



EOG Resources, Inc.
Artesia Division Office
104 S. 4th Street
Artesia, N. M. 88210

August 29, 2022

Bradford Billings
EMNRD
1220 South St. Francis Drive
Santa Fe, NM 87505

Re: Junior AWW State #4H
30-015-36421
I-17-16S-28E
Eddy County, NM
2RP-4612
nAB1804435837

EOG Resources, Inc. is submitting the enclosed Closure Report for the above referenced site which currently has an open incident on the NMOCD E-Permitting website. The report is being submitted in reference to the C-141 Initial dated February 12, 2018. EOG Resources, Inc. has included a C-141 Final on the most current form in this Closure Report, and hereby requests closure of the open incident.

If you have any questions, feel free to call me at (575) 748-1471.

Respectfully,

Chase Settle

Chase Settle
Rep Safety & Environmental Sr
EOG Resources, Inc.

Junior AWW State #4H
Closure Report
#nAB1804435837



August 29, 2022

Junior AWW State #4H

Closure Report

30-015-36421

I-17-16S-28E

Eddy County, NM

August 29, 2022

nAB1804435837

Junior AWW State #4H
Closure Report
#nAB1804435837



August 29, 2022

Table of Contents

I. Location..... 1

II. Background..... 1

III. Scope of Work Completed..... 1

IV. Closure Request..... 1

Liner Inspection Photographs

Appendices:

Appendix A: Original C-141 Initial

Appendix B: Characterization Plan

Appendix C: Characterization Plan Approval Email

Appendix D: Original Closure Report

Appendix E: Current C-141 Closure

Junior AWW State #4H
Closure Report
#nAB1804435837



August 29, 2022

I. Location

The site is located in Eddy County, New Mexico approximately 13.25 miles northeast of Artesia.

II. Background

On January 25, 2018, EOG Y Resources Inc. (EOG) had a release of 1 barrel of crude oil and 5 barrels produced water at the Junior AWW State #4H. The release was caused due to corrosion of a heater treater, however the release occurred within a lined containment which allowed for all fluids to be recovered. The area impacted by the release was approximately 50 feet by 20 feet within the berm of the lined containment. A C-141 Initial (Appendix A) was submitted to NMOCD on February 12, 2018.

NMOCD District II required a workplan for the characterization of impacts at the site to be submitted prior to activities being completed at the site, this email is also included in Appendix A. This Characterization Plan was submitted to NMOCD on March 20, 2018, with approval to proceed with the investigation provided by NMOCD District II through email on May 14, 2018. These are included as Appendix B and Appendix C.

III. Scope of Work Completed

Based on the approval of the Characterization Plan by NMOCD on May 14, 2018, EOG submitted a notice to NMOCD District II to perform a liner inspection at the release site on November 8, 2018. Prior to the scheduling of the inspection, all gravel within the impacted area of the containment had been removed to provide visual access to the liner for inspection. With the liner exposed, the inspection of the liner was completed on November 8, 2018, and documented with photographs. The inspection confirmed no integrity issues with the liner at the time of the release, finding no defects or other failures which would have allowed the release to breach the lined containment.

As evidenced by the photos included in the original Closure Report, and included with this report as well, a precipitation event occurred prior to the inspection date, but other than displaying the ability of the liner to retain fluids, it had no other adverse impacts on the visual inspection of the liner integrity.

Since the liner integrity was not compromised, no soil sampling was conducted beneath the liner. As stated in the approved Characterization Plan, soil sampling was only to occur if the liner integrity was to have already been compromised. However, without prior damage to the liner, there was no need to damage and create integrity issues to collect soil samples when the release could not have impacted the soil beneath the liner.

On November 20, 2018, the original Closure Report and C-141 Final were submitted to NMOCD. These documents are included as Appendix D.

IV. Closure Request

This release and approval of the Characterization Plan occurred prior to the passage of the current Spill Rule (NMAC 19.15.29), but the remediation actions performed meet the current notification and guidance requirements.

Based on the completion of the approved plan at the time, and being within the current requirements of the rule, EOG Resources, Inc. requests Closure of nAB1804435837, the current C-141 Closure Form is included with this Closure Report as Appendix E.

energy opportunity growth

Junior AWW State #4H
Closure Report
#nAB1804435837



August 29, 2022

Liner Inspection Photographs

Junior AWW State #4H
Closure Report
#nAB1804435837



August 29, 2022



energy opportunity growth

Junior AWW State #4H
Closure Report
#nAB1804435837



August 29, 2022



11/8/2018 8:42:50 AM (-7.0 hrs) Lat=32.92117 Lon=104.18985 WGS 1984



11/8/2018 8:43:01 AM (-7.0 hrs) Lat=32.92117 Lon=104.18985 WGS 1984

energy opportunity growth

Junior AWW State #4H
Closure Report
#nAB1804435837



August 29, 2022



11/8/2018 8:42:45 AM (-7.0 hrs) Lat=32.92117 Lon=104.18985 WGS 1984



11/8/2018 8:42:47 AM (-7.0 hrs) Lat=32.92117 Lon=104.18985 WGS 1984

Junior AWW State #4H
Closure Report
#nAB1804435837



August 29, 2022



energy opportunity growth

Junior AWW State #4H
Closure Report
#nAB1804435837



August 29, 2022

Appendix A

Original C-141 Initial

From: [Weaver, Crystal, EMNRD](#)
To: "Yvette Moore"; [Bratcher, Mike, EMNRD](#)
Cc: [Bob Asher](#); [Chase Settle](#)
Subject: RE: C-141 Initial Junior AWW State #4H
Date: Thursday, March 15, 2018 12:40:00 PM
Attachments: [image001.png](#)
[1. 4612 - COAs and signed C-141 Initial.pdf](#)

