

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	nAPP2127258746
District RP	
Facility ID	
Application ID	

### Release Notification

#### Responsible Party

Responsible Party EOG Resources, Inc.	OGRID 7377
Contact Name Robert Asher	Contact Telephone 575-748-4217
Contact email bob_asher@eogresources.com	Incident # (assigned by OCD) napp2127258746
Contact mailing address 104 South Fourth Street, Artesia, NM 88210	

#### Location of Release Source

Latitude 32.73624 Longitude -104.37482  
*(NAD 83 in decimal degrees to 5 decimal places)*

Site Name: Gates AAC Battery	Site Type: Battery
Date Release Discovered: 8/5/2021	API# 30-015-25102

Unit Letter	Section	Township	Range	County
D	22	18S	26E	Eddy

Surface Owner:  State  Federal  Tribal  Private (*Wanda Faye Wilson Estate*)

#### 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 (Unknown)	Volume Recovered (Unknown)
	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"/>	Volume/Weight Released	Volume/Weight Recovered

Cause of Release  
When conducting decommission work of the tank battery after the Gates AAC #2 was plugged and abandoned, historical contamination (chlorides) was discovered in an area in and around the tank battery. (approximate area, 185' X 325').


State of New Mexico  
Oil Conservation Division

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

### 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>Robert Asher</u> Title: <u>Environmental Supervisor</u> Signature: <u></u> Date: <u>9/29/2021</u> email: <u>bob_asher@eogresources.com</u> Telephone: <u>575-748-4217</u>
<b>OCD Only</b> Received by: _____ Date: _____

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### Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>70</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<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 type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

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

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

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: Robert Asher Title: Environmental Supervisor

Signature:  Date: 5/4/2022

email: bob\_asher@eogresources.com Telephone: 575-748-4217

**OCD Only**

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

Incident ID	nAPP2127258746
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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: Robert Asher Title: Environmental Supervisor

Signature:  Date: 5/4/2022

email: bob\_asher@eogresources.com Telephone: 575-748-4217

**OCD Only**

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

- Approved
  Approved with Attached Conditions of Approval
  Denied
  Deferral Approved

Signature:  Date: 05/23/2022

Incident ID	nAPP2127258746
District RP	
Facility ID	
Application ID	

### Closure

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

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

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

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

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

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

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

**OCD Only**

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

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

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

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

State of New Mexico  
Energy, Minerals and Natural Resources Department  
Oil Conservation Division



Receipt of Fee Application Payment

PO Number: I4NPC-220504-C-1410

Payment Date: 5/4/2022 1:00:02 PM  
Payment Amount: \$150.00  
Payment Type: Credit Card

Application Type: Application for administrative approval of a release notification and corrective action  
Fee Amount: \$150.00  
Application Status: Under OCD Review

OGRID: 7377  
First Name: Katie  
Last Name: Jamison  
Email: katie\_jamison@eogresources.com

**IMPORTANT:** If you are mailing or delivering your application, you must print and include your receipt of payment as the first page on your application. All mailed and delivered applications must be sent to the following address: 1220 S. St. Francis Dr., Santa Fe, NM 87505. For inquiries, reference the PO Number listed above.



**General Information**

NMOCD District:	District 2	Incident ID:	nAPP2127258746
Landowner:	Wanda Faye Wilson Estate	RP Reference:	N/A
Client:	EOG Resources, Inc.	Site Location:	Gates AAC Battery
Date:	4/21/2022	Project #:	22E-00124-02
Client Contact:	Robert Asher	Phone #:	575.703.6537
Vertex PM:	Monica Peppin	Phone #:	575.361.9880

**Objective**

The objective of the environmental remediation and reclamation plan is to identify exceedances found during the site assessment/characterization activity, propose an appropriate technique to address these areas, and prepare the site for final reclamation. On August 5, 2021, EOG Resources, Inc. reported a release from the Gates AAC Battery which was entered into the New Mexico Oil Conservation District (NMOCD) database as nAPP2127258746. Remediation of this release was the initial objective for characterization of the site. Reclamation criteria under New Mexico Administrative Code (NMAC) (19.15.29.13) was also considered as a secondary objective as the site is no longer in production and entering the end-of-life phase. The decommissioned pad will be excavated to a minimum of four feet below ground surface (bgs) and backfilled with clean, locally sourced soil having a chloride concentration less than 600 mg/kg, as analyzed by EPA Method 300.0. All areas of environmental concern that were delineated include: secondary containment area, and surrounding pastureland. Closure criteria has been selected as per NMAC 19.15.29 and 19.15.29.13. All applicable research as it pertains to closure criteria selection is presented in Attachment 1. The closure criteria for the site are presented below.

	Constituent	Limit
0-4 feet bgs (19.15.29.13)	Chloride	600 mg/kg
	TPH (GRO+DRO+MRO)	100 mg/kg
DTGW 51-100 feet (19.15.29.12)	Chloride	10,000 mg/kg
	TPH (GRO+DRO+MRO)	2,500 mg/kg
	GRO+DRO	1,000 mg/kg
	BTEX	50 mg/kg
	Benzene	10 mg/kg

**Site Assessment/Characterization**

An Environmental Site Characterization Plan was submitted and approved by NMOCD on March 11, 2022. A permit was obtained from New Mexico Office of the State Engineer (NMOSE) approving collection of lithological data for a test borehole for depth to groundwater determination with Hungry Horse, LLC. A borehole was drilled on April 4, 2022, and no water was present at 55 feet bgs. The borehole was left open as per requirements on the WR-07 Application for Permit to Drill A Well With No Water Right and a bailer was lowered to the bottom of the borehole on April 6, 2022, to collect any groundwater that may have accumulated in the waiting period; no water was present at that time. A second attempt was made on April 11, 2022; no water was present in the depth to groundwater borehole at any time. The borehole was then plugged as per requirements on the WR-08, Well Plugging Plan of Operations. The boring log and well plugging plan are presented in Attachment 2. The daily field reports (DFRs) are presented in Attachment 3.



### Remedial Activities

Areas identified with contaminant concentrations above closure criteria were remediated through excavation. Laboratory results from the site assessment/characterization were referenced to estimate both the vertical and horizontal limits of the impacts and the volume of soil that was removed. Soil was then excavated to the extents of the contamination. Field screening was utilized to guide removal of contaminated soil to extents below the applicable closure criteria. Once excavation is complete, confirmatory samples will be collected and laboratory analysis completed to confirm closure criteria guidelines were met. Excavations will be backfilled with locally sourced clean soil.

#### nAPP2127258746

Remediation efforts began on January 10, 2022. The excavation area was fenced off and remains open pending the approval of the variance request for confirmation sampling. On January 25, 2022, sampling was conducted to characterize the existing excavation. The excavation encompassed an area of approximately 54,445 square feet, at a depth of four feet, meeting the requirements of the restoration, reclamation, and re-vegetation standard (19.15.29.13). A total of 50 composite samples were collected from the base and walls of the excavated area as shown in Figure 1 (Attachment 4). Field screening was completed on samples using a photoionization detector (volatile hydrocarbons), Dextil Petroflag using EPA SW-846 Method 9074 (extractable hydrocarbons) and titration (chlorides). Samples were submitted to Envirotech, Inc. in Farmington, New Mexico, under chain-of-custody protocol and analyzed for benzene, toluene, ethylbenzene and xylenes (EPA Method 8021B), total petroleum hydrocarbons (GRO, DRO, MRO – EPA Method 8015D), and total chlorides (EPA Method 300.0). Laboratory results are presented in Table 2 (Attachment 5) and laboratory data reports are included in Attachment 6. The DFRs and field screening forms associated with the remediation are presented in Attachment 3.

A GeoExplorer 7000 series Trimble global positioning system (GPS) unit, or equivalent, was used to map the approximate center of each of the five-point composite samples for the excavation characterization. The sample locations and excavation extents are presented in Figure 2 (Attachment 4).

This characterization identified several locations in the walls and base of the excavation that exceeded applicable Table 1 closure criteria for the site under NMAC 19.15.29.12. The four-foot excavation footprint was expanded vertically and horizontally to remove contamination at locations BH22-01, BH22-02, BH22-06, BH22-07, BH22-09, BH22-19, and BH22-25. The total area excavated was determined to be 72,990 square feet. An aerial photograph and site schematic of the additional excavation is included in Figure 2 (Attachment 5).

Vertex Resource Services Inc and EOG Resources, Inc. request a variance for confirmation sampling due to the square footage of the excavated area and the depth to ground water being greater than 51 feet for closure criteria. This variance request will consist of five-point composite samples for every 1,000 square feet of excavation area in the four-foot excavation. Excavation areas greater than four feet of vertical depth will utilize five-point composite samples each representative of no more than 200 square feet. Additional discrete grab samples will be collected from areas with discoloration and analyzed for chloride (EPA 300.0), BTEX (EPA 8021B), and TPH (EPA 8015D) depending on field screening results.

Heavy equipment will be used to remove contaminated soils in the event that any confirmation samples are above applicable constituents based on Table 1 of 19.15.29.12 & 13 NMAC once the analytical reports have been received. A detailed closure report of all events will be submitted once all field work has been completed.

Should you have any questions or concerns, please do not hesitate to contact the undersigned at 575.361.9880 or mpeppin@vertex.ca.

Remediation and Reclamation Plan



Monica Peppin  
SR. ENVIRONMENTAL TECHNICIAN, REPORTING

April 21, 2022  
Date

Dhugal Hayton B.Sc., P.Ag., SR/WA, P.Biol.  
VICE PRESIDENT, REPORT REVIEW

April 21, 2022  
Date

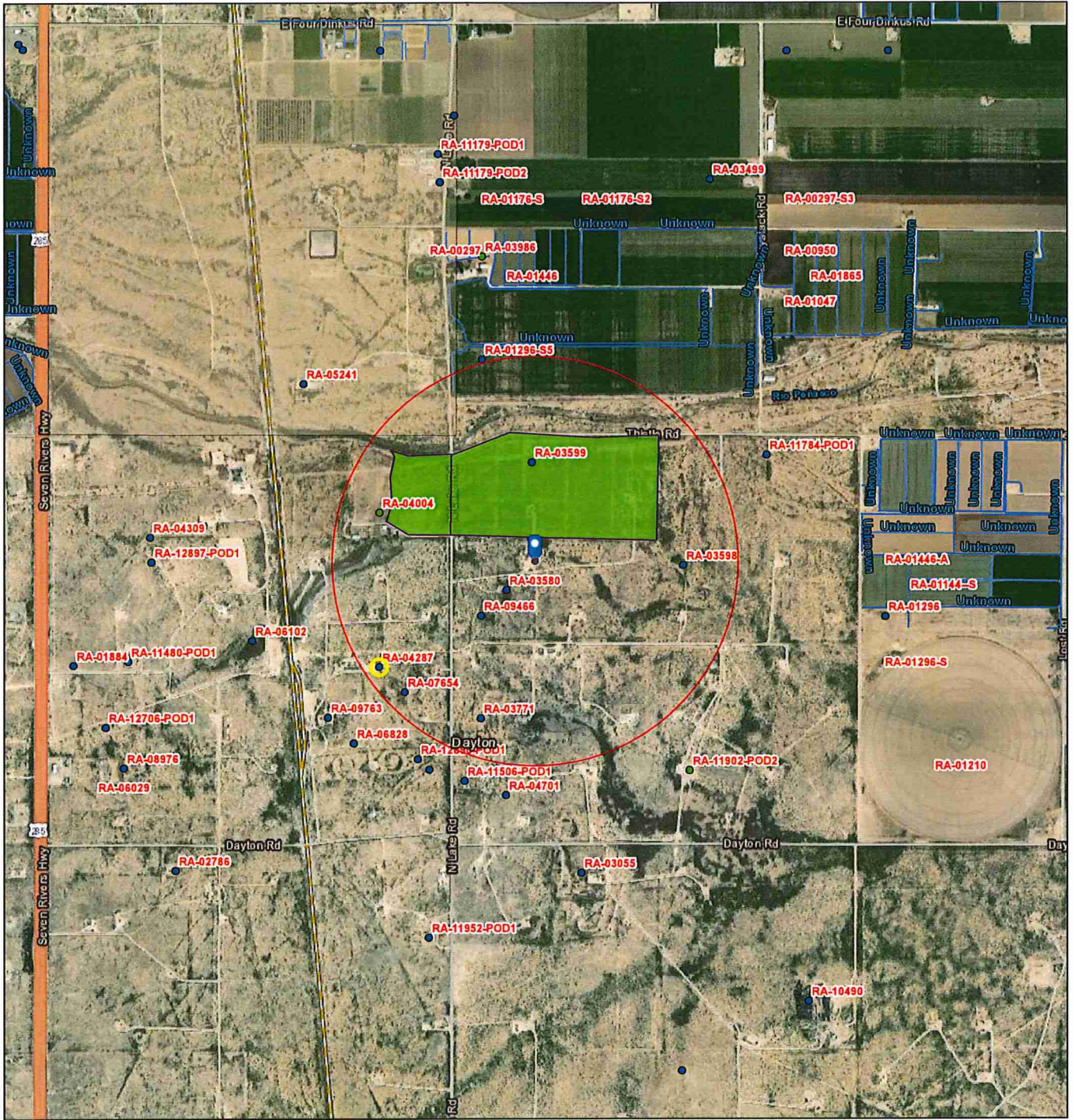
**Attachments**

- Attachment 1: Closure Criteria Research
- Attachment 2: NMOSE WR-07/WR-08
- Attachment 3: Daily Field Reports
- Attachment 4: Figures
- Attachment 5: Tables
- Attachment 6: Laboratory Analysis Reports

# ATTACHMENT 1

Closure Criteria Worksheet			
Site Name: Gates AAC #2			
Spill Coordinates:		X: 32.73780	Y: -104.37481
Site Specific Conditions		Value	Unit
1	Depth to Groundwater	>55	feet
2	Within 300 feet of any continuously flowing watercourse or any other significant watercourse	20,178	feet
3	Within 200 feet of any lakebed, sinkhole or playa lake (measured from the ordinary high-water mark)	14,618	feet
4	Within 300 feet from an occupied residence, school, hospital, institution or church	1,854	feet
5	i) Within 500 feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or	1,503	feet
	ii) Within 1000 feet of any fresh water well or spring	1,503	feet
6	Within incorporated municipal boundaries or within a defined municipal fresh water field covered under a municipal ordinance adopted pursuant to Section 3-27-3 NMSA 1978 as amended, unless the municipality specifically approves	No	(Y/N)
7	Within 300 feet of a wetland	14,664	feet
8	Within the area overlying a subsurface mine	No	(Y/N)
9	Within an unstable area (Karst Map)	Low	Critical High Medium Low
10	Within a 100-year Floodplain	Zone X Unshaded	year
11	Soil Type	Karro Loam	
12	Ecological Classification	Limy	
13	Geology	Qp	
NMAC 19.15.29.12 E (Table 1) Closure Criteria		51-100'	<50' 51-100' >100'

# Gates AAC #2



10/14/2021, 6:27:12 AM

GIS WATERS PODs

- Active
- Pending

OSE District Boundary

Water Right Regulations

Negative Easement Area

New Mexico State Trust Lands

Subsurface Estate

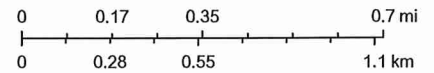
Conveyances

Ditch

Lateral

Site Boundaries

1:18,056



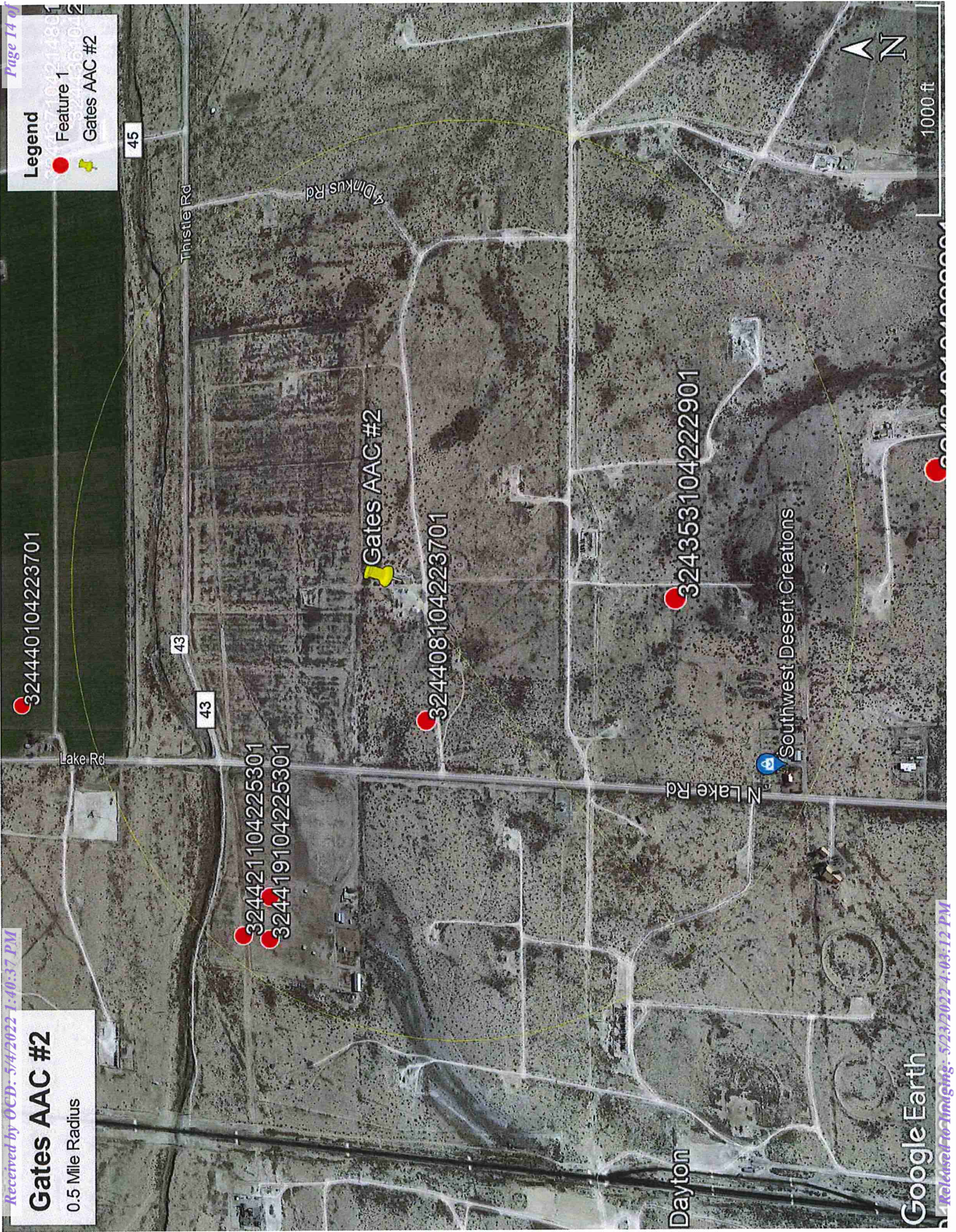
Esri, HERE, IPC, U.S. Department of Energy Office of Legacy Management, Esri, HERE, Garmin, IPC, Maxar

Printed from Public Web Map  
Unofficial Map from OSE POD Locations Web Application

# Gates AAC #2

0.5 Mile Radius

- Legend**
- Feature 1
  - 📍 Gates AAC #2




# Gates AAC Battery

Distance to DTGW Borehole: 0.42 miles

43

## Legend

 Feature 1

 Gates AAC Battery

 RA-13158.POD1



1000 ft

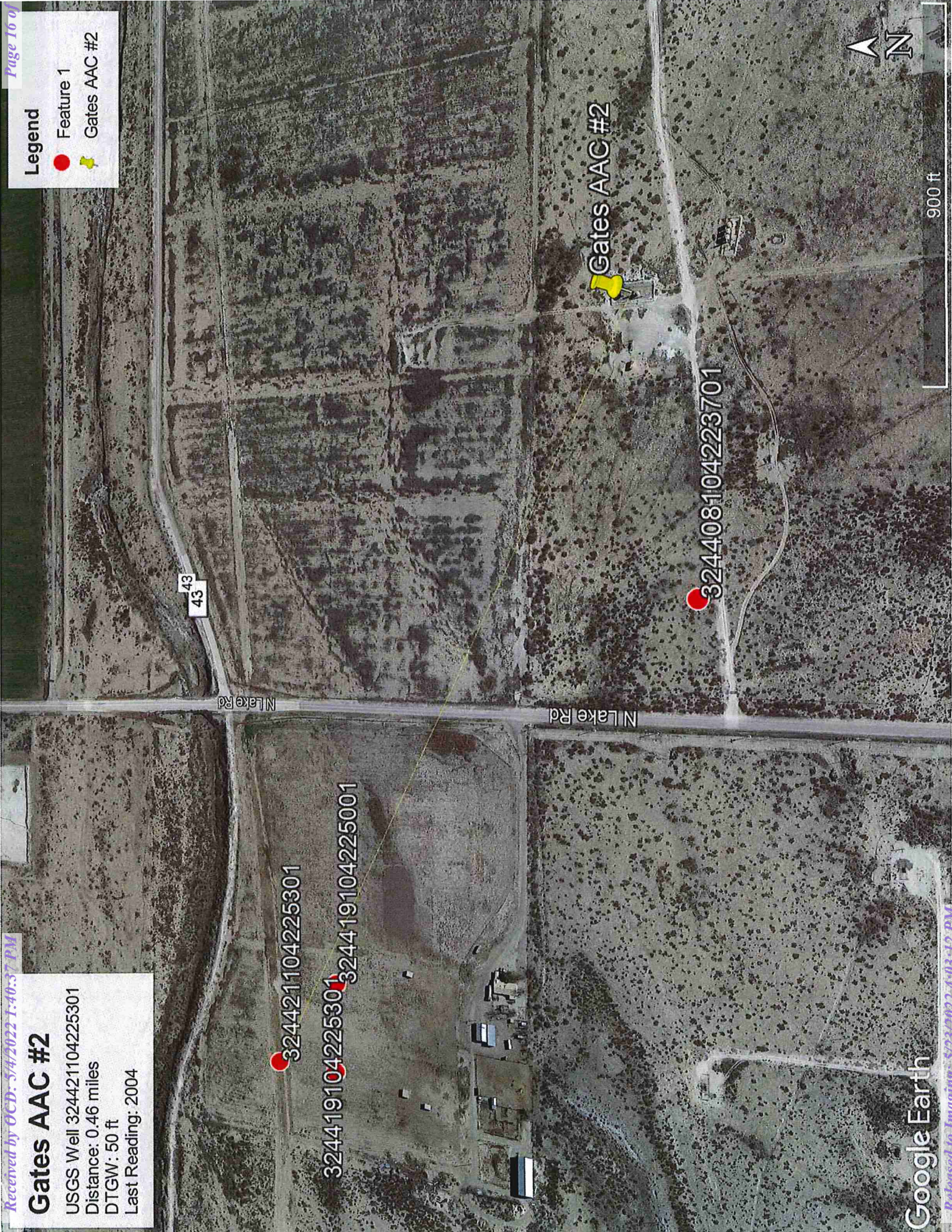


### Gates AAC #2

USGS Well 324421104225301  
Distance: 0.46 miles  
DTGW: 50 ft  
Last Reading: 2004

### Legend

- Feature 1
- 📌 Gates AAC #2







# New Mexico Office of the State Engineer

## Water Column/Average Depth to Water

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

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

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

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
<a href="#">RA 03599</a>	RA	ED		2	1	1	22	18S	26E	558552	3622599*	207	1765		
<a href="#">RA 03340</a>	RA	ED			3	1	22	18S	26E	558454	3622097*	319	100	60	40
<a href="#">RA 03580</a>	RA	ED			3	1	22	18S	26E	558454	3622097*	319	1700		
<a href="#">RA 09466</a>	RA	ED		3	3	1	22	18S	26E	558353	3621996*	454	160	70	90
<a href="#">RA 03598</a>	RA	ED		1	3	2	22	18S	26E	559154	3622198*	610	1815		
<a href="#">RA 04004</a>	RA	ED		3	2	2	21	18S	26E	557948	3622399*	627	140		
<a href="#">RA 01296 S3</a>	RA	ED		1	3	3	15	18S	26E	558351	3623003*	650	230	70	160
<a href="#">RA 01296 S5</a>	RA	ED		1	3	3	15	18S	26E	558351	3623003*	650	223	35	188
<a href="#">RA 01446 CLW</a>	RA	ED		1	3	3	15	18S	26E	558351	3623003*	650	165	42	123
<a href="#">RA 02800</a>	RA	ED		1	3	3	15	18S	26E	558351	3623003*	650	102	30	72
<a href="#">RA 03771</a>	RA	ED		3	1	3	22	18S	26E	558354	3621592*	830	110	75	35
<a href="#">RA 04287</a>	RA	ED		1	2	4	21	18S	26E	557951	3621792*	866	170	140	30
<a href="#">RA 07654</a>	RA	ED			2	4	21	18S	26E	558052	3621693*	873	180	170	10
<a href="#">RA 01446</a>	RA	ED			1	3	15	18S	26E	558450	3623307*	922	175		
<a href="#">RA 11784 POD1</a>	RA	ED		1	2	2	22	18S	26E	559480	3622632	936	154	98	56
<a href="#">RA 05241</a>	RA	ED			3	4	16	18S	26E	557644	3622903*	1061	200	100	100
<a href="#">RA 12890 POD1</a>	RA	ED		2	4	4	21	18S	26E	558105	3621429	1071	180	102	78
<a href="#">RA 11506 POD1</a>	RA	ED		1	3	3	22	18S	26E	558290	3621345	1085	160	78	82
<a href="#">RA 07408</a>	RA	ED		2	4	4	21	18S	26E	558152	3621389*	1089	155	85	70
<a href="#">RA 04701</a>	RA	ED			3	3	22	18S	26E	558456	3621290*	1109	80	55	25
<a href="#">RA 09763</a>	RA	ED		4	1	4	21	18S	26E	557748	3621592*	1151	240	140	100
<a href="#">RA 06828</a>	RA	CH				4	21	18S	26E	557851	3621491*	1156	130	105	25
<a href="#">RA 06102</a>	RA	ED					21	18S	26E	557447	3621893*	1234	202	136	66
<a href="#">RA 11179 POD2</a>	RA	ED		4	4	2	16	18S	26E	558180	3623696	1362	71	60	11
<a href="#">RA 01296 CLW229885</a>	O	RA	ED	1	3	1	23	18S	26E	559954	3622201*	1392	180	70	110
<a href="#">RA 03055</a>	RA	ED		1	2	1	27	18S	26E	558757	3620986*	1418	146	85	61

\*UTM location was derived from PLSS - see Help

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

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

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

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
<a href="#">RA 01296</a>	RA	ED		3	3	1	23	18S	26E	559954	3622001*	1433	180	80	100
<a href="#">RA 11179 POD1</a>	RA	ED		2	3	2	16	18S	26E	558172	3623807	1471	74	60	14
<a href="#">RA 03499</a>	RA	ED		3	2	15	18S	26E	559251	3623715*	1484	616	40	576	
<a href="#">RA 03499 CLW261762</a>	O	RA	ED	3	2	15	18S	26E	559251	3623715*	1484	616	40	576	
<a href="#">RA 01144 -S</a>	RA	CH		3	1	23	18S	26E	560055	3622102*	1508	809			
<a href="#">RA 04309</a>	RA	ED			1	21	18S	26E	557041	3622297*	1537	180			
<a href="#">RA 12897 POD1</a>	RA	ED		1	4	1	21	18S	26E	557046	3622199	1541	180	120	60
<a href="#">RA 11682 POD2</a>	RA	ED		4	2	2	16	18S	26E	558236	3623959	1602	98		

