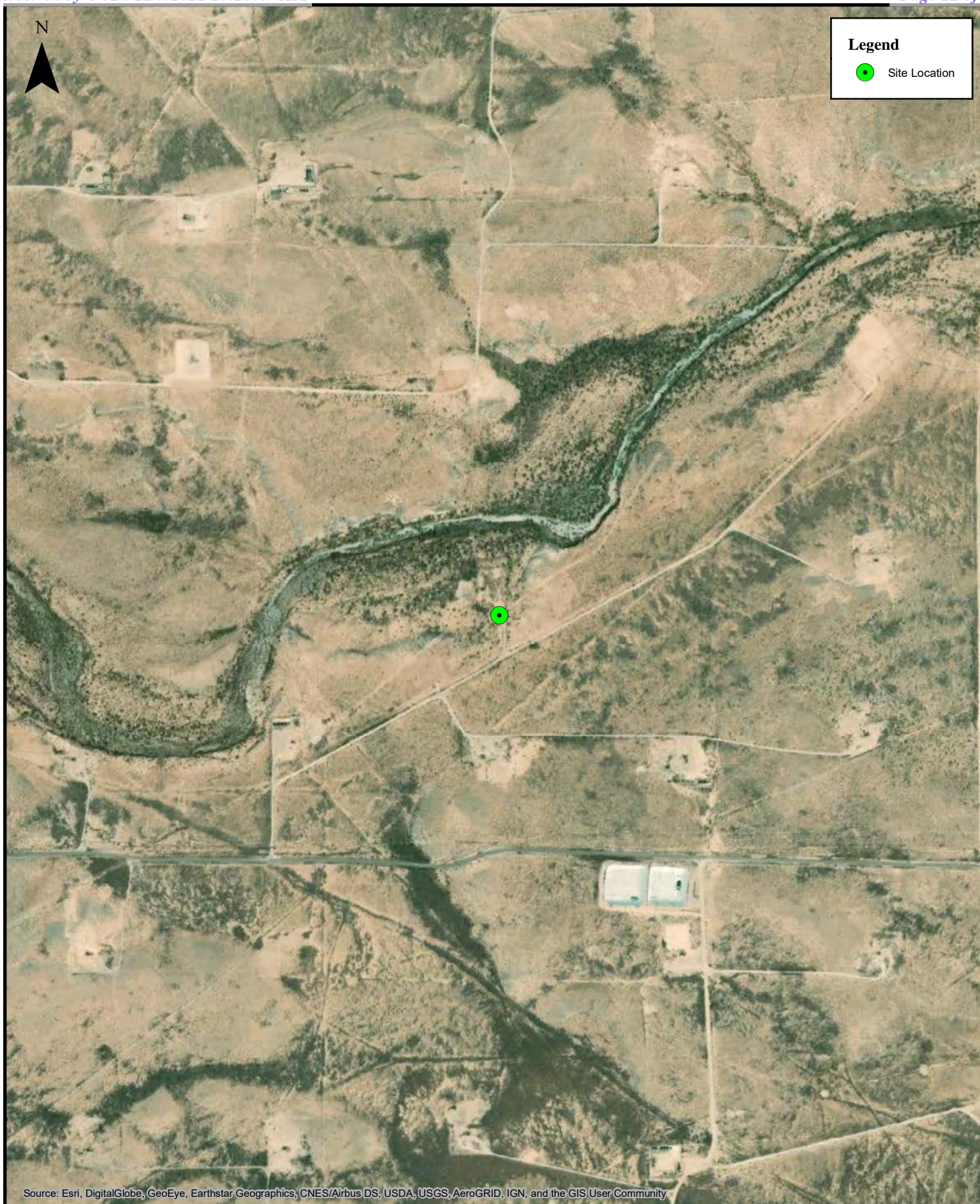
☒ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral ApprovedSignature: Date: 02/08/2022

## FIGURES

Topographic Map  
Area Map  
Well Location Map  
National Wetland Inventory Map  
FEMA Floodplain Map  
Karst Topography Map  
Assessment Sample Location Map  
Proposed Excavation and Sample Location Map