RE: EOG * Junior AWW State #4H * 30-015-36421 * 2RP-4612

Yvette/Bob,

I have included a scanned copy of the signed Initial C-141 Remediation Permit along with an attached Conditions of Approval (COA). The OCD tracking number for this event is 2RP-4612, please refer to this tracking number on any and all submissions sent in to the OCD. Please remit a site characterization plan (see COA document included in attachment) or advise OCD of plan of action immediately since this one has a due date of 3/12/18 and that has passed.

Thank you,

Crystal Weaver

Environmental Specialist
OCD – Artesia District II
811 S. 1st Street
Artesia, NM 88210
Office: 575-748-1283 ext. 101
Cell: 575-840-5963
Fax: 575-748-9720

From: Yvette Moore [mailto:Yvette_Moore@eogresources.com]
Sent: Monday, February 12, 2018 10:30 AM
To: Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; Weaver, Crystal, EMNRD <Crystal.Weaver@state.nm.us>
Cc: Bob Asher <Bob_Asher@eogresources.com>; Chase Settle <Chase_Settle@eogresources.com>
Subject: C-141 Initial Junior AWW State #4H

Please find the attached C-141 Initial for the location listed below:

Junior AWW State #4H
30-015-36421
2130' FSL & 150' FEL
Sec 17-16S-28E

Eddy County, New Mexico

Thanks,



Yvette Moore

Rep Safety & Environmental II

Safety & Environmental Department

Artesia Division

(575)748-4223

yvette_moore@eogresources.com

NM OIL CONSERVATION
ARTESIA DISTRICT

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

FEB 12 2018

Form C-141
Revised April 3, 2017

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.
RECEIVED

Release Notification and Corrective Action
OPERATOR

NAB1804435837

Initial Report Final Report

Name of Company EOG Y Resources, Inc.	Contact Robert Asher
Address 104 S. 4 th Street Artesia NM 88210	Telephone No. 575-748-1471
Facility Name Junior AWW State #4H	Facility Type Battery

Surface Owner State <i>Private</i>	Mineral Owner State	API No. 30-015-36421
---------------------------------------	------------------------	-------------------------

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
<i>I</i>	17	16S	28E	2130	South	150	East	Eddy

Latitude 32.92112 Longitude -104.18951 NAD83

NATURE OF RELEASE

Type of Release Crude Oil/Produced Water	Volume of Release 1 B/O & 5 B/PW	Volume Recovered 1 B/O & 5 B/PW
Source of Release Heater Treater	Date and Hour of Occurrence 1/25/2018; PM	Date and Hour of Discovery 1/26/2018; 3:30 PM
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom? N/A	
By Whom? N/A	Date and Hour N/A	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.* N/A

Describe Cause of Problem and Remedial Action Taken.*

Welding around the swedge on the bottom water leg of heater rusted out. Vacuum truck and roustabout crew called.

Describe Area Affected and Cleanup Action Taken.*

The impacted area was approximately 75' X 45' within the secondary containment of the production pad (this containment is bermed with a 20 mil liner). Vacuum truck recovered all oil and produced water released. A liner integrity test will be conducted, if results are within the allowable limits to affirm integrity a Final Report, C-141 will be submitted to the NMOCD requesting closure. If the results indicate integrity failure a characterization plan will be submitted to the NMOCD. **Depth to Ground Water: 50-99' (70' per NMOSE & 79.25' per USGS), Wellhead Protection Area: No, Distance to Surface Water Body: >1000', SITE RANKING IS 10.**

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature: <i>Robert Asher</i>	OIL CONSERVATION DIVISION	
Printed Name: Robert Asher	Accepted for record only	
Title: Environmental Supervisor	Approved by Environmental Specialist:	Approval Date: <i>2/13/18</i> Expiration Date: <i>N/A</i>
E-mail Address: robert.asher@eogresources.com	Conditions of Approval: <i>see attached</i>	Attached <input checked="" type="checkbox"/> <i>JRP 4/1/18</i>
Date: February 12, 2018	Phone: 575-748-4217	

* Attach Additional Sheets If Necessary

site assessments on initial C-141 will not be accepted.

Operator/Responsible Party,

The OCD has received the form C-141 you provided on **2/12/18** regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number 2RP-4612 has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC. [emphasis added]

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District II office in Artesia on or before 3/12/18. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

- Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C₆ thru C₃₆), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.
- Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C₆ thru C₃₆), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.
- Nominal detection limits for field and laboratory analyses must be provided.
- Composite sampling is not generally allowed.
- Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

- Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

- If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

- Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.