Average Depth to Water: **82 feet**  
 Minimum Depth: **30 feet**  
 Maximum Depth: **170 feet**

Record Count: 34

**UTMNAD83 Radius Search (in meters):**

**Easting (X):** 558575.26

**Northing (Y):** 3622392.87

**Radius:** 1610

\*UTM location was derived from PLSS - see Help

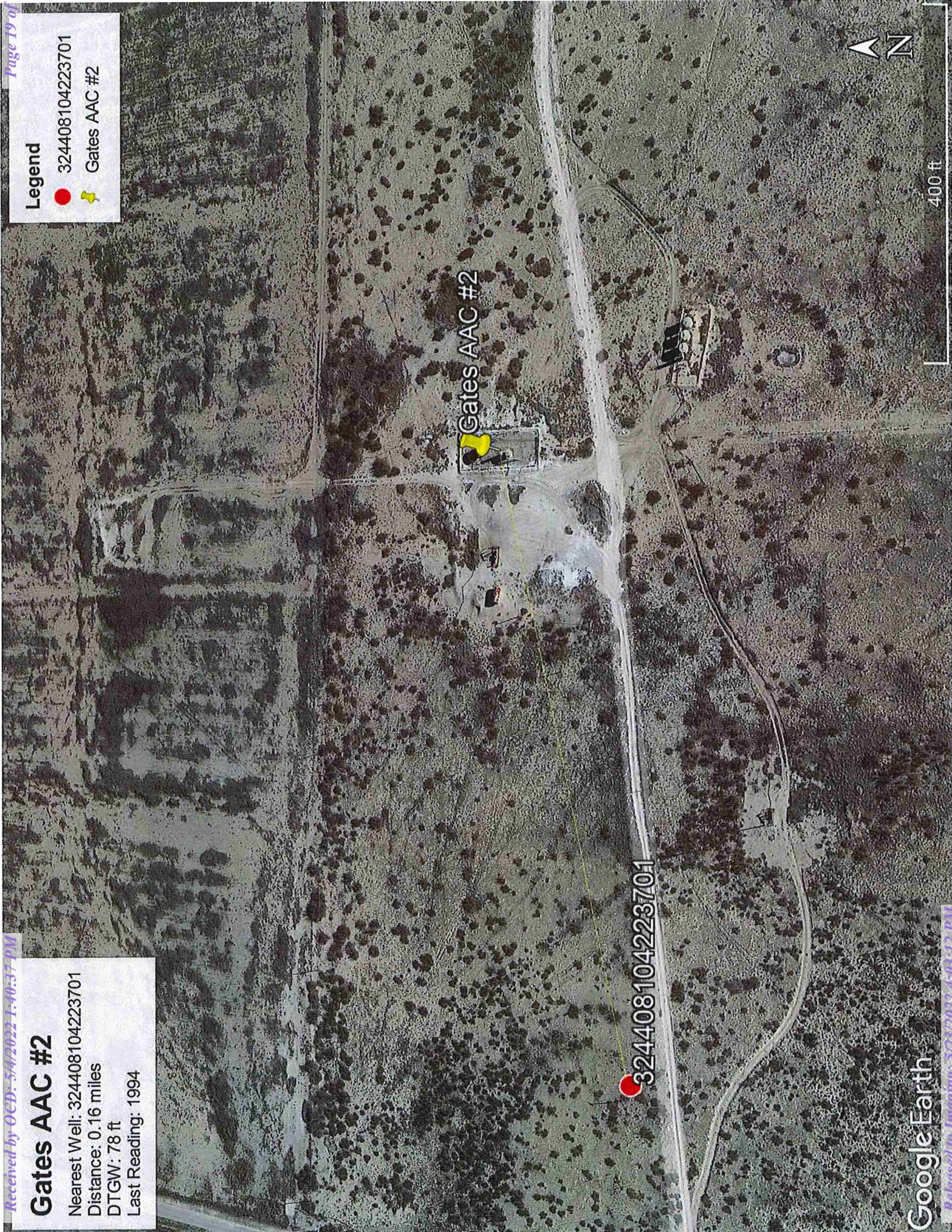
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### Gates AAC #2

Nearest Well: 324408104223701  
Distance: 0.16 miles  
DTGW: 78 ft  
Last Reading: 1994

### Legend

- 324408104223701
- 📍 Gates AAC #2



324408104223701

Gates AAC #2



400 ft



# 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 03771	3	1	3	22	18S	26E	558354	3621592*

<b>Driller License:</b>	406	<b>Driller Company:</b>	TIDWELL, CLYDE J.		
<b>Driller Name:</b>	TIDWELL, CLYDE J.				
<b>Drill Start Date:</b>	04/05/1969	<b>Drill Finish Date:</b>	04/11/1969	<b>Plug Date:</b>	
<b>Log File Date:</b>	04/14/1969	<b>PCW Rev Date:</b>		<b>Source:</b>	Shallow
<b>Pump Type:</b>		<b>Pipe Discharge Size:</b>		<b>Estimated Yield:</b>	
<b>Casing Size:</b>	7.00	<b>Depth Well:</b>	110 feet	<b>Depth Water:</b>	75 feet

<b>Water Bearing Stratifications:</b>	<b>Top</b>	<b>Bottom</b>	<b>Description</b>
	84	103	Sandstone/Gravel/Conglomerate

<b>Casing Perforations:</b>	<b>Top</b>	<b>Bottom</b>
	80	110

\*UTM location was derived from PLSS - see Help

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10/14/21 6:39 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)

<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 09466	3	3	1	22	18S	26E	558353	3621996*

**Driller License:** 1064      **Driller Company:** DELFORD W. MARTIN  
**Driller Name:** MARTIN, DELFORD

**Drill Start Date:** 12/15/1997      **Drill Finish Date:** 12/16/1997      **Plug Date:**  
**Log File Date:** 12/24/1997      **PCW Rev Date:**      **Source:** Shallow  
**Pump Type:**      **Pipe Discharge Size:**      **Estimated Yield:** 20 GPM  
**Casing Size:** 5.50      **Depth Well:** 160 feet      **Depth Water:** 70 feet

<b>Water Bearing Stratifications:</b>	<b>Top</b>	<b>Bottom</b>	<b>Description</b>
	92	154	Shallow Alluvium/Basin Fill

<b>Casing Perforations:</b>	<b>Top</b>	<b>Bottom</b>
	94	154

\*UTM location was derived from PLSS - see Help

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10/14/21 6:35 AM

POINT OF DIVERSION SUMMARY



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## National Water Information System: Web Interface

USGS Water Resources

Data Category:  Geographic Area:

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

**i** Important: [Next Generation Monitoring Location Page](#)

### Search Results -- 1 sites found

site\_no list =  
• 324408104223701

Minimum number of levels = 1

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

### USGS 324408104223701 18S.26E.22.133313

Available data for this site

Eddy County, New Mexico

Hydrologic Unit Code 13060011

Latitude 32°44'08", Longitude 104°22'37" NAD27

Land-surface elevation 3,348 feet above NAVD88

The depth of the well is 100 feet below land surface.

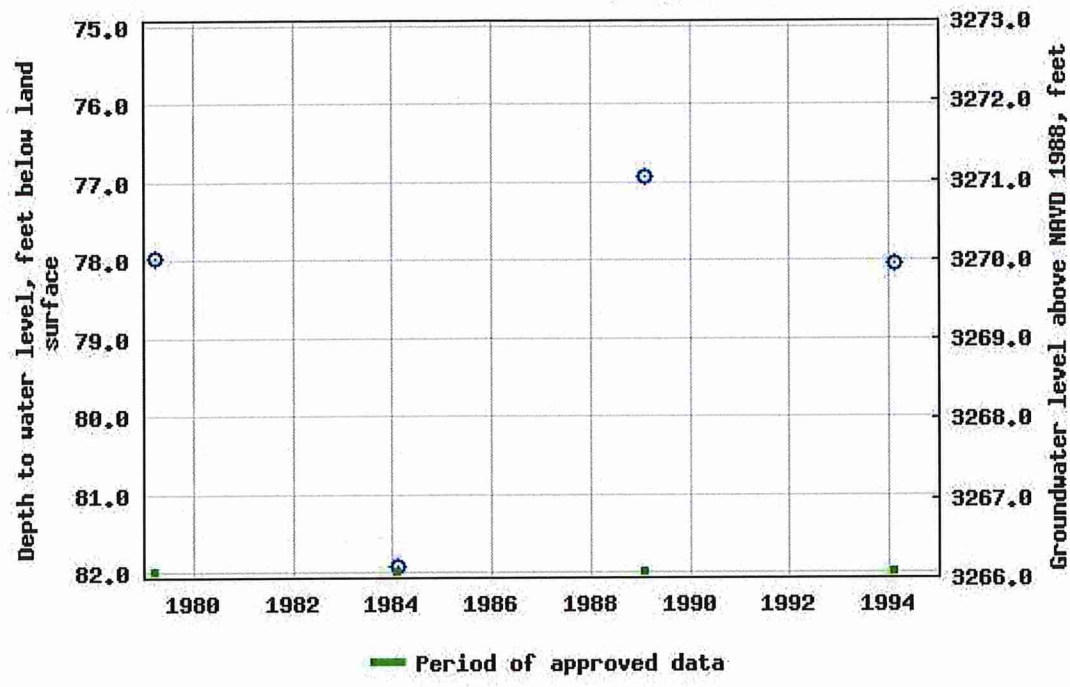
This well is completed in the Roswell Basin aquifer system (S400RSWLBS) national aquifer.

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

#### Output formats

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

USGS 324408104223701 18S,26E,22,133313



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: 2021-10-13 16:53:52 EDT  
 0.58 0.5 nadww02



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## 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 Monitoring Location Page](#)

### Search Results -- 1 sites found

site\_no list =

- 324421104225301

Minimum number of levels = 1

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

### USGS 324421104225301 18S.26E.21.2233113

Available data for this site

Groundwater: Field measurements

GO

Eddy County, New Mexico

Hydrologic Unit Code 13060010

Latitude 32°44'21", Longitude 104°22'53" NAD27

Land-surface elevation 3,356 feet above NAVD88

The depth of the well is 1,099 feet below land surface.

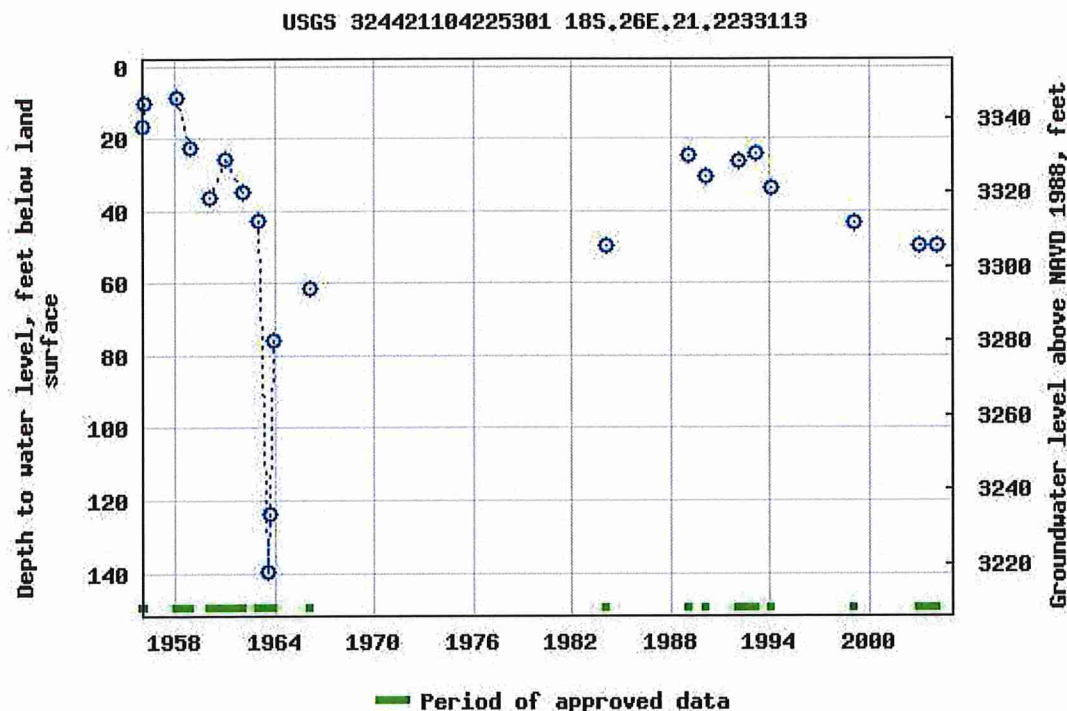
This well is completed in the Roswell Basin aquifer system (S400RSWLBS) national aquifer.

This well is completed in the San Andres Limestone (313SADR) 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](#)

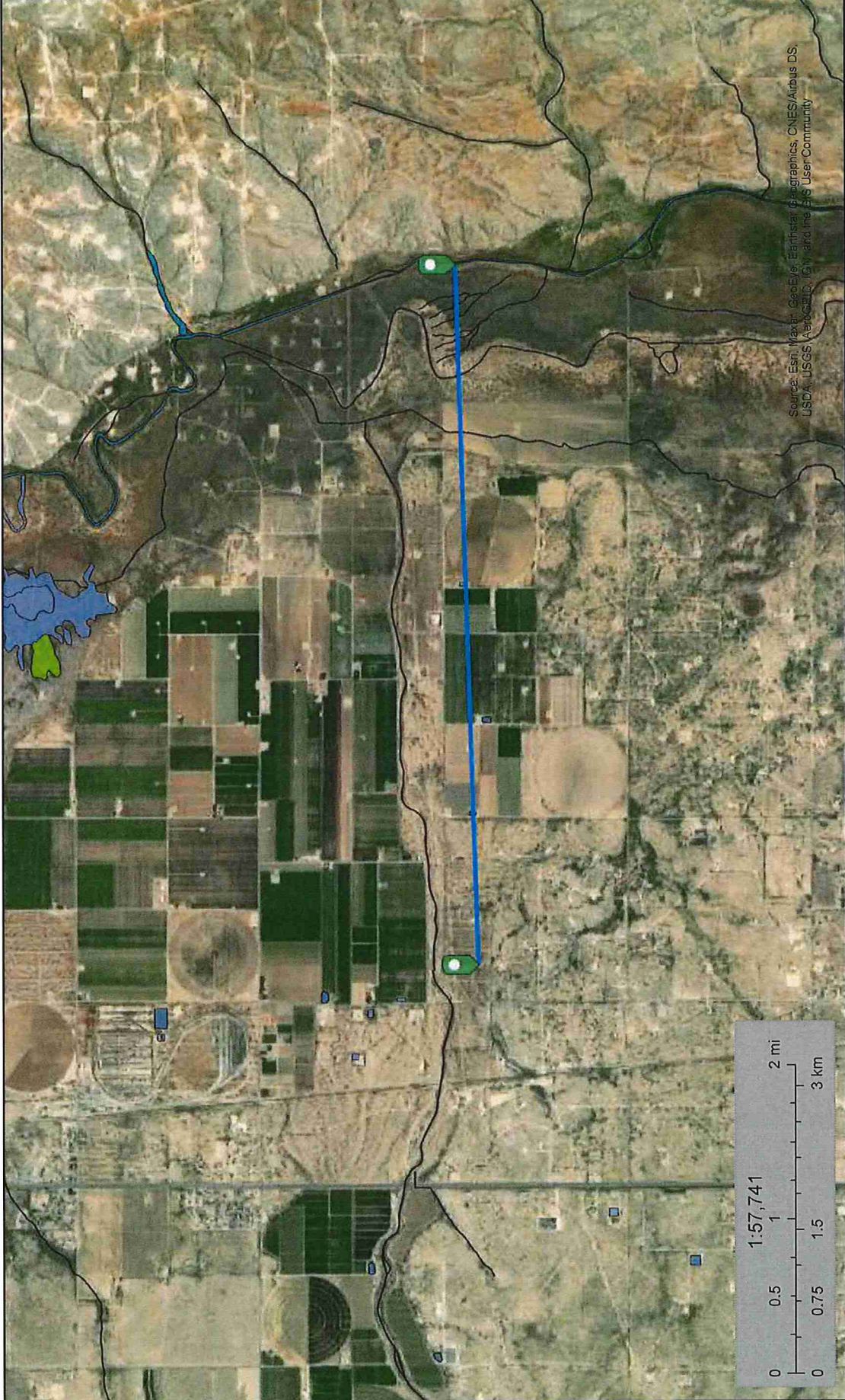
Page Last Modified: 2021-10-13 17:05:23 EDT

0.62 0.52 nadww01



**U.S. Fish and Wildlife Service**  
**National Wetlands Inventory**

Pecos River 20,178ft.



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October 10, 2021

**Wetlands**

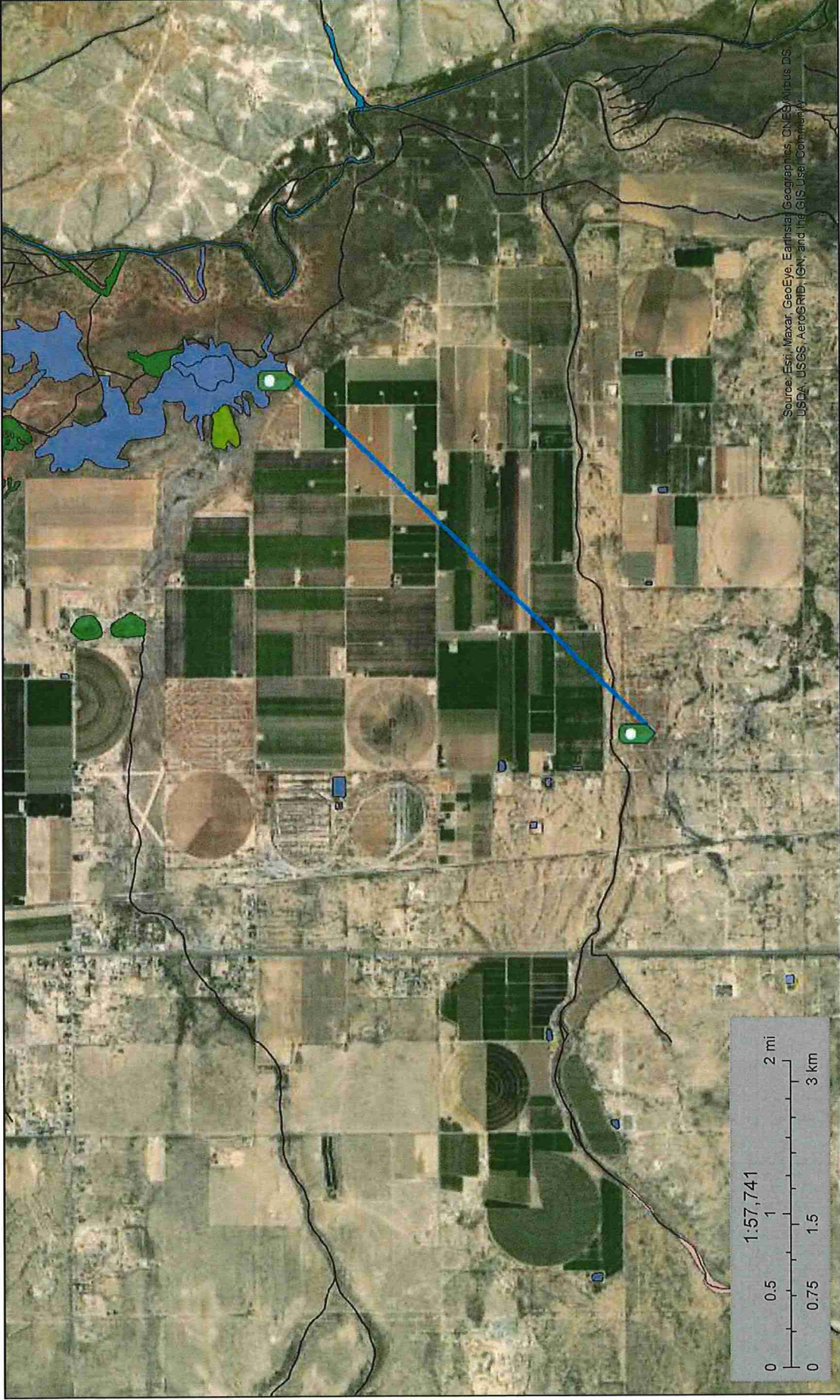
-  Estuarine and Marine Deepwater
-  Estuarine and Marine Wetland
-  Freshwater Emergent Wetland
-  Freshwater Forested/Shrub Wetland
-  Freshwater Pond
-  Lake
-  Other
-  Riverine

National Wetlands Inventory (NWI)  
This page was produced by the NWI mapper



# National Wetlands Inventory

## Nearest Lakebed 14,618ft.



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

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October 10, 2021

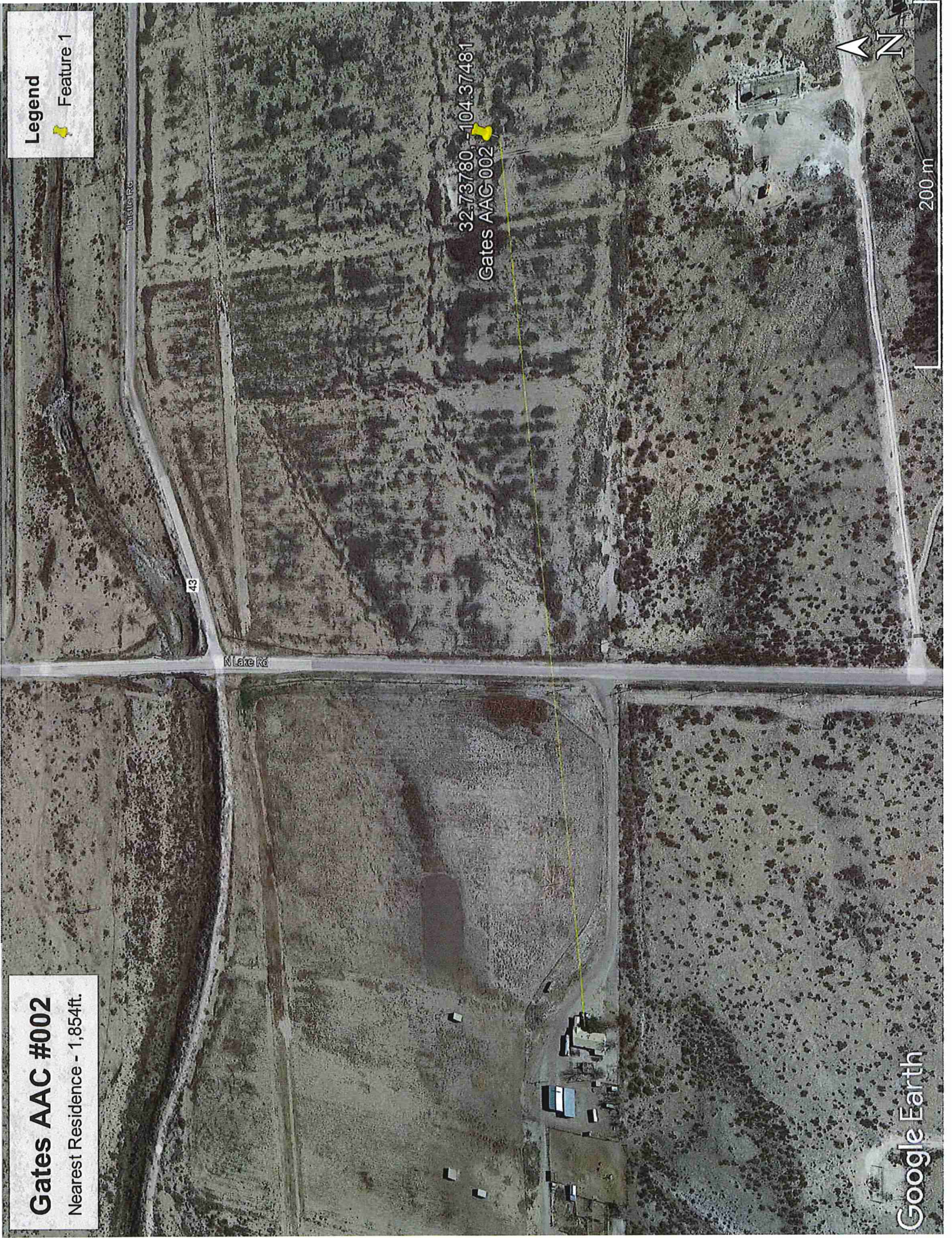
### Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

National Wetlands Inventory (NWI)  
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**Gates AAC #002**  
Nearest Residence - 1,854ft.