**Legend**  
● Site Location

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

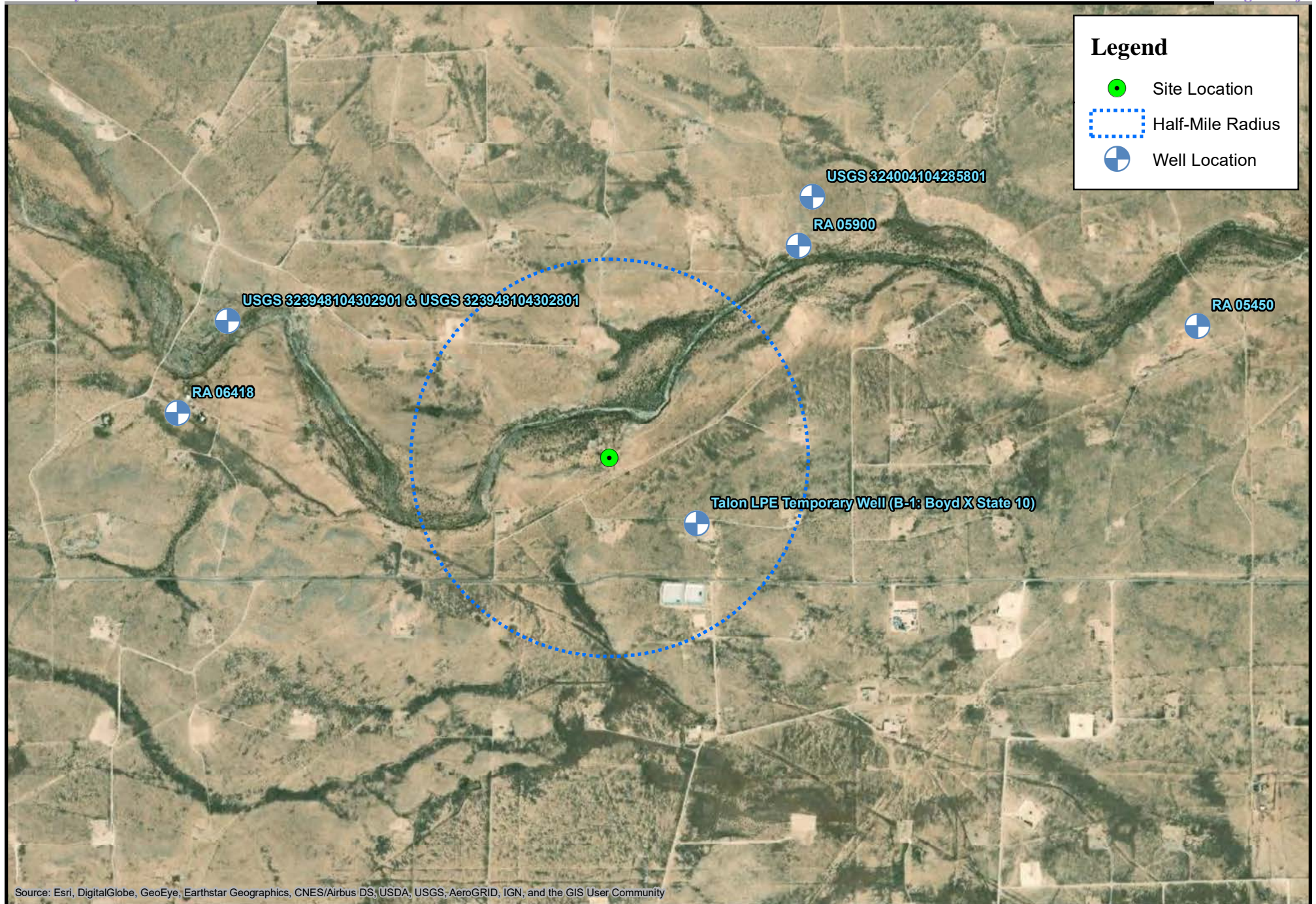


0 250 500 1,000 1,500 2,000 Feet

1:10,000

**Area Map**  
Amole AMM State #2  
EOG Resources, Inc.



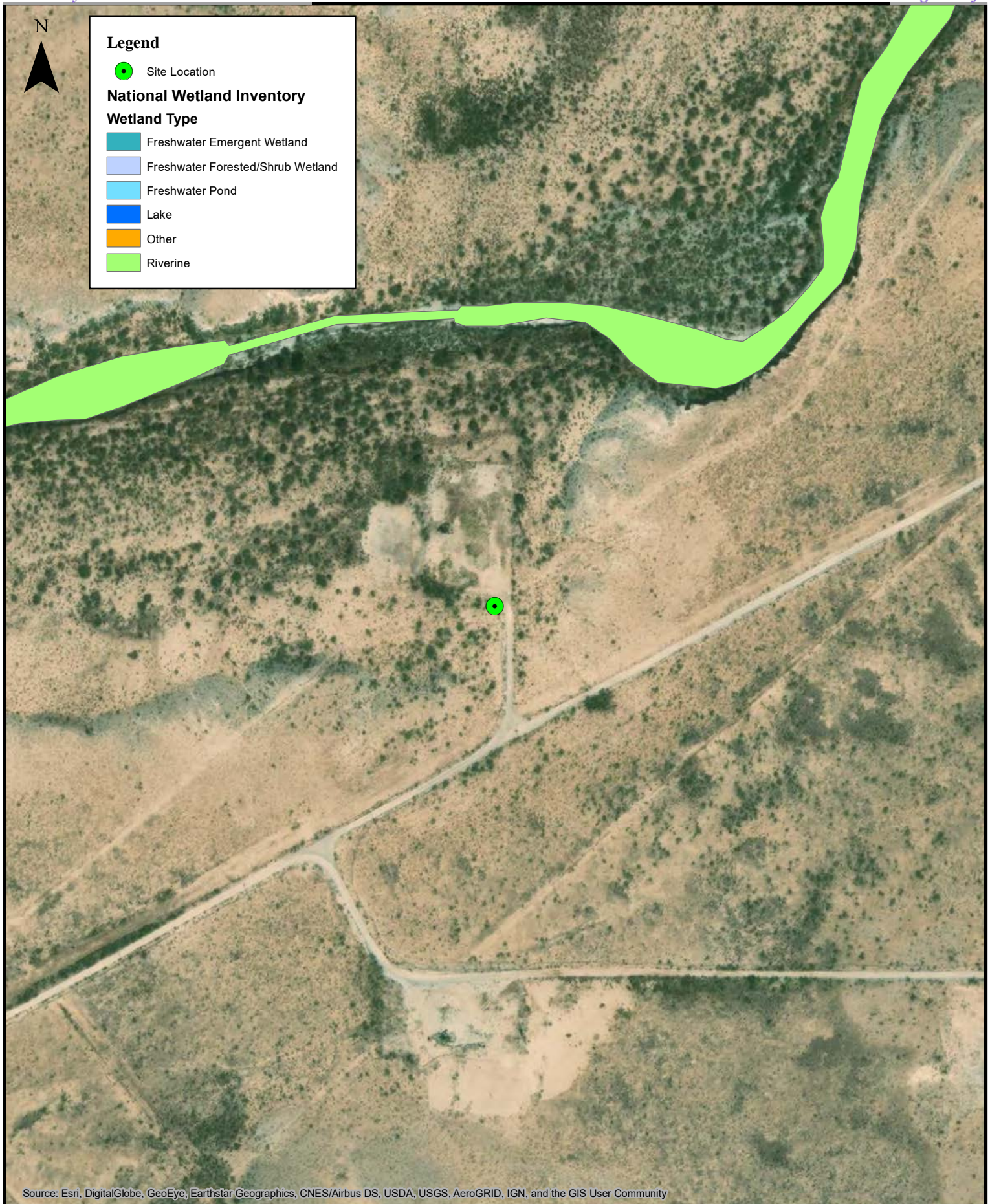


0 500 1,000 2,000 3,000 4,000 Feet  
1:20,000



**Well Location Map**  
Amole AMM State #2  
EOG Resources, Inc.





0 80 160 320 480 640 Feet

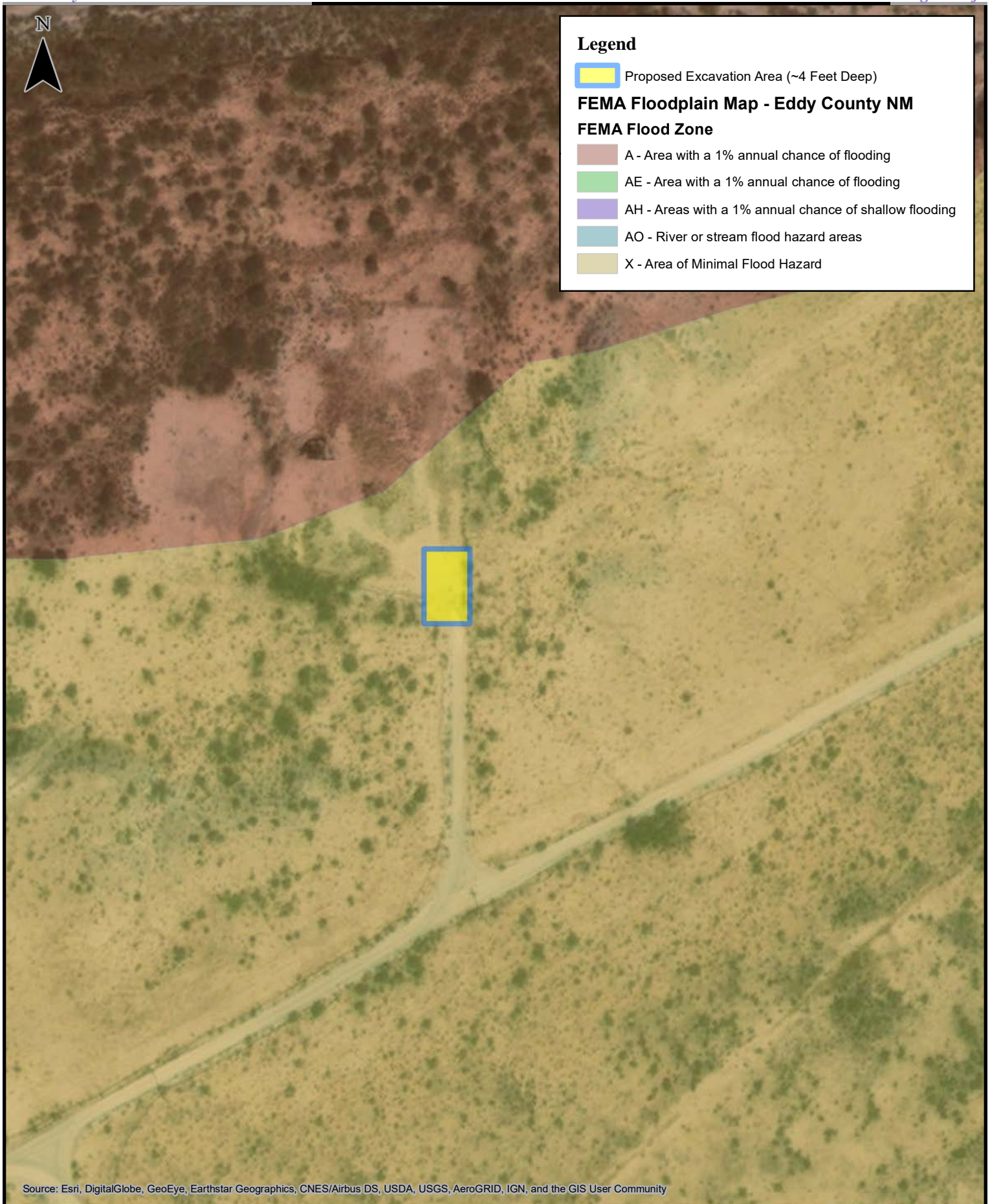
1:3,300

### National Wetland Inventory Map

Amole AMM State #2

EOG Resources, Inc.