Jim Griswold

OCD Environmental Bureau Chief
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
505-476-3465
jim.griswold@state.nm.us

Weaver, Crystal, EMNRD

From: Yvette Moore <Yvette_Moore@eogresources.com>
Sent: Monday, February 12, 2018 10:30 AM
To: Bratcher, Mike, EMNRD; Weaver, Crystal, EMNRD
Cc: Bob Asher; Chase Settle
Subject: C-141 Initial Junior AWW State #4H
Attachments: Form C-141 Initial (Junior AWW State #4H).pdf

Please find the attached C-141 Initial for the location listed below:

Junior AWW State #4H
30-015-36421
2130' FSL & 150' FEL
Sec 17-16S-28E
Eddy County, New Mexico

Thanks,



Yvette Moore

Rep Safety & Environmental II
Safety & Environmental Department
Artesia Division
(575)748-4223
yvette_moore@eogresources.com

Junior AWW State #4H
Closure Report
#nAB1804435837



August 29, 2022

Appendix B

Characterization Plan



EOG Resources, Inc.
Artesia Division Office
104 S. 4th Street
Artesia, N. M. 88210

EOG Y Resources, Inc.

Characterization Plan

Junior AWW State #4H

30-015-36421

Section 17, T16S-R28E

Eddy County, New Mexico

March 20, 2018

2RP-4612

I. Location

Go east of Artesia on US Highway 82 to MM 127, continue approximately 0.5 miles County Road 214 (Barnaval Draw Road) and turn left (North). Continue north approximately 6.2 miles, the road will fork (take left fork) and continue for approximately 2.2 miles. Road will curve to the left, continue on main lease road in a west/southwest direction for approximately 3.9 miles. Turn left (south) at lease road for 0.1 miles, turn right (west) and follow the inclined road to the NE corner of the location.

II. Background

On February 12, 2018, EOG Y Resources, Inc. submitted to the NMOCD District I office a Form C-141 for the release of 1 B/O & 5 B/PW with 1 B/O & 5 B/PW recovered. The affected area is approximately 75' X 45' within the secondary containment of the production facility and was contained within the bermed and lined battery. The release was caused by the welding around a swedge on the bottom of the water leg of the heater unit rusted out. A vacuum truck was dispatched and recovered all of the released oil and produced water. A backhoe crew was dispatched and excavated the visibly impacted gravel. The impacted gravel excavated was hauled to an NMOCD approved disposal facility.

III. Surface and Ground Water

Area surface geology is Paleozoic Permian. Based on information regarding this location (Section 17, T16S-R28E), the New Mexico Office of the State Engineer (NMOSE) database depth to groundwater is follows: (NMOSE-RA 12299 POD1, 70'), the United States Geological Survey National Water Information System, is as follows: (USGS #335834104164501, 79.25' & USGS #325638104072801, 49.25'). The depth to groundwater is 50 – 99', per USGS and NMOSE groundwater level. **Based on this information the Site Ranking is a Ten (10).**

Watercourses in the area are dry except for infrequent flows in response to major precipitation events, with the nearest body of surface water being Flat Lake at 3.10 miles away.

IV. NMOCD Ranking Criteria

The ranking for this site is Ten (10) based on the following:

Depth to ground water	50-99'
Wellhead Protection Area	> 1000'
Distance to surface water body	> 1000'

Based on the ranking criteria, the NMOCD established RRALs for this site are:

Benzene	10 ppm
BTEX	50 ppm
TPH	1,000 ppm
Chlorides	No established RRAL

V. Liner Integrity Test

With the battery being bermed and lined with a 20 millimeter liner, a liner integrity test will be performed to determine if there are any leaks, tears, punctures and/or breaches. The battery will be filled with fresh water and the level gauged. After a period of three (3) hours, the water level will be gauged again, based off of the measurements, the SMA Evaporation Formula will be used to determine either liner integrity is intact where a Closure Report/Form C-141 Final Report will be submitted to the NMOCD II Office requesting closure. Or if there is abnormal water loss that would indicate a liner failure in which, VI. Sampling Procedure will be implemented.

VI. Sampling Procedure

Samples will only be collected if the liner integrity test shows a failure or breach in the liner.

Vertical delineation samples (SP-1 & SP-2) will be collected at a central sample point within the release area. Samples will be collected at 1', 2', 3', and 4' below grade surface (bgs) or when auger refusal is encountered. Due to the nature of the release (oil & produced water), the vertical delineation soil samples will be analyzed for Benzene, BTEX, TPH extended (Chlorides for documentation). All samples will be sent to a NMOCD approved laboratory for analysis.

Horizontal delineation samples will be collected at the 4 cardinal point (CP1-CP4) at what is believed to be the outer edge of the release/excavation area. Samples will be collected at 1' below grade surface (bgs) or when auger refusal is encountered. If a sample point is determined to be impacted by the release, a new sample will be collected moving out further until an area without impaction is located. Once located, samples will be taken to collaborate the impaction path to the next sample point in the sequence. Due to the nature of the release (oil & produced water), the vertical delineation soil samples will be analyzed for Benzene, BTEX, TPH extended (Chlorides for documentation). All samples will be sent to a NMOCD approved laboratory for analysis.