**Legend**  
Feature 1



Google Earth




# 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 Q16 Q4</b>	<b>Sec</b>	<b>Tws</b>	<b>Rng</b>	<b>X</b>	<b>Y</b>
	RA 03340	3 1 22	18S	26E	558454	3622097*	

<b>Driller License:</b> 28	<b>Driller Company:</b> SMITH, A.F.	
<b>Driller Name:</b> SMITH, A.F.		
<b>Drill Start Date:</b> 11/28/1958	<b>Drill Finish Date:</b> 11/29/1958	<b>Plug Date:</b>
<b>Log File Date:</b> 01/12/1959	<b>PCW Rcv Date:</b>	<b>Source:</b> Shallow
<b>Pump Type:</b>	<b>Pipe Discharge Size:</b>	<b>Estimated Yield:</b>
<b>Casing Size:</b> 7.00	<b>Depth Well:</b> 100 feet	<b>Depth Water:</b> 60 feet

<b>Water Bearing Stratifications:</b>	<b>Top</b>	<b>Bottom</b>	<b>Description</b>
	45	100	Sandstone/Gravel/Conglomerate

<b>Casing Perforations:</b>	<b>Top</b>	<b>Bottom</b>
	70	90

\*UTM location was derived from PLSS - see Help

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# 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 Q16 Q4</b>	<b>Sec</b>	<b>Tws</b>	<b>Rng</b>	<b>X</b>	<b>Y</b>
	RA 09466	3 3 1	22	18S	26E	558353	3621996*

<b>Driller License:</b>	1064	<b>Driller Company:</b>	DELFORD W. MARTIN				
<b>Driller Name:</b>	MARTIN, DELFORD						
<b>Drill Start Date:</b>	12/15/1997	<b>Drill Finish Date:</b>	12/16/1997	<b>Plug Date:</b>			
<b>Log File Date:</b>	12/24/1997	<b>PCW Rcv Date:</b>		<b>Source:</b>	Shallow		
<b>Pump Type:</b>		<b>Pipe Discharge Size:</b>		<b>Estimated Yield:</b>	20 GPM		
<b>Casing Size:</b>	5.50	<b>Depth Well:</b>	160 feet	<b>Depth Water:</b>	70 feet		

Water Bearing Stratifications:	Top	Bottom	Description
		92	

Casing Perforations:	Top	Bottom
		94

\*UTM location was derived from PLSS - see Help

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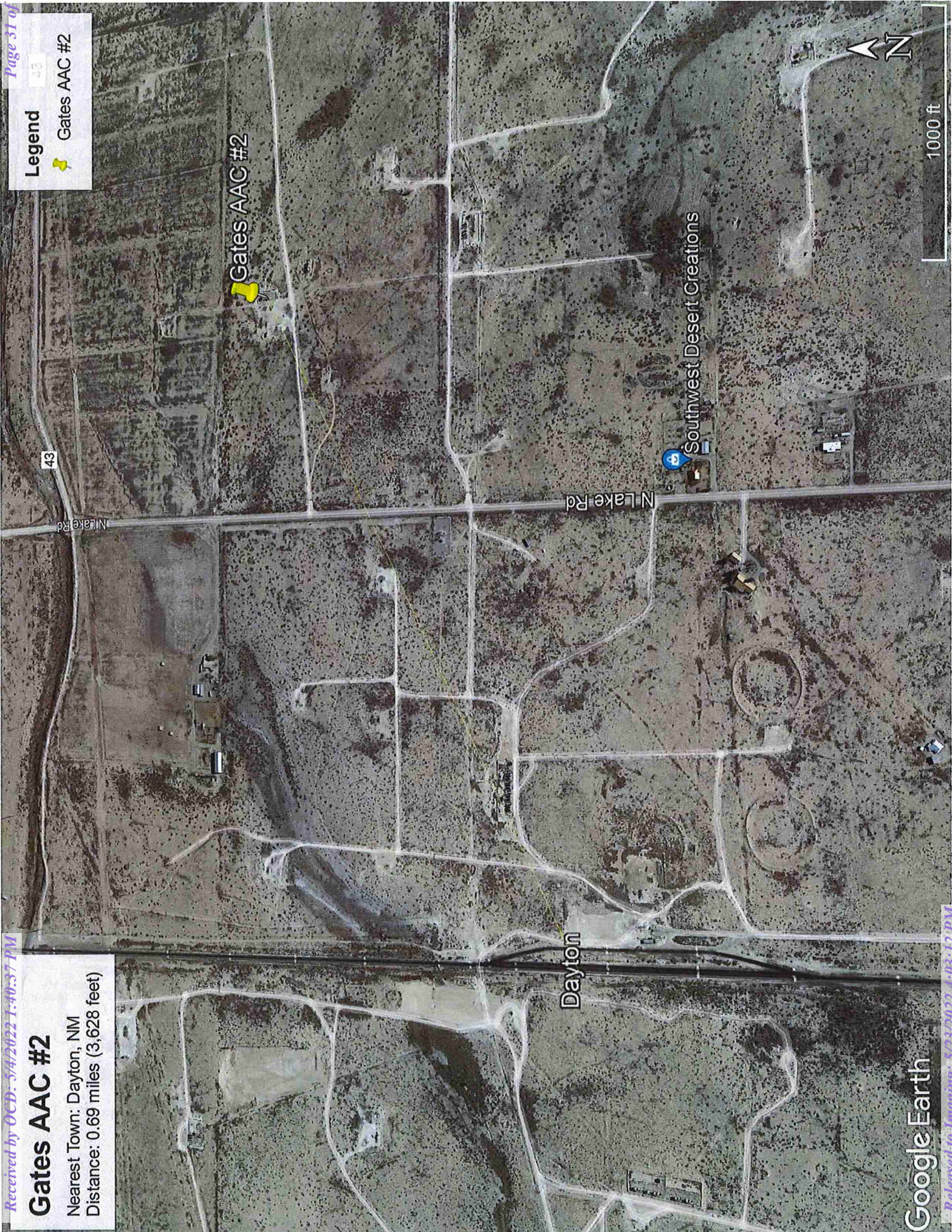
# Gates AAC #2

Nearest Town: Dayton, NM  
Distance: 0.69 miles (3,628 feet)

## Legend

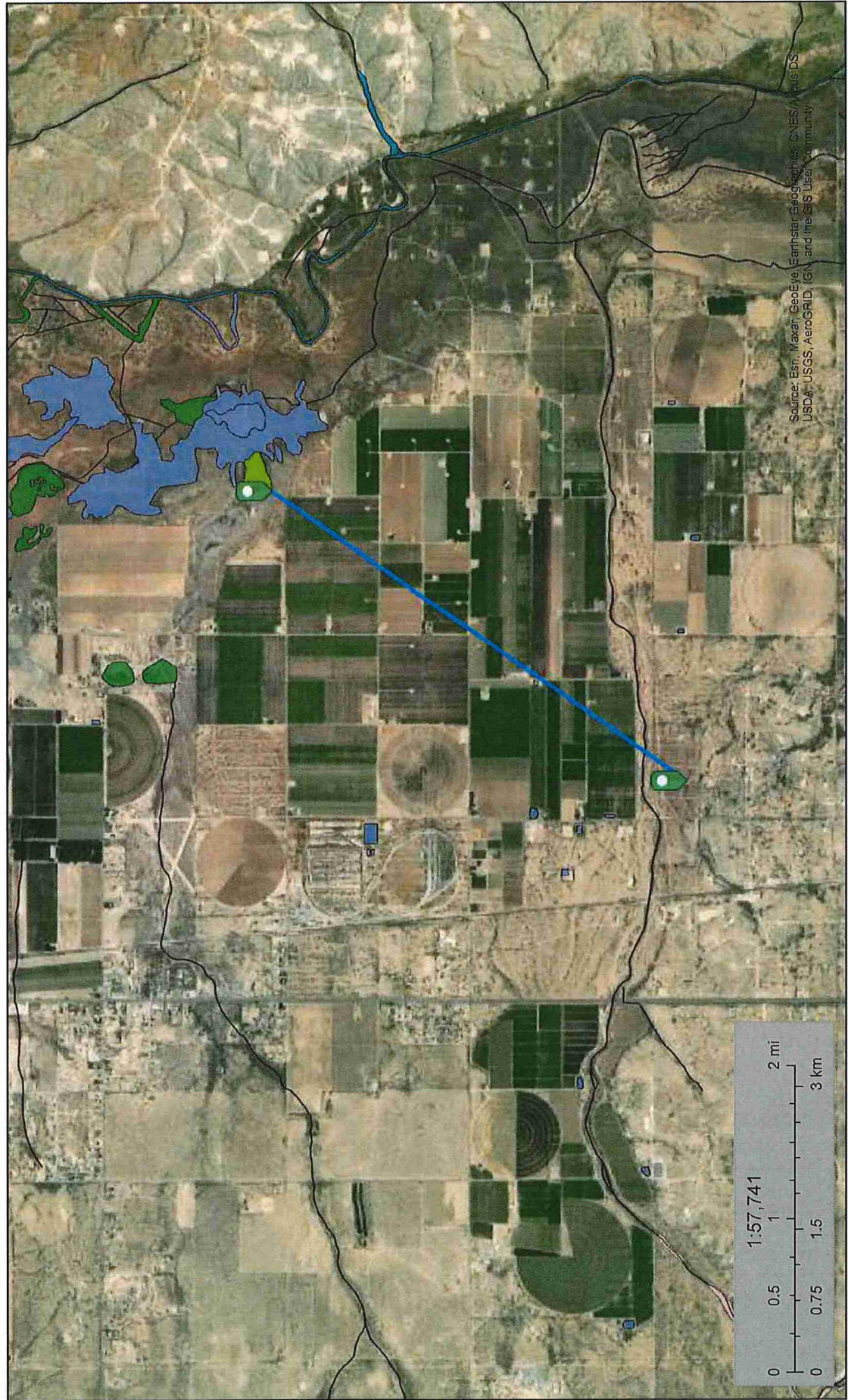


Gates AAC #2



U.S. Fish and Wildlife Service  
**National Wetlands Inventory**

Nearest Wetland 14,664ft.



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

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October 10, 2021

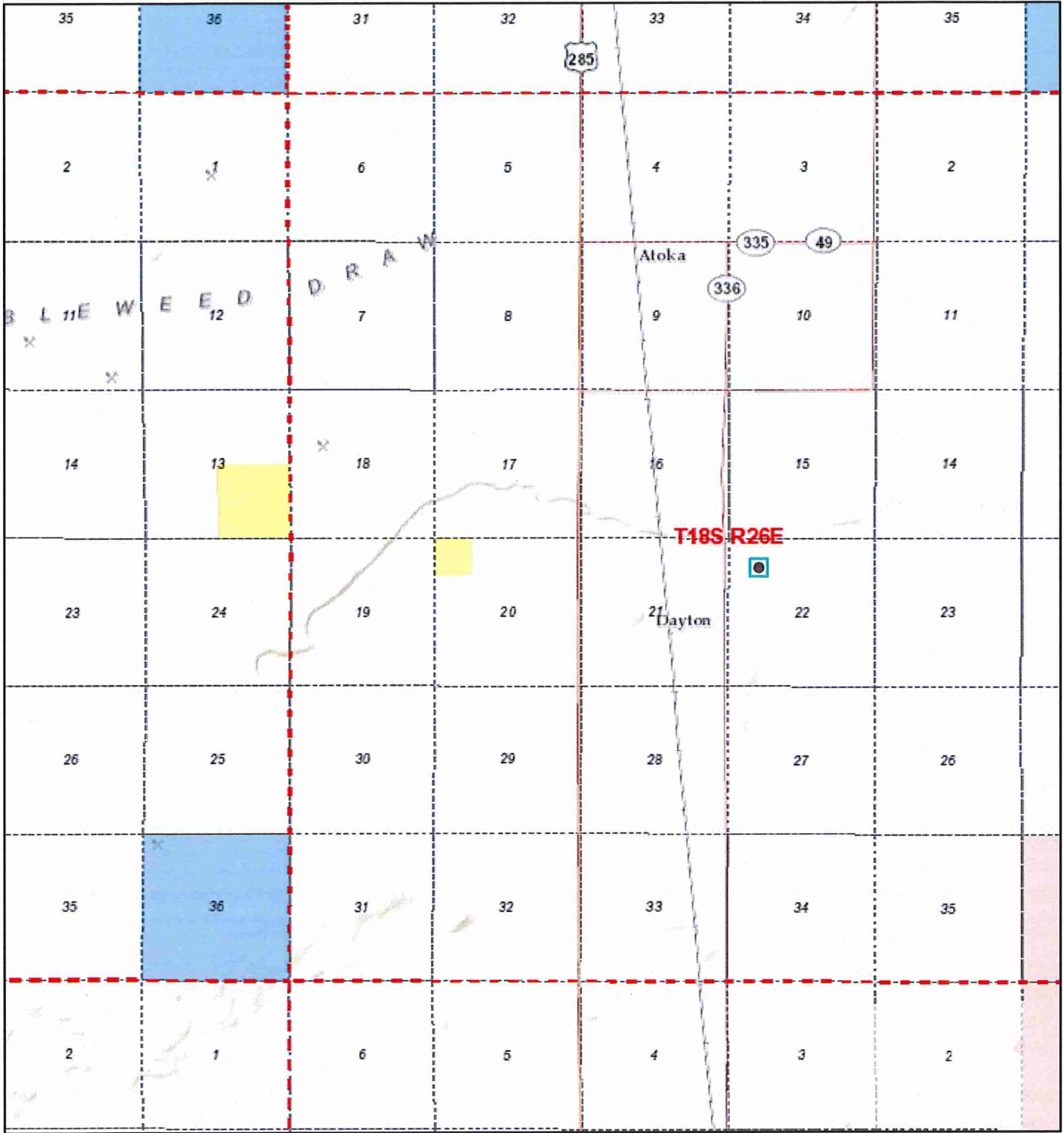
**Wetlands**

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

National Wetlands Inventory (NWI)  
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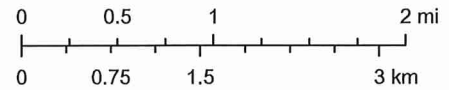
# Active Mines in New Mexico



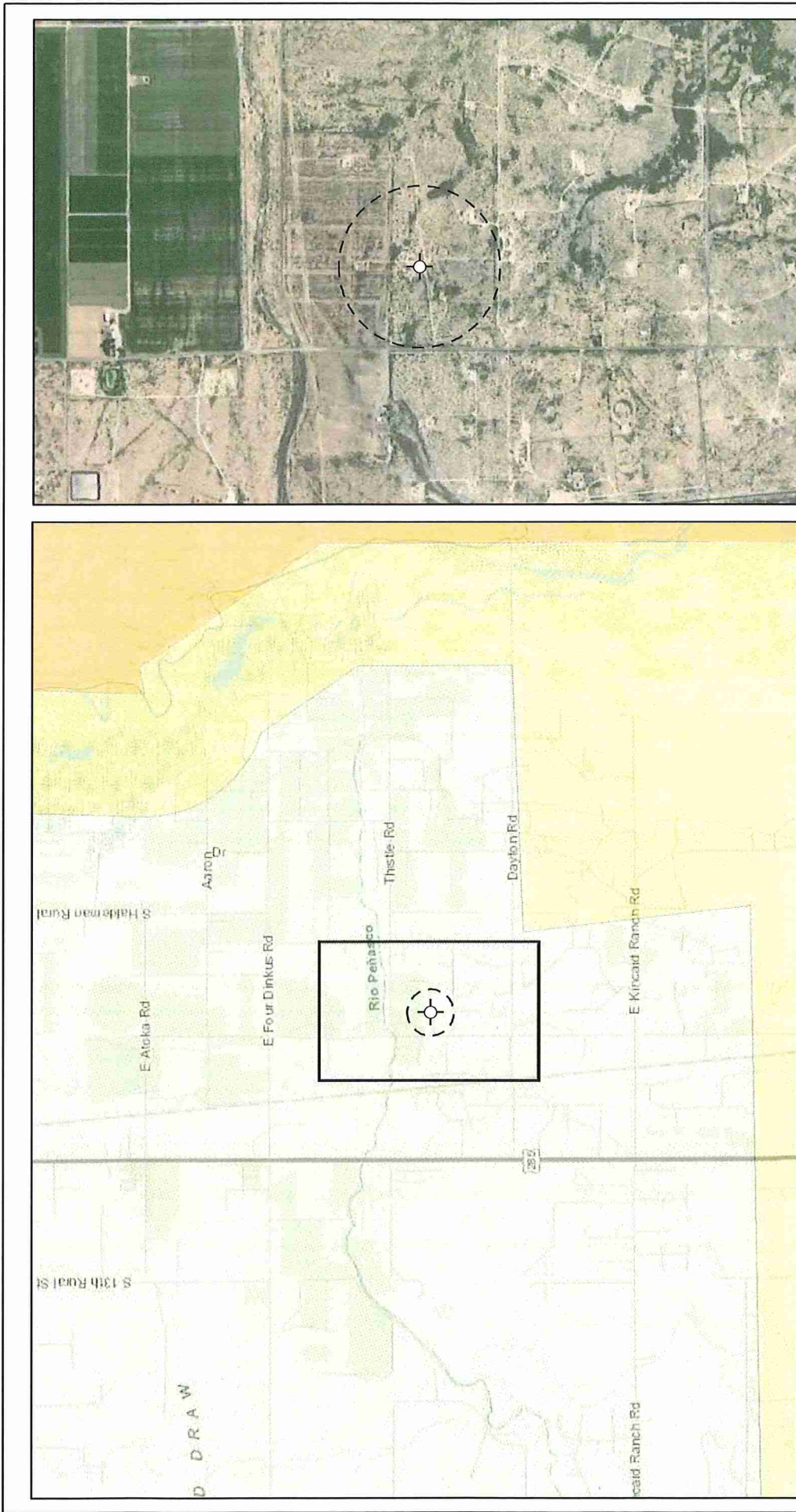
10/10/2021, 2:17:41 PM

1:72,224

- Township / Range
- Sections
- Bureau of Land Management
- Bureau of Reclamation
- Department of Agriculture
- Department of Defense
- Department of Energy
- National Park Service
- Private Land
- State Game and Fish
- State Land
- State Parks
- Tribal



U.S. Bureau of Land Management - New Mexico State Office, Sources: Esri, USGS, NOAA, Sources: Esri, Garmin, USGS, NPS



**Detail Map**  
 0 600 1,200 ft.


**Overview Map**  
 0 0.25 0.5 1 mi

**Karst Potential**

- Critical
- High
- Medium
- Low

**Site Location**


- Site Buffer ( 1,000 ft. )



Map Center:  
Lat/Long: 32.736088, -104.374953

NAD 1983 UTM Zone 13N  
Date: Oct 15/21

FIGURE: **X**



**Karst Potential Map  
Gates AAC #002**

Note: Inset Map, ESRI 20XX; Overview Map: ESRI World Topographic

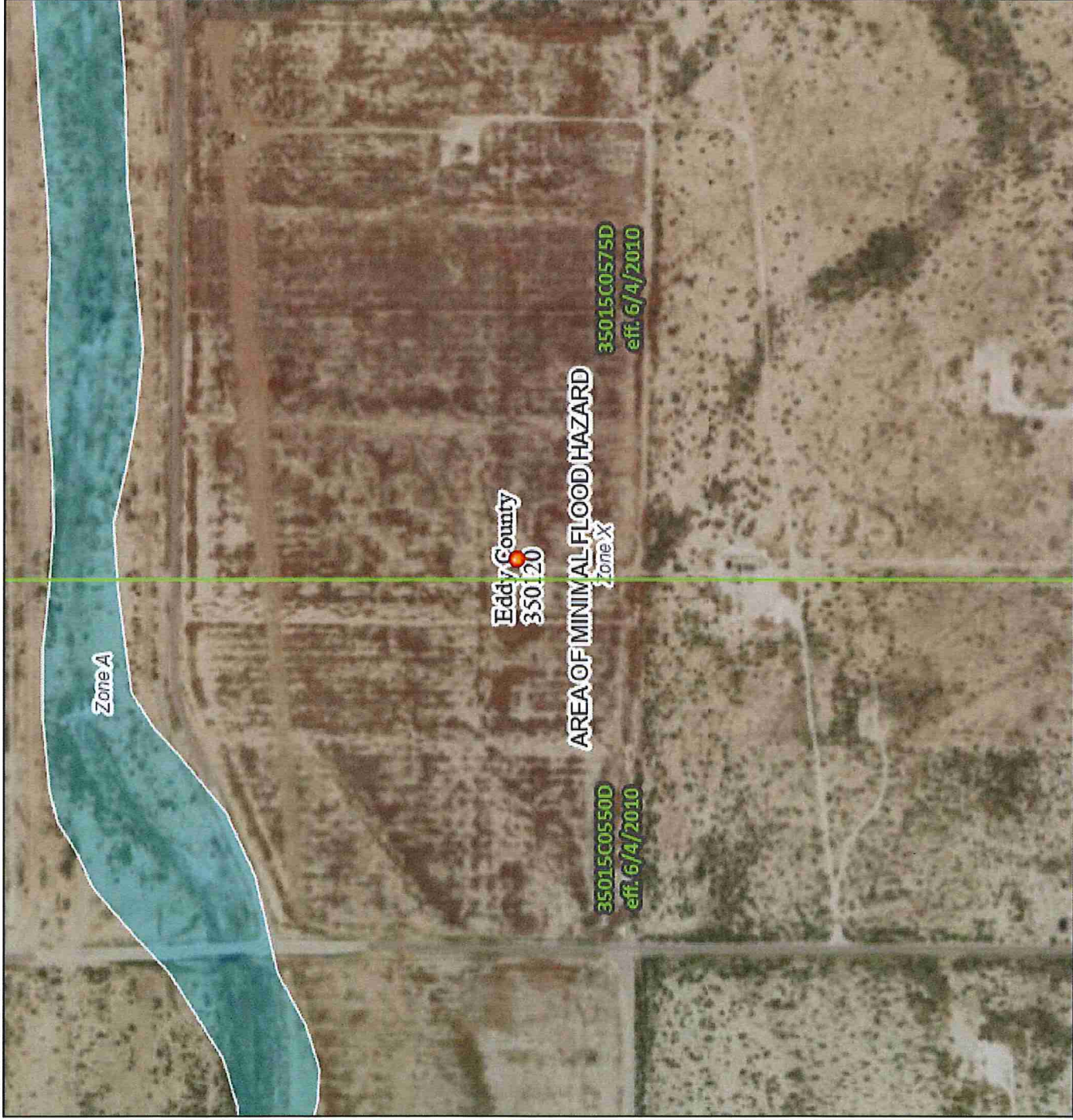
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VERSATILITY. EXPERTISE.

# National Flood Hazard Layer FIRMette



104°22'48"W 32°44'31"N



104°22'11"W 32°44'1"N

1:6,000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

## Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

**SPECIAL FLOOD HAZARD AREAS**

- Without Base Flood Elevation (BFE) Zone A, V, A99
- With BFE or Depth Zone AE, AO, AH, VE, AR
- Regulatory Floodway

**OTHER AREAS OF FLOOD HAZARD**

- 0.2% Annual Chance Flood Hazard. Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
- Future Conditions 1% Annual Chance Flood Hazard Zone X
- Area with Reduced Flood Risk due to Levee. See Notes. Zone X
- Area with Flood Risk due to Levee Zone D

**OTHER AREAS**

- NO SCREEN
- Area of Minimal Flood Hazard Zone X
- Effective LOMRs
- Area of Undetermined Flood Hazard Zone D

**GENERAL STRUCTURES**

- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

**OTHER FEATURES**

- Cross Sections with 1% Annual Chance Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

**MAP PANELS**

- Digital Data Available
- No Digital Data Available
- Unmapped



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 10/10/2021 at 4:22 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

# Custom Soil Resource Report for Eddy Area, New Mexico



# Preface

---

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist ([http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2\\_053951](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951)).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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        Eddy Area, New Mexico..... 13  
        Kr—Karro loam, 0 to 1 percent slopes..... 13  
References..... 15

## How Soil Surveys Are Made

---

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil



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scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

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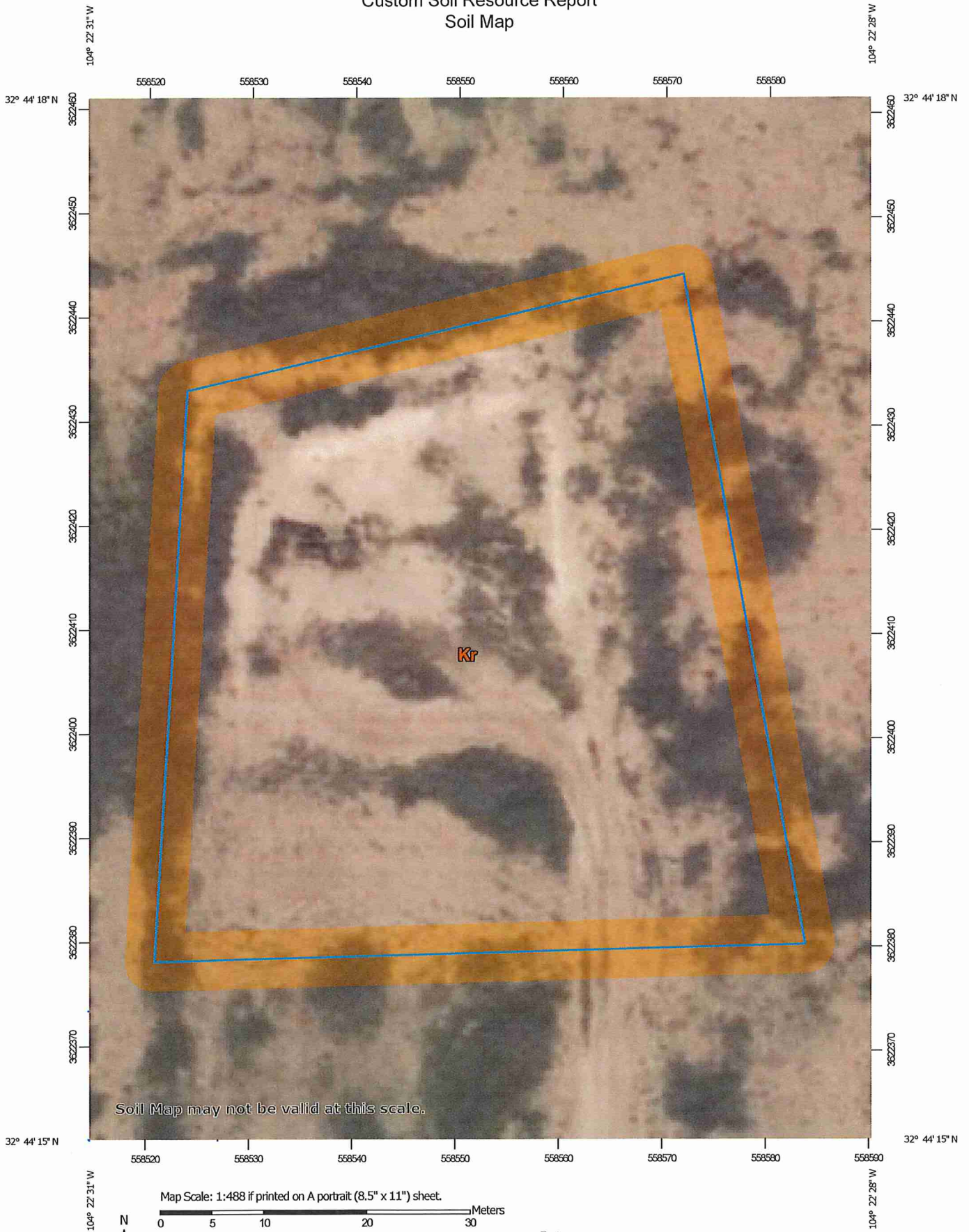
identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

## Soil Map

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The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

# Custom Soil Resource Report Soil Map



Custom Soil Resource Report

MAP LEGEND

- Area of Interest (AOI)
  - Area of Interest (AOI)
- Soils
  - Soil Map Unit Polygons
  - Soil Map Unit Lines
  - Soil Map Unit Points
- Special Point Features
  - Blowout
  - Borrow Pit
  - Clay Spot
  - Closed Depression
  - Gravel Pit
  - Gravelly Spot
  - Landfill
  - Lava Flow
  - Marsh or swamp
  - Mine or Quarry
  - Miscellaneous Water
  - Perennial Water
  - Rock Outcrop
  - Saline Spot
  - Sandy Spot
  - Severely Eroded Spot
  - Sinkhole
  - Slide or Slip
  - Sodic Spot
- Water Features
  - Streams and Canals
- Transportation
  - Rails
  - Interstate Highways
  - US Routes
  - Major Roads
  - Local Roads
- Background
  - Aerial Photography
- Soil Spot
  - Spoil Area
  - Stony Spot
  - Very Stony Spot
  - Wet Spot
  - Other
  - Special Line Features

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
Web Soil Survey URL:  
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Eddy Area, New Mexico  
Survey Area Data: Version 17, Sep 12, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 27, 2020—Feb 28, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

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## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Kr	Karro loam, 0 to 1 percent slopes	0.8	100.0%
<b>Totals for Area of Interest</b>		<b>0.8</b>	<b>100.0%</b>

## Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

## Custom Soil Resource Report

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

## Eddy Area, New Mexico

### Kr—Karro loam, 0 to 1 percent slopes

#### Map Unit Setting

*National map unit symbol:* 1w4v  
*Elevation:* 2,500 to 5,300 feet  
*Mean annual precipitation:* 10 to 15 inches  
*Mean annual air temperature:* 57 to 64 degrees F  
*Frost-free period:* 200 to 230 days  
*Farmland classification:* Farmland of statewide importance

#### Map Unit Composition

*Karro and similar soils:* 99 percent  
*Minor components:* 1 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Karro

##### Setting

*Landform:* Plains, alluvial fans  
*Landform position (three-dimensional):* Riser, talf, rise  
*Down-slope shape:* Convex, linear  
*Across-slope shape:* Linear  
*Parent material:* Mixed alluvium

##### Typical profile

*H1 - 0 to 10 inches:* loam  
*H2 - 10 to 90 inches:* clay loam

##### Properties and qualities

*Slope:* 0 to 1 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.60 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 60 percent  
*Maximum salinity:* Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)  
*Sodium adsorption ratio, maximum:* 1.0  
*Available water supply, 0 to 60 inches:* High (about 10.5 inches)

##### Interpretive groups

*Land capability classification (irrigated):* 2s  
*Land capability classification (nonirrigated):* 6s  
*Hydrologic Soil Group:* C  
*Ecological site:* R042XC030NM - Limy  
*Hydric soil rating:* No

#### Minor Components

##### Reeves

*Percent of map unit:* 1 percent



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Ecological site: R042XC007NM - Loamy  
Hydric soil rating: No

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United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2\\_054242](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242)

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### Ecological Reference Worksheet

Author(s) / participant(s): John Tunberg,  
 Contact for lead author : 505-761-4488 Reference site used? Yes/No No

Date: 2/12/2010 MLRA: 42.3 Ecological Site: Limy This must be verified based on soils and climate (see Ecological Site Description). Current plant community cannot be used to identify the ecological site.