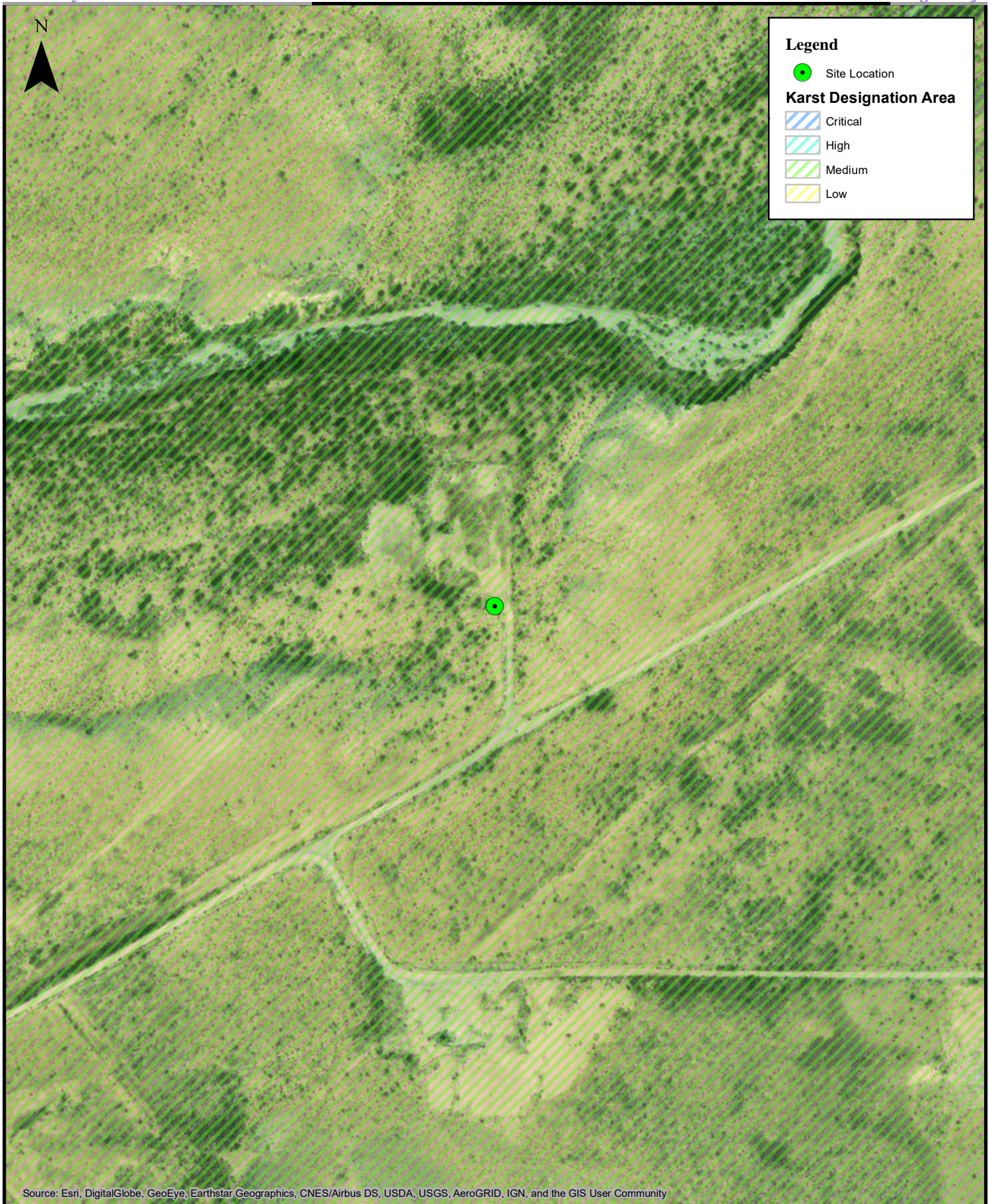


0 35 70 140 210 280 Feet

1:1,500

**FEMA Floodplain Map**  
Amole AMM State #2  
EOG Resources, Inc.





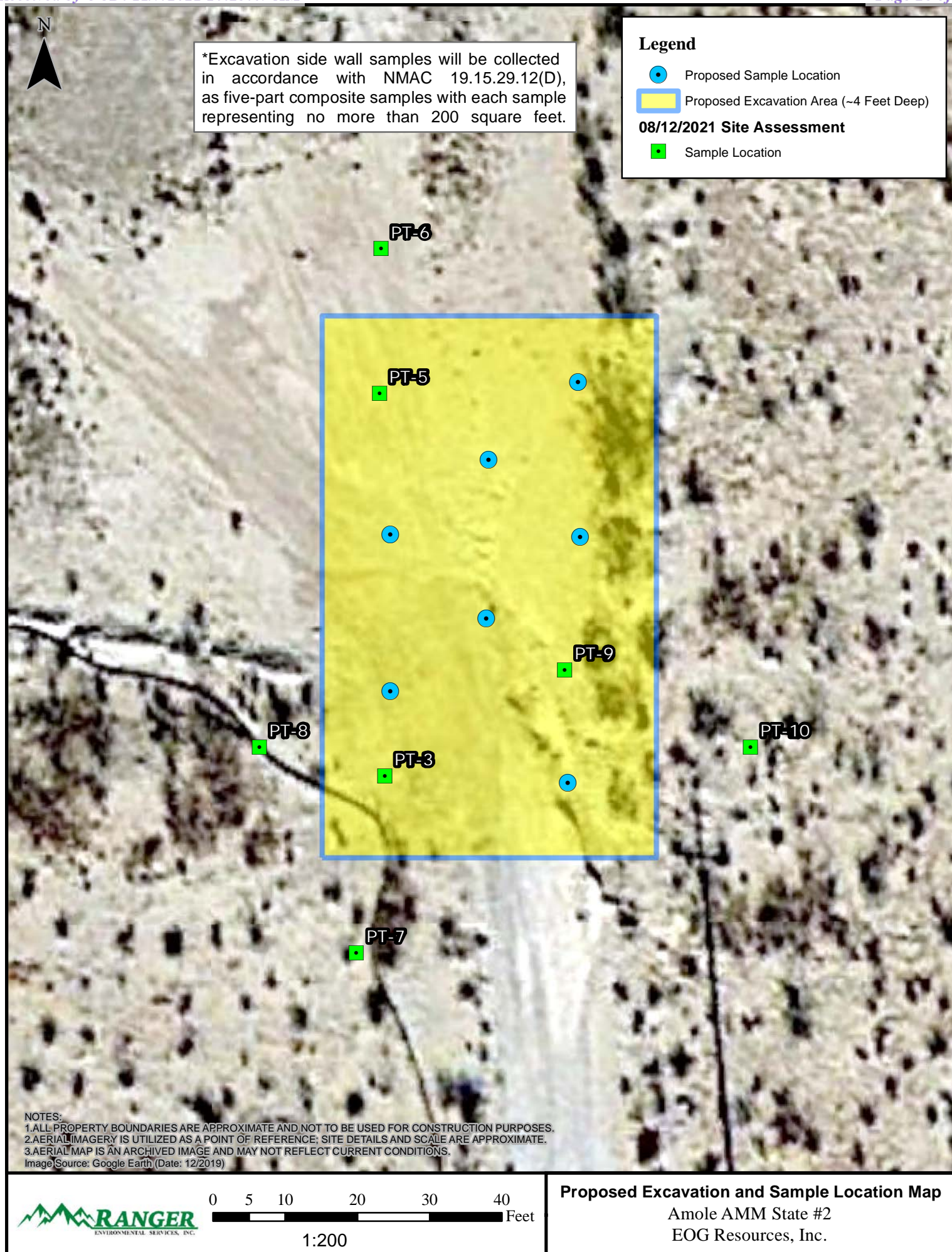
0 80 160 320 480 640 Feet  
1:3,300

**Karst Topography Map**  
Amole AMM State #2  
EOG Resources, Inc.









## TABLES

Soil BTEX (EPA 8260), TPH (EPA 8015) & Chloride (EPA 300)  
Analytical Data

SOIL BTEX (EPA 8021), TPH (SW 8015) & CHLORIDE (EPA 300) ANALYTICAL DATA EOG RESOURCES, INC. AMOLE AMM STATE #2													
All values presented in parts per million (mg/Kg)													
SAMPLE ID	DATE	DEPTH (FT)	BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENES	TOTAL BTEX	TPH GRO C6-C10	TPH DRO C10-C28	TPH MRO C28-C36	TPH (GRO+DRO)	TPH (GRO+DRO+MRO)	CHLORIDE
<b>Initial Assessment Soil Samples - August 12, 2021</b>													
PT3-1	8/12/2021	1'	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<10	<50	<10	<50	<b>3,300</b>
PT3-5	8/12/2021	5'	<0.024	<0.049	<0.049	<0.098	<0.10	<4.9	<9.4	<47	<9.4	<47	4,000
PT3-10	8/12/2021	10'	<0.025	<0.049	<0.049	<0.098	<0.10	<4.9	<8.0	<40	<8.0	<40	5,400
PT3-15	8/12/2021	15'	<0.024	<0.049	<0.049	<0.098	<0.10	<4.9	<7.7	<39	<7.7	<39	230
PT5-1	8/12/2021	1'	<0.024	<0.049	<0.049	<0.098	<0.10	<4.9	22	<48	22	22	<b>3,200</b>
PT5-5	8/12/2021	5'	<0.025	<0.049	<0.049	<0.099	<0.10	<4.9	<9.9	<50	<9.9	<50	180
PT6-0	8/12/2021	0'	<0.024	<0.048	<0.048	<0.095	<0.10	<4.8	<9.9	<50	<9.9	<50	<60
PT6-2	8/12/2021	2'	<0.025	<0.049	<0.049	<0.099	<0.10	<4.9	<9.9	<49	<9.9	<49	65
PT6-5	8/12/2021	5'	<0.023	<0.047	<0.047	<0.093	<0.09	<4.7	<9.9	<49	<9.9	<49	310
PT7-0	8/12/2021	0'	<0.024	<0.048	<0.048	<0.096	<0.10	<4.8	<10	<50	<10	<50	<60
PT7-2	8/12/2021	2'	<0.025	<0.050	<0.050	<0.099	<0.10	<5.0	<9.6	<48	<9.6	<48	78
PT7-5	8/12/2021	5'	<0.024	<0.049	<0.049	<0.097	<0.10	<4.9	<9.9	<50	<9.9	<50	<61
PT8-0	8/12/2021	0'	<0.024	<0.049	<0.049	<0.097	<0.10	<4.9	<10	<50	<10	<50	<60
PT8-2	8/12/2021	2'	<0.025	<0.049	<0.049	<0.098	<0.10	<4.9	<9.7	<49	<9.7	<49	<60
PT8-5	8/12/2021	5'	<0.024	<0.049	<0.049	<0.097	<0.10	<4.9	<10	<50	<10	<50	84
PT9-1	8/12/2021	1'	<0.023	<0.047	<0.047	<0.094	<0.09	<4.7	<10	<50	<10	<50	<b>1,200</b>
PT9-5	8/12/2021	5'	<0.024	<0.048	<0.048	<0.096	<0.10	<4.8	<9.9	<50	<9.9	<50	100
PT10-0	8/12/2021	0'	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<9.9	<50	<9.9	<50	<60
PT10-2	8/12/2021	2'	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<9.7	<49	<9.7	<49	92
PT10-5	8/12/2021	5'	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<9.9	<50	<9.9	<50	91
<b>19.15.29.12 NMAC Table 1 Closure Criteria for Soils Impacted by a Release (GW 51'-100')</b>			<b>10</b>	---	---	---	<b>50</b>	---	---	---	<b>1000</b>	<b>2,500</b>	<b>10,000</b>
<b>19.15.29.13 NMAC Reclamation Criteria (0'-4' Soils Only)</b>			<b>10<sup>3</sup></b>	---	---	---	<b>50<sup>3</sup></b>	---	---	---	---	<b>100<sup>3</sup></b>	<b>600</b>
<b>Notes:</b>													
1. Results exceeding the Table 1 Closure Criteria are presented in bold type and are highlighted yellow.													
2. Results exceeding the NMAC Restoration, Reclamation and re-vegetation chloride concentration requirements are presented in bold red type.													
3. Value derived from the State of New Mexico Energy, Minerals and Natural Resources Department document Procedures for the Implementation of the Spill Rule (19.15.29 NMAC) dated September 6, 2019.													

## ATTACHMENT 1 – DEPTH-TO-GROUNDWATER DATA



# BORING LOG

Project No.: 700438.244.01

Weather: Clear, Temp.: 75°F

Driller: J. Michalsky

Site Name: Boyd X State 10 Battery

Logger: M. Collier

Rig Type: Sonic Drill

Location: Eddy County, New Mexico

Field Instrument: NA

Bit Size: 6"

Date: 6/30/2021

Latitude: 32.655864 N

Drilling Method: Vibratory Rotary

Boring Number: B-1

Longitude: -104.487850 W

Sample Retrieval Method: Core Barrel

Time	Lab Sample Collected	Sample Interval (ft)	Sample Recovery (ft)	USCS	Composition (%)	Sample Material/Comments Include composition, color, grain size, moisture, hardness, plasticity, density	Hydrocarbon Odor	PID (ppm)
	<input type="checkbox"/>	0-10'				Light gray, slightly clayey fine sand and cobbles	None Slight Mod. Strong	
	<input type="checkbox"/>	10-30'				Light gray to white, calcareous, silty sand and caliche	None Slight Mod. Strong	
	<input type="checkbox"/>	30-40'				Dry, light red/brown, hi-plasticity Clay (CH)	None Slight Mod. Strong	
	<input type="checkbox"/>	40-50'				Light gray limestone w/varying amounts of slightly sandy clay	None Slight Mod. Strong	
	<input type="checkbox"/>	50-60'				Red/brown, hi-plasticity Clay (CH)	None Slight Mod. Strong	
	<input type="checkbox"/>	60-70'				Tan, hi-plasticity Clay (CH)	None Slight Mod. Strong	
	<input type="checkbox"/>	70-80'				Dark red/brown, hi-plasticity Clay (CH)	None Slight Mod. Strong	
	<input type="checkbox"/>	80-90'				Dry, dark red/brown, low-plasticity Clay (CL)	None Slight Mod. Strong	
	<input type="checkbox"/>	90-105'				Moist, light red/brown to red/brown hi-plasticity Clay (CH) w/white fragmented limestone	None Slight Mod. Strong	
	<input type="checkbox"/>					__TD 105'__	None Slight Mod. Strong	
	<input type="checkbox"/>						None Slight Mod. Strong	
	<input type="checkbox"/>						None Slight Mod. Strong	

Surface Elevation: \_\_\_\_\_

Notes: Groundwater Encountered @ 61' BGS – 72 hr.

Logger Initials: MC \_\_\_\_\_



Time	Lab Sample Collected	Sample Interval (ft)	Sample Recovery (ft)	USCS	Composition (%)	Sample Material/Comments Include composition, color, grain size, moisture, hardness, plasticity, density	Hydrocarbon Odor	PID (ppm)
	<input type="checkbox"/>						None Slight Mod. Strong	
	<input type="checkbox"/>						None Slight Mod. Strong	
	<input type="checkbox"/>						None Slight Mod. Strong	
	<input type="checkbox"/>						None Slight Mod. Strong	
	<input type="checkbox"/>						None Slight Mod. Strong	
	<input type="checkbox"/>						None Slight Mod. Strong	
	<input type="checkbox"/>						None Slight Mod. Strong	
	<input type="checkbox"/>						None Slight Mod. Strong	
	<input type="checkbox"/>						None Slight Mod. Strong	
	<input type="checkbox"/>						None Slight Mod. Strong	
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	<input type="checkbox"/>						None Slight Mod. Strong	
	<input type="checkbox"/>						None Slight Mod. Strong	
	<input type="checkbox"/>						None Slight Mod. Strong	
	<input type="checkbox"/>						None Slight Mod. Strong	

**Notes:**

The borehole was advanced to 105' below ground surface (bgs). A 2-inch diameter temporary well constructed of schedule 40 PVC thread coupled to 10-feet of machine slotted well screen was installed into the drill casing. 72-hours after installation, a Solinst water level meter was utilized to determine the presence or absence of groundwater.