As a baseline for all sampling analytical data, background sample(s) will be collected up gradient from the release to the east. The point remains on the production pad in an area that has no known release impaction. This creates less damage to the SLO surface by keeping the activities on the production pad and reduces the vegetative damage that would otherwise be created by moving off of location to collect background samples in the adjoining pasture.

Latitude/Longitude Coordinates for Sample Points

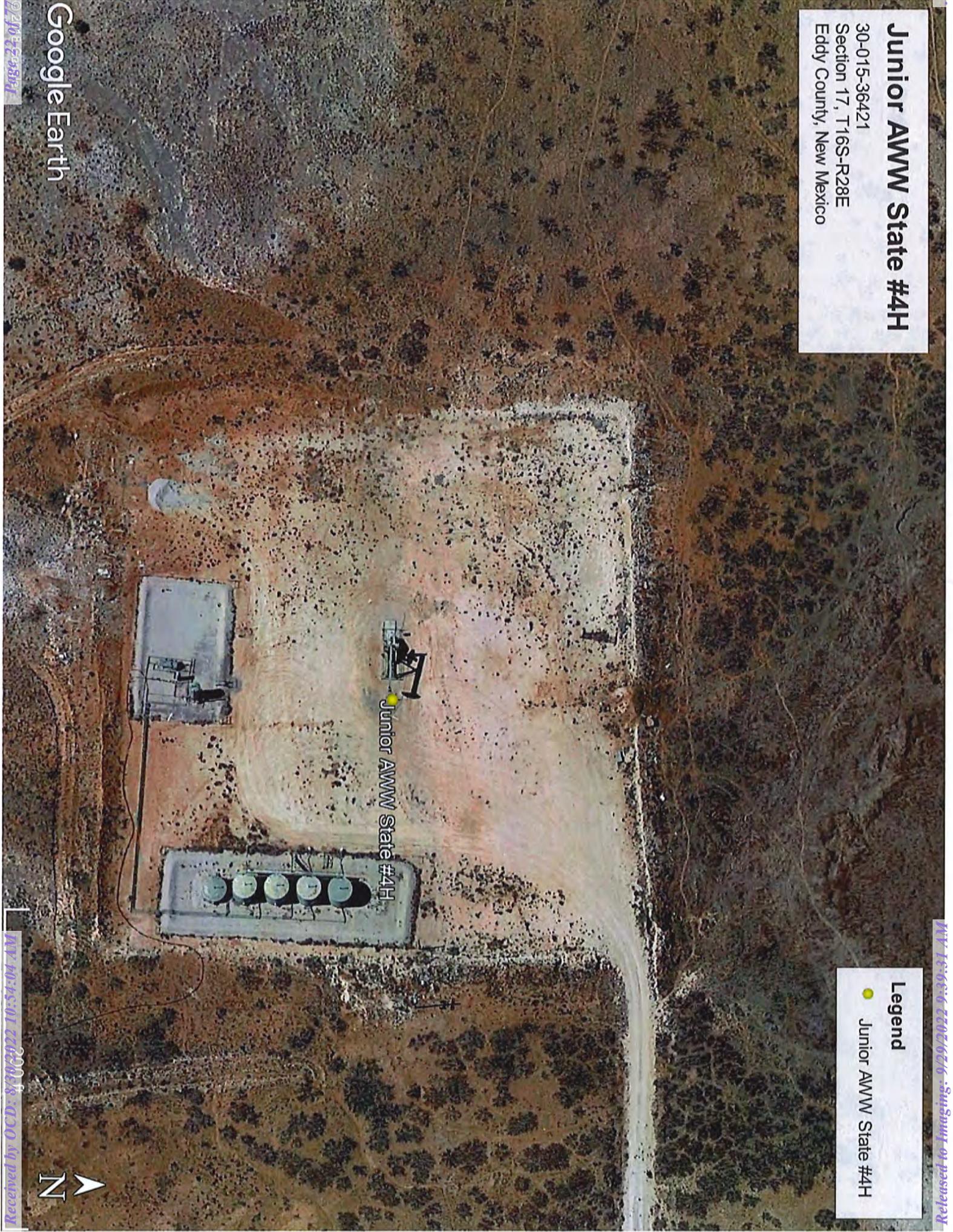
SP-1	32.920836°; -104.190035°
SP-2	32.920776°; -104.189881°
CP-1	32.920856°; -104.189967°
CP-2	32.920757°; -104.189969°
CP-3	32.920796°; -104.189853°
CP-4	32.920805°; -104.190063°
Background Sample	32.920866°; -104.190620°

Figure 1

Site Map

Junior AWW State #4H
30-015-36421
Section 17, T16S-R28E
Eddy County, New Mexico

Legend
● Junior AWW State #4H



Google Earth

921042387

Received by OCD: 8/29/2022 9:39:31 AM



Released to public on 8/29/2022 9:39:31 AM

Figure 2

Vertical Sample Point(s)

Junior AWW State #4H
30-015-36421
Section 17, T16S-R28E
Eddy County, New Mexico

- Legend**
- Junior AWW State #4H
 - Vertical Sample Points

Junior AWW State #4H

SP-1

SP-2

Google Earth



© 2015 Google

Received by OGD: 2012/05/18 10:45:21 AM

NY 13:6:6-220202/6-292020/6-292020

Figure 3

Horizontal Sample Point(s)