**Indicators:** For each indicator, describe the potential for the site. Where possible, (1) use numbers, (2) include expected range of values for above and below average years for each community within the reference state, when appropriate & (3) site data. Continue description on separate sheet.

**1. Number and extent of rills** | There can be a few rills that should be short and discontinuous. After wildfires, or abnormally high human or herbivore impacts or extended drought or combinations of these disturbances rills may double in number on steeper slopes at the margins of this site after high-intensity summer thunderstorms. Any rills formed should not be long lived or interconnected and should heal rapidly.

**2. Presence of water flow patterns:** | There can be a few flow patterns that should be short and discontinuous. There can be some sheet flow. Water flow patterns should only be present following intense storm events on upper slope limits at the margins of this site. Numerous obstructions alter flow paths. Flow pattern length and numbers may double after wildfires, or abnormally high human or herbivore impacts or extended drought or combinations of these disturbances.

**3. Number and height of erosional pedestals or terracettes:** | There can be a few pedestals that should be less than 1 inch high. Terracettes can be common and should be discontinuous. If present plant or rock pedestals and terracettes are almost always in flow patterns. Wind caused pedestals are rare and only would be on the site following after wildfires, or abnormally high human or herbivore impacts or extended drought or combinations of these disturbances. These would show signs of healing within 1 year after event.

**4. Bare ground from Ecological Site Description or other studies (rock, litter, lichen, moss, plant canopy are not bare ground) :**  
 Bare ground can make up to 67% of the ground cover on this site according to the ESD. Bare patch size should be less than 2 feet in diameter.

**5. Number of gullies and erosion associated with gullies:** | Gullies and erosion associated with gullies should be rare are infrequent. Typically, gullies if present will only follow the micro topography. Natural drainages with little to no active cutting are common on this site. There should not be any accelerated erosion. After high-intensity summer thunderstorms or after wildfire, or abnormally high human or herbivore impacts or extended drought or combinations of these disturbances then gully formation would be accelerated for a year or two. Evidence of healing within 1 year of event and continuing after that.

**6. Extent of wind scoured, blowouts and/or depositional area** | There should not be any wind scoured, blowouts and/or depositional areas. However there can be potential for depositional areas. Wind erosion is minimal when the site is in a well vegetated condition. Significant wind erosion would only be present following high-intensity summer thunderstorms, after wildfire, or abnormally high human or herbivore impacts or extended drought or combinations of these disturbances. After rain events, exposed soil surfaces form physical crusts that tend to reduce wind erosion. Deposition from off site sources can be common on this site and is in fact a primary soil forming process. This site is susceptible to wind erosion when vegetation is removed or significantly decreased.

**7. Amount of litter movement (describe size and distance expected to travel) :** | Litter should be small (less than "1 in diameter) and its movement should be minimal. This site has adequate vegetation to stop litter movement after short distances. Most of the litter movement on this site will be litter that has been transported onto the site from adjacent sites. Litter produced on this site stays on the site and only travels short distances.

**8. Soil surface (top few mm) resistance to erosion (stability) values are averages - most sites will show a range of values for both plant canopy and interspaces, if different) :** | This site can be susceptible to alluvial erosion. Stability values are estimated to be 1-2 in interspaces and 3-5 at bases of vegetation.

**9. Soil surface structures and SOM content (include type and strength of structure, and A-horizon color and thickness for both plant canopy and interspaces, if different) :** | The SOM should be less than 1%. A--0 to 3 inches; brown (10YR 5/3) very fine sandy loam, dark yellowish brown (10YR 4/4) moist; weak thin platy structure in upper 1 inch and weak fine granular structure in lower part; soft, very friable, slightly sticky and nonplastic; common very fine, fine and medium roots; strongly effervescent; moderately alkaline (pH 8.0).

**10. Effect of plant community composition (relative proportion of different functional groups) & spatial distribution on infiltration & runoff:** |

Infiltration rates should be moderate until it reaches the finer texture soil layer. It should be higher around bases of grasses than in interspaces and around bases of shrubs. Runoff can be slow to medium. Soils are deep and very deep. Surface layers are fine sand, very fine sand, silty clay loam, very fine sandy loam, clay loam and loam. Subsoil textures are loam, clay loam, silty clay loam, sandy clay loam or silt loam. Depth to calcic horizon: 10 to 24 inches, and calcium carbonate equivalent is averaging more than 40 percent. Permeability is moderate and the available water holding capacity is moderate. Because of the high lime content and rather moderately coarse surface textures, the soils are easily windblown if not protected by vegetation.

**11. Presence and thickness of compaction layer (usually none; describe soil profile features which may be mistaken for compaction):** There should not be compaction layers on this site.  
There should not be any compaction layers on this site. There are soil profile features in the top 9 inches of the soil profile that would be mistaken for a management induced soil compaction layer. Management induced compaction layers will be more difficult to penetrate than clay lenses.

**12. Functional/Structural Groups (list in order of descending dominance by above-ground weight using symbols: indicate much greater than (>>), greater than (>), and equal to (=) :**  
Dominant: black grama >>forbs > bush muhly = C4 midgrasses (threeawns) > sand dropseed > C 4 bunch grasses (Arizona cottontop, cane bluestem, plains bristle grass) > Subdominants: shrubs (creosote, tarbush, soap tree yucca, ephedra, fourwing saltbush, winterfat,) > Others: Forbs

**13. Amount of plant mortality and decadence (include which functional groups are expected to show mortality or decadence) :**  
Black grama and bunchgrasses can show decadence in centers of plants.

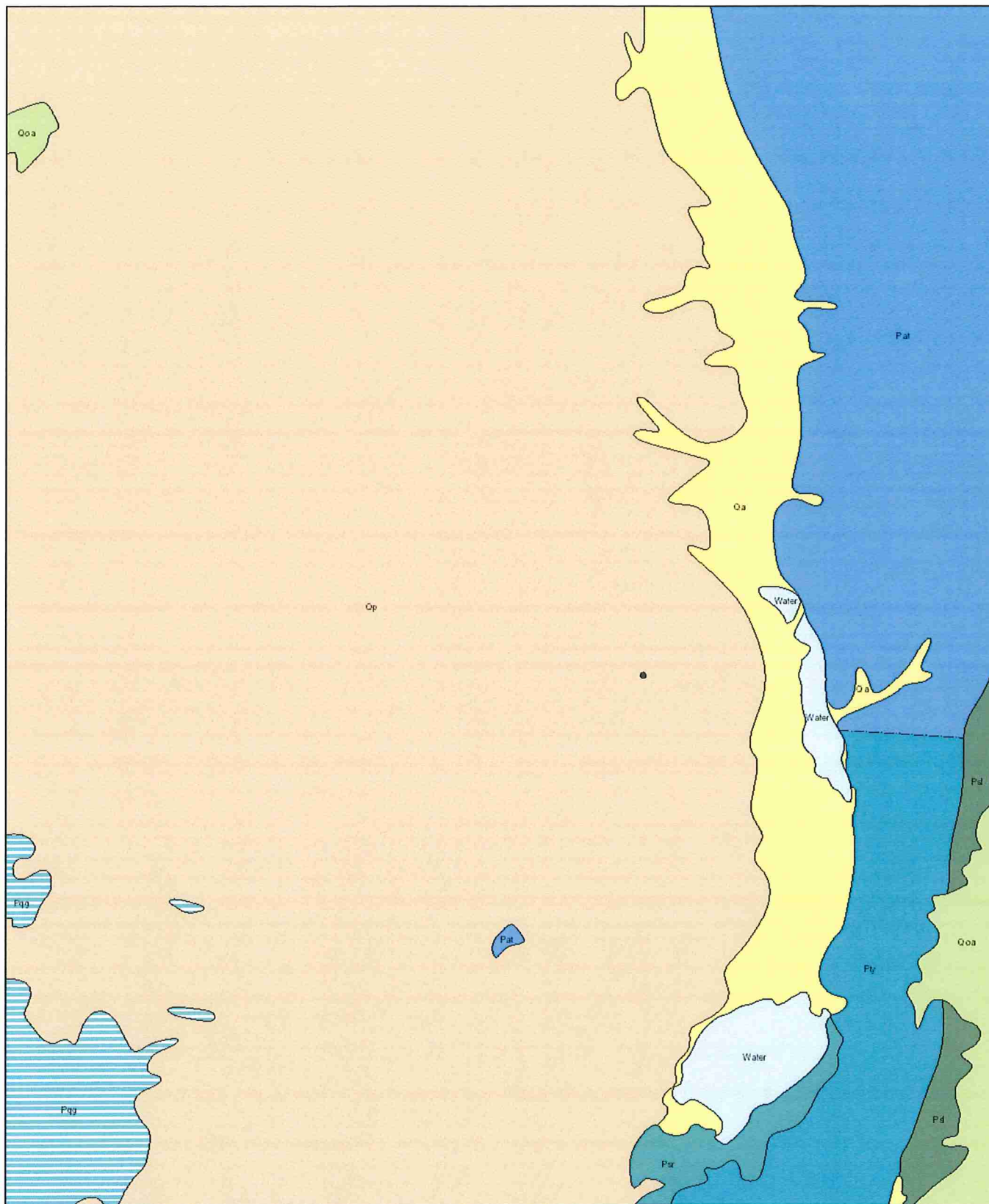
**14. Average percent litter cover ( \_\_\_\_\_ % ) and depth ( \_\_\_\_\_ inches).**  
Average 3% cover and 0.75 inch deep. (As per ESD)

**15. Expected annual production (this is TOTAL above-ground production, not just forage production):**  
(Low Production 500 lbs./ac.) (Average RV Production 925 lbs./ac.) (High Production 1350 lbs./ac.) After wildfires, high herbivore impacts, extended drought, or combinations of these disturbances, can cause production to be significantly reduced (100-200 lbs per ac. the first growing season following a wildfire) and recover slowly under below average precipitation regimes.

**16. Potential invasive (including noxious) species (native and non-native). List species which characterize degraded states and which, after a threshold is crossed, "can, and often do , continue to increase regardless of the management of the site and may eventually dominate**  
Tarbush, creosote and mesquite can be invaders to this site. Invasive plants should not occur in reference plant community. However, lovegrass, Russian thistle, kochia, and other nonnative annuals may initially invade following extended disturbance. Mesquite and tarbush and creosote and lovegrass are the greatest threat to dominate this site in the long term after disturbance (primarily following wildfire exclusion but also includes high human or herbivore impacts and extended drought). Mesquite and tarbush and creosote and lovegrass are most likely to retain dominance if allowed to alter natural fire regime (this alteration may require poor land management combined with years of wet winter-spring; dry summer-fall conditions). Any of these invaded communities represent a departure from the reference state.

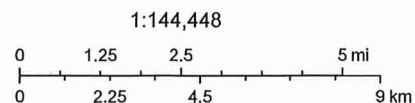
**17. Perennial plant reproductive capability :**  
Black grama reproduces by seed sporadically and reproduction by tiller and stolon can be common. The C4 midgrasses should have high reproductive potential and rapidly recover from drought in the absence of additional stresses (grazing).

# ArcGIS Web Map



10/10/2021, 2:36:55 PM

Lithologic Contacts	Faults	Dikes
Contact, Exposed	Fault, Exposed	<all other values>
Contact, Gradational	Fault, Intermittent	Dike
Nomenclature change	Fault, Concealed	Dike intruding fault
Map Boundary	Shore Zone	Volcanic Vents



USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data;

ArcGIS Web AppBuilder

USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset,

## ATTACHMENT 2

File No.

NEW MEXICO OFFICE OF THE STATE ENGINEER



WR-07 APPLICATION FOR PERMIT TO DRILL

A WELL WITH NO WATER RIGHT

(check applicable box):

For fees, see State Engineer website: <http://www.ose.state.nm.us/>

Purpose:	<input type="checkbox"/> Pollution Control And/Or Recovery	<input type="checkbox"/> Ground Source Heat Pump
<input type="checkbox"/> Exploratory Well (Pump test)	<input type="checkbox"/> Construction Site/Public Works Dewatering	<input type="checkbox"/> Other(Describe):
<input checked="" type="checkbox"/> Monitoring Well	<input type="checkbox"/> Mine Dewatering	

A separate permit will be required to apply water to beneficial use regardless if use is consumptive or nonconsumptive.

<input checked="" type="checkbox"/> Temporary Request - Requested Start Date: 2/21/2022	Requested End Date: 3/31/2022
Plugging Plan of Operations Submitted? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

1. APPLICANT(S)

Name: EOG Resources, Inc	Name:
Contact or Agent: <input type="checkbox"/> check here if Agent	Contact or Agent: <input type="checkbox"/> check here if Agent
Robert Asher	
Mailing Address: 104 South Fourth Street	Mailing Address:
City: Artesia	City:
State: NM      Zip Code: 88210	State:      Zip Code:
Phone: 575-748-4217 <input type="checkbox"/> Home <input type="checkbox"/> Cell	Phone: <input type="checkbox"/> Home <input type="checkbox"/> Cell
Phone (Work):	Phone (Work):
E-mail (optional): bob_asher@eogresources.com	E-mail (optional):

FOR OSE INTERNAL USE      Application for Permit, Form WR-07, Rev 11/17/16

File No.:	Trn. No.:	Receipt No.:
Trans Description (optional):		
Sub-Basin:	PCW/LOG Due Date:	



2. WELL(S) Describe the well(s) applicable to this application.

**Location Required: Coordinate location must be reported in NM State Plane (NAD 83), UTM (NAD 83), or Latitude/Longitude (Lat/Long - WGS84).**  
**District II (Roswell) and District VII (Cimarron) customers, provide a PLSS location in addition to above.**

NM State Plane (NAD83) (Feet)       UTM (NAD83) (Meters)       Lat/Long (WGS84) (to the nearest 1/10<sup>th</sup> of second)  
 NM West Zone       Zone 12N  
 NM East Zone       Zone 13N  
 NM Central Zone

Well Number (if known):	X or Easting or Longitude:	Y or Northing or Latitude:	Provide if known: -Public Land Survey System (PLSS) (Quarters or Halves, Section, Township, Range) OR - Hydrographic Survey Map & Tract; OR - Lot, Block & Subdivision; OR - Land Grant Name
	32.734210	-104.381822	Unit Letter 'H', Section 21, T18S, R26E

**NOTE: If more well locations need to be described, complete form WR-08 (Attachment 1 – POD Descriptions)**  
**Additional well descriptions are attached:**  Yes  No      If yes, how many \_\_\_\_\_

Other description relating well to common landmarks, streets, or other:

Well is on land owned by: EOG Resources, Inc.

**Well Information: NOTE: If more than one (1) well needs to be described, provide attachment. Attached?**  Yes  No  
 If yes, how many \_\_\_\_\_

Approximate depth of well (feet): 55'	Outside diameter of well casing (inches): N/A
Driller Name: Hungry Horse, LLC	Driller License Number: 1755

3. ADDITIONAL STATEMENTS OR EXPLANATIONS

The borehole will be drilled according to NMOCD request. Depth to water data for the wells within a half mile of the site are all over 25 years old. Attempted to gauge one well and found the well had collapsed. Permission to gauge any other of these wells could not be obtained. As per NMOCD, drill a 55' borehole, wait 72 hrs, and check for presence of water. If water is present driller will notify NMOSE and NMOCD for guidance on possibly converting the well to a monitoring well. If no water is present the well will be plugged.

FOR OSE INTERNAL USE

Application for Permit, Form WR-07

File No.:	Trn No.:
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4. SPECIFIC REQUIREMENTS: The applicant must include the following, as applicable to each well type. Please check the appropriate boxes, to indicate the information has been included and/or attached to this application:

<b>Exploratory:</b> <input type="checkbox"/> Include a description of any proposed pump test, if applicable.	<b>Pollution Control and/or Recovery:</b> <input type="checkbox"/> Include a plan for pollution control/recovery, that includes the following: <input type="checkbox"/> A description of the need for the pollution control or recovery operation. <input type="checkbox"/> The estimated maximum period of time for completion of the operation. <input type="checkbox"/> The annual diversion amount. <input type="checkbox"/> The annual consumptive use amount. <input type="checkbox"/> The maximum amount of water to be diverted and injected for the duration of the operation. <input type="checkbox"/> The method and place of discharge.	<b>Construction De-Watering:</b> <input type="checkbox"/> Include a description of the proposed dewatering operation, <input type="checkbox"/> The estimated duration of the operation, <input type="checkbox"/> The maximum amount of water to be diverted, <input type="checkbox"/> A description of the need for the dewatering operation, and, <input type="checkbox"/> A description of how the diverted water will be disposed of.	<b>Mine De-Watering:</b> <input type="checkbox"/> Include a plan for pollution control/recovery, that includes the following: <input type="checkbox"/> A description of the need for mine dewatering. <input type="checkbox"/> The estimated maximum period of time for completion of the operation. <input type="checkbox"/> The source(s) of the water to be diverted. <input type="checkbox"/> The geohydrologic characteristics of the aquifer(s). <input type="checkbox"/> The maximum amount of water to be diverted per annum. <input type="checkbox"/> The maximum amount of water to be diverted for the duration of the operation. <input type="checkbox"/> The quality of the water.
<b>Monitoring:</b> <input checked="" type="checkbox"/> Include the reason for the monitoring well, and, <input checked="" type="checkbox"/> The duration of the planned monitoring.	<input type="checkbox"/> The method of measurement of water produced and discharged. <input type="checkbox"/> The source of water to be injected. <input type="checkbox"/> The method of measurement of water injected. <input type="checkbox"/> The characteristics of the aquifer. <input type="checkbox"/> The method of determining the resulting annual consumptive use of water and depletion from any related stream system. <input type="checkbox"/> Proof of any permit required from the New Mexico Environment Department. <input type="checkbox"/> An access agreement if the applicant is not the owner of the land on which the pollution plume control or recovery well is to be located.	<b>Ground Source Heat Pump:</b> <input type="checkbox"/> Include a description of the geothermal heat exchange project, <input type="checkbox"/> The number of boreholes for the completed project and required depths. <input type="checkbox"/> The time frame for constructing the geothermal heat exchange project, and, <input type="checkbox"/> The duration of the project. <input type="checkbox"/> Preliminary surveys, design data, and additional information shall be included to provide all essential facts relating to the request.	<input type="checkbox"/> The method of measurement of water diverted. <input type="checkbox"/> The recharge of water to the aquifer. <input type="checkbox"/> Description of the estimated area of hydrologic effect of the project. <input type="checkbox"/> The method and place of discharge. <input type="checkbox"/> An estimation of the effects on surface water rights and underground water rights from the mine dewatering project. <input type="checkbox"/> A description of the methods employed to estimate effects on surface water rights and underground water rights. <input type="checkbox"/> Information on existing wells, rivers, springs, and wetlands within the area of hydrologic effect.

ACKNOWLEDGEMENT

I, We (name of applicant(s)), Robert Asher

Print Name(s)

affirm that the foregoing statements are true to the best of (my, our) knowledge and belief.

Applicant Signature

Applicant Signature

ACTION OF THE STATE ENGINEER

This application is:

- approved
- partially approved
- denied

provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare and further subject to the attached conditions of approval.

Witness my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_\_, for the State Engineer,

\_\_\_\_\_, State Engineer

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

\_\_\_\_\_  
Print

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

FOR OSE INTERNAL USE

Application for Permit, Form WR-07

File No.:	Trn No.:
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4-153-106-422-234

Hyperlinks

[Aerial Property Information](#)

Details

UNC

4-153-106-422-234

Map Number

N/A

Owner

EOG RESOURCES INC

Owner Address1

PO BOX 4362

Owner Address2

N/A

Owner Address City

HOUSTON

Owner Address State

TX

Owner Address Zip Code

772104362

Site Address

DAYTON ROAD

Legal Description

Subd: NORTH DAYTON Lot: 12 Block: 44 LOT

12 MAP # 117-44.12 CAB# 1 22-1 LOC DAYTON

ROAD LOT SIZE 25' X 120'

Model Type

Land

Land Average

51

Actual Area

1

Tax Area

160\_NR

Land Code

106\_50\_01

Book

N/A

Page

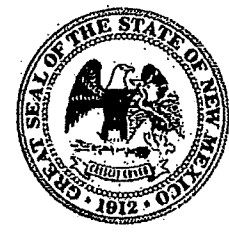
N/A



Source: Aerial Imagery, 2012



# WELL PLUGGING PLAN OF OPERATIONS



**NOTE:** A Well Plugging Plan of Operations shall be filed with and accepted by the Office of the State Engineer prior to plugging. This form may be used to plug a single well, or if you are plugging multiple monitoring wells on the same site using the same plugging methodology.

**Alert!** Your well may be eligible to participate in the Aquifer Mapping Program (AMP)-NM Bureau of Geology [geoinfo.nmt.edu/resources/water/cgmm/](http://geoinfo.nmt.edu/resources/water/cgmm/) if within an area of interest and meets the minimum construction requirements, such as there is still water in your well, and the well construction reflected in a well record and log is not compromised, contact AMP at 575-835-5038 or -6951, or by email [nmbg-waterlevels@nmt.edu](mailto:nmbg-waterlevels@nmt.edu), prior to completing this prior form. Showing proof to the OSE that your well was accepted in this program, may delay the plugging of your well until a later date.

**I. FILING FEE:** There is no filing fee for this form.

**II. GENERAL / WELL OWNERSHIP:**  Check here if proposing one plan for multiple monitoring wells on the same site and attaching WD-08m

Existing Office of the State Engineer POD Number (Well Number) for well to be plugged: \_\_\_\_\_

Name of well owner: EOG Resources, Inc.

Mailing address: 104 South Fourth Street County: Eddy

City: Artesia State: NM Zip code: 88210

Phone number: 575-748-4217 E-mail: bob\_asher@gmail.com

**III. WELL DRILLER INFORMATION:**

Well Driller contracted to provide plugging services: Hungry Horse, LLC

New Mexico Well Driller License No.: 1755 Expiration Date: 10/14/2023

**IV. WELL INFORMATION:**  Check here if this plan describes method for plugging multiple monitoring wells on the same site and attach supplemental form WD-08m and skip to #2 in this section.

Note: A copy of the existing Well Record for the well(s) to be plugged should be attached to this plan.

1) GPS Well Location: Latitude: 32 deg, 44 min, 3.16 sec  
Longitude: 104 deg, 22 min, 54.56 sec, NAD 83

2) Reason(s) for plugging well(s):  

No water present

3) Was well used for any type of monitoring program? Yes If yes, please use section VII of this form to detail what hydrogeologic parameters were monitored. If the well was used to monitor contaminated or poor quality water, authorization from the New Mexico Environment Department may be required prior to plugging.

4) Does the well tap brackish, saline, or otherwise poor quality water? No If yes, provide additional detail, including analytical results and/or laboratory report(s): 

N/A

5) Static water level: >100 feet below land surface / feet above land surface (circle one)

6) Depth of the well: 55 feet

- 7) Inside diameter of innermost casing:       N/A       inches.
- 8) Casing material:       N/A
- 9) The well was constructed with:
  - an open-hole production interval, state the open interval:       N/A
  - a well screen or perforated pipe, state the screened interval(s):       N/A
- 10) What annular interval surrounding the artesian casing of this well is cement-grouted?       N/A
- 11) Was the well built with surface casing?       No       If yes, is the annulus surrounding the surface casing grouted or otherwise sealed?       N/A       If yes, please describe:  

N/A
- 12) Has all pumping equipment and associated piping been removed from the well?       N/A       If not, describe remaining equipment and intentions to remove prior to plugging in Section VII of this form.

**V. DESCRIPTION OF PLANNED WELL PLUGGING:**  If plugging method differs between multiple wells on same site, a separate form must be completed for each method.

Note: If this plan proposes to plug an artesian well in a way other than with cement grout, placed bottom to top with a tremie pipe, a detailed diagram of the well showing proposed final plugged configuration shall be attached, as well as any additional technical information, such as geophysical logs, that are necessary to adequately describe the proposal. Attach a copy of any signed OSE variance to this plugging plan.

Also, if this planned plugging plan requires a variance to 19.27.4 NMAC, attach a detailed variance request signed by the applicant.

- 1) Describe the method by which cement grout shall be placed in the well, or describe requested plugging methodology proposed for the well:  

The borehole will be grouted using a tremie pipe, from the bottom to the surface.
- 2) Will well head be cut-off below land surface after plugging?       N/A

**VI. PLUGGING AND SEALING MATERIALS:**

Note: The plugging of a well that taps poor quality water may require the use of a specialty cement or specialty sealant. Attach a copy of the batch mix recipe from the cement company and/or product description for specialty cement mixes or any sealant that deviates from the list of OSE approved sealants.

- 1) For plugging intervals that employ cement grout, complete and attach Table A.
- 2) For plugging intervals that will employ approved non-cement based sealant(s), complete and attach Table B.
- 3) Theoretical volume of grout required to plug the well to land surface:       3 bags
- 4) Type of Cement proposed:       Bentonite Pellets
- 5) Proposed cement grout mix:       N/A       gallons of water per 94 pound sack of Portland cement.
- 6) Will the grout be:        batch-mixed and delivered to the site  
      X       mixed on site

7) Grout additives requested, and percent by dry weight relative to cement:  
 N/A

8) Additional notes and calculations:  
 N/A

**VII. ADDITIONAL INFORMATION:** List additional information below, or on separate sheet(s):  
 72 hours after drilling, the well (32.734210, -104.381822) will be checked for the presence of water. If water is present the NMOSE and NMOCD will be notified for guidance on possible conversion to monitor well. If no water is present the well will be plugged according to NMOSE Well Plugging Handbook, Appendix A, Permit Condition 6E. Within 20 days of well plugging, driller will submit Well Plugging Record WD-11 to NMOSE. The maximum period of time for completion of the operation will be 30 days.

**VIII. SIGNATURE:**

I, Robert Asher, say that I have carefully read the foregoing Well Plugging Plan of Operations and any attachments, which are a part hereof; that I am familiar with the rules and regulations of the State Engineer pertaining to the plugging of wells and will comply with them, and that each and all of the statements in the Well Plugging Plan of Operations and attachments are true to the best of my knowledge and belief.

Robert Asher  
 Signature of Applicant

3/4/2022  
 Date

**IX. ACTION OF THE STATE ENGINEER:**

This Well Plugging Plan of Operations is:

- Approved subject to the attached conditions.
- Not approved for the reasons provided on the attached letter.