# New Mexico Office of the State Engineer

## Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE)							
		(quarters are smallest to largest)				(NAD83 UTM in meters)			
<b>Well Tag</b>	<b>POD Number</b>	<b>Q64</b>	<b>Q16</b>	<b>Q4</b>	<b>Sec</b>	<b>Tw</b>	<b>Rng</b>	<b>X</b>	<b>Y</b>
	RA 05900	2	2	16	19S	25E	548442	3614424*	

---

**Driller License:** 460      **Driller Company:** JENKINS BROTHERS DRILLING

**Driller Name:**

**Drill Start Date:** 03/18/1974      **Drill Finish Date:** 03/19/1974      **Plug Date:**

**Log File Date:** 03/25/1974      **PCW Rev Date:**      **Source:** Shallow

**Pump Type:**      **Pipe Discharge Size:**      **Estimated Yield:** 30 GPM

**Casing Size:** 7.00      **Depth Well:** 185 feet      **Depth Water:** 95 feet

---

<b>Water Bearing Stratifications:</b>	<b>Top</b>	<b>Bottom</b>	<b>Description</b>
	118	122	Sandstone/Gravel/Conglomerate

---

<b>Casing Perforations:</b>	<b>Top</b>	<b>Bottom</b>
	108	158

---

\*UTM location was derived from PLSS - see Help

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


8/3/21 9:45 AM

POINT OF DIVERSION SUMMARY



# New Mexico Office of the State Engineer

## Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest)						(NAD83 UTM in meters)	
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	RA 05450		4	2	15	19S	25E	550057	3614015* 
<hr/>									
Driller License: 464		Driller Company:				FULTON, C.O.			
Driller Name:									
Drill Start Date: 07/16/1968		Drill Finish Date:				07/21/1968		Plug Date:	
Log File Date: 08/21/1969		PCW Rcv Date:						Source: Shallow	
Pump Type:		Pipe Discharge Size:						Estimated Yield:	
Casing Size:		Depth Well:				204 feet		Depth Water: 80 feet	

\*UTM location was derived from PLSS - see Help

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10/7/21 1:56 PM

POINT OF DIVERSION SUMMARY



# New Mexico Office of the State Engineer

## Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE)							
		(quarters are smallest to largest)				(NAD83 UTM in meters)			
<b>Well Tag</b>	<b>POD Number</b>	<b>Q64</b>	<b>Q16</b>	<b>Q4</b>	<b>Sec</b>	<b>Tws</b>	<b>Rng</b>	<b>X</b>	<b>Y</b>
	RA 06418	1	2	3	17	19S	25E	545925	3613710* 

---

**Driller License:** 406      **Driller Company:** TIDWELL, CLYDE J.

**Driller Name:**

**Drill Start Date:** 12/11/1978      **Drill Finish Date:** 12/18/1978      **Plug Date:**

**Log File Date:** 12/26/1978      **PCW Rev Date:**      **Source:** Shallow

**Pump Type:**      **Pipe Discharge Size:**      **Estimated Yield:**

**Casing Size:** 7.00      **Depth Well:** 120 feet      **Depth Water:** 72 feet

---

**Water Bearing Stratifications:**

Top	Bottom	Description
72	75	Shallow Alluvium/Basin Fill
106	112	Shallow Alluvium/Basin Fill

---

**Casing Perforations:**

Top	Bottom
51	109

---

\*UTM location was derived from PLSS - see Help

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

8/3/21 9:45 AM

POINT OF DIVERSION SUMMARY



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## National Water Information System: Web Interface

USGS Water Resources

Data Category:

Groundwater



Geographic Area:

United States



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- [Full News](#)

Groundwater levels for the Nation

\* IMPORTANT: [Next Generation Station Page](#)

## Search Results -- 1 sites found

site\_no list =

- 323948104302801

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

## USGS 323948104302801 19S.25E.17.321212

Available data for this site

Groundwater: Field measurements



GO

Eddy County, New Mexico

Hydrologic Unit Code 13060011

Latitude 32°39'48", Longitude 104°30'28" NAD27

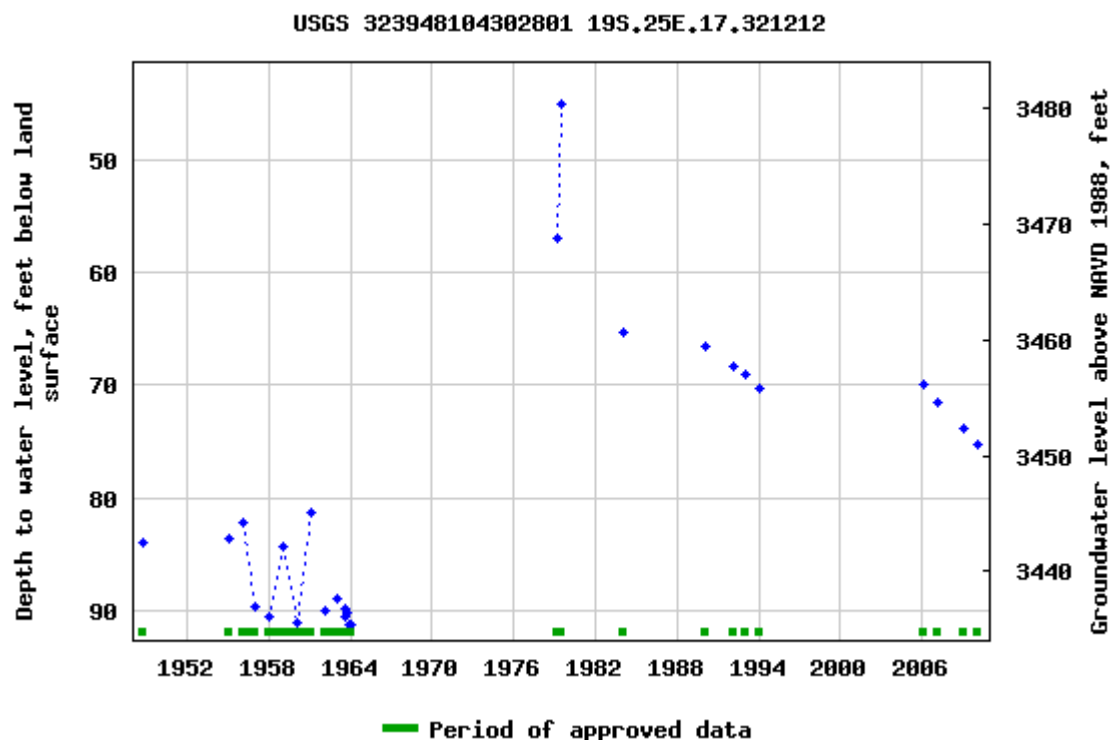
Land-surface elevation 3,526 feet above NAVD88

This well is completed in the Roswell Basin aquifer system (S400RSWLBS) national aquifer.

This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

### Output formats

<a href="#">Table of data</a>
<a href="#">Tab-separated data</a>
<a href="#">Graph of data</a>
<a href="#">Reselect period</a>



Breaks in the plot represent a gap of at least one year between field measurements.  
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**Title: Groundwater for USA: Water Levels**

**URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>**

Page Contact Information: [USGS Water Data Support Team](#)

Page Last Modified: 2021-08-03 11:41:49 EDT

0.56 0.49 nadww01





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USGS Water Resources

Data Category:

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Groundwater levels for the Nation

\* IMPORTANT: [Next Generation Station Page](#)

## Search Results -- 1 sites found

site\_no list =

- 324004104285801

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

## USGS 324004104285801 19S.25E.16.22332

Available data for this site

Groundwater: Field measurements



GO

Eddy County, New Mexico

Hydrologic Unit Code 13060011

Latitude 32°40'04", Longitude 104°28'58" NAD27

Land-surface elevation 3,487 feet above NAVD88

This well is completed in the Roswell Basin aquifer system (S400RSWLBS) national aquifer.

This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

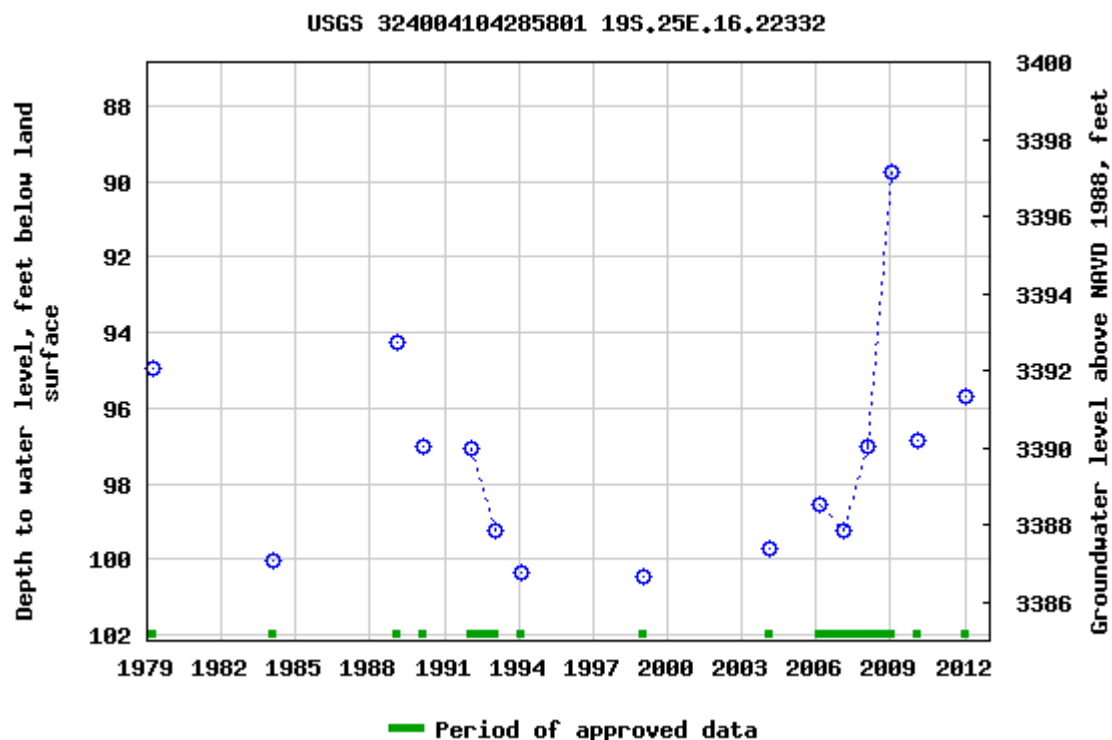
### Output formats

[Table of data](#)

[Tab-separated data](#)

[Graph of data](#)

[Reselect period](#)



Breaks in the plot represent a gap of at least one year between field measurements.