Junior AWW State #4H
30-015-36421
Section 17, T16S-R28E
Eddy County, New Mexico

Legend

- Horizontal Sample Points
- Junior AWW State #4H



Google Earth

270965804

Received by CDD: 02/05/18 10:45:20 AM

Received by CDD: 02/05/18 10:45:20 AM

Figure 4

Background Sample Point(s)

Photos



Geogy Resources (575) 748-1471

JUNIOR "AWW" State # 4-H
2130' FSL & 150' FEL - NE/SE
Sec. 17 - T 16 S - R 28 E - Unit 1
Eddy Co. New Mexico
Lse. # V-5604 - API # 30-015-36421

AFF # 08-233-0

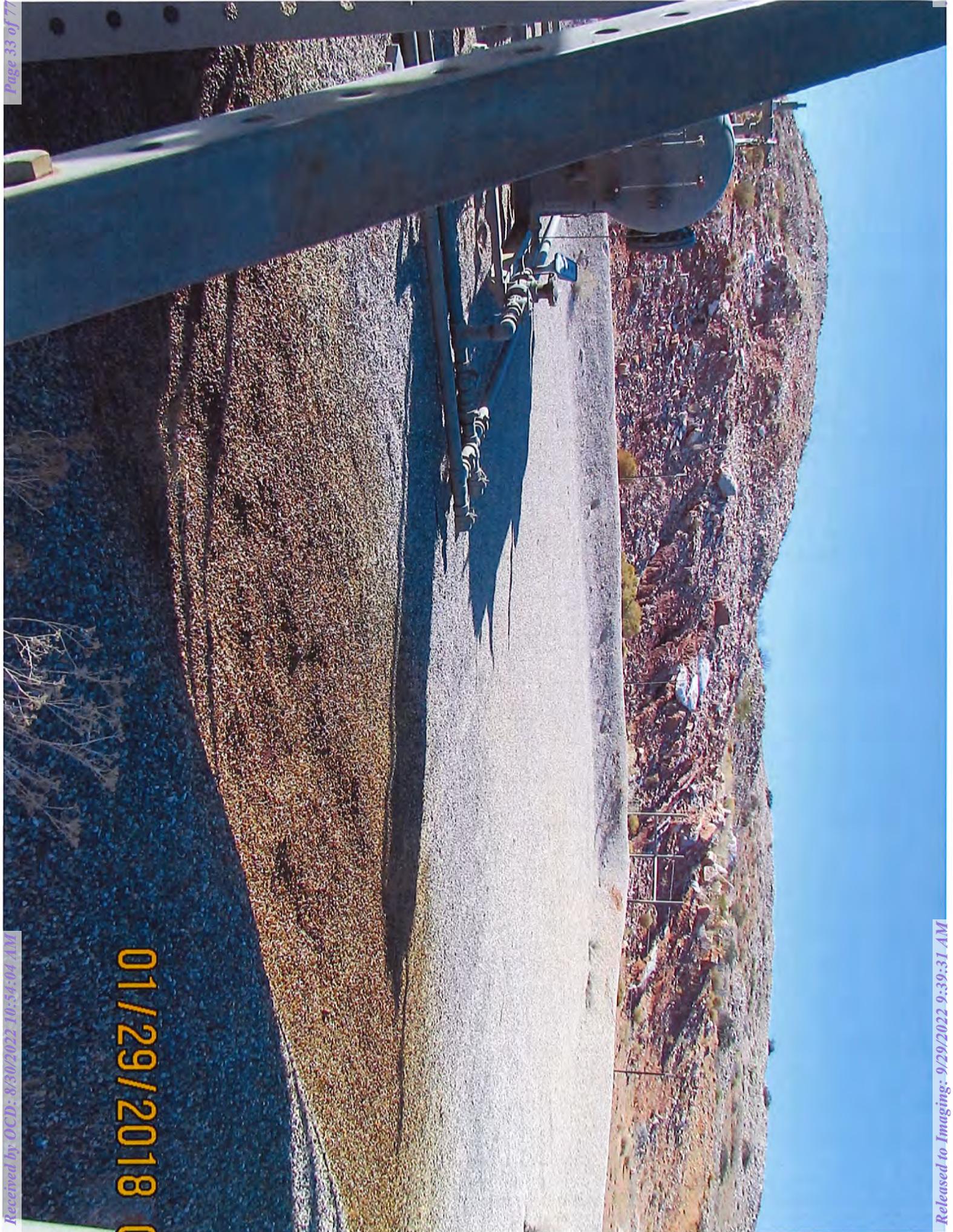
01/29/2018

01/29/2018





01/29/2018 10:34:04 AM



01/29/2018 0

Appendix A

Water Well Date Site Map

Junior AWW State #4H

30-015-36421
Section 17, T16S-R28E
Eddy County, New Mexico
Water Well Data
Site Rankings Ten (10). Depth to Groundwater: 50-99'
(Approximately 66.2', per NMOSE & USGS Groundwater Levels)

Legend

- Junior AWW State #4H
- NMOSE & USGS Water Wells

USGS 335834104164501 (DTGW @ 79.25')