Witness my hand and official seal this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_

John R. D'Antonio Jr. P.E., New Mexico State Engineer

By: \_\_\_\_\_

**TABLE A - For plugging intervals that employ cement grout. Start with deepest interval.**

	<b>Interval 1 – deepest</b>	<b>Interval 2</b>	<b>Interval 3 – most shallow</b>
			Note: if the well is non-artesian and breaches only one aquifer, use only this column.
Top of proposed interval of grout placement (ft bgl)			
Bottom of proposed interval of grout placement (ft bgl)			
Theoretical volume of grout required per interval (gallons)			
Proposed cement grout mix gallons of water per 94-lb. sack of Portland cement			
Mixed on-site or batch-mixed and delivered?			
Grout additive 1 requested			
Additive 1 percent by dry weight relative to cement			
Grout additive 2 requested			
Additive 2 percent by dry weight relative to cement			

**TABLE B - For plugging intervals that will employ approved non-cement based sealant(s). Start with deepest interval.**

	Interval 1 – deepest	Interval 2	Interval 3 – most shallow
			Note: if the well is non-artesian and breaches only one aquifer, use only this column.
Top of proposed interval of sealant placement (ft bgl)	10	0	
Bottom of proposed sealant or grout placement (ft bgl)	55	10	
Theoretical volume of sealant required per interval (gallons)	N/A	N/A	
Proposed abandonment sealant (manufacturer and trade name)	native soil	bentonite	



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# WELL RECORD & LOG

**OFFICE OF THE STATE ENGINEER**  
[www.ose.state.nm.us](http://www.ose.state.nm.us)

<b>I. GENERAL AND WELL LOCATION</b>	OSE POD NO (WELL NO) POD1		WELL TAG ID NO.		OSE FILE NO(S) RA-13158			
	WELL OWNER NAME(S) EOG Resources, Inc				PHONE (OPTIONAL) 575-748-4217			
	WELL OWNER MAILING ADDRESS 104 South Fourth Street				CITY Artesia	STATE NM	ZIP 88210	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE		MINUTES 44	SECONDS 3.16	N		* ACCURACY REQUIRED: ONE TENTH OF A SECOND
		LONGITUDE		04	22	54.56	W	
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE Unit Letter "H", Section 21, T 18S, R 26E								
<b>2. DRILLING &amp; CASING INFORMATION</b>	LICENSE NO 1755		NAME OF LICENSED DRILLER John Norris			NAME OF WELL DRILLING COMPANY Hungry Horse, LLC		
	DRILLING STARTED 04/04/2022	DRILLING ENDED 04/04/2022	DEPTH OF COMPLETED WELL (FT)		BORE HOLE DEPTH (FT) 55	DEPTH WATER FIRST ENCOUNTERED (FT) NA		
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) NA		
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:							
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
				No Casing				
<b>3. ANNULAR MATERIAL</b>	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						
	1	55	6	Bentonite Chips	10.8	Remix top		

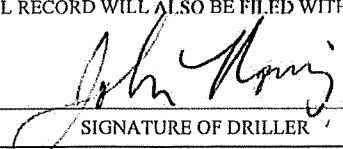
FOR OSE INTERNAL USE			WR-20 WELL RECORD & LOG (Version 04/30/19)		
FILE NO.		POD NO.	TRN NO.		
LOCATION			WELL TAG ID NO.	PAGE 1 OF 2	

4. HYDROGEOLOGIC LOG OF WELL	DEPTH (fcet bgl)		THICKNESS (fcet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
	FROM	TO				
	0	10	10	Surface sand/rock mix	Y ✓ N	
	10	40	30	rock/sand mix	Y ✓ N	
	40	50	10	clay	Y ✓ N	
	50	55	5	sand	Y ✓ N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
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					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input checked="" type="checkbox"/> OTHER - SPECIFY: Not tested					TOTAL ESTIMATED WELL YIELD (gpm): 0.00	

5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.
	MISCELLANEOUS INFORMATION:	The borehole was drilled according to NMOCD request as no water wells exist within a half-mile radius of a release site. As per NMOCD, drill a 55' borehole, wait 72 hours, then gauge for presence of water. No water was present so borehole was plugged.
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: Dean Parent	

6. SIGNATURE	BY SIGNING BELOW, I CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED WELL. I ALSO CERTIFY THAT THE WELL TAG, IF REQUIRED, HAS BEEN INSTALLED AND THAT THIS WELL RECORD WILL ALSO BE FILED WITH THE PERMIT HOLDER WITHIN 30 DAYS AFTER THE COMPLETION OF WELL DRILLING.	
	 _____ SIGNATURE OF DRILLER	John Norris _____ PRINT SIGNED NAME
	_____ DATE	04/15/2022

FOR OSE INTERNAL USE			WR-20 WELL RECORD & LOG (Version 04/30/2019)		
FILE NO.	POD NO.	TRN NO.			
LOCATION		WELL TAG ID NO.		PAGE 2 OF 2	



# PLUGGING RECORD



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

### I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: RA-13158 POD1

Well owner: EOG Resources, Inc Phone No.: 575-748-4217

Mailing address: 104 South Fourth Street

City: Artesia State: NM Zip code: 88210

### II. WELL PLUGGING INFORMATION:

- 1) Name of well drilling company that plugged well: Hungry Horse, LLC
- 2) New Mexico Well Driller License No.: 1755 Expiration Date: 10/14/2023
- 3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): John Norris
- 4) Date well plugging began: 04/12/2022 Date well plugging concluded: 04/12/2022
- 5) GPS Well Location: Latitude: 32 deg, 44 min, 3.16 sec  
Longitude: 104 deg, 22 min, 54.56 sec, WGS 84
- 6) Depth of well confirmed at initiation of plugging as: 55 ft below ground level (bgl),  
by the following manner: measuring tape
- 7) Static water level measured at initiation of plugging: NA ft bgl
- 8) Date well plugging plan of operations was approved by the State Engineer: 3/24/2022
- 9) Were all plugging activities consistent with an approved plugging plan? yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

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

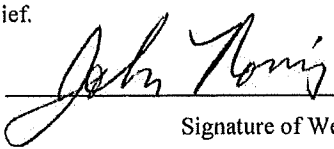
For each interval plugged, describe within the following columns:

<u>Depth</u> (ft bgl)	<u>Plugging Material Used</u> (include any additives used)	<u>Volume of Material Placed</u> (gallons)	<u>Theoretical Volume of Borehole/ Casing</u> (gallons)	<u>Placement Method</u> (tremie pipe, other)	<u>Comments</u> ("casing perforated first", "open annular space also plugged", etc.)
	Bentonite pellets	80.79		top	

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

**III. SIGNATURE:**

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

  
 \_\_\_\_\_  
 Signature of Well Driller

04/15/2022  
 \_\_\_\_\_  
 Date

# ATTACHMENT 3



# Daily Site Visit Report

Client: EOG Resources Inc. Inspection Date: 4/4/2022

Site Location Name: Gates AAC #2 Report Run Date: 4/4/2022 11:26 PM

Client Contact Name: Chase Settle API #:

Client Contact Phone #: 575-703-6537 Project Owner:

Unique Project ID Project Manager:

Project Reference #

## Summary of Times

Arrived at Site 4/4/2022 8:30 AM

Departed Site 4/4/2022 12:45 PM

## Field Notes

- 9:29 Drilling GW well at 32.734210, -104.381822
- 9:33 Waiting for Hungry Horse to arrive on site and start setting up
- 11:57 Drilling complete to 55' after about 50 minutes
- 12:23 Well required no casing, and will be left covered until DTGW can be established on Wednesday
- 12:40 Taking down rig
- 12:47 Mileage for Gates 31





## Next Steps & Recommendations

- 1 Return on Wednesday to probe well



# Daily Site Visit Report

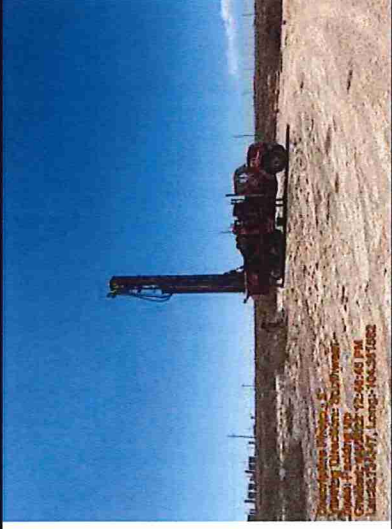
## Site Photos

<p>Viewing Direction: Northeast</p>  <p>Operator: Photo - 1 Viewing Direction: Northeast Date: 5/4/2022 11:28:58 AM Location: 750108, Longitude: 5104, 500000</p>	<p>Viewing Direction: West</p>  <p>Operator: Photo - 2 Viewing Direction: West Date: 5/4/2022 11:30:08 AM Location: 750108, Longitude: 5104, 500000</p>
<p>Site</p>	<p>Setting up</p>
<p>Viewing Direction: Southeast</p>  <p>Operator: Photo - 3 Viewing Direction: Southeast Date: 5/4/2022 11:31:46 AM Location: 750108, Longitude: 511710</p>	<p>Viewing Direction: Southeast</p>  <p>Operator: Photo - 4 Viewing Direction: Southeast Date: 5/4/2022 11:32:08 AM Location: 750108, Longitude: 511710</p>
<p>Below 30'</p>	<p>Samples assessed</p>





# Daily Site Visit Report

Viewing Direction: Southwest
 <p>Company: Vertex Industries, Inc. County: DeWitt County, South Carolina Project: Kentucky AP Operator: 5/4/2022 12:50:46 PM Location: 34.471, Longitude: -82.461882</p>
Packing up

# Daily Site Visit Report



## Daily Site Visit Signature

**Inspector:** Sally Carttar

**Signature:**

Signature



Client Name		Borehole Location		Start Date	Logged by	Northing				
Project Number		Borehole No.		End Date <td>Checked by <td>Easting </td></td>	Checked by <td>Easting </td>	Easting				
Project Name		Borehole Diameter (in)		Top of Well Elevation (m or ft)						
Project Location		Total Depth (m or ft)		Depth to Water (m or ft)						
Project Location		Total Depth (m or ft)		Page						
Client Name		Borehole Location		Start Date	Logged by	Northing				
Project Number		Borehole No.		End Date	Checked by	Easting				
Project Name		Borehole Diameter (in)		Top of Well Elevation (m or ft)						
Project Location		Total Depth (m or ft)		Depth to Water (m or ft)						
Project Location		Total Depth (m or ft)		Page						
Top	Bottom	% Major (>50%)	% Minor (10-40%)	% Trace (<10%)	Gradation	Grain Size	Moisture	Plasticity	Color	Notes
0	0	Fine: Clay, Coarse: Sand	Fine: Clay, Coarse: Sand	Fine: Clay, Coarse: Sand	Poorly Graded	Fine: Fine, Major: Fine, Minor: Fine	Dry	Non Plastic	light grey	
0	5	Fine: Silt, Coarse: Gravel	Fine: Silt, Coarse: Gravel	Fine: Silt, Coarse: Gravel	Well Graded	Fine: Coarse, Major: Coarse, Minor: Coarse	Moist	Plastic		
0	10	Fine: Clay, Coarse: Sand	Fine: Clay, Coarse: Sand	Fine: Clay, Coarse: Sand	Poorly Graded	Fine: Fine, Major: Fine, Minor: Fine	Dry	Non Plastic		
0	10	Fine: Silt, Coarse: Gravel	Fine: Silt, Coarse: Gravel	Fine: Silt, Coarse: Gravel	Well Graded	Fine: Coarse, Major: Coarse, Minor: Coarse	Damp	Slightly Plastic		
0	15	Fine: Clay, Coarse: Sand	Fine: Clay, Coarse: Sand	Fine: Clay, Coarse: Sand	Poorly Graded	Fine: Fine, Major: Fine, Minor: Fine	Dry	Plastic		
0	30	Fine: Silt, Coarse: Gravel	Fine: Silt, Coarse: Gravel	Fine: Silt, Coarse: Gravel	Well Graded	Fine: Coarse, Major: Coarse, Minor: Coarse	Moist	Very Plastic		
0	40	Fine: Clay, Coarse: Sand	Fine: Clay, Coarse: Sand	Fine: Clay, Coarse: Sand	Poorly Graded	Fine: Fine, Major: Fine, Minor: Fine	Dry	Non Plastic		
0	40	Fine: Silt, Coarse: Gravel	Fine: Silt, Coarse: Gravel	Fine: Silt, Coarse: Gravel	Well Graded	Fine: Coarse, Major: Coarse, Minor: Coarse	Damp	Slightly Plastic		
Field Screening										
Depth (m or ft)		CVC/VDC (ppm or LEL)		EC (µS/m or µS/cm)		Lab Sampling (Check Box)				



Client Name		Borehole Location		Start Date		Logged by		Northing						
Project Number		Borehole No.		End Date		Checked by		Easting						
Project Name		Borehole Diameter (in)		Drilling Company		Top of Well Elevation (m or ft)		UTM Zone						
Project Location		Total Depth (m or ft)		Drilling Method		Depth to Water (m or ft)		Page of						
Top (m or ft)	Bottom (m or ft)	% Major (>50%)		% Minor (10-40%)		% Trace (<10%)		Gradation (Major and Coarse only)	Grain Size	Moisture	Plasticity	Color	Notes	
		Fine	Coarse	Fine	Coarse	Fine	Coarse							Major
0	30	Clay	Sand	Clay	Sand	Clay	Sand	Poorly Graded	Fine Medium	Dry Damp Moist	Non Plastic Slightly Plastic Plastic	White	Caliche	
0	40	Clay	Sand	Clay	Sand	Clay	Sand	Poorly Graded	Fine Medium	Dry Damp Moist	Non Plastic Slightly Plastic Plastic	White		
0	5/5	Silt	Gravel	Silt	Gravel	Silt	Gravel	Well Graded	Coarse	Wet Saturated	Very Plastic	Brown		
0	50	Clay	Sand	Clay	Sand	Clay	Sand	Poorly Graded	Fine Medium	Dry Damp Moist	Non Plastic Slightly Plastic Plastic	It. Brown Yellow	Silt clumping	
0	55	Clay	Sand	Clay	Sand	Clay	Sand	Poorly Graded	Fine Medium	Dry Damp Moist	Non Plastic Slightly Plastic Plastic	grey- It. brown		
0	Bottom	Clay	Sand	Clay	Sand	Clay	Sand	Poorly Graded	Fine Medium	Dry Damp Moist	Non Plastic Slightly Plastic Plastic			
Field Screening														
Depth (m or ft)														
CVC/DOC (ppm or LEL)														
EC (µS/m or µS/cm)														
Lab Sampling (Check Box)														



# Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	4/6/2022
Site Location Name:	Gates AAC #2	Report Run Date:	4/7/2022 11:34 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537	Project Owner:	
Unique Project ID		Project Manager:	

## Summary of Times

Arrived at Site	4/6/2022 7:55 AM
Departed Site	4/6/2022 8:40 AM

## Field Notes

- 8:19** Well dry at 55'
- 8:22** DTGW > 50'
- 8:28** Borehole covered back up until it can be plugged

## Next Steps & Recommendations

- 1 Have Hungry Horse return to plug well
- 2 Continue with gates site closure

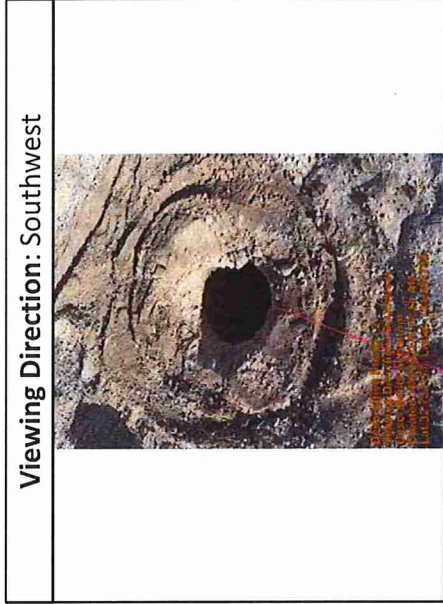


# Daily Site Visit Report

## Site Photos



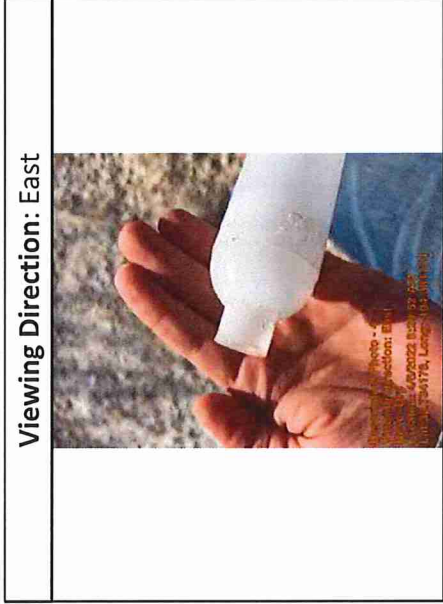
Borehole cover



Bailer at bottom




Tip of bailer collected some dry sediment from bottom of borehole



Dry



# Daily Site Visit Report

	<p>Viewing Direction: South</p> 
Cover replaced	

# Daily Site Visit Report



Daily Site Visit Signature

**Inspector:** Sally Carttar

**Signature:**





# Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	4/11/2022
Site Location Name:	Gates AAC #2	Report Run Date:	4/11/2022 5:55 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537	Project Owner:	
Unique Project ID		Project Manager:	
Project Reference #			

**Summary of Times**

Arrived at Site	4/11/2022 9:45 AM
Departed Site	4/11/2022 10:32 AM

**Field Notes**

**9:50** Second bailing of borehole to determine dtgw if water has accumulated inside borehole

**9:51** Borehole walls have stability to hold up without the use of casing

**10:00** Used 100 ft of rope to attach to bailer and dropped all the way to the bottom with about 6 ft rope remaining above hole to ensure bailer hit bottom and allow time for any water accumulation

**10:01** Pulled bailer back to surface and came back up dry

**10:05** Complete field work and inform driller to plug borehole

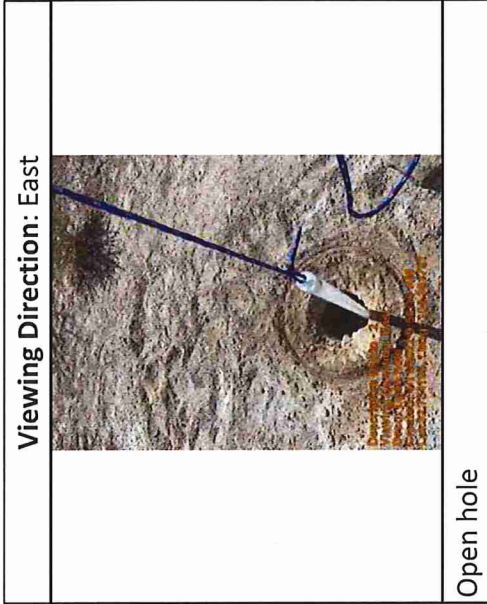
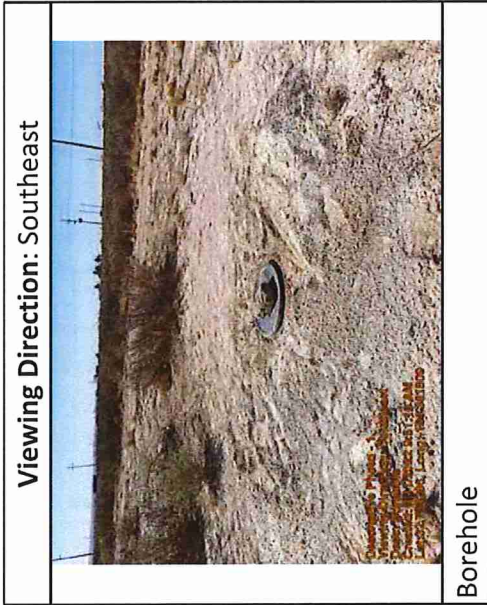
**Next Steps & Recommendations**

- 1 Driller to come and plug well with concrete
- 2 Submit appropriate paperwork



# Daily Site Visit Report

## Site Photos



# Daily Site Visit Report



Daily Site Visit Signature

**Inspector:** Monica Peppin

**Signature:**

Signature

## ATTACHMENT 4

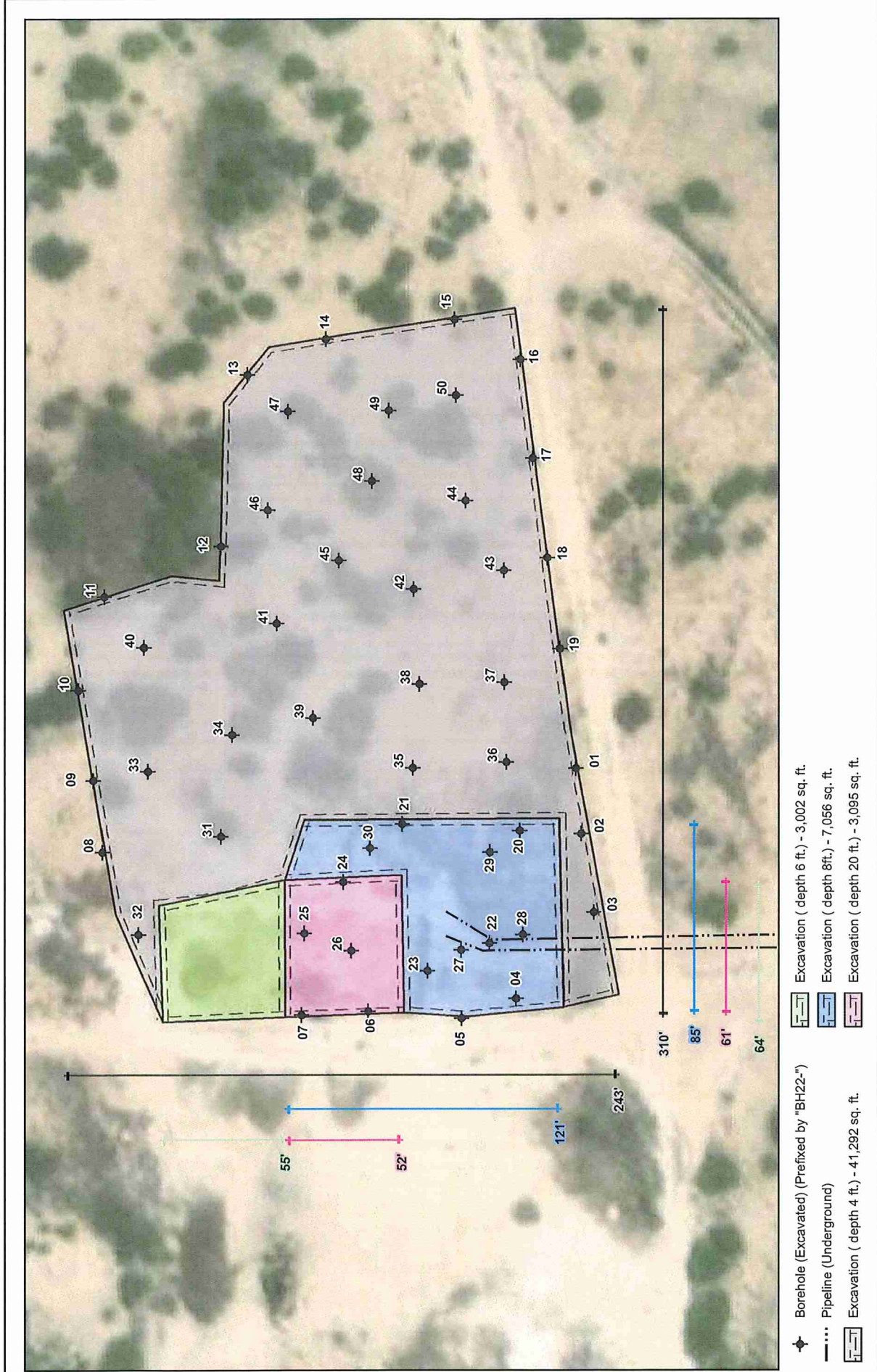


FIGURE: **1**

**Current Excavation  
Gates AAC Battery**

NAD 1983 UTM Zone 13N  
Date: Apr 21/22

0 7.5 15 30 45 ft  
Map Center:  
Lat/Long: 32.736065, -104.374469



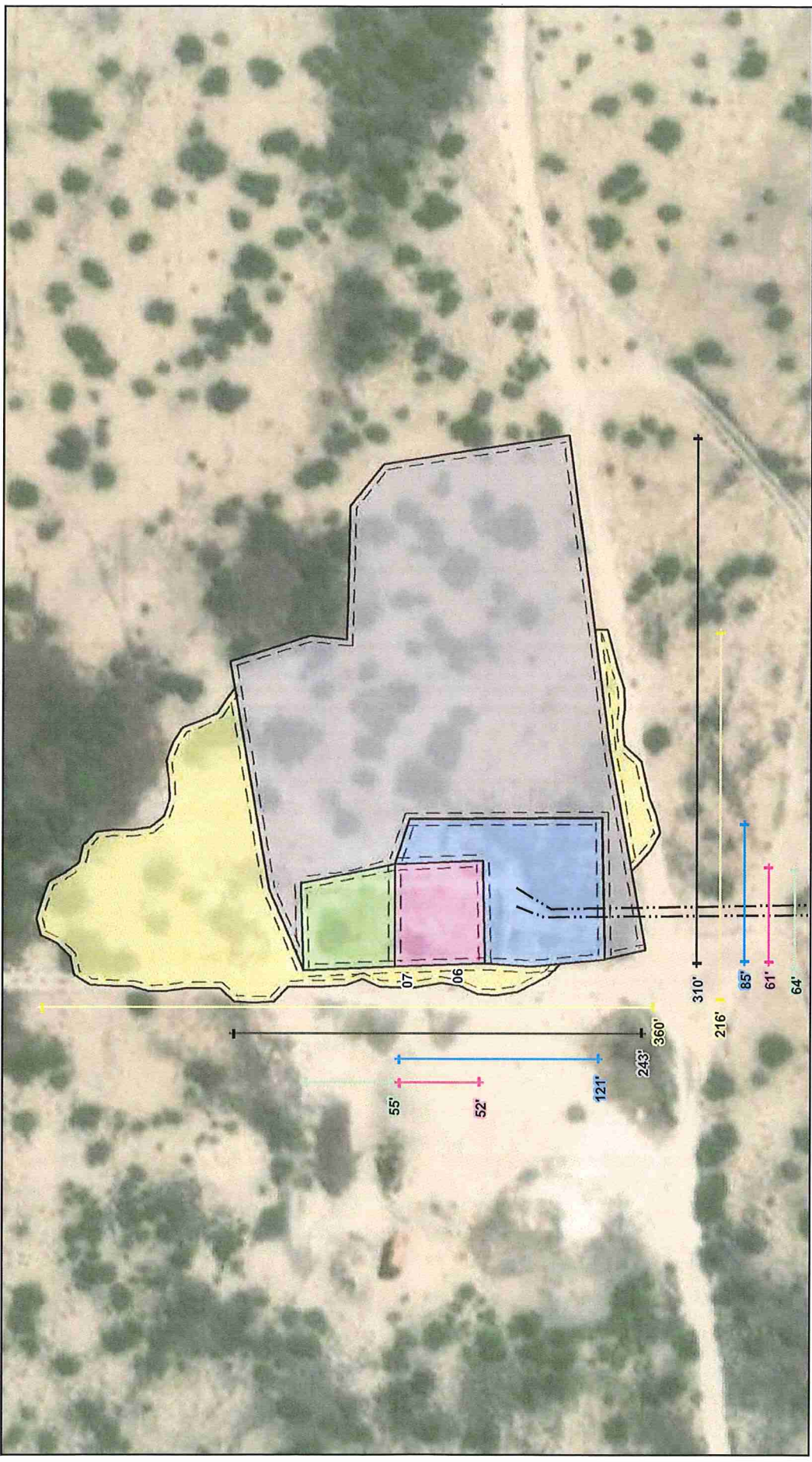
**VERTEX**

**geog resources**

Note: Imagery from ESRI, 2020. Borehole locations from GPS, Vertex Professional Services, Ltd., 2021.

Geospatial data presented in this figure may be derived from external sources and Vertex does not assume any liability for inaccuracies. This figure is intended for reference use only and is not certified for legal, survey, or engineering purposes.