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**Title: Groundwater for USA: Water Levels**

**URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>**

Page Contact Information: [USGS Water Data Support Team](#)

Page Last Modified: 2021-08-03 11:41:26 EDT

0.58 0.5 nadww01







USGS Home  
Contact USGS  
Search USGS

## National Water Information System: Web Interface

USGS Water Resources

Data Category:

Groundwater



Geographic Area:

United States



GO

Click to hide News Bulletins

- Explore the *NEW* [USGS National Water Dashboard](#) interactive map to access real-time water data from over 13,500 stations nationwide.
- [Full News](#)

Groundwater levels for the Nation

\* IMPORTANT: [Next Generation Station Page](#)

## Search Results -- 1 sites found

site\_no list =

- 323948104302901

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

## USGS 323948104302901 19S.25E.17.321211

Available data for this site

Groundwater: Field measurements



GO

Eddy County, New Mexico

Hydrologic Unit Code 13060011

Latitude 32°39'48", Longitude 104°30'29" NAD27

Land-surface elevation 3,528 feet above NAVD88

The depth of the well is 120 feet below land surface.

This well is completed in the Roswell Basin aquifer system (S400RSWLBS) national aquifer.

This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

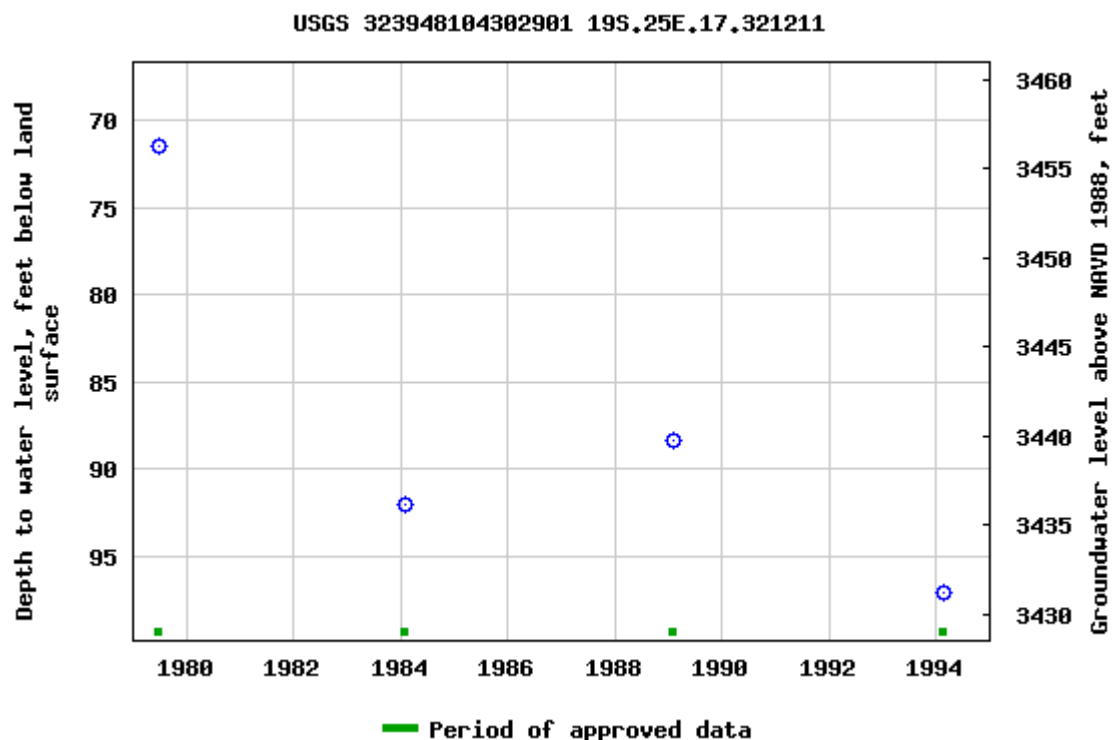
### Output formats

[Table of data](#)

[Tab-separated data](#)

[Graph of data](#)

[Reselect period](#)



Breaks in the plot represent a gap of at least one year between field measurements.

[Download a presentation-quality graph](#)

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**Title: Groundwater for USA: Water Levels**

**URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>**

Page Contact Information: [USGS Water Data Support Team](#)

Page Last Modified: 2021-08-03 11:41:35 EDT

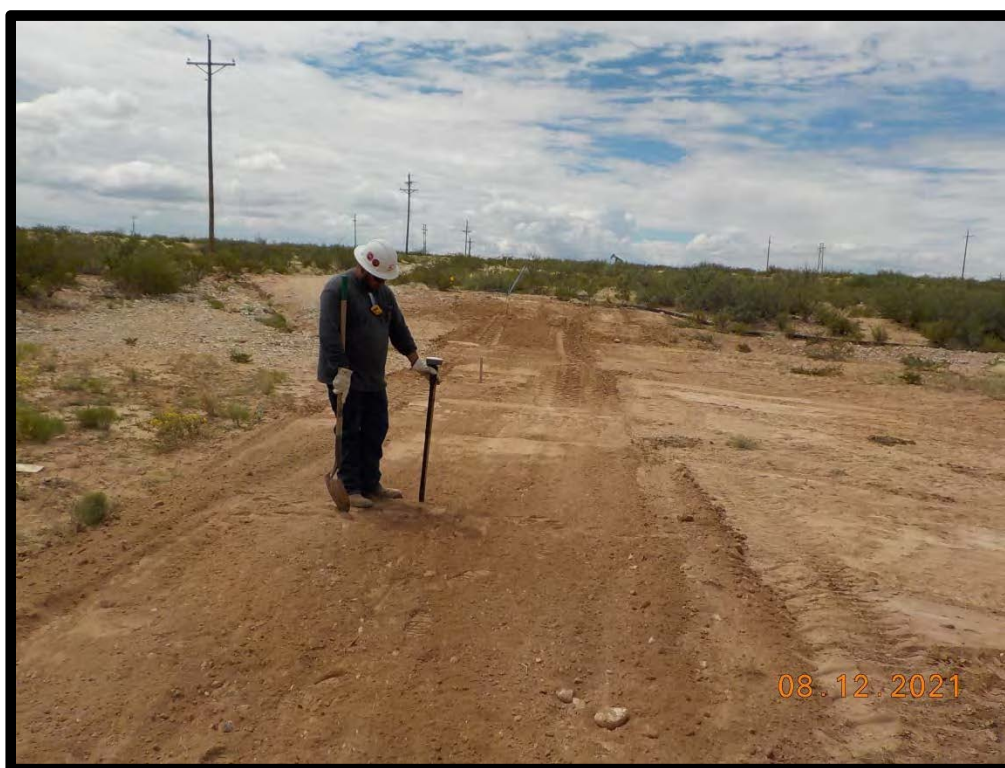
0.64 0.57 nadww01



## ATTACHMENT 2 – PHOTOGRAPHIC DOCUMENTATION



**PHOTOGRAPH NO. 1 – A general view of the Site assessment activities at the PT-3 location. The view is towards the southeast.**



**PHOTOGRAPH NO. 2 – An additional view of the assessment/proposed remediation area during the August 12, 2021, site activities. The view is towards the south.**

## ATTACHMENT 3 – LABORATORY ANALYTICAL REPORT



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: clients.hallenvironmental.com

August 20, 2021

Will Kierdorf  
EOG  
105 South Fourth Street  
Artesia, NM 88210  
TEL:  
FAX

RE: Amole AMA State 2

OrderNo.: 2108710

Dear Will Kierdorf:

Hall Environmental Analysis Laboratory received 20 sample(s) on 8/13/2021 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Analytical Report

Lab Order 2108710

Date Reported: 8/20/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: PT3-1

Project: Amole AMA State 2

Collection Date: 8/12/2021 2:00:00 PM

Lab ID: 2108710-001

Matrix: SOIL

Received Date: 8/13/2021 7:19:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	3300	150		mg/Kg	50	8/19/2021 8:11:10 AM	62045
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/17/2021 11:40:28 AM	61979
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/17/2021 11:40:28 AM	61979
Surr: DNOP	107	70-130		%Rec	1	8/17/2021 11:40:28 AM	61979
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/17/2021 1:56:42 PM	61978
Surr: BFB	93.2	70-130		%Rec	1	8/17/2021 1:56:42 PM	61978
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	8/17/2021 1:56:42 PM	61978
Toluene	ND	0.050		mg/Kg	1	8/17/2021 1:56:42 PM	61978
Ethylbenzene	ND	0.050		mg/Kg	1	8/17/2021 1:56:42 PM	61978
Xylenes, Total	ND	0.10		mg/Kg	1	8/17/2021 1:56:42 PM	61978
Surr: 4-Bromofluorobenzene	86.1	70-130		%Rec	1	8/17/2021 1:56:42 PM	61978

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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## Analytical Report

Lab Order 2108710

Date Reported: 8/20/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: PT3-5

Project: Amole AMA State 2

Collection Date: 8/12/2021 2:05:00 PM

Lab ID: 2108710-002

Matrix: SOIL

Received Date: 8/13/2021 7:19:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	4000	150		mg/Kg	50	8/19/2021 8:23:35 AM	62045
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	8/17/2021 11:50:14 AM	61979
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/17/2021 11:50:14 AM	61979
Surr: DNOP	98.5	70-130		%Rec	1	8/17/2021 11:50:14 AM	61979
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/17/2021 2:20:20 PM	61978
Surr: BFB	96.3	70-130		%Rec	1	8/17/2021 2:20:20 PM	61978
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	8/17/2021 2:20:20 PM	61978
Toluene	ND	0.049		mg/Kg	1	8/17/2021 2:20:20 PM	61978
Ethylbenzene	ND	0.049		mg/Kg	1	8/17/2021 2:20:20 PM	61978
Xylenes, Total	ND	0.098		mg/Kg	1	8/17/2021 2:20:20 PM	61978
Surr: 4-Bromofluorobenzene	89.3	70-130		%Rec	1	8/17/2021 2:20:20 PM	61978

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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## Analytical Report

Lab Order 2108710

Date Reported: 8/20/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: PT3-10

Project: Amole AMA State 2

Collection Date: 8/12/2021 2:07:00 PM

Lab ID: 2108710-003

Matrix: SOIL

Received Date: 8/13/2021 7:19:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	5400	300		mg/Kg	100	8/19/2021 8:35:59 AM	62045
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	8.0		mg/Kg	1	8/17/2021 12:00:02 PM	61979
Motor Oil Range Organics (MRO)	ND	40		mg/Kg	1	8/17/2021 12:00:02 PM	61979
Surr: DNOP	93.4	70-130		%Rec	1	8/17/2021 12:00:02 PM	61979
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/17/2021 3:31:32 PM	61978
Surr: BFB	95.1	70-130		%Rec	1	8/17/2021 3:31:32 PM	61978
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	8/17/2021 3:31:32 PM	61978
Toluene	ND	0.049		mg/Kg	1	8/17/2021 3:31:32 PM	61978
Ethylbenzene	ND	0.049		mg/Kg	1	8/17/2021 3:31:32 PM	61978
Xylenes, Total	ND	0.098		mg/Kg	1	8/17/2021 3:31:32 PM	61978
Surr: 4-Bromofluorobenzene	86.8	70-130		%Rec	1	8/17/2021 3:31:32 PM	61978