Junior AWW State #4H

USGS 325638104072801 (DTGW @ 49.25')

RA 12299 POD1 (DTGW @ 70')

Google Earth

© 2013 Google



Received by OGD: 2/20/05/8 : CDD by Ivan

Released to Imaging: 6/22/2022 9:29:06 AM

Appendix B

NMOSE Well Log



New Mexico Office of the State Engineer Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

Well Tag	POD Number	Q64 Q16 Q4	Sec	Tws	Rng	X	Y
RA 12299	POD1	4 3 3	25	16S	28E	580832	3639215 

Driller License: 1058	Driller Company: KEY'S DRILLING & PUMP SERVICE	
Driller Name: CLINTON KEY		
Drill Start Date: 09/21/2015	Drill Finish Date: 09/23/2015	Plug Date:
Log File Date: 10/07/2015	PCW Rcv Date:	Source: Shallow
Pump Type:	Pipe Discharge Size:	Estimated Yield: 30 GPM
Casing Size: 4.50	Depth Well: 115 feet	Depth Water: 70 feet

Water Bearing Stratifications:	Top	Bottom	Description
	70	80	Sandstone/Gravel/Conglomerate
	80	90	Shale/Mudstone/Siltstone
	105	115	Other/Unknown

Casing Perforations:	Top	Bottom
	95	115

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

Appendix C

USGS Groundwater Level Information



[USGS Home](#)
[Contact USGS](#)
[Search USGS](#)

National Water Information System: Web Interface

[USGS Water Resources](#)

Data Category:

Site Information ▼

Geographic Area:

United States ▼

GO

Click to hide News Bulletins

- [Please see news on new formats](#)
- [Full News](#) 

USGS 335834104164501 15S.27E.31.11442

Available data for this site

SUMMARY OF ALL AVAILABLE DATA ▼

GO

Well Site

DESCRIPTION:

Latitude 32°58'34", Longitude 104°16'45" NAD27
 Chaves County, New Mexico , Hydrologic Unit 13060007
 Well depth: not determined.
 Land surface altitude: 3,429 feet above NGVD29.
 Well completed in "Artesia Group" (313ARTS) local aquifer

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1986-06-01	1994-04-28	4

OPERATION:

Record for this site is maintained by the USGS New Mexico Water Science Center
 Email questions about this site to [New Mexico Water Science Center Water-Data Inquiries](#)

-
- [Questions about sites/data?](#)
 - [Feedback on this web site](#)
 - [Automated retrievals](#)
 - [Help](#)

[Data Tips](#)

[Explanation of terms](#)

[Subscribe for system changes](#)

[News](#)

[Accessibility](#)

[Plug-Ins](#)

[FOIA](#)

[Privacy](#)

[Policies and Notices](#)

[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)

Title: NWIS Site Information for USA: Site Inventory

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



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

Page Last Modified: 2018-02-12 11:08:19 EST

0.29 0.28 caww01



USGS Home
Contact USGS
Search USGS

National Water Information System: Web Interface

[USGS Water Resources](#)

Data Category:

Groundwater

Geographic Area:

United States

GO

Click to hide News Bulletins

- [Please see news on new formats](#)
- [Full News](#)

Groundwater levels for the Nation

Search Results -- 1 sites found

site_no list =

- 335834104164501

Minimum number of levels = 1

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

USGS 335834104164501 15S.27E.31.11442

Available data for this site

Groundwater: Field measurements

GO

Chaves County, New Mexico

Hydrologic Unit Code 13060007

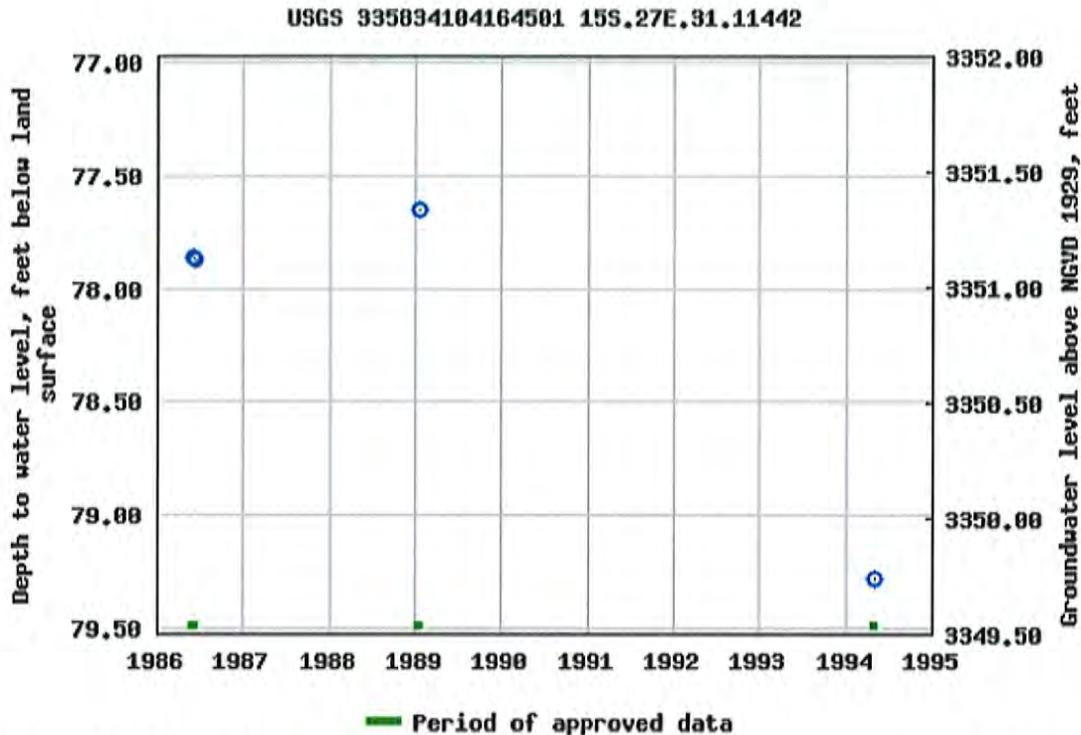
Latitude 32°58'34", Longitude 104°16'45" NAD27