VERSATILITY. EXPERTISE.



- Pipeline (Underground)
- Excavation ( depth 4ft.) - 7,056 sq. ft.
- Excavation ( depth 20 ft.) - 3,095 sq. ft.
- Excavation ( depth 6 ft.) - 3,002 sq. ft.
- Additional Excavation ( depth 4 ft. ) - 18,545 sq. ft.



NAD 1983 UTM Zone 13N  
Date: Apr 20/22

Map Center:  
Lat/Long: 32.736188, -104.374478

0 15 30 60 90 ft

### Additional Excavation Gates AAC Battery

FIGURE: **2**



Geospatial data presented in this figure may be derived from external sources and Vertex does not assume any liability for inaccuracies. This figure is intended for reference use only and is not certified for legal, survey, or engineering purposes.

Note: Imagery from ESRI, 2020. Borehole locations from GPS, Vertex Professional Services, Ltd., 2021.

# ATTACHMENT 5

Client Name: EOG Resources, Inc.  
 Site Name: Gates AAC Battery  
 NMOCD Tracking #: nAPP2127258746  
 Project #: 22E-00124-02  
 Lab Reports: E201130, E201131

Table 2. Excavation Characterization Sample Laboratory Results - Depth to Groundwater 51-100 feet bgs

Sample Description			Petroleum Hydrocarbons							Inorganic Chloride Concentration (mg/kg)
Sample ID	Depth (ft)	Sample Date	Volatile		Extractable					
			Benzene (mg/kg)	BTEX (Total) (mg/kg)	Gasoline Range Organics (GRO) (mg/kg)	Diesel Range Organics (DRO) (mg/kg)	Motor Oil Range Organics (MRO) (mg/kg)	(GRO + DRO) (mg/kg)	Total Petroleum Hydrocarbons (TPH) (mg/kg)	
BH22-01	0-4	1/25/2022	ND	ND	ND	ND	ND	ND	ND	842
BH22-02	0-4	1/25/2022	ND	ND	ND	ND	ND	ND	ND	1350
BH22-03	0-4	1/25/2022	ND	ND	ND	ND	ND	ND	ND	505
BH22-03	4-8	1/25/2022	ND	ND	ND	ND	ND	ND	ND	776
BH22-04	0-4	1/25/2022	ND	ND	ND	ND	ND	ND	ND	373
BH22-05	0-4	1/25/2022	ND	ND	ND	ND	ND	ND	ND	67.6
BH22-06	0-10	1/25/2022	ND	ND	ND	ND	ND	ND	ND	3630
BH22-06	10-20	1/25/2022	ND	ND	ND	49.3	ND	49.3	49.3	5060
BH22-07	0-4	1/25/2022	ND	ND	ND	127	100	127	227	1260
BH22-08	0-4	1/25/2022	ND	ND	ND	ND	ND	ND	ND	253
BH22-09	0-4	1/25/2022	ND	ND	ND	ND	ND	ND	ND	698
BH22-10	0-4	1/25/2022	ND	ND	ND	ND	ND	ND	ND	156
BH22-11	0-4	1/25/2022	ND	ND	ND	ND	ND	ND	ND	88
BH22-12	0-4	1/25/2022	ND	ND	ND	ND	ND	ND	ND	200
BH22-13	0-4	1/25/2022	ND	ND	ND	ND	ND	ND	ND	40.2
BH22-14	0-4	1/25/2022	ND	ND	ND	ND	ND	ND	ND	115
BH22-15	0-4	1/25/2022	ND	ND	ND	ND	ND	ND	ND	38
BH22-16	0-4	1/25/2022	ND	ND	ND	ND	ND	ND	ND	93.6
BH22-17	0-4	1/25/2022	ND	ND	ND	ND	ND	ND	ND	195
BH22-18	0-4	1/25/2022	ND	ND	ND	ND	ND	ND	ND	229
BH22-19	0-4	1/25/2022	ND	ND	ND	ND	ND	ND	ND	1010
BH22-20	4-8	1/25/2022	ND	ND	ND	ND	ND	ND	ND	1160
BH22-21	4-8	1/25/2022	ND	ND	ND	ND	ND	ND	ND	998
BH22-22	4-8	1/25/2022	ND	ND	ND	ND	ND	ND	ND	1050
BH22-23	4-10	1/25/2022	ND	ND	ND	ND	ND	ND	ND	2100
BH22-23	10-20	1/25/2022	ND	ND	ND	ND	ND	ND	ND	2080
BH22-24	10-20	1/25/2022	ND	ND	ND	ND	ND	ND	ND	7410
BH22-25	10-20	1/25/2022	ND	ND	ND	ND	ND	ND	ND	10600
BH22-26	20	1/25/2022	ND	ND	ND	87.9	ND	87.9	87.9	5550
BH22-27	8	1/25/2022	ND	ND	ND	31.4	ND	31.4	31.4	1780
BH22-28	8	1/25/2022	ND	ND	ND	ND	ND	ND	ND	1320
BH22-29	8	1/25/2022	ND	ND	ND	58.6	ND	58.6	58.6	1540
BH22-30	8	1/25/2022	ND	ND	ND	ND	ND	ND	ND	2010
BH22-31	4	1/25/2022	ND	ND	ND	ND	ND	ND	ND	1830
BH22-32	4	1/25/2022	ND	ND	ND	ND	ND	ND	ND	752
BH22-33	4	1/25/2022	ND	ND	ND	ND	ND	ND	ND	1670
BH22-34	4	1/25/2022	ND	ND	ND	ND	ND	ND	ND	846
BH22-35	4	1/25/2022	ND	ND	ND	ND	ND	ND	ND	356
BH22-36	4	1/25/2022	ND	ND	ND	ND	ND	ND	ND	1080



BH22-37	4	1/25/2022	ND	ND	ND	ND	ND	ND	ND	ND	2480
BH22-38	4	1/25/2022	ND	ND	ND	49.1	ND	49.1	49.1	ND	467
BH22-39	4	1/25/2022	ND	ND	ND	ND	ND	ND	ND	ND	445
BH22-40	4	1/25/2022	ND	ND	ND	ND	ND	ND	ND	ND	467
BH22-41	4	1/25/2022	ND	ND	ND	ND	ND	ND	ND	ND	715
BH22-42	4	1/25/2022	ND	ND	ND	ND	ND	ND	ND	ND	501
BH22-43	4	1/25/2022	ND	ND	ND	110	ND	110	110	ND	81
BH22-44	4	1/25/2022	ND	ND	ND	ND	ND	ND	ND	ND	875
BH22-45	4	1/25/2022	ND	ND	ND	ND	ND	ND	ND	ND	299
BH22-46	4	1/25/2022	ND	ND	ND	ND	ND	ND	ND	ND	98.9
BH22-47	4	1/25/2022	ND	ND	ND	ND	ND	ND	ND	ND	129
BH22-48	4	1/25/2022	ND	ND	ND	ND	ND	ND	ND	ND	101
BH22-49	4	1/25/2022	ND	ND	ND	ND	ND	ND	ND	ND	55.3
BH22-50	4	1/25/2022	ND	ND	ND	ND	ND	ND	ND	ND	327

"ND" Not Detected at the Reporting Limit

"-" indicates not analyzed/assessed

**Bold and grey shaded indicates exceedance outside of NMOCD Closure Criteria**

**Bold and green shaded indicates exceedance outside of NMOCD Reclamation Criteria**

## ATTACHMENT 6

Report to:  
Monica Peppin



# envirotech

*Practical Solutions for a Better Tomorrow*



## Analytical Report

EOG Resources Inc. - Carlsbad

Project Name: Gates AAC #2

Work Order: E201130

Job Number: 19034-0001

Received: 1/26/2022

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
1/28/22

5796 U.S. Hwy 64  
Farmington, NM 87401

Phone: (505) 632-1881  
Envirotech-inc.com



Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.  
Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.  
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.  
Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.  
Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.  
Envirotech Inc, holds the NM SDWA certification for data reported. (Lab #NM00979)

Date Reported: 1/28/22



Monica Peppin  
104 South 4th Street  
Artesia, NM 88210

Project Name: Gates AAC #2  
Workorder: E201130  
Date Received: 1/26/2022 6:30:00PM

Monica Peppin,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 1/26/2022 6:30:00PM, under the Project Name: Gates AAC #2.

The analytical test results summarized in this report with the Project Name: Gates AAC #2 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues regarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

**Walter Hinchman**  
Laboratory Director  
Office: 505-632-1881  
Cell: 775-287-1762  
[whinchman@envirotech-inc.com](mailto:whinchman@envirotech-inc.com)

**Raina Schwanz**  
Laboratory Administrator  
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**Alexa Michaels**  
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**West Texas Midland/Odessa Area**  
**Rayny Hagan**  
Technical Representative  
Office: 505-421-LABS(5227)

Envirotech Web Address: [www.envirotech-inc.com](http://www.envirotech-inc.com)

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### Sample Summary

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 01/28/22 15:30
--	--	-----------------------------

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH22-01 0-4'	E201130-01A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-02 0-4'	E201130-02A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-03 0-4'	E201130-03A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-03 4-8'	E201130-04A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-04 0-4'	E201130-05A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-05 0-4'	E201130-06A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-06 0-10'	E201130-07A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-06 10-20'	E201130-08A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-07 0-8'	E201130-09A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-08 0-4	E201130-10A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-09 0-4	E201130-11A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-10 0-4	E201130-12A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-11 0-4	E201130-13A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-12 0-4	E201130-14A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-13 0-4	E201130-15A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-14 0-4	E201130-16A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-15 0-4	E201130-17A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-16 0-4	E201130-18A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-17 0-4	E201130-19A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-18 0-4	E201130-20A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-19 0-4'	E201130-21A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-20 4-8	E201130-22A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-21 4-8'	E201130-23A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-22 4-8'	E201130-24A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-23 4-10'	E201130-25A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-23 10-20'	E201130-26A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-24 10-20'	E201130-27A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-25 10-20'	E201130-28A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.

### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 3:30:11PM
--	--	----------------------------------

**BH22-01 0-4'**

**E201130-01**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205055
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		96.6 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205055
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		94.0 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205047
Diesel Range Organics (C10-C28)	ND	25.0	1	01/26/22	01/26/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/26/22	
<i>Surrogate: n-Nonane</i>						
		80.5 %	50-200	01/26/22	01/26/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205045
Chloride	842	20.0	1	01/26/22	01/27/22	





### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 3:30:11PM
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**BH22-02 0-4'**

**E201130-02**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205055
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.3 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205055
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	93.7 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205047
Diesel Range Organics (C10-C28)	ND	25.0	1	01/26/22	01/26/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/26/22	
<i>Surrogate: n-Nonane</i>						
	94.4 %	50-200		01/26/22	01/26/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205045
Chloride	1350	200	10	01/26/22	01/27/22	



### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 3:30:11PM
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**BH22-03 0-4'**

**E201130-03**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205055
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		97.8 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205055
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		94.1 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205047
Diesel Range Organics (C10-C28)	ND	25.0	1	01/26/22	01/26/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/26/22	
<i>Surrogate: n-Nonane</i>						
		99.2 %	50-200	01/26/22	01/26/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205045
Chloride	505	200	10	01/26/22	01/27/22	



### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 3:30:11PM
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**BH22-03 4-8'**

**E201130-04**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205055
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.9 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205055
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	93.7 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205047
Diesel Range Organics (C10-C28)	ND	25.0	1	01/26/22	01/26/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/26/22	
<i>Surrogate: n-Nonane</i>						
	88.6 %	50-200		01/26/22	01/26/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205045
Chloride	776	200	10	01/26/22	01/27/22	

### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 3:30:11PM
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**BH22-04 0-4'**

**E201130-05**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205055
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		97.2 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205055
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		94.6 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205047
Diesel Range Organics (C10-C28)	ND	25.0	1	01/26/22	01/26/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/26/22	
<i>Surrogate: n-Nonane</i>						
		93.6 %	50-200	01/26/22	01/26/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205045
Chloride	373	20.0	1	01/26/22	01/27/22	



### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 3:30:11PM
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BH22-05 0-4'

E201130-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatiles by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205055
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	98.0 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205055
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.4 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205047
Diesel Range Organics (C10-C28)	ND	25.0	1	01/26/22	01/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/27/22	
<i>Surrogate: n-Nonane</i>						
	99.4 %	50-200		01/26/22	01/27/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205045
Chloride	67.6	20.0	1	01/26/22	01/27/22	



### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 3:30:11PM
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**BH22-06 0-10'**

**E201130-07**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205055
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	97.6 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205055
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.0 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205047
Diesel Range Organics (C10-C28)	ND	25.0	1	01/26/22	01/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/27/22	
<i>Surrogate: n-Nonane</i>						
	95.9 %	50-200		01/26/22	01/27/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205045
Chloride	3630	400	20	01/26/22	01/27/22	



## Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 3:30:11PM
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**BH22-06 10-20'**

**E201130-08**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205055
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		100 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205055
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		93.4 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205047
Diesel Range Organics (C10-C28)	49.3	25.0	1	01/26/22	01/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/27/22	
<i>Surrogate: n-Nonane</i>						
		100 %	50-200	01/26/22	01/27/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205045
Chloride	5060	400	20	01/26/22	01/27/22	



### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 3:30:11PM
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**BH22-07 0-8'**

**E201130-09**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205055
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	97.1 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205055
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	93.1 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205047
Diesel Range Organics (C10-C28)	127	25.0	1	01/26/22	01/27/22	
Oil Range Organics (C28-C36)	100	50.0	1	01/26/22	01/27/22	
<i>Surrogate: n-Nonane</i>						
	93.5 %	50-200		01/26/22	01/27/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205045
Chloride	1260	200	10	01/26/22	01/27/22	





### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 3:30:11PM
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**BH22-08 0-4**

**E201130-10**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205055
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	99.5 %		70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205055
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.6 %		70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205047
Diesel Range Organics (C10-C28)	ND	25.0	1	01/26/22	01/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/27/22	
<i>Surrogate: n-Nonane</i>						
	98.4 %		50-200	01/26/22	01/27/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205045
Chloride	253	40.0	2	01/26/22	01/27/22	



### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 3:30:11PM
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**BH22-09 0-4**

**E201130-11**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205055
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	98.2 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205055
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	93.8 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205047
Diesel Range Organics (C10-C28)	ND	25.0	1	01/26/22	01/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/27/22	
<i>Surrogate: n-Nonane</i>						
	94.8 %	50-200		01/26/22	01/27/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205045
Chloride	698	40.0	2	01/26/22	01/27/22	

### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 3:30:11PM
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**BH22-10 0-4**

**E201130-12**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205055
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	98.2 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205055
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.4 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205047
Diesel Range Organics (C10-C28)	ND	25.0	1	01/26/22	01/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/27/22	
<i>Surrogate: n-Nonane</i>						
	103 %	50-200		01/26/22	01/27/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205045
Chloride	156	20.0	1	01/26/22	01/27/22	



### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 3:30:11PM
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**BH22-11 0-4**  
**E201130-13**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205055
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	98.2 %		70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205055
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.4 %		70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205047
Diesel Range Organics (C10-C28)	ND	25.0	1	01/26/22	01/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/27/22	
<i>Surrogate: n-Nonane</i>						
	84.0 %		50-200	01/26/22	01/27/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205045
Chloride	88.0	20.0	1	01/26/22	01/27/22	

### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 3:30:11PM
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**BH22-12 0-4**

**E201130-14**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205055
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	98.5 %		70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205055
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.8 %		70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205047
Diesel Range Organics (C10-C28)	ND	25.0	1	01/26/22	01/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/27/22	
<i>Surrogate: n-Nonane</i>						
	99.3 %		50-200	01/26/22	01/27/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205045
Chloride	200	20.0	1	01/26/22	01/27/22	



### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 3:30:11PM
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**BH22-13 0-4**  
**E201130-15**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatiles by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205055
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		98.2 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205055
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		94.4 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205047
Diesel Range Organics (C10-C28)	ND	25.0	1	01/26/22	01/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/27/22	
<i>Surrogate: n-Nonane</i>						
		105 %	50-200	01/26/22	01/27/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205045
Chloride	40.2	20.0	1	01/26/22	01/27/22	

### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 3:30:11PM
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**BH22-14 0-4**

**E201130-16**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205055
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	98.4 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205055
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	93.1 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205047
Diesel Range Organics (C10-C28)	ND	25.0	1	01/26/22	01/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/27/22	
<i>Surrogate: n-Nonane</i>						
	103 %	50-200		01/26/22	01/27/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205045
Chloride	115	20.0	1	01/26/22	01/27/22	



### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 3:30:11PM
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**BH22-15 0-4**

**E201130-17**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatiles by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205055
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	97.8 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205055
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	93.8 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205047
Diesel Range Organics (C10-C28)	ND	25.0	1	01/26/22	01/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/27/22	
<i>Surrogate: n-Nonane</i>						
	102 %	50-200		01/26/22	01/27/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205045
Chloride	38.0	20.0	1	01/26/22	01/27/22	





### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 3:30:11PM
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**BH22-16 0-4**  
**E201130-18**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatiles by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205055
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	97.3 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205055
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	93.8 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205047
Diesel Range Organics (C10-C28)	ND	25.0	1	01/26/22	01/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/27/22	
<i>Surrogate: n-Nonane</i>						
	104 %	50-200		01/26/22	01/27/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205045
Chloride	93.6	20.0	1	01/26/22	01/27/22	

### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 3:30:11PM
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**BH22-17 0-4**  
**E201130-19**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205055
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	98.3 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205055
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.2 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205047
Diesel Range Organics (C10-C28)	378	25.0	1	01/26/22	01/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/27/22	
<i>Surrogate: n-Nonane</i>						
	87.3 %	50-200		01/26/22	01/27/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205045
Chloride	195	20.0	1	01/26/22	01/27/22	



### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 3:30:11PM
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**BH22-18 0-4**

**E201130-20**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205055
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		99.2 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205055
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		93.6 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205047
Diesel Range Organics (C10-C28)	ND	25.0	1	01/26/22	01/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/27/22	
<i>Surrogate: n-Nonane</i>						
		104 %	50-200	01/26/22	01/27/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205045
Chloride	229	20.0	1	01/26/22	01/27/22	



### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 3:30:11PM
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**BH22-19 0-4'**

**E201130-21**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205054
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.5 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205054
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	101 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205048
Diesel Range Organics (C10-C28)	ND	25.0	1	01/26/22	01/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/27/22	
<i>Surrogate: n-Nonane</i>						
	91.0 %	50-200		01/26/22	01/27/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205051
Chloride	1010	20.0	1	01/26/22	01/27/22	



### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 3:30:11PM
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**BH22-20 4-8**  
**E201130-22**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205054
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.1 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205054
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	101 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205048
Diesel Range Organics (C10-C28)	ND	25.0	1	01/26/22	01/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/27/22	
<i>Surrogate: n-Nonane</i>						
	92.1 %	50-200		01/26/22	01/27/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205051
Chloride	1160	200	10	01/26/22	01/27/22	

### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 3:30:11PM
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**BH22-21 4-8'**

**E201130-23**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205054
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.4 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205054
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	101 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205048
Diesel Range Organics (C10-C28)	ND	25.0	1	01/26/22	01/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/27/22	
<i>Surrogate: n-Nonane</i>						
	106 %	50-200		01/26/22	01/27/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205051
Chloride	998	200	10	01/26/22	01/27/22	



### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 3:30:11PM
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**BH22-22 4-8'**

**E201130-24**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205054
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.5 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205054
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	102 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205048
Diesel Range Organics (C10-C28)	ND	25.0	1	01/26/22	01/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/27/22	
<i>Surrogate: n-Nonane</i>						
	110 %	50-200		01/26/22	01/27/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205051
Chloride	1050	200	10	01/26/22	01/27/22	



### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 3:30:11PM
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**BH22-23 4-10'**

**E201130-25**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205054
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.8 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205054
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	102 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205048
Diesel Range Organics (C10-C28)	ND	25.0	1	01/26/22	01/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/27/22	
<i>Surrogate: n-Nonane</i>						
	99.8 %	50-200		01/26/22	01/27/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205051
Chloride	2100	400	20	01/26/22	01/27/22	





### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 3:30:11PM
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**BH22-23 10-20'**

**E201130-26**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205054
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.7 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205054
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	102 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205048
Diesel Range Organics (C10-C28)	ND	25.0	1	01/26/22	01/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/27/22	
<i>Surrogate: n-Nonane</i>						
	108 %	50-200		01/26/22	01/27/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205051
Chloride	2080	40.0	2	01/26/22	01/27/22	



### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 3:30:11PM
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**BH22-24 10-20'**

**E201130-27**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205054
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.5 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205054
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	103 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205048
Diesel Range Organics (C10-C28)	ND	25.0	1	01/26/22	01/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/27/22	
<i>Surrogate: n-Nonane</i>						
	108 %	50-200		01/26/22	01/27/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205051
Chloride	7410	400	20	01/26/22	01/27/22	



### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 3:30:11PM
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**BH22-25 10-20'**  
**E201130-28**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatiles by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205054
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		93.8 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205054
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		100 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205048
Diesel Range Organics (C10-C28)	408	50.0	2	01/26/22	01/27/22	
Oil Range Organics (C28-C36)	325	100	2	01/26/22	01/27/22	
<i>Surrogate: n-Nonane</i>						
		73.3 %	50-200	01/26/22	01/27/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205051
Chloride	10600	400	20	01/26/22	01/27/22	

### QC Summary Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 3:30:11PM
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#### Volatile Organics by EPA 8021B

Analyst: RKS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

**Blank (2205054-BLK1)**

Prepared: 01/26/22 Analyzed: 01/27/22

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	7.61		8.00		95.1			70-130	

**LCS (2205054-BS1)**

Prepared: 01/26/22 Analyzed: 01/27/22

Benzene	4.34	0.0250	5.00		86.8			70-130	
Ethylbenzene	4.46	0.0250	5.00		89.1			70-130	
Toluene	4.65	0.0250	5.00		93.0			70-130	
o-Xylene	4.45	0.0250	5.00		89.1			70-130	
p,m-Xylene	9.08	0.0500	10.0		90.8			70-130	
Total Xylenes	13.5	0.0250	15.0		90.2			70-130	
Surrogate: 4-Bromochlorobenzene-PID	7.62		8.00		95.2			70-130	

**Matrix Spike (2205054-MS1)**

Source: E201137-02

Prepared: 01/26/22 Analyzed: 01/27/22

Benzene	4.78	0.0250	5.00	ND	95.5			54-133	
Ethylbenzene	4.95	0.0250	5.00	ND	98.9			61-133	
Toluene	5.12	0.0250	5.00	ND	102			61-130	
o-Xylene	4.89	0.0250	5.00	ND	97.7			63-131	
p,m-Xylene	10.1	0.0500	10.0	ND	101			63-131	
Total Xylenes	15.0	0.0250	15.0	ND	99.7			63-131	
Surrogate: 4-Bromochlorobenzene-PID	7.89		8.00		98.6			70-130	

**Matrix Spike Dup (2205054-MSD1)**

Source: E201137-02

Prepared: 01/26/22 Analyzed: 01/27/22

Benzene	4.83	0.0250	5.00	ND	96.7	54-133	1.22	20
Ethylbenzene	4.99	0.0250	5.00	ND	99.8	61-133	0.844	20
Toluene	5.17	0.0250	5.00	ND	103	61-130	0.991	20
o-Xylene	4.92	0.0250	5.00	ND	98.5	63-131	0.730	20
p,m-Xylene	10.1	0.0500	10.0	ND	101	63-131	0.596	20
Total Xylenes	15.1	0.0250	15.0	ND	100	63-131	0.640	20
Surrogate: 4-Bromochlorobenzene-PID	7.83		8.00		97.8	70-130		



### QC Summary Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 3:30:11PM
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#### Volatile Organics by EPA 8021B

Analyst: RKS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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#### Blank (2205055-BLK1)

Prepared: 01/26/22 Analyzed: 01/27/22

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	7.84		8.00		98.0	70-130			

#### LCS (2205055-BS1)

Prepared: 01/26/22 Analyzed: 01/27/22

Benzene	4.24	0.0250	5.00		84.8	70-130			
Ethylbenzene	4.27	0.0250	5.00		85.4	70-130			
Toluene	4.39	0.0250	5.00		87.7	70-130			
o-Xylene	4.37	0.0250	5.00		87.4	70-130			
p,m-Xylene	8.68	0.0500	10.0		86.8	70-130			
Total Xylenes	13.0	0.0250	15.0		87.0	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.95		8.00		99.4	70-130			

#### Matrix Spike (2205055-MS1)

Source: E201130-04

Prepared: 01/26/22 Analyzed: 01/27/22

Benzene	4.31	0.0250	5.00	ND	86.3	54-133			
Ethylbenzene	4.34	0.0250	5.00	ND	86.9	61-133			
Toluene	4.46	0.0250	5.00	ND	89.2	61-130			
o-Xylene	4.44	0.0250	5.00	ND	88.9	63-131			
p,m-Xylene	8.84	0.0500	10.0	ND	88.4	63-131			
Total Xylenes	13.3	0.0250	15.0	ND	88.6	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.98		8.00		99.7	70-130			

#### Matrix Spike Dup (2205055-MSD1)

Source: E201130-04

Prepared: 01/26/22 Analyzed: 01/27/22

Benzene	4.43	0.0250	5.00	ND	88.5	54-133	2.59	20	
Ethylbenzene	4.44	0.0250	5.00	ND	88.9	61-133	2.32	20	
Toluene	4.57	0.0250	5.00	ND	91.4	61-130	2.53	20	
o-Xylene	4.55	0.0250	5.00	ND	91.1	63-131	2.44	20	
p,m-Xylene	9.04	0.0500	10.0	ND	90.4	63-131	2.20	20	
Total Xylenes	13.6	0.0250	15.0	ND	90.6	63-131	2.28	20	
Surrogate: 4-Bromochlorobenzene-PID	7.92		8.00		99.0	70-130			



### QC Summary Data

EOG Resources Inc. - Carlsbad	Project Name:	Gates AAC #2	Reported:
104 South 4th Street	Project Number:	19034-0001	
Artesia NM, 88210	Project Manager:	Monica Peppin	1/28/2022 3:30:11PM

#### Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RKS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

**Blank (2205054-BLK1)**

Prepared: 01/26/22 Analyzed: 01/27/22

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.06		8.00		101	70-130			

**LCS (2205054-BS2)**

Prepared: 01/26/22 Analyzed: 01/27/22

Gasoline Range Organics (C6-C10)	47.8	20.0	50.0		95.6	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.29		8.00		104	70-130			

**Matrix Spike (2205054-MS2)**

Source: E201137-02

Prepared: 01/26/22 Analyzed: 01/27/22

Gasoline Range Organics (C6-C10)	48.5	20.0	50.0	ND	97.1	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.34		8.00		104	70-130			

**Matrix Spike Dup (2205054-MSD2)**

Source: E201137-02

Prepared: 01/26/22 Analyzed: 01/27/22

Gasoline Range Organics (C6-C10)	48.0	20.0	50.0	ND	96.0	70-130	1.05	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.35		8.00		104	70-130			



### QC Summary Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 3:30:11PM
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#### Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RKS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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<b>Blank (2205055-BLK1)</b>	Prepared: 01/26/22 Analyzed: 01/27/22
Gasoline Range Organics (C6-C10)	ND      20.0
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.78      8.00      97.2      70-130

<b>LCS (2205055-BS2)</b>	Prepared: 01/26/22 Analyzed: 01/27/22
Gasoline Range Organics (C6-C10)	49.0      20.0      50.0      98.0      70-130
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.82      8.00      97.7      70-130