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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## Analytical Report

Lab Order 2108710

Date Reported: 8/20/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: PT3-15

Project: Amole AMA State 2

Collection Date: 8/12/2021 2:10:00 PM

Lab ID: 2108710-004

Matrix: SOIL

Received Date: 8/13/2021 7:19:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	230	60		mg/Kg	20	8/18/2021 9:05:31 PM	62045
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	7.7		mg/Kg	1	8/17/2021 12:09:49 PM	61979
Motor Oil Range Organics (MRO)	ND	39		mg/Kg	1	8/17/2021 12:09:49 PM	61979
Surr: DNOP	119	70-130		%Rec	1	8/17/2021 12:09:49 PM	61979
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/17/2021 3:55:16 PM	61978
Surr: BFB	95.4	70-130		%Rec	1	8/17/2021 3:55:16 PM	61978
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	8/17/2021 3:55:16 PM	61978
Toluene	ND	0.049		mg/Kg	1	8/17/2021 3:55:16 PM	61978
Ethylbenzene	ND	0.049		mg/Kg	1	8/17/2021 3:55:16 PM	61978
Xylenes, Total	ND	0.098		mg/Kg	1	8/17/2021 3:55:16 PM	61978
Surr: 4-Bromofluorobenzene	87.2	70-130		%Rec	1	8/17/2021 3:55:16 PM	61978

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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## Analytical Report

Lab Order 2108710

Date Reported: 8/20/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: PT5-1

Project: Amole AMA State 2

Collection Date: 8/12/2021 3:05:00 PM

Lab ID: 2108710-005

Matrix: SOIL

Received Date: 8/13/2021 7:19:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	3200	150		mg/Kg	50	8/19/2021 8:48:24 AM	62045
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>SB</b>
Diesel Range Organics (DRO)	22	9.6		mg/Kg	1	8/17/2021 12:19:38 PM	61979
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/17/2021 12:19:38 PM	61979
Surr: DNOP	101	70-130		%Rec	1	8/17/2021 12:19:38 PM	61979
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/17/2021 4:19:00 PM	61978
Surr: BFB	95.0	70-130		%Rec	1	8/17/2021 4:19:00 PM	61978
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	8/17/2021 4:19:00 PM	61978
Toluene	ND	0.049		mg/Kg	1	8/17/2021 4:19:00 PM	61978
Ethylbenzene	ND	0.049		mg/Kg	1	8/17/2021 4:19:00 PM	61978
Xylenes, Total	ND	0.098		mg/Kg	1	8/17/2021 4:19:00 PM	61978
Surr: 4-Bromofluorobenzene	87.1	70-130		%Rec	1	8/17/2021 4:19:00 PM	61978

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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## Analytical Report

Lab Order 2108710

Date Reported: 8/20/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: PT5-5

Project: Amole AMA State 2

Collection Date: 8/12/2021 3:10:00 PM

Lab ID: 2108710-006

Matrix: SOIL

Received Date: 8/13/2021 7:19:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	180	60		mg/Kg	20	8/18/2021 9:30:19 PM	62045
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/17/2021 12:29:27 PM	61979
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/17/2021 12:29:27 PM	61979
Surr: DNOP	100	70-130		%Rec	1	8/17/2021 12:29:27 PM	61979
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/17/2021 4:42:44 PM	61978
Surr: BFB	93.2	70-130		%Rec	1	8/17/2021 4:42:44 PM	61978
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	8/17/2021 4:42:44 PM	61978
Toluene	ND	0.049		mg/Kg	1	8/17/2021 4:42:44 PM	61978
Ethylbenzene	ND	0.049		mg/Kg	1	8/17/2021 4:42:44 PM	61978
Xylenes, Total	ND	0.099		mg/Kg	1	8/17/2021 4:42:44 PM	61978
Surr: 4-Bromofluorobenzene	85.5	70-130		%Rec	1	8/17/2021 4:42:44 PM	61978

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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## Analytical Report

Lab Order 2108710

Date Reported: 8/20/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: PT6-0

Project: Amole AMA State 2

Collection Date: 8/12/2021 2:15:00 PM

Lab ID: 2108710-007

Matrix: SOIL

Received Date: 8/13/2021 7:19:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	8/18/2021 9:42:44 PM	62045
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/17/2021 12:39:18 PM	61979
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/17/2021 12:39:18 PM	61979
Surr: DNOP	71.0	70-130		%Rec	1	8/17/2021 12:39:18 PM	61979
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/17/2021 5:06:30 PM	61978
Surr: BFB	95.0	70-130		%Rec	1	8/17/2021 5:06:30 PM	61978
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	8/17/2021 5:06:30 PM	61978
Toluene	ND	0.048		mg/Kg	1	8/17/2021 5:06:30 PM	61978
Ethylbenzene	ND	0.048		mg/Kg	1	8/17/2021 5:06:30 PM	61978
Xylenes, Total	ND	0.095		mg/Kg	1	8/17/2021 5:06:30 PM	61978
Surr: 4-Bromofluorobenzene	88.1	70-130		%Rec	1	8/17/2021 5:06:30 PM	61978

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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## Analytical Report

Lab Order 2108710

Date Reported: 8/20/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: PT6-2

Project: Amole AMA State 2

Collection Date: 8/12/2021 2:17:00 PM

Lab ID: 2108710-008

Matrix: SOIL

Received Date: 8/13/2021 7:19:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	65	60		mg/Kg	20	8/18/2021 10:19:57 PM	62049
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/17/2021 12:49:17 PM	61979
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/17/2021 12:49:17 PM	61979
Surr: DNOP	110	70-130		%Rec	1	8/17/2021 12:49:17 PM	61979
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/17/2021 5:30:17 PM	61978
Surr: BFB	94.5	70-130		%Rec	1	8/17/2021 5:30:17 PM	61978
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	8/17/2021 5:30:17 PM	61978
Toluene	ND	0.049		mg/Kg	1	8/17/2021 5:30:17 PM	61978
Ethylbenzene	ND	0.049		mg/Kg	1	8/17/2021 5:30:17 PM	61978
Xylenes, Total	ND	0.099		mg/Kg	1	8/17/2021 5:30:17 PM	61978
Surr: 4-Bromofluorobenzene	86.3	70-130		%Rec	1	8/17/2021 5:30:17 PM	61978

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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## Analytical Report

Lab Order 2108710

Date Reported: 8/20/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: PT6-5

Project: Amole AMA State 2

Collection Date: 8/12/2021 2:20:00 PM

Lab ID: 2108710-009

Matrix: SOIL

Received Date: 8/13/2021 7:19:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	310	60		mg/Kg	20	8/18/2021 10:32:21 PM	62049
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/17/2021 12:59:18 PM	61979
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/17/2021 12:59:18 PM	61979
Surr: DNOP	82.7	70-130		%Rec	1	8/17/2021 12:59:18 PM	61979
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/17/2021 5:54:07 PM	61978
Surr: BFB	95.3	70-130		%Rec	1	8/17/2021 5:54:07 PM	61978
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.023		mg/Kg	1	8/17/2021 5:54:07 PM	61978
Toluene	ND	0.047		mg/Kg	1	8/17/2021 5:54:07 PM	61978
Ethylbenzene	ND	0.047		mg/Kg	1	8/17/2021 5:54:07 PM	61978
Xylenes, Total	ND	0.093		mg/Kg	1	8/17/2021 5:54:07 PM	61978
Surr: 4-Bromofluorobenzene	88.0	70-130		%Rec	1	8/17/2021 5:54:07 PM	61978

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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## Analytical Report

Lab Order 2108710

Date Reported: 8/20/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: PT7-0

Project: Amole AMA State 2

Collection Date: 8/12/2021 2:21:00 PM

Lab ID: 2108710-010

Matrix: SOIL

Received Date: 8/13/2021 7:19:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	8/18/2021 11:09:34 PM	62049
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/17/2021 1:09:17 PM	61979
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/17/2021 1:09:17 PM	61979
Surr: DNOP	95.5	70-130		%Rec	1	8/17/2021 1:09:17 PM	61979
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/17/2021 6:17:50 PM	61978
Surr: BFB	92.8	70-130		%Rec	1	8/17/2021 6:17:50 PM	61978
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	8/17/2021 6:17:50 PM	61978
Toluene	ND	0.048		mg/Kg	1	8/17/2021 6:17:50 PM	61978
Ethylbenzene	ND	0.048		mg/Kg	1	8/17/2021 6:17:50 PM	61978
Xylenes, Total	ND	0.096		mg/Kg	1	8/17/2021 6:17:50 PM	61978
Surr: 4-Bromofluorobenzene	86.7	70-130		%Rec	1	8/17/2021 6:17:50 PM	61978

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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## Analytical Report

Lab Order 2108710

Date Reported: 8/20/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: PT7-2

Project: Amole AMA State 2

Collection Date: 8/12/2021 2:25:00 PM

Lab ID: 2108710-011

Matrix: SOIL

Received Date: 8/13/2021 7:19:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	78	60		mg/Kg	20	8/18/2021 11:21:58 PM	62049
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	8/17/2021 1:47:02 PM	61979
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/17/2021 1:47:02 PM	61979
Surr: DNOP	114	70-130		%Rec	1	8/17/2021 1:47:02 PM	61979
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/17/2021 6:41:31 PM	61978
Surr: BFB	97.5	70-130		%Rec	1	8/17/2021 6:41:31 PM	61978
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	8/17/2021 6:41:31 PM	61978
Toluene	ND	0.050		mg/Kg	1	8/17/2021 6:41:31 PM	61978
Ethylbenzene	ND	0.050		mg/Kg	1	8/17/2021 6:41:31 PM	61978
Xylenes, Total	ND	0.099		mg/Kg	1	8/17/2021 6:41:31 PM	61978
Surr: 4-Bromofluorobenzene	90.0	70-130		%Rec	1	8/17/2021 6:41:31 PM	61978

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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## Analytical Report

Lab Order 2108710

Date Reported: 8/20/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: PT7-5

Project: Amole AMA State 2

Collection Date: 8/12/2021 2:30:00 PM

Lab ID: 2108710-012

Matrix: SOIL

Received Date: 8/13/2021 7:19:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	61		mg/Kg	20	8/18/2021 11:34:22 PM	62049
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/17/2021 1:56:57 PM	61979
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/17/2021 1:56:57 PM	61979
Surr: DNOP	102	70-130		%Rec	1	8/17/2021 1:56:57 PM	61979
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/17/2021 7:05:17 PM	61978
Surr: BFB	95.1	70-130		%Rec	1	8/17/2021 7:05:17 PM	61978
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	8/17/2021 7:05:17 PM	61978
Toluene	ND	0.049		mg/Kg	1	8/17/2021 7:05:17 PM	61978
Ethylbenzene	ND	0.049		mg/Kg	1	8/17/2021 7:05:17 PM	61978
Xylenes, Total	ND	0.097		mg/Kg	1	8/17/2021 7:05:17 PM	61978
Surr: 4-Bromofluorobenzene	87.9	70-130		%Rec	1	8/17/2021 7:05:17 PM	61978