Land-surface elevation 3,429 feet above NGVD29

This well is completed in the Artesia Group (313ARTS) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period



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

[Download a presentation-quality graph](#)

[Questions about sites/data?](#)

[Feedback on this web site](#)

[Automated retrievals](#)

[Help](#)

[Data Tips](#)

[Explanation of terms](#)

[Subscribe for system changes](#)

[News](#)

[Accessibility](#) [Plug-Ins](#) [FOIA](#) [Privacy](#) [Policies and Notices](#)

[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)

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: 2018-02-12 11:08:26 EST

1.05 0.91 nadww01



[USGS Home](#)
[Contact USGS](#)
[Search USGS](#)

National Water Information System: Web Interface

[USGS Water Resources](#)

Data Category:

Site Information ▼

Geographic Area:

United States ▼

GO

Click to hide News Bulletins

- [Please see news on new formats](#)
- [Full News](#) 

USGS 325638104072801 16S.28E.12.22132

Available data for this site

SUMMARY OF ALL AVAILABLE DATA ▼

GO

Well Site

DESCRIPTION:

Latitude 32°56'38", Longitude 104°07'28" NAD27
 Eddy County, New Mexico , Hydrologic Unit 13060011
 Well depth: 54 feet
 Land surface altitude: 3,580 feet above NGVD29.
 Well completed in "Alluvium, Bolson Deposits and Other Surface
 Deposits" (110AVMB) local aquifer

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1994-03-09	2009-01-13	7

OPERATION:

Record for this site is maintained by the USGS New Mexico Water Science Center
 Email questions about this site to [New Mexico Water Science Center Water-Data Inquiries](#)

-
- [Questions about sites/data?](#)
 - [Feedback on this web site](#)
 - [Automated retrievals](#)
 - [Help](#)

[Data Tips](#)

[Explanation of terms](#)

[Subscribe for system changes](#)

[News](#)

[Accessibility](#)

[Plug-Ins](#)

[FOIA](#)

[Privacy](#)

[Policies and Notices](#)

[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)

Title: NWIS Site Information for USA: Site Inventory

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



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

Page Last Modified: 2018-02-12 11:14:20 EST

0.29 0.27 caww01



[USGS Home](#)
[Contact USGS](#)
[Search USGS](#)

National Water Information System: Web Interface

[USGS Water Resources](#)

Data Category:

Groundwater

Geographic Area:

United States

GO

Click to hide News Bulletins

- [Please see news on new formats](#)
- [Full News](#) 

Groundwater levels for the Nation

Search Results -- 1 sites found

site_no list =

- 325638104072801

Minimum number of levels = 1

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

USGS 325638104072801 16S.28E.12.22132

Available data for this site

Groundwater: Field measurements

GO

Eddy County, New Mexico

Hydrologic Unit Code 13060011

Latitude 32°56'38", Longitude 104°07'28" NAD27

Land-surface elevation 3,580 feet above NGVD29

The depth of the well is 54 feet below land surface.