<b>Matrix Spike (2205055-MS2)</b>	Source: E201130-04	Prepared: 01/26/22 Analyzed: 01/27/22
Gasoline Range Organics (C6-C10)	50.1      20.0      50.0      ND      100      70-130	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.83      8.00      97.8      70-130	

<b>Matrix Spike Dup (2205055-MSD2)</b>	Source: E201130-04	Prepared: 01/26/22 Analyzed: 01/27/22
Gasoline Range Organics (C6-C10)	48.3      20.0      50.0      ND      96.6      70-130      3.77      20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.84      8.00      98.0      70-130	

### QC Summary Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 3:30:11PM
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#### Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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**Blank (2205047-BLK1)** Prepared: 01/26/22 Analyzed: 01/27/22

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	51.4		50.0		103	50-200			

**LCS (2205047-BS1)** Prepared: 01/26/22 Analyzed: 01/27/22

Diesel Range Organics (C10-C28)	473	25.0	500		94.7	38-132			
Surrogate: n-Nonane	48.5		50.0		97.1	50-200			

**Matrix Spike (2205047-MS1)** Source: E201130-19 Prepared: 01/26/22 Analyzed: 01/27/22

Diesel Range Organics (C10-C28)	777	25.0	500	378	79.7	38-132			
Surrogate: n-Nonane	47.0		50.0		94.0	50-200			

**Matrix Spike Dup (2205047-MSD1)** Source: E201130-19 Prepared: 01/26/22 Analyzed: 01/27/22

Diesel Range Organics (C10-C28)	734	25.0	500	378	71.2	38-132	5.61	20	
Surrogate: n-Nonane	44.2		50.0		88.5	50-200			



### QC Summary Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 3:30:11PM
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#### Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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**Blank (2205048-BLK1)** Prepared: 01/26/22 Analyzed: 01/27/22

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
<i>Surrogate: n-Nonane</i>	47.4		50.0		94.8	50-200			

**LCS (2205048-BS1)** Prepared: 01/26/22 Analyzed: 01/27/22

Diesel Range Organics (C10-C28)	492	25.0	500		98.3	38-132			
<i>Surrogate: n-Nonane</i>	43.9		50.0		87.8	50-200			

**Matrix Spike (2205048-MS1)** Source: E201130-21 Prepared: 01/26/22 Analyzed: 01/27/22

Diesel Range Organics (C10-C28)	502	25.0	500	ND	100	38-132			
<i>Surrogate: n-Nonane</i>	47.7		50.0		95.5	50-200			

**Matrix Spike Dup (2205048-MSD1)** Source: E201130-21 Prepared: 01/26/22 Analyzed: 01/27/22

Diesel Range Organics (C10-C28)	488	25.0	500	ND	97.6	38-132	2.83	20	
<i>Surrogate: n-Nonane</i>	48.0		50.0		96.0	50-200			

### QC Summary Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 3:30:11PM
--	--	----------------------------------

#### Anions by EPA 300.0/9056A

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

**Blank (2205045-BLK1)** Prepared: 01/26/22 Analyzed: 01/27/22

Chloride	ND	20.0							
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**LCS (2205045-BS1)** Prepared: 01/26/22 Analyzed: 01/27/22

Chloride	265	20.0	250		106	90-110			
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**Matrix Spike (2205045-MS1)** Source: E201130-01 Prepared: 01/26/22 Analyzed: 01/27/22

Chloride	1020	20.0	250	842	70.2	80-120			M2
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**Matrix Spike Dup (2205045-MSD1)** Source: E201130-01 Prepared: 01/26/22 Analyzed: 01/27/22

Chloride	1160	20.0	250	842	128	80-120	13.3	20	M2
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### QC Summary Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 3:30:11PM
--	--	----------------------------------

#### Anions by EPA 300.0/9056A

Analyst: RAS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec % %	Rec Limits %	RPD %	RPD Limit %	Notes
<b>Blank (2205051-BLK1)</b>									
Chloride	ND	20.0							Prepared: 01/26/22 Analyzed: 01/27/22
<b>LCS (2205051-BS1)</b>									
Chloride	259	20.0	250		103	90-110			Prepared: 01/26/22 Analyzed: 01/27/22
<b>Matrix Spike (2205051-MS1)</b>									
Chloride	1290	20.0	250	1010	111	80-120			Source: E201130-21 Prepared: 01/26/22 Analyzed: 01/27/22
<b>Matrix Spike Dup (2205051-MSD1)</b>									
Chloride	1290	20.0	250	1010	110	80-120	0.269	20	

**QC Summary Report Comment:**

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.



### Definitions and Notes

EOG Resources Inc. - Carlsbad	Project Name:	Gates AAC #2	<b>Reported:</b> 01/28/22 15:30
104 South 4th Street	Project Number:	19034-0001	
Artesia NM, 88210	Project Manager:	Monica Peppin	

M2 Matrix spike recovery was outside quality control limits. The associated LCS spike recovery was acceptable.

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

Note (1): Methods marked with \*\* are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



Client: EOG - Bob Asher  
 Project: Gostes A/C #2  
 Sampler: SPC  
 Phone: 575-361-9880  
 Email(s): m.peppin@vestex.ca  
 Project Manager: Monica Peppin

RUSH?  
 1d  
 3d

Page 3 of 3

Sample ID	Sample Date	Sample Time	Matrix	QTY - Vol/TYPE/Preservative	Analysis and Method				Lab Only
					GRO/DRO by 8015	BTEX by 8021	TPH by 418.1	Chloride by 300.0	
BH22-01	1/25	1:00	soil	40z	✓	✓	✓	✓	1
BH22-02		1:05							2
BH22-03		1:10							3
BH22-03		1:15							4
BH22-04		1:20							5
BH22-05		1:25							6
BH22-06		1:30							7
BH22-06		1:35							8
BH22-07		1:40							9
BH22-08		1:45							10

Lab Use Only  
 Lab WO# PE201130  
 Job Number 19034-0001

Containers of 3

Received by: (Signature) [Signature] Date 1-26-22 Time 9:20  
 Received by: (Signature) [Signature] Date 1/26/22 Time 18:30

Relinquished by: (Signature) [Signature] Date 1/26 Date 13:05

Sample Matrix: S - Solid, Sg - Sludge, A - Aqueous, O - Other

\*\*Received on Ice  N  
 T1 T2 T3  
 AVG Temp °C 4

Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

\*\*Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Notes/Billing info:  
 Chain of Custody  
 Direct bill EOG cc: M. Peppin report



57615 Highway 64, Farmington, NH 07401  
 Three Springs, 65 Mercede Street, Suite 115, Ouray, CO 81301

Ph: (505) 632-0615 Fax: (505) 632-1665  
 Ph: (970) 259-0615 Fax: (970) 362-1079



Client: EOG - Bob Asher  
 Project: Gates AAC #2  
 Sampler: SPC  
 Phone: 575-361-9880  
 Email(s): mpeppin@vertex.ca  
 Project Manager: Monica Peppin

RUSH?  
 1d  
 3d

Page 2 of 3

Sample ID	Sample Date	Sample Time	Matrix	QTY - Vol/TYPE/Preservative	Lab Use Only				Analysis and Method				Lab Only	
					Containers	Lab WO#	Job Number	GRO/DRO by 8015	BTEX by 8021	TPH by 418.1	Chloride by 300.0	TPH 8015D		Lab Number
BH22-09	1/25	1:50	Soil	4oz									11	
BH22-10		1:55											12	
BH22-11		2:00											13	
BH22-12		2:05											14	
BH22-13		2:10											15	
BH22-14		2:15											16	
BH22-15		2:20											17	
BH22-16		2:25											18	
BH22-17		2:30											19	
BH22-18		2:35											20	

Relinquished by: (Signature) [Signature] Date 1/26 Time 9:20  
 Relinquished by: (Signature) [Signature] Date 1-26-22 Time 1305  
 Received by: (Signature) [Signature] Date 1-26-22 Time 9:20  
 Received by: (Signature) [Signature] Date 1/26/22 Time 18:30  
 \*\*Received on Ice  N  
 T1 \_\_\_\_\_ T2 \_\_\_\_\_ T3 \_\_\_\_\_  
 AVG Temp °C 4

Sample Mgr: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other \_\_\_\_\_  
 Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

\*\*Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Sample(s) dropped off after hours to a secure drop off area.

Chain of Custody

Notes/Billing info:

Direct Bill EOG CC: M. Peppin report



5786 US Highway 64, Farmington, NM 87401  
 Three Springs - 63 Mercade Street, Suite 115, Durango, CO 81301

Ph: (505) 612-0615 Fr: (505) 632-1865  
 Fax: (970) 254-0615 Fr: (800) 362-1879



Client: EOG - Bob Asher  
 Project: Gates AAC #2  
 Sampler: SPC  
 Phone: 575-361-9880  
 Email(s): mpeppin@vertex.ca  
 Project Manager: Monica Peppin

RUSH?  
 1d  
 3d

Page 3 of 3

Sample ID	Sample Date	Sample Time	Matrix	Containers QTY - Vol/TYPE/Preservative	Lab Use Only				Analysis and Method				Lab Only Lab Number	Correct Cont/Prsrv (s) Y/N
					GRO/DRO by 8015	BTEX by 8021	TPH by 418.1	Chloride by 300.0	TPH 8015D					
BH22-19	0-4'	1/25	soil	4 oz	✓				✓				22	
BH22-20	<del>0-4'</del> 4-8'												22	
BH22-21	4-8'												23	
BH22-22	4-8'												24	
BH22-23	4-10'												25	
BH22-23	10-20'												26	
BH22-24	10-20'												27	
BH22-25	10-20'												28	
													27	

Received by: (Signature) *[Signature]* Date 1-26-22 Time 9:20  
 Relinquished by: (Signature) *[Signature]* Date 1-26-22 Time 13:05  
 Received by: (Signature) *[Signature]* Date 1-26-22 Time 18:30  
 Relinquished by: (Signature) *[Signature]* Date 1-26-22 Time 18:30  
 \*\*Received on Ice  / N  
 T1 \_\_\_\_\_ T2 \_\_\_\_\_ T3 \_\_\_\_\_  
 AVG Temp °C 4  
 Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA  
 \*\*Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Chain of Custody  
 Direct bill EOG CC: M. Peppin report



5750 US Highway 64, Farmington, NJ 07401  
 Three Springs - 65 Mercede Street, Suite 115, Durango, CO 81301  
 Ph: (505) 612-0615 Fr: (505) 612-1665  
 Ph: (970) 259-0615 Fr: (800) 362-3879

# Envirotech Analytical Laboratory

Printed: 1/27/2022 9:20:48AM

## Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client: EOG Resources Inc. - Carlsbad	Date Received: 01/26/22 18:30	Work Order ID: E201130
Phone: (575) 748-4217	Date Logged In: 01/26/22 10:00	Logged In By: Caitlin Christian
Email: mpeppin@vertex.ca	Due Date: 01/28/22 17:00 (1 day TAT)	

### Chain of Custody (COC)

- 1. Does the sample ID match the COC? Yes
  - 2. Does the number of samples per sampling site location match the COC? Yes
  - 3. Were samples dropped off by client or carrier? Yes
  - 4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
  - 5. Were all samples received within holding time? Yes
- Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: Courier

### Sample Turn Around Time (TAT)

- 6. Did the COC indicate standard TAT, or Expedited TAT? Yes

### Sample Cooler

- 7. Was a sample cooler received? Yes
  - 8. If yes, was cooler received in good condition? Yes
  - 9. Was the sample(s) received intact, i.e., not broken? Yes
  - 10. Were custody/security seals present? No
  - 11. If yes, were custody/security seals intact? NA
  - 12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6±2°C Yes
- Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling
- 13. If no visible ice, record the temperature. Actual sample temperature: 4°C

### Sample Container

- 14. Are aqueous VOC samples present? No
- 15. Are VOC samples collected in VOA Vials? NA
- 16. Is the head space less than 6-8 mm (pea sized or less)? NA
- 17. Was a trip blank (TB) included for VOC analyses? NA
- 18. Are non-VOC samples collected in the correct containers? Yes
- 19. Is the appropriate volume/weight or number of sample containers collected? Yes

### Field Label

- 20. Were field sample labels filled out with the minimum information:
  - Sample ID? Yes
  - Date/Time Collected? Yes
  - Collectors name? Yes

### Sample Preservation

- 21. Does the COC or field labels indicate the samples were preserved? No
- 22. Are sample(s) correctly preserved? NA
- 24. Is lab filtration required and/or requested for dissolved metals? No

### Multiphase Sample Matrix

- 26. Does the sample have more than one phase, i.e., multiphase? No
- 27. If yes, does the COC specify which phase(s) is to be analyzed? NA

### Subcontract Laboratory

- 28. Are samples required to get sent to a subcontract laboratory? No
- 29. Was a subcontract laboratory specified by the client and if so who? NA Subcontract Lab: na

### Client Instruction

CC: m.peppin@vertex.ca / dwilliams@vertex.ca on Final Report

### Comments/Resolution

CC: m.peppin@vertex.ca /  
dwilliams@vertex.ca on Final Report

Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.



Report to:  
Monica Peppin



5796 U.S. Hwy 64  
Farmington, NM 87401

Phone: (505) 632-1881  
Envirotech-inc.com



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

EOG Resources Inc. - Carlsbad

Project Name: Gates AAC #2

Work Order: E201131

Job Number: 19034-0001

Received: 1/26/2022

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
1/28/22

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.  
Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.  
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.  
Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.  
Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.  
Envirotech Inc, holds the NM SDWA certification for data reported. (Lab #NM00979)

Date Reported: 1/28/22



Monica Peppin  
104 South 4th Street  
Artesia, NM 88210

Project Name: Gates AAC #2  
Workorder: E201131  
Date Received: 1/26/2022 6:30:00PM

Monica Peppin,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 1/26/2022 6:30:00PM, under the Project Name: Gates AAC #2.

The analytical test results summarized in this report with the Project Name: Gates AAC #2 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues regarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

**Walter Hinchman**  
Laboratory Director  
Office: 505-632-1881  
Cell: 775-287-1762  
[whinchman@envirotech-inc.com](mailto:whinchman@envirotech-inc.com)

**Raina Schwanz**  
Laboratory Administrator  
Office: 505-632-1881  
[rainaschwanz@envirotech-inc.com](mailto:rainaschwanz@envirotech-inc.com)

**Alexa Michaels**  
Sample Custody Officer  
Office: 505-632-1881  
[labadmin@envirotech-inc.com](mailto:labadmin@envirotech-inc.com)

Field Offices:

**Southern New Mexico Area**  
**Lynn Jarboe**  
Technical Representative/Client Services  
Office: 505-421-LABS(5227)  
Cell: 505-320-4759  
[ljjarboe@envirotech-inc.com](mailto:ljjarboe@envirotech-inc.com)

**West Texas Midland/Odessa Area**  
**Rayny Hagan**  
Technical Representative  
Office: 505-421-LABS(5227)

Envirotech Web Address: [www.envirotech-inc.com](http://www.envirotech-inc.com)

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### Sample Summary

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 01/28/22 14:14
--	--	-----------------------------

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH22-26 20'	E201131-01A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-27 8'	E201131-02A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-28 8'	E201131-03A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-29 8'	E201131-04A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-30 8'	E201131-05A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-31 4'	E201131-06A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-32 4'	E201131-07A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-33 4'	E201131-08A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-34 4'	E201131-09A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-35 4'	E201131-10A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-36	E201131-11A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-37	E201131-12A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-38	E201131-13A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-39	E201131-14A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-40	E201131-15A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-41	E201131-16A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-42	E201131-17A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-43	E201131-18A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-44	E201131-19A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-45	E201131-20A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-46 4'	E201131-21A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-47 4'	E201131-22A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-48 4'	E201131-23A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-49 4'	E201131-24A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.
BH22-50 4'	E201131-25A	Soil	01/25/22	01/26/22	Glass Jar, 4 oz.

### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 2:14:47PM
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**BH22-26 20'**  
**E201131-01**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205056
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: Bromofluorobenzene</i>	95.9 %	70-130		01/26/22	01/27/22	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	104 %	70-130		01/26/22	01/27/22	
<i>Surrogate: Toluene-d8</i>	97.6 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205056
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: Bromofluorobenzene</i>	95.9 %	70-130		01/26/22	01/27/22	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	104 %	70-130		01/26/22	01/27/22	
<i>Surrogate: Toluene-d8</i>	97.6 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205048
Diesel Range Organics (C10-C28)	87.9	25.0	1	01/26/22	01/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/27/22	
<i>Surrogate: n-Nonane</i>	104 %	50-200		01/26/22	01/27/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205046
Chloride	5550	200	10	01/26/22	01/27/22	

## Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 2:14:47PM
--	--	----------------------------------

**BH22-27 8'**

**E201131-02**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205056
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: Bromofluorobenzene</i>		94.8 %	70-130	01/26/22	01/27/22	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		99.6 %	70-130	01/26/22	01/27/22	
<i>Surrogate: Toluene-d8</i>		97.2 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205056
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: Bromofluorobenzene</i>		94.8 %	70-130	01/26/22	01/27/22	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		99.6 %	70-130	01/26/22	01/27/22	
<i>Surrogate: Toluene-d8</i>		97.2 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205048
Diesel Range Organics (C10-C28)	31.4	25.0	1	01/26/22	01/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/27/22	
<i>Surrogate: n-Nonane</i>		109 %	50-200	01/26/22	01/27/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205046
Chloride	1780	400	20	01/26/22	01/27/22	



### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 2:14:47PM
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**BH22-28 8'**

**E201131-03**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205056
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: Bromofluorobenzene</i>						
		96.7 %	70-130	01/26/22	01/27/22	
<i>Surrogate: 1,2-Dichloroethane-d4</i>						
		101 %	70-130	01/26/22	01/27/22	
<i>Surrogate: Toluene-d8</i>						
		98.0 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205056
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: Bromofluorobenzene</i>						
		96.7 %	70-130	01/26/22	01/27/22	
<i>Surrogate: 1,2-Dichloroethane-d4</i>						
		101 %	70-130	01/26/22	01/27/22	
<i>Surrogate: Toluene-d8</i>						
		98.0 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205048
Diesel Range Organics (C10-C28)	ND	25.0	1	01/26/22	01/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/27/22	
<i>Surrogate: n-Nonane</i>						
		105 %	50-200	01/26/22	01/27/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205046
Chloride	1320	400	20	01/26/22	01/27/22	





### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 2:14:47PM
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**BH22-29 8'**

**E201131-04**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205056
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: Bromofluorobenzene</i>						
		95.7 %	70-130	01/26/22	01/27/22	
<i>Surrogate: 1,2-Dichloroethane-d4</i>						
		98.4 %	70-130	01/26/22	01/27/22	
<i>Surrogate: Toluene-d8</i>						
		97.6 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205056
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: Bromofluorobenzene</i>						
		95.7 %	70-130	01/26/22	01/27/22	
<i>Surrogate: 1,2-Dichloroethane-d4</i>						
		98.4 %	70-130	01/26/22	01/27/22	
<i>Surrogate: Toluene-d8</i>						
		97.6 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205048
Diesel Range Organics (C10-C28)	58.6	25.0	1	01/26/22	01/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/27/22	
<i>Surrogate: n-Nonane</i>						
		99.2 %	50-200	01/26/22	01/27/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205046
Chloride	1540	400	20	01/26/22	01/27/22	



### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 2:14:47PM
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**BH22-30 8'**  
**E201131-05**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205056
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: Bromofluorobenzene</i>		94.8 %	70-130	01/26/22	01/27/22	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		105 %	70-130	01/26/22	01/27/22	
<i>Surrogate: Toluene-d8</i>		96.6 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205056
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: Bromofluorobenzene</i>		94.8 %	70-130	01/26/22	01/27/22	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		105 %	70-130	01/26/22	01/27/22	
<i>Surrogate: Toluene-d8</i>		96.6 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205048
Diesel Range Organics (C10-C28)	ND	25.0	1	01/26/22	01/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/27/22	
<i>Surrogate: n-Nonane</i>		103 %	50-200	01/26/22	01/27/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205046
Chloride	2010	200	10	01/26/22	01/27/22	



### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 2:14:47PM
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**BH22-31 4'**

**E201131-06**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205056
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: Bromofluorobenzene</i>	98.4 %	70-130		01/26/22	01/27/22	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	99.7 %	70-130		01/26/22	01/27/22	
<i>Surrogate: Toluene-d8</i>	98.7 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205056
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: Bromofluorobenzene</i>	98.4 %	70-130		01/26/22	01/27/22	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	99.7 %	70-130		01/26/22	01/27/22	
<i>Surrogate: Toluene-d8</i>	98.7 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205048
Diesel Range Organics (C10-C28)	ND	25.0	1	01/26/22	01/26/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/26/22	
<i>Surrogate: n-Nonane</i>	105 %	50-200		01/26/22	01/26/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205046
Chloride	1830	400	20	01/26/22	01/27/22	



### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 2:14:47PM
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**BH22-32 4'**  
**E201131-07**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205056
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: Bromofluorobenzene</i>		94.8 %	70-130	01/26/22	01/27/22	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		102 %	70-130	01/26/22	01/27/22	
<i>Surrogate: Toluene-d8</i>		96.6 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205056
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: Bromofluorobenzene</i>		94.8 %	70-130	01/26/22	01/27/22	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		102 %	70-130	01/26/22	01/27/22	
<i>Surrogate: Toluene-d8</i>		96.6 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205048
Diesel Range Organics (C10-C28)	ND	25.0	1	01/26/22	01/26/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/26/22	
<i>Surrogate: n-Nonane</i>		111 %	50-200	01/26/22	01/26/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205046
Chloride	752	100	5	01/26/22	01/27/22	



### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 2:14:47PM
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**BH22-33 4'**  
**E201131-08**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205056
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: Bromofluorobenzene</i>		96.6 %	70-130	01/26/22	01/27/22	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		98.5 %	70-130	01/26/22	01/27/22	
<i>Surrogate: Toluene-d8</i>		97.6 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205056
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: Bromofluorobenzene</i>		96.6 %	70-130	01/26/22	01/27/22	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		98.5 %	70-130	01/26/22	01/27/22	
<i>Surrogate: Toluene-d8</i>		97.6 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205048
Diesel Range Organics (C10-C28)	ND	25.0	1	01/26/22	01/26/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/26/22	
<i>Surrogate: n-Nonane</i>		104 %	50-200	01/26/22	01/26/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205046
Chloride	1670	400	20	01/26/22	01/27/22	



### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 2:14:47PM
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**BH22-34 4'**  
**E201131-09**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatiles Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205056
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: Bromofluorobenzene</i>		94.6 %	70-130	01/26/22	01/27/22	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		102 %	70-130	01/26/22	01/27/22	
<i>Surrogate: Toluene-d8</i>		97.6 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205056
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: Bromofluorobenzene</i>		94.6 %	70-130	01/26/22	01/27/22	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		102 %	70-130	01/26/22	01/27/22	
<i>Surrogate: Toluene-d8</i>		97.6 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205048
Diesel Range Organics (C10-C28)	ND	25.0	1	01/26/22	01/26/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/26/22	
<i>Surrogate: n-Nonane</i>		97.3 %	50-200	01/26/22	01/26/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205046
Chloride	846	200	10	01/26/22	01/27/22	



### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 2:14:47PM
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BH22-35 4'

E201131-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205056
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: Bromofluorobenzene</i>		96.1 %	70-130	01/26/22	01/27/22	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		103 %	70-130	01/26/22	01/27/22	
<i>Surrogate: Toluene-d8</i>		97.3 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205056
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: Bromofluorobenzene</i>		96.1 %	70-130	01/26/22	01/27/22	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		103 %	70-130	01/26/22	01/27/22	
<i>Surrogate: Toluene-d8</i>		97.3 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205048
Diesel Range Organics (C10-C28)	ND	25.0	1	01/26/22	01/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/27/22	
<i>Surrogate: n-Nonane</i>		107 %	50-200	01/26/22	01/27/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205046
Chloride	356	100	5	01/26/22	01/27/22	



### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 2:14:47PM
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**BH22-36**  
**E201131-11**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatiles Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205056
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: Bromofluorobenzene</i>		95.9 %	70-130	01/26/22	01/27/22	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		100 %	70-130	01/26/22	01/27/22	
<i>Surrogate: Toluene-d8</i>		98.4 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205056
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: Bromofluorobenzene</i>		95.9 %	70-130	01/26/22	01/27/22	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		100 %	70-130	01/26/22	01/27/22	
<i>Surrogate: Toluene-d8</i>		98.4 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205048
Diesel Range Organics (C10-C28)	ND	25.0	1	01/26/22	01/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/27/22	
<i>Surrogate: n-Nonane</i>		104 %	50-200	01/26/22	01/27/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205046
Chloride	1080	200	10	01/26/22	01/27/22	



### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 2:14:47PM
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**BH22-37**

**E201131-12**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205056
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: Bromofluorobenzene</i>		94.8 %	70-130	01/26/22	01/27/22	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		101 %	70-130	01/26/22	01/27/22	
<i>Surrogate: Toluene-d8</i>		98.6 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205056
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: Bromofluorobenzene</i>		94.8 %	70-130	01/26/22	01/27/22	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		101 %	70-130	01/26/22	01/27/22	
<i>Surrogate: Toluene-d8</i>		98.6 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205048
Diesel Range Organics (C10-C28)	ND	25.0	1	01/26/22	01/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/27/22	
<i>Surrogate: n-Nonane</i>		108 %	50-200	01/26/22	01/27/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205046
Chloride	2480	400	20	01/26/22	01/27/22	



### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 2:14:47PM
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**BH22-38**  
**E201131-13**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205056
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<hr/>						
<i>Surrogate: Bromofluorobenzene</i>		97.3 %	70-130	01/26/22	01/27/22	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		98.8 %	70-130	01/26/22	01/27/22	
<i>Surrogate: Toluene-d8</i>		97.4 %	70-130	01/26/22	01/27/22	
<hr/>						
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205056
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<hr/>						
<i>Surrogate: Bromofluorobenzene</i>		97.3 %	70-130	01/26/22	01/27/22	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		98.8 %	70-130	01/26/22	01/27/22	
<i>Surrogate: Toluene-d8</i>		97.4 %	70-130	01/26/22	01/27/22	
<hr/>						
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205049
Diesel Range Organics (C10-C28)	49.1	25.0	1	01/26/22	01/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/27/22	
<hr/>						
<i>Surrogate: n-Nonane</i>		106 %	50-200	01/26/22	01/27/22	
<hr/>						
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205046
Chloride	467	400	20	01/26/22	01/27/22	

### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 2:14:47PM
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**BH22-39**

**E201131-14**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205056
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: Bromofluorobenzene</i>		95.3 %	70-130	01/26/22	01/27/22	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		107 %	70-130	01/26/22	01/27/22	
<i>Surrogate: Toluene-d8</i>		96.0 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205056
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: Bromofluorobenzene</i>		95.3 %	70-130	01/26/22	01/27/22	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		107 %	70-130	01/26/22	01/27/22	
<i>Surrogate: Toluene-d8</i>		96.0 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205049
Diesel Range Organics (C10-C28)	ND	25.0	1	01/26/22	01/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/27/22	
<i>Surrogate: n-Nonane</i>		105 %	50-200	01/26/22	01/27/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205046
Chloride	445	100	5	01/26/22	01/27/22	



### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 2:14:47PM
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**BH22-40**

**E201131-15**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205056
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: Bromofluorobenzene</i>		95.2 %	70-130	01/26/22	01/27/22	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		100 %	70-130	01/26/22	01/27/22	
<i>Surrogate: Toluene-d8</i>		97.1 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205056
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: Bromofluorobenzene</i>		95.2 %	70-130	01/26/22	01/27/22	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		100 %	70-130	01/26/22	01/27/22	
<i>Surrogate: Toluene-d8</i>		97.1 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205049
Diesel Range Organics (C10-C28)	ND	25.0	1	01/26/22	01/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/27/22	
<i>Surrogate: n-Nonane</i>		106 %	50-200	01/26/22	01/27/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205046
Chloride	467	40.0	2	01/26/22	01/27/22	



### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 2:14:47PM
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**BH22-41**

**E201131-16**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205056
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: Bromofluorobenzene</i>		94.1 %	70-130	01/26/22	01/27/22	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		100 %	70-130	01/26/22	01/27/22	
<i>Surrogate: Toluene-d8</i>		97.1 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205056
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: Bromofluorobenzene</i>		94.1 %	70-130	01/26/22	01/27/22	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		100 %	70-130	01/26/22	01/27/22	
<i>Surrogate: Toluene-d8</i>		97.1 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205049
Diesel Range Organics (C10-C28)	ND	25.0	1	01/26/22	01/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/27/22	
<i>Surrogate: n-Nonane</i>		104 %	50-200	01/26/22	01/27/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205046
Chloride	715	200	10	01/26/22	01/27/22	



## Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 2:14:47PM
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**BH22-42**

**E201131-17**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205056
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: Bromofluorobenzene</i>		93.8 %	70-130	01/26/22	01/27/22	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		101 %	70-130	01/26/22	01/27/22	
<i>Surrogate: Toluene-d8</i>		96.1 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205056
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: Bromofluorobenzene</i>		93.8 %	70-130	01/26/22	01/27/22	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		101 %	70-130	01/26/22	01/27/22	
<i>Surrogate: Toluene-d8</i>		96.1 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205049
Diesel Range Organics (C10-C28)	ND	25.0	1	01/26/22	01/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/27/22	
<i>Surrogate: n-Nonane</i>		104 %	50-200	01/26/22	01/27/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205046
Chloride	501	40.0	2	01/26/22	01/27/22	



### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 2:14:47PM
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**BH22-43**

**E201131-18**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205056
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: Bromofluorobenzene</i>		96.6 %	70-130	01/26/22	01/27/22	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		105 %	70-130	01/26/22	01/27/22	
<i>Surrogate: Toluene-d8</i>		97.7 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205056
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: Bromofluorobenzene</i>		96.6 %	70-130	01/26/22	01/27/22	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		105 %	70-130	01/26/22	01/27/22	
<i>Surrogate: Toluene-d8</i>		97.7 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205049
Diesel Range Organics (C10-C28)	110	25.0	1	01/26/22	01/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/27/22	
<i>Surrogate: n-Nonane</i>		101 %	50-200	01/26/22	01/27/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205046
Chloride	81.0	20.0	1	01/26/22	01/27/22	



### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 2:14:47PM
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BH22-44  
E201131-19

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205056
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: Bromofluorobenzene</i>	96.1 %	70-130		01/26/22	01/27/22	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	99.8 %	70-130		01/26/22	01/27/22	
<i>Surrogate: Toluene-d8</i>	96.7 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205056
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: Bromofluorobenzene</i>	96.1 %	70-130		01/26/22	01/27/22	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	99.8 %	70-130		01/26/22	01/27/22	
<i>Surrogate: Toluene-d8</i>	96.7 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205049
Diesel Range Organics (C10-C28)	ND	25.0	1	01/26/22	01/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/27/22	
<i>Surrogate: n-Nonane</i>	99.0 %	50-200		01/26/22	01/27/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205046
Chloride	875	200	10	01/26/22	01/27/22	



### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 2:14:47PM
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BH22-45

E201131-20

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205056
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: Bromofluorobenzene</i>		95.7 %	70-130	01/26/22	01/27/22	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		104 %	70-130	01/26/22	01/27/22	
<i>Surrogate: Toluene-d8</i>		96.6 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205056
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: Bromofluorobenzene</i>		95.7 %	70-130	01/26/22	01/27/22	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		104 %	70-130	01/26/22	01/27/22	
<i>Surrogate: Toluene-d8</i>		96.6 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205049
Diesel Range Organics (C10-C28)	ND	25.0	1	01/26/22	01/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/27/22	
<i>Surrogate: n-Nonane</i>		106 %	50-200	01/26/22	01/27/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205046
Chloride	299	40.0	2	01/26/22	01/27/22	



### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 2:14:47PM
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**BH22-46 4'**

**E201131-21**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205054
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		95.2 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205054
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		101 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205049
Diesel Range Organics (C10-C28)	ND	25.0	1	01/26/22	01/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/27/22	
<i>Surrogate: n-Nonane</i>						
		103 %	50-200	01/26/22	01/27/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205052
Chloride	98.9	20.0	1	01/26/22	01/26/22	



### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 2:14:47PM
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**BH22-47 4'**

**E201131-22**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205054
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		95.3 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205054
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		102 %	70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205049
Diesel Range Organics (C10-C28)	ND	25.0	1	01/26/22	01/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/27/22	
<i>Surrogate: n-Nonane</i>						
		103 %	50-200	01/26/22	01/27/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205052
Chloride	129	40.0	2	01/26/22	01/26/22	

### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 2:14:47PM
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**BH22-48 4'**

**E201131-23**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205054
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.4 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205054
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	102 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205049
Diesel Range Organics (C10-C28)	ND	25.0	1	01/26/22	01/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/27/22	
<i>Surrogate: n-Nonane</i>						
	105 %	50-200		01/26/22	01/27/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205052
Chloride	101	20.0	1	01/26/22	01/26/22	

### Sample Data

EOG Resources Inc. - Carlsbad	Project Name:	Gates AAC #2	
104 South 4th Street	Project Number:	19034-0001	<b>Reported:</b>
Artesia NM, 88210	Project Manager:	Monica Peppin	1/28/2022 2:14:47PM

**BH22-49 4'**

**E201131-24**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205054
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.4 %		70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205054
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	102 %		70-130	01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205049
Diesel Range Organics (C10-C28)	ND	25.0	1	01/26/22	01/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/27/22	
<i>Surrogate: n-Nonane</i>						
	104 %		50-200	01/26/22	01/27/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205052
Chloride	55.3	20.0	1	01/26/22	01/26/22	



### Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 2:14:47PM
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**BH22-50 4'**

**E201131-25**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205054
Benzene	ND	0.0250	1	01/26/22	01/27/22	
Ethylbenzene	ND	0.0250	1	01/26/22	01/27/22	
Toluene	ND	0.0250	1	01/26/22	01/27/22	
o-Xylene	ND	0.0250	1	01/26/22	01/27/22	
p,m-Xylene	ND	0.0500	1	01/26/22	01/27/22	
Total Xylenes	ND	0.0250	1	01/26/22	01/27/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.1 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2205054
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/26/22	01/27/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	101 %	70-130		01/26/22	01/27/22	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2205049
Diesel Range Organics (C10-C28)	ND	25.0	1	01/26/22	01/27/22	
Oil Range Organics (C28-C36)	ND	50.0	1	01/26/22	01/27/22	
<i>Surrogate: n-Nonane</i>						
	100 %	50-200		01/26/22	01/27/22	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2205052
Chloride	327	20.0	1	01/26/22	01/27/22	

### QC Summary Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 2:14:47PM
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#### Volatile Organic Compounds by EPA 8260B

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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#### Blank (2205056-BLK1)

Prepared: 01/26/22 Analyzed: 01/27/22

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.480		0.500		95.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.512		0.500		102	70-130			
Surrogate: Toluene-d8	0.489		0.500		97.8	70-130			

#### LCS (2205056-BS1)

Prepared: 01/26/22 Analyzed: 01/27/22

Benzene	2.51	0.0250	2.50		100	70-130			
Ethylbenzene	2.56	0.0250	2.50		102	70-130			
Toluene	2.52	0.0250	2.50		101	70-130			
o-Xylene	2.49	0.0250	2.50		99.5	70-130			
p,m-Xylene	5.01	0.0500	5.00		100	70-130			
Total Xylenes	7.49	0.0250	7.50		99.9	70-130			
Surrogate: Bromofluorobenzene	0.493		0.500		98.5	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.518		0.500		104	70-130			
Surrogate: Toluene-d8	0.503		0.500		101	70-130			

#### Matrix Spike (2205056-MS1)

Source: E201131-05

Prepared: 01/26/22 Analyzed: 01/27/22

Benzene	2.87	0.0250	2.50	ND	115	48-131			
Ethylbenzene	2.87	0.0250	2.50	ND	115	45-135			
Toluene	2.84	0.0250	2.50	ND	114	48-130			
o-Xylene	2.80	0.0250	2.50	ND	112	43-135			
p,m-Xylene	5.63	0.0500	5.00	ND	113	43-135			
Total Xylenes	8.43	0.0250	7.50	ND	112	43-135			
Surrogate: Bromofluorobenzene	0.490		0.500		97.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.498		0.500		99.5	70-130			
Surrogate: Toluene-d8	0.502		0.500		100	70-130			

#### Matrix Spike Dup (2205056-MSD1)

Source: E201131-05

Prepared: 01/26/22 Analyzed: 01/27/22

Benzene	2.86	0.0250	2.50	ND	114	48-131	0.367	23	
Ethylbenzene	2.92	0.0250	2.50	ND	117	45-135	1.71	27	
Toluene	2.90	0.0250	2.50	ND	116	48-130	2.07	24	
o-Xylene	2.87	0.0250	2.50	ND	115	43-135	2.50	27	
p,m-Xylene	5.75	0.0500	5.00	ND	115	43-135	2.13	27	
Total Xylenes	8.62	0.0250	7.50	ND	115	43-135	2.25	27	
Surrogate: Bromofluorobenzene	0.489		0.500		97.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.508		0.500		102	70-130			
Surrogate: Toluene-d8	0.502		0.500		100	70-130			



### QC Summary Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 2:14:47PM
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#### Volatile Organics by EPA 8021B

Analyst: RKS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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**Blank (2205054-BLK1)**

Prepared: 01/26/22 Analyzed: 01/27/22

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	7.61		8.00		95.1	70-130			

**LCS (2205054-BS1)**

Prepared: 01/26/22 Analyzed: 01/27/22

Benzene	4.34	0.0250	5.00		86.8	70-130			
Ethylbenzene	4.46	0.0250	5.00		89.1	70-130			
Toluene	4.65	0.0250	5.00		93.0	70-130			
o-Xylene	4.45	0.0250	5.00		89.1	70-130			
p,m-Xylene	9.08	0.0500	10.0		90.8	70-130			
Total Xylenes	13.5	0.0250	15.0		90.2	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.62		8.00		95.2	70-130			

**Matrix Spike (2205054-MS1)**

Source: E201137-02

Prepared: 01/26/22 Analyzed: 01/27/22

Benzene	4.78	0.0250	5.00	ND	95.5	54-133			
Ethylbenzene	4.95	0.0250	5.00	ND	98.9	61-133			
Toluene	5.12	0.0250	5.00	ND	102	61-130			
o-Xylene	4.89	0.0250	5.00	ND	97.7	63-131			
p,m-Xylene	10.1	0.0500	10.0	ND	101	63-131			
Total Xylenes	15.0	0.0250	15.0	ND	99.7	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.89		8.00		98.6	70-130			

**Matrix Spike Dup (2205054-MSD1)**

Source: E201137-02

Prepared: 01/26/22 Analyzed: 01/27/22

Benzene	4.83	0.0250	5.00	ND	96.7	54-133	1.22	20	
Ethylbenzene	4.99	0.0250	5.00	ND	99.8	61-133	0.844	20	
Toluene	5.17	0.0250	5.00	ND	103	61-130	0.991	20	
o-Xylene	4.92	0.0250	5.00	ND	98.5	63-131	0.730	20	
p,m-Xylene	10.1	0.0500	10.0	ND	101	63-131	0.596	20	
Total Xylenes	15.1	0.0250	15.0	ND	100	63-131	0.640	20	
Surrogate: 4-Bromochlorobenzene-PID	7.83		8.00		97.8	70-130			





### QC Summary Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 2:14:47PM
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#### Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RKS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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**Blank (2205054-BLK1)**

Prepared: 01/26/22 Analyzed: 01/27/22

Gasoline Range Organics (C6-C10)	ND	20.0							
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	8.06		8.00		101				70-130

**LCS (2205054-BS2)**

Prepared: 01/26/22 Analyzed: 01/27/22

Gasoline Range Organics (C6-C10)	47.8	20.0	50.0		95.6				70-130
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	8.29		8.00		104				70-130

**Matrix Spike (2205054-MS2)**

Source: E201137-02

Prepared: 01/26/22 Analyzed: 01/27/22

Gasoline Range Organics (C6-C10)	48.5	20.0	50.0	ND	97.1				70-130
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	8.34		8.00		104				70-130

**Matrix Spike Dup (2205054-MSD2)**

Source: E201137-02

Prepared: 01/26/22 Analyzed: 01/27/22

Gasoline Range Organics (C6-C10)	48.0	20.0	50.0	ND	96.0	70-130	1.05	20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	8.35		8.00		104				70-130



### QC Summary Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 2:14:47PM
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#### Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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**Blank (2205056-BLK1)** Prepared: 01/26/22 Analyzed: 01/27/22

Gasoline Range Organics (C6-C10)	ND	20.0							
<i>Surrogate: Bromofluorobenzene</i>	0.480		0.500		95.9				70-130
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.512		0.500		102				70-130
<i>Surrogate: Toluene-d8</i>	0.489		0.500		97.8				70-130

**LCS (2205056-BS2)** Prepared: 01/26/22 Analyzed: 01/27/22

Gasoline Range Organics (C6-C10)	54.5	20.0	50.0		109				70-130
<i>Surrogate: Bromofluorobenzene</i>	0.487		0.500		97.3				70-130
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.504		0.500		101				70-130
<i>Surrogate: Toluene-d8</i>	0.503		0.500		101				70-130

**Matrix Spike (2205056-MS2)** Source: E201131-05 Prepared: 01/26/22 Analyzed: 01/27/22

Gasoline Range Organics (C6-C10)	59.0	20.0	50.0	ND	118				70-130
<i>Surrogate: Bromofluorobenzene</i>	0.482		0.500		96.3				70-130
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.514		0.500		103				70-130
<i>Surrogate: Toluene-d8</i>	0.501		0.500		100				70-130

**Matrix Spike Dup (2205056-MSD2)** Source: E201131-05 Prepared: 01/26/22 Analyzed: 01/27/22

Gasoline Range Organics (C6-C10)	52.2	20.0	50.0	ND	104	70-130	12.2	20	
<i>Surrogate: Bromofluorobenzene</i>	0.479		0.500		95.8				70-130
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.512		0.500		102				70-130
<i>Surrogate: Toluene-d8</i>	0.493		0.500		98.5				70-130

### QC Summary Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 2:14:47PM
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#### Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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**Blank (2205048-BLK1)** Prepared: 01/26/22 Analyzed: 01/27/22

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	47.4		50.0		94.8	50-200			

**LCS (2205048-BS1)** Prepared: 01/26/22 Analyzed: 01/27/22

Diesel Range Organics (C10-C28)	492	25.0	500		98.3	38-132			
Surrogate: n-Nonane	43.9		50.0		87.8	50-200			

**Matrix Spike (2205048-MS1)** Source: E201130-21 Prepared: 01/26/22 Analyzed: 01/27/22

Diesel Range Organics (C10-C28)	502	25.0	500	ND	100	38-132			
Surrogate: n-Nonane	47.7		50.0		95.5	50-200			

**Matrix Spike Dup (2205048-MSD1)** Source: E201130-21 Prepared: 01/26/22 Analyzed: 01/27/22

Diesel Range Organics (C10-C28)	488	25.0	500	ND	97.6	38-132	2.83	20	
Surrogate: n-Nonane	48.0		50.0		96.0	50-200			

## QC Summary Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 2:14:47PM
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### Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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**Blank (2205049-BLK1)** Prepared: 01/26/22 Analyzed: 01/27/22

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	58.9		50.0		118	50-200			

**LCS (2205049-BS1)** Prepared: 01/26/22 Analyzed: 01/27/22

Diesel Range Organics (C10-C28)	446	25.0	500		89.3	38-132			
Surrogate: n-Nonane	53.2		50.0		106	50-200			

**Matrix Spike (2205049-MS1)** Source: E201137-02 Prepared: 01/26/22 Analyzed: 01/27/22

Diesel Range Organics (C10-C28)	459	25.0	500	ND	91.8	38-132			
Surrogate: n-Nonane	53.9		50.0		108	50-200			

**Matrix Spike Dup (2205049-MSD1)** Source: E201137-02 Prepared: 01/26/22 Analyzed: 01/27/22

Diesel Range Organics (C10-C28)	473	25.0	500	ND	94.7	38-132	3.06	20	
Surrogate: n-Nonane	54.4		50.0		109	50-200			

### QC Summary Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 2:14:47PM
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#### Anions by EPA 300.0/9056A

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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**Blank (2205046-BLK1)** Prepared: 01/26/22 Analyzed: 01/27/22

Chloride	ND	20.0							
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**LCS (2205046-BS1)** Prepared: 01/26/22 Analyzed: 01/27/22

Chloride	244	20.0	250		97.8	90-110			
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**Matrix Spike (2205046-MS1)** Source: E201131-01 Prepared: 01/26/22 Analyzed: 01/27/22

Chloride	4490	200	250	5550	NR	80-120			MS
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**Matrix Spike Dup (2205046-MSD1)** Source: E201131-01 Prepared: 01/26/22 Analyzed: 01/27/22

Chloride	4990	200	250	5550	NR	80-120	10.6	20	MS
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### QC Summary Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Gates AAC #2 Project Number: 19034-0001 Project Manager: Monica Peppin	Reported: 1/28/2022 2:14:47PM
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#### Anions by EPA 300.0/9056A

Analyst: RAS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
<b>Blank (2205052-BLK1)</b>									
Chloride	ND	20.0							Prepared: 01/26/22 Analyzed: 01/26/22
<b>LCS (2205052-BS1)</b>									
Chloride	249	20.0	250		99.5	90-110			Prepared: 01/26/22 Analyzed: 01/26/22
<b>Matrix Spike (2205052-MS1)</b>									
Chloride	353	20.0	250	98.9	102	80-120			Source: E201131-21 Prepared: 01/26/22 Analyzed: 01/27/22
<b>Matrix Spike Dup (2205052-MSD1)</b>									
Chloride	382	20.0	250	98.9	113	80-120	7.79	20	Prepared: 01/26/22 Analyzed: 01/27/22

**QC Summary Report Comment:**

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

### Definitions and Notes

EOG Resources Inc. - Carlsbad	Project Name:	Gates AAC #2	
104 South 4th Street	Project Number:	19034-0001	<b>Reported:</b>
Artesia NM, 88210	Project Manager:	Monica Peppin	01/28/22 14:14

- MS      The analysis of the MS sample required a dilution such that the spike recovery calculation does not provide useful information. The associated LCS spike recovery was acceptable.
- ND      Analyte NOT DETECTED at or above the reporting limit
- NR      Not Reported
- RPD     Relative Percent Difference
- DNI     Did Not Ignite

Note (1): Methods marked with \*\* are non-accredited methods.  
 Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.

Client: EOG - Bob Asher  
 Project: Gates AAC #2  
 Sampler: MJP  
 Phone: 575-361-9880  
 Email(s): mpeppin@vertex.ca  
 Project Manager: Monica Peppin

RUSH?  
 1d  
 3d

Page 3 of 3

Sample ID	Sample Date	Sample Time	Matrix	QTY - Vol/TYPE/Preservative	Lab Use Only					Analysis and Method					Lab Only	
					Containers	Lab WO#	Job Number	GRO/DRO by 8015	BTEX by 8021	TPH by 418.1	Chloride by 300.0	TPH 8015D	Lab Number	Correct Cont/Prsrv (s) Y/N		
BH22-26	1/25	12:45	Soil	4oz											1	
BH22-27		12:50													2	
BH22-28		12:55													3	
BH22-29		1:00													4	
BH22-30		1:05													5	
BH22-31		1:10													6	
BH22-32		1:15													7	
BH22-33		1:20													8	
BH22-34		1:25													9	
BH22-35		1:45													10	

Relinquished by: (Signature) [Signature] Date 1/26 Time 9:20  
 Relinquished by: (Signature) [Signature] Date 1-26-22 Time 1305  
 Received by: (Signature) [Signature] Date 1-26-22 Time 9:20  
 Received by: (Signature) [Signature] Date 1/26/22 Time 18:30

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other  
 Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

\*\*Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Sample(s) dropped off after hours to a secure drop off area.

Chain of Custody

Notes/Billing info:  
 Direct bill EOG cc: M. Peppin Report



5796 US Highway 64, Farmington, NM 87401  
 Three Springs, 65 Mercade Street, Suite 115, Durango, CO 81301

Ph: (505) 632-0615 Fax: (505) 632-1865  
 Ph: (970) 259-0615 Fax: (970) 362-1879





Client: EoG - Bob Asher  
 Project: Gates AAc #2  
 Sampler: MJP  
 Phone: 575-361-9880  
 Email(s): m.peppin@vertex.ca  
 Project Manager: Monica Peppin

RUSH?  
 1d  
 3d

Page 2 of 3

Sample ID	Sample Date	Sample Time	Matrix	QTY - Vol/TYPE/Preservative	Lab Use Only				Analysis and Method				Lab Only		
					Containers	Lab WO#	Job Number	GRO/DRO by 8015	BTEX by 8021	TPH by 418.1	Chloride by 300.0	TPH 8015D	Lab Number	Correct Cont/Prsrv (s) Y/N	
BH22-36	1/25	1:50	Soil	4oz										11	
BH22-37		1:55												12	
BH22-38		2:00												13	
BH22-39		2:05												14	
BH22-40		2:10												15	
BH22-41		2:30												16	
BH22-42		2:35												17	
BH22-43		2:40												18	
BH22-44		2:45												19	
BH22-45		3:00												20	

Relinquished by: (Signature) [Signature] Date 1/26 Time 9:20  
 Relinquished by: (Signature) [Signature] Date 1-26-22 Time 1305  
 Received by: (Signature) [Signature] Date 1-26-22 Time 9:20  
 Received by: (Signature) [Signature] Date 1/26/22 Time 18:30  
 Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other  
 Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA  
 \*\*Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Chain of Custody

Notes/Billing info:  
 Directed bill EoG cc: M. Peppin report



5796 US Highway 64, Farmington, NH 07401  
 Three Springs - 65 Merriam Street, Suite 115, Durango, CO 81301

Ph: (505) 632-0615 Ex: (505) 632-1865  
 Ph: (970) 259-0615 Fr: (800) 362-1879



Client: EOG - Bob Asher  
 Project: Giates AAC #2  
 Sampler: MJP  
 Phone: \_\_\_\_\_  
 Email(s): \_\_\_\_\_  
 Project Manager: Monica Peppin

RUSH?  
 1d  
 3d

Page 3 of 3

Sample ID	Sample Date	Sample Time	Matrix	QTY - Vol/TYPE/Preservative	Analysis and Method					Lab Only	
					GRO/DRO by 8015	BTEX by 8021	TPH by 418.1	Chloride by 300.0	TPH 8015D		Lab Number
BH22-46	1/25	3:05	soil	40z	✓	✓	✓	✓	✓	22	
BH22-47		3:10								22	
BH22-48		3:15								23	
BH22-49		3:20								24	
BH22-50		3:25								25	

Lab Use Only  
 Lab WO# PE2011 31  
 Job Number 19034-0001  
 Containers 3 of 3

Received by: (Signature) [Signature] Date 1-26-22 Time 9:20  
 Received by: (Signature) [Signature] Date 1/26/22 Time 10:30  
 Received by: (Signature) [Signature] Date 1/26/22 Time 13:05

Relinquished by: (Signature) [Signature] Date 1/26 Time 9:20  
 Relinquished by: (Signature) [Signature] Date 1-26-22 Time 1305

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other  
 Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA  
 \*\*Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Lab Use Only  
 \*\*Received on Ice  N  
 T1 \_\_\_\_\_ T2 \_\_\_\_\_ T3 \_\_\_\_\_  
 AVG Temp °C 4

Notes/Billing info:  
 Chain of Custody  
 Direct bill EOG CC.M.Peppin report



5750 US Highway 64, Farmington, NM 87401  
 Three Springs - 65 Westado Street, Suite 115, Durango, CO 81301

Ph: (505) 632-6015 F: (505) 632-1865  
 Ph: (970) 259-0615 F: (970) 262-1079



# Envirotech Analytical Laboratory

Printed: 1/27/2022 9:25:32AM

## Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client: EOG Resources Inc. - Carlsbad	Date Received: 01/26/22 18:30	Work Order ID: E201131
Phone: (575) 748-4217	Date Logged In: 01/26/22 10:29	Logged In By: Caitlin Christian
Email: mpeppin@vertex.ca	Due Date: 01/28/22 17:00 (1 day TAT)	

### Chain of Custody (COC)

- 1. Does the sample ID match the COC? Yes
  - 2. Does the number of samples per sampling site location match the COC? Yes
  - 3. Were samples dropped off by client or carrier? Yes
  - 4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
  - 5. Were all samples received within holding time? Yes
- Note: Analysis, such as pH which should be conducted in the field, i.e, 15 minute hold time, are not included in this discussion.

Carrier: Courier

### Comments/Resolution

CC: m.peppin@vertex.ca /  
dwilliams@vertex.ca on Final Report

### Sample Turn Around Time (TAT)

- 6. Did the COC indicate standard TAT, or Expedited TAT? Yes

### Sample Cooler

- 7. Was a sample cooler received? Yes
  - 8. If yes, was cooler received in good condition? Yes
  - 9. Was the sample(s) received intact, i.e., not broken? Yes
  - 10. Were custody/security seals present? No
  - 11. If yes, were custody/security seals intact? NA
  - 12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6±2°C Yes
- Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling
- 13. If no visible ice, record the temperature. Actual sample temperature: 4°C

### Sample Container

- 14. Are aqueous VOC samples present? No
- 15. Are VOC samples collected in VOA Vials? NA
- 16. Is the head space less than 6-8 mm (pea sized or less)? NA
- 17. Was a trip blank (TB) included for VOC analyses? NA
- 18. Are non-VOC samples collected in the correct containers? Yes
- 19. Is the appropriate volume/weight or number of sample containers collected? Yes

### Field Label

- 20. Were field sample labels filled out with the minimum information:
  - Sample ID? Yes
  - Date/Time Collected? Yes
  - Collectors name? Yes

### Sample Preservation

- 21. Does the COC or field labels indicate the samples were preserved? No
- 22. Are sample(s) correctly preserved? NA
- 24. Is lab filtration required and/or requested for dissolved metals? No

### Multiphase Sample Matrix

- 26. Does the sample have more than one phase, i.e., multiphase? No
- 27. If yes, does the COC specify which phase(s) is to be analyzed? NA

### Subcontract Laboratory

- 28. Are samples required to get sent to a subcontract laboratory? No
- 29. Was a subcontract laboratory specified by the client and if so who? NA Subcontract Lab: na

### Client Instruction

CC: m.peppin@vertex.ca / dwilliams@vertex.ca on Final Report

Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.

**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 104094

**CONDITIONS**

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 104094
	Action Type: [C-141] Release Corrective Action (C-141)

**CONDITIONS**

Created By	Condition	Condition Date
jnobui	Remediation Plan Approved with Conditions. Please excavate 0-4 feet using <50 DTW criteria (600mg/kg chloride, 100mg/kg TPH, etc). Please excavate >4ft 51-100 ft DTW criteria (10,000mg/kg chloride, 2,500mg/kg TPH, etc). Composite confirmation samples will be collected from the bottom and sidewalls of the excavation from areas representing no more than four hundred (400) square feet.	5/23/2022