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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## Analytical Report

Lab Order 2108710

Date Reported: 8/20/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: PT8-0

Project: Amole AMA State 2

Collection Date: 8/12/2021 2:35:00 PM

Lab ID: 2108710-013

Matrix: SOIL

Received Date: 8/13/2021 7:19:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	8/18/2021 11:46:47 PM	62049
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/17/2021 4:54:01 PM	61990
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/17/2021 4:54:01 PM	61990
Surr: DNOP	109	70-130		%Rec	1	8/17/2021 4:54:01 PM	61990
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>mb</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/17/2021 9:15:00 AM	61980
Surr: BFB	97.5	70-130		%Rec	1	8/17/2021 9:15:00 AM	61980
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>mb</b>
Benzene	ND	0.024		mg/Kg	1	8/17/2021 9:15:00 AM	61980
Toluene	ND	0.049		mg/Kg	1	8/17/2021 9:15:00 AM	61980
Ethylbenzene	ND	0.049		mg/Kg	1	8/17/2021 9:15:00 AM	61980
Xylenes, Total	ND	0.097		mg/Kg	1	8/17/2021 9:15:00 AM	61980
Surr: 4-Bromofluorobenzene	88.6	70-130		%Rec	1	8/17/2021 9:15:00 AM	61980

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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## Analytical Report

Lab Order 2108710

Date Reported: 8/20/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: PT8-2

Project: Amole AMA State 2

Collection Date: 8/12/2021 2:37:00 PM

Lab ID: 2108710-014

Matrix: SOIL

Received Date: 8/13/2021 7:19:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	8/18/2021 11:59:11 PM	62049
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	8/17/2021 6:05:52 PM	61990
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/17/2021 6:05:52 PM	61990
Surr: DNOP	112	70-130		%Rec	1	8/17/2021 6:05:52 PM	61990
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>mb</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/17/2021 10:14:00 AM	61980
Surr: BFB	99.2	70-130		%Rec	1	8/17/2021 10:14:00 AM	61980
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>mb</b>
Benzene	ND	0.025		mg/Kg	1	8/17/2021 10:14:00 AM	61980
Toluene	ND	0.049		mg/Kg	1	8/17/2021 10:14:00 AM	61980
Ethylbenzene	ND	0.049		mg/Kg	1	8/17/2021 10:14:00 AM	61980
Xylenes, Total	ND	0.098		mg/Kg	1	8/17/2021 10:14:00 AM	61980
Surr: 4-Bromofluorobenzene	89.7	70-130		%Rec	1	8/17/2021 10:14:00 AM	61980

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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## Analytical Report

Lab Order 2108710

Date Reported: 8/20/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: PT8-5

Project: Amole AMA State 2

Collection Date: 8/12/2021 2:40:00 PM

Lab ID: 2108710-015

Matrix: SOIL

Received Date: 8/13/2021 7:19:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	84	59		mg/Kg	20	8/19/2021 12:11:36 AM	62049
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/17/2021 6:29:57 PM	61990
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/17/2021 6:29:57 PM	61990
Surr: DNOP	92.9	70-130		%Rec	1	8/17/2021 6:29:57 PM	61990
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>mb</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/17/2021 11:14:00 AM	61980
Surr: BFB	92.7	70-130		%Rec	1	8/17/2021 11:14:00 AM	61980
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>mb</b>
Benzene	ND	0.024		mg/Kg	1	8/17/2021 11:14:00 AM	61980
Toluene	ND	0.049		mg/Kg	1	8/17/2021 11:14:00 AM	61980
Ethylbenzene	ND	0.049		mg/Kg	1	8/17/2021 11:14:00 AM	61980
Xylenes, Total	ND	0.097		mg/Kg	1	8/17/2021 11:14:00 AM	61980
Surr: 4-Bromofluorobenzene	84.2	70-130		%Rec	1	8/17/2021 11:14:00 AM	61980

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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## Analytical Report

Lab Order 2108710

Date Reported: 8/20/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: PT9-1

Project: Amole AMA State 2

Collection Date: 8/12/2021 3:20:00 PM

Lab ID: 2108710-016

Matrix: SOIL

Received Date: 8/13/2021 7:19:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	1200	60		mg/Kg	20	8/19/2021 12:24:00 AM	62049
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/17/2021 6:53:55 PM	61990
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/17/2021 6:53:55 PM	61990
Surr: DNOP	103	70-130		%Rec	1	8/17/2021 6:53:55 PM	61990
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>mb</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/17/2021 11:34:00 AM	61980
Surr: BFB	95.8	70-130		%Rec	1	8/17/2021 11:34:00 AM	61980
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>mb</b>
Benzene	ND	0.023		mg/Kg	1	8/17/2021 11:34:00 AM	61980
Toluene	ND	0.047		mg/Kg	1	8/17/2021 11:34:00 AM	61980
Ethylbenzene	ND	0.047		mg/Kg	1	8/17/2021 11:34:00 AM	61980
Xylenes, Total	ND	0.094		mg/Kg	1	8/17/2021 11:34:00 AM	61980
Surr: 4-Bromofluorobenzene	86.3	70-130		%Rec	1	8/17/2021 11:34:00 AM	61980

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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## Analytical Report

Lab Order 2108710

Date Reported: 8/20/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: PT9-5

Project: Amole AMA State 2

Collection Date: 8/12/2021 3:30:00 PM

Lab ID: 2108710-017

Matrix: SOIL

Received Date: 8/13/2021 7:19:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	100	60		mg/Kg	20	8/19/2021 12:36:24 AM	62049
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/17/2021 7:17:54 PM	61990
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/17/2021 7:17:54 PM	61990
Surr: DNOP	120	70-130		%Rec	1	8/17/2021 7:17:54 PM	61990
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>mb</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/17/2021 11:54:00 AM	61980
Surr: BFB	95.1	70-130		%Rec	1	8/17/2021 11:54:00 AM	61980
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>mb</b>
Benzene	ND	0.024		mg/Kg	1	8/17/2021 11:54:00 AM	61980
Toluene	ND	0.048		mg/Kg	1	8/17/2021 11:54:00 AM	61980
Ethylbenzene	ND	0.048		mg/Kg	1	8/17/2021 11:54:00 AM	61980
Xylenes, Total	ND	0.096		mg/Kg	1	8/17/2021 11:54:00 AM	61980
Surr: 4-Bromofluorobenzene	87.7	70-130		%Rec	1	8/17/2021 11:54:00 AM	61980

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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## Analytical Report

Lab Order 2108710

Date Reported: 8/20/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: PT10-0

Project: Amole AMA State 2

Collection Date: 8/12/2021 2:45:00 PM

Lab ID: 2108710-018

Matrix: SOIL

Received Date: 8/13/2021 7:19:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	8/19/2021 12:48:49 AM	62049
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/17/2021 7:41:48 PM	61990
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/17/2021 7:41:48 PM	61990
Surr: DNOP	74.5	70-130		%Rec	1	8/17/2021 7:41:48 PM	61990
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>mb</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/17/2021 12:14:00 PM	61980
Surr: BFB	97.2	70-130		%Rec	1	8/17/2021 12:14:00 PM	61980
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>mb</b>
Benzene	ND	0.025		mg/Kg	1	8/17/2021 12:14:00 PM	61980
Toluene	ND	0.050		mg/Kg	1	8/17/2021 12:14:00 PM	61980
Ethylbenzene	ND	0.050		mg/Kg	1	8/17/2021 12:14:00 PM	61980
Xylenes, Total	ND	0.10		mg/Kg	1	8/17/2021 12:14:00 PM	61980
Surr: 4-Bromofluorobenzene	86.4	70-130		%Rec	1	8/17/2021 12:14:00 PM	61980

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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## Analytical Report

Lab Order 2108710

Date Reported: 8/20/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: PT10-2

Project: Amole AMA State 2

Collection Date: 8/12/2021 2:50:00 PM

Lab ID: 2108710-019

Matrix: SOIL

Received Date: 8/13/2021 7:19:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	92	60		mg/Kg	20	8/19/2021 1:01:13 AM	62049
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	8/17/2021 10:05:10 PM	61990
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/17/2021 10:05:10 PM	61990
Surr: DNOP	105	70-130		%Rec	1	8/17/2021 10:05:10 PM	61990
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>mb</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/17/2021 12:34:00 PM	61980
Surr: BFB	98.8	70-130		%Rec	1	8/17/2021 12:34:00 PM	61980
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>mb</b>
Benzene	ND	0.025		mg/Kg	1	8/17/2021 12:34:00 PM	61980
Toluene	ND	0.050		mg/Kg	1	8/17/2021 12:34:00 PM	61980
Ethylbenzene	ND	0.050		mg/Kg	1	8/17/2021 12:34:00 PM	61980
Xylenes, Total	ND	0.10		mg/Kg	1	8/17/2021 12:34:00 PM	61980
Surr: 4-Bromofluorobenzene	86.6	70-130		%Rec	1	8/17/2021 12:34:00 PM	61980

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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## Analytical Report

Lab Order 2108710

Date Reported: 8/20/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: PT10-5

Project: Amole AMA State 2

Collection Date: 8/12/2021 2:55:00 PM

Lab ID: 2108710-020

Matrix: SOIL

Received Date: 8/13/2021 7:19:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	91	60		mg/Kg	20	8/19/2021 1:38:27 AM	62049
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/17/2021 10:29:07 PM	61990
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/17/2021 10:29:07 PM	61990
Surr: DNOP	112	70-130		%Rec	1	8/17/2021 10:29:07 PM	61990
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>mb</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/17/2021 12:53:00 PM	61980
Surr: BFB	96.5	70-130		%Rec	1	8/17/2021 12:53:00 PM	61980
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>mb</b>
Benzene	ND	0.025		mg/Kg	1	8/17/2021 12:53:00 PM	61980
Toluene	ND	0.050		mg/Kg	1	8/17/2021 12:53:00 PM	61980
Ethylbenzene	ND	0.050		mg/Kg	1	8/17/2021 12:53:00 PM	61980
Xylenes, Total	ND	0.10		mg/Kg	1	8/17/2021 12:53:00 PM	61980
Surr: 4-Bromofluorobenzene	87.7	70-130		%Rec	1	8/17/2021 12:53:00 PM	61980

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2108710

20-Aug-21

**Client:** EOG  
**Project:** Amole AMA State 2

Sample ID: <b>MB-62045</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>62045</b>	RunNo: <b>80630</b>								
Prep Date: <b>8/18/2021</b>	Analysis Date: <b>8/18/2021</b>	SeqNo: <b>2844404</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-62045</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>62045</b>	RunNo: <b>80630</b>								
Prep Date: <b>8/18/2021</b>	Analysis Date: <b>8/18/2021</b>	SeqNo: <b>2844405</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.5	90	110			

Sample ID: <b>MB-62049</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>62049</b>	RunNo: <b>80630</b>								
Prep Date: <b>8/18/2021</b>	Analysis Date: <b>8/18/2021</b>	SeqNo: <b>2844434</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-62049</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>62049</b>	RunNo: <b>80630</b>								
Prep Date: <b>8/18/2021</b>	Analysis Date: <b>8/18/2021</b>	SeqNo: <b>2844435</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.3	90	110			

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2108710

20-Aug-21

**Client:** EOG  
**Project:** Amole AMA State 2

Sample ID: <b>LCS-61979</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>61979</b>	RunNo: <b>80580</b>								
Prep Date: <b>8/16/2021</b>	Analysis Date: <b>8/17/2021</b>	SeqNo: <b>2842402</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	60	10	50.00	0	120	68.9	141			
Surr: DNOP	5.9		5.000		118	70	130			

Sample ID: <b>LCS-62000</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>62000</b>	RunNo: <b>80580</b>								
Prep Date: <b>8/16/2021</b>	Analysis Date: <b>8/17/2021</b>	SeqNo: <b>2842403</b> Units: <b>%Rec</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.5		5.000		90.9	70	130			

Sample ID: <b>MB-61979</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>61979</b>	RunNo: <b>80580</b>								
Prep Date: <b>8/16/2021</b>	Analysis Date: <b>8/17/2021</b>	SeqNo: <b>2842404</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	13		10.00		133	70	130			S

Sample ID: <b>MB-62000</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>62000</b>	RunNo: <b>80580</b>								
Prep Date: <b>8/16/2021</b>	Analysis Date: <b>8/17/2021</b>	SeqNo: <b>2842405</b> Units: <b>%Rec</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		105	70	130			

Sample ID: <b>MB-61990</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>61990</b>	RunNo: <b>80597</b>								
Prep Date: <b>8/16/2021</b>	Analysis Date: <b>8/17/2021</b>	SeqNo: <b>2843079</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	13		10.00		128	70	130			

Sample ID: <b>LCS-61990</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>61990</b>	RunNo: <b>80597</b>								
Prep Date: <b>8/16/2021</b>	Analysis Date: <b>8/17/2021</b>	SeqNo: <b>2843080</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2108710

20-Aug-21

**Client:** EOG  
**Project:** Amole AMA State 2

Sample ID: <b>LCS-61990</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>61990</b>	RunNo: <b>80597</b>								
Prep Date: <b>8/16/2021</b>	Analysis Date: <b>8/17/2021</b>	SeqNo: <b>2843080</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	53	10	50.00	0	107	68.9	141			
Surr: DNOP	5.7		5.000		115	70	130			

Sample ID: <b>LCS-61999</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>61999</b>	RunNo: <b>80580</b>								
Prep Date: <b>8/16/2021</b>	Analysis Date: <b>8/17/2021</b>	SeqNo: <b>2843603</b>	Units: <b>%Rec</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.6		5.000		92.6	70	130			

Sample ID: <b>MB-61999</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>61999</b>	RunNo: <b>80580</b>								
Prep Date: <b>8/16/2021</b>	Analysis Date: <b>8/17/2021</b>	SeqNo: <b>2843604</b>	Units: <b>%Rec</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		107	70	130			

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit



**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2108710

20-Aug-21

**Client:** EOG  
**Project:** Amole AMA State 2

Sample ID: <b>mb-61978</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>61978</b>	RunNo: <b>80592</b>								
Prep Date: <b>8/16/2021</b>	Analysis Date: <b>8/17/2021</b>	SeqNo: <b>2842697</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	940		1000		93.5	70	130			

Sample ID: <b>lcs-61978</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>61978</b>	RunNo: <b>80592</b>								
Prep Date: <b>8/16/2021</b>	Analysis Date: <b>8/17/2021</b>	SeqNo: <b>2842698</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	112	78.6	131			
Surr: BFB	1100		1000		106	70	130			

Sample ID: <b>mb-61980</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>61980</b>	RunNo: <b>80594</b>								
Prep Date: <b>8/16/2021</b>	Analysis Date: <b>8/17/2021</b>	SeqNo: <b>2842803</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	960		1000		96.2	70	130			

Sample ID: <b>lcs-61980</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>61980</b>	RunNo: <b>80594</b>								
Prep Date: <b>8/16/2021</b>	Analysis Date: <b>8/17/2021</b>	SeqNo: <b>2842805</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	99.0	78.6	131			
Surr: BFB	1100		1000		109	70	130			

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2108710

20-Aug-21

**Client:** EOG  
**Project:** Amole AMA State 2

Sample ID: <b>mb-61978</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>61978</b>	RunNo: <b>80592</b>								
Prep Date: <b>8/16/2021</b>	Analysis Date: <b>8/17/2021</b>	SeqNo: <b>2842745</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.87		1.000		87.2	70	130			

Sample ID: <b>LCS-61978</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>61978</b>	RunNo: <b>80592</b>								
Prep Date: <b>8/16/2021</b>	Analysis Date: <b>8/17/2021</b>	SeqNo: <b>2842746</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.025	1.000	0	91.0	80	120			
Toluene	0.91	0.050	1.000	0	91.4	80	120			
Ethylbenzene	0.92	0.050	1.000	0	92.0	80	120			
Xylenes, Total	2.7	0.10	3.000	0	91.1	80	120			
Surr: 4-Bromofluorobenzene	0.88		1.000		88.4	70	130			

Sample ID: <b>mb-61980</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>61980</b>	RunNo: <b>80594</b>								
Prep Date: <b>8/16/2021</b>	Analysis Date: <b>8/17/2021</b>	SeqNo: <b>2842967</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.87		1.000		87.5	70	130			

Sample ID: <b>lcs-61980</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>61980</b>	RunNo: <b>80594</b>								
Prep Date: <b>8/16/2021</b>	Analysis Date: <b>8/17/2021</b>	SeqNo: <b>2842969</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.025	1.000	0	88.5	80	120			
Toluene	0.90	0.050	1.000	0	89.8	80	120			
Ethylbenzene	0.92	0.050	1.000	0	92.4	80	120			
Xylenes, Total	2.8	0.10	3.000	0	93.2	80	120			
Surr: 4-Bromofluorobenzene	0.92		1.000		91.7	70	130			

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: clients.hallenvironmental.com

## Sample Log-In Check List

Client Name: EOG

Work Order Number: 2108710

RcptNo: 1

Received By: Cheyenne Cason

8/13/2021 7:19:00 AM

Completed By: Sean Livingston

8/13/2021 8:27:39 AM

Reviewed By:

JR 8/13/21

Cason

Sean Livingston

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace  $<1/4"$  for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?  
(If no, notify customer for authorization.) Yes ☒ No ☐

# of preserved  
bottles checked  
for pH:

(&lt;2 or &gt;12 unless noted)

Adjusted?

Checked by:

SPA 8.13.21

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:

Date:

By Whom:

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

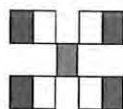
16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.5	Good				

<b>Chain-of-Custody Record</b>			
Client: EOG-Artesia / Ranger Env.			
<div style="display: flex; justify-content: space-between;"> <div>Turn-Around Time: <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush</div> <div>5 Day</div> </div>			
Project Name: <u>Amole AMA STATE #2</u>			
Project #: 5375			
Project Manager: W. Kierdorf			
Sampler: <u>Keith Copeland</u> On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
# of Coolers: <u>1</u>			
Cooler Temp (including CF): <u>1.5 - 0.5 - 1.5</u>			
Date	Time	Matrix	Sample Name
8/12/21	1400	Soil	PT3-1
	1405		PT3-5
	1407		PT3-10
	1410		PT3-15
	1505		PT5-1
	1510		PT5-5
	1415		PT6-0
	1417		PT6-2
	1420		PT6-5
	1421		PT7-0
	1425		PT7-2
	1430		PT7-5
Date: 8/12/21		Time: 1615	
Relinquished by: <u>[Signature]</u>		Relinquished by: <u>[Signature]</u>	
Date: 8/12/21		Time: 1900	
Relinquished by: <u>[Signature]</u>		Relinquished by: <u>[Signature]</u>	

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



**HALL ENVIRONMENTAL  
ANALYSIS LABORATORY**

[www.hallenvironmental.com](http://www.hallenvironmental.com)

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

## Analysis Request

**Project Manager:** W. Kierdorf

Sampler: Keith Copeland

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp (including CF): 5-9-15

[illegible]

Container	Preservative	HEAL N
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Type and #	Type
	21087

4-1	T	
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[illegible]

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10

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[illegible]

9




10

[illegible]


0

[illegible][illegible]

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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Received by: \_\_\_\_\_  
Via: \_\_\_\_\_  
Date: \_\_\_\_\_

18/ell2 & mmmj

Received by:	Via:	Date	Time
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U

all cases 01/31/00

entracted to other accredited laboratories. This serves as







## ATTACHMENT 4 – STATE LAND OFFICE LOAMY SITES SEED MIXTURE

**NMSLO Seed Mix****Loamy (L)****LOAMY (L) SITES SEED MIXTURE:**

COMMON NAME	VARIETY	APPLICATION RATE (PLS/Acre)	DRILL BOX
<b>Grasses:</b>			
Black grama	VNS, Southern	1.0	D
Blue grama	Lovington	1.0	D
Sideoats grama	Vaughn, El Reno	4.0	F
Sand dropseed	VNS, Southern	2.0	S
Alkali sacaton	VNS, Southern	1.0	
Little bluestem	Cimarrón, Pastura	1.5	F
<b>Forbs:</b>			
Firewheel ( <i>Gaillardia</i> )	VNS, Southern	1.0	D
<b>Shrubs:</b>			
Fourwing saltbush	Marana, Santa Rita	1.0	D
Common winterfat	VNS, Southern	0.5	F
<b>Total PLS/acre</b>		<b>18.0</b>	

S = Small seed drill box, D = Standard seed drill box, F = Fluffy seed drill box

VNS = Variety Not Stated, PLS = Pure Live Seed

- Seed mixes should be provided in bags separating seed types into the three categories: small (S), standard (D) and fluffy (F).
- VNS, Southern – Seed should be from a southern latitude collection of this species.
- Double seed application rate for broadcast or hydroseeding.
- If one species is not available, contact the SLO for an approved substitute; alternatively the SLO may require other species proportionately increased.
- Additional information on these seed species can be found on the USDA Plants Database website at <http://plants.usda.gov>.



**District I**

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

**District II**

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

**District III**

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

**District IV**

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

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

CONDITIONS

Action 60983

**CONDITIONS**

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 60983
	Action Type: [C-141] Release Corrective Action (C-141)

**CONDITIONS**

Created By	Condition	Condition Date
jnobui	None	2/8/2022