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

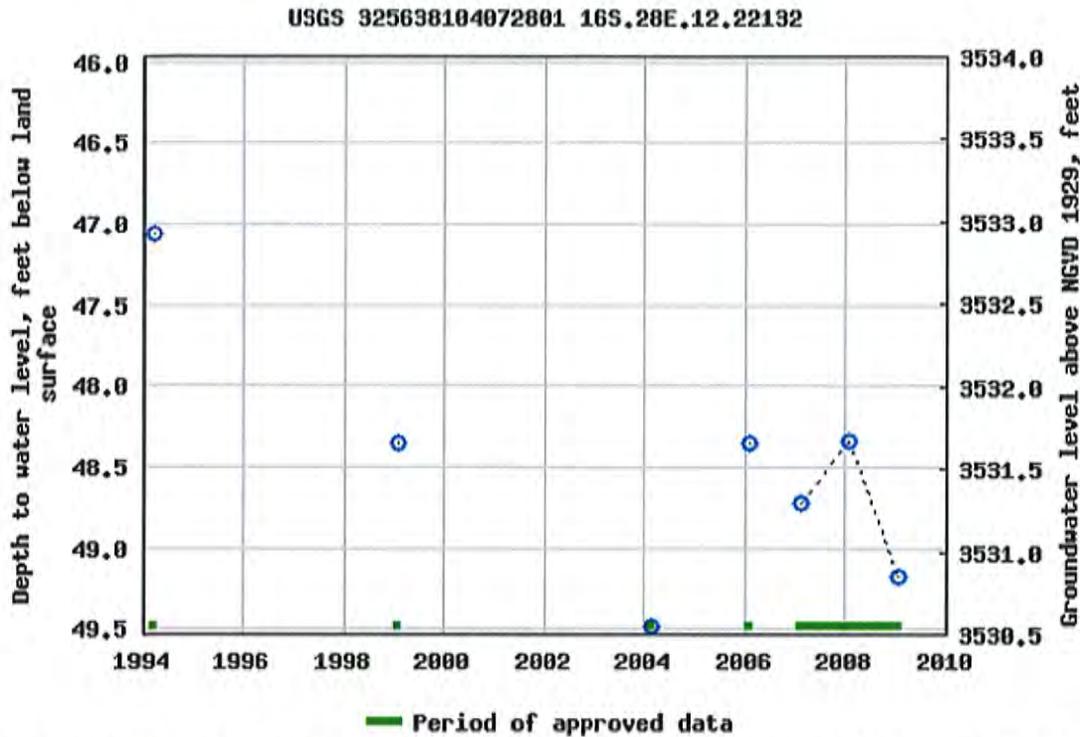
Output formats

[Table of data](#)

[Tab-separated data](#)

[Graph of data](#)

[Reselect period](#)



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

[Download a presentation-quality graph](#)

[Questions about sites/data?](#)

[Feedback on this web site](#)

[Automated retrievals](#)

[Help](#)

[Data Tips](#)

[Explanation of terms](#)

[Subscribe for system changes](#)

[News](#)

[Accessibility](#) [Plug-Ins](#) [FOIA](#) [Privacy](#) [Policies and Notices](#)

[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)

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: 2018-02-12 11:14:37 EST

1.07 0.92 nadww01

Appendix D

Form C-141 Initial

NM OIL CONSERVATION

ARTESIA DISTRICT

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

FEB 12 2018

Form C-141
Revised April 3, 2017

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

Submit 1 Copy to appropriate District Office in
RECEIVED accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

NAB1804435837

Initial Report Final Report

Name of Company: EOG Y Resources, Inc. Contact: Robert Asher
Address: 104 S. 4th Street Artesia NM 88210 Telephone No.: 575-748-1471
Facility Name: Junior AWW State #4H Facility Type: Battery

Surface Owner: Private Mineral Owner: State API No.: 30-015-36421

LOCATION OF RELEASE

Table with 9 columns: Unit Letter, Section, Township, Range, Feet from the, North/South Line, Feet from the, East/West Line, County. Values: I, 17, 16S, 28E, 2130, South, 150, East, Eddy

Latitude 32.92112 Longitude -104.18951 NAD83

NATURE OF RELEASE

Type of Release: Crude Oil/Produced Water Volume of Release: 1 B/O & 5 B/PW
Source of Release: Heater Treater Date and Hour of Occurrence: 1/25/2018; PM
Was Immediate Notice Given? Not Required If YES, To Whom? N/A

If a Watercourse was Impacted, Describe Fully.* N/A
Describe Cause of Problem and Remedial Action Taken.*
Welding around the swedge on the bottom water leg of heater rusted out. Vacuum truck and roustabout crew called.

Describe Area Affected and Cleanup Action Taken.*
The impacted area was approximately 75' X 45' within the secondary containment of the production pad (this containment is bermed with a 20 mil liner). Vacuum truck recovered all oil and produced water released. A liner integrity test will be conducted, if results are within the allowable limits to affirm integrity a Final Report, C-141 will be submitted to the NMOCD requesting closure. If the results indicate integrity failure a characterization plan will be submitted to the NMOCD. Depth to Ground Water: 50-99' (70' per NMOSE & 79.25' per USGS), Wellhead Protection Area: No, Distance to Surface Water Body: >1000', SITE RANKING IS 10.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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.

Signature: Robert Asher OIL CONSERVATION DIVISION
Printed Name: Robert Asher Approved by Environmental Specialist: only
Title: Environmental Supervisor Approval Date: 2/13/18 Expiration Date: N/A
E-mail Address: robert_asher@eogresources.com Conditions of Approval: see attached Attached: [initials]

Date: February 12, 2018 Phone: 575-748-4217
* Attach Additional Sheets If Necessary

site assessments on initial C-141 will not be accepted.

Operator/Responsible Party,

The OCD has received the form C-141 you provided on **2/12/18** regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number 2RP-4012 has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC. [emphasis added]

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District II office in Artesia on or before 3/12/18. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

- Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C₆ thru C₃₆), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.
- Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C₆ thru C₃₆), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.
- Nominal detection limits for field and laboratory analyses must be provided.
- Composite sampling is not generally allowed.
- Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

- Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.
- If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.
- Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.

Jim Griswold
OCD Environmental Bureau Chief
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
505-476-3465
jim.griswold@state.nm.us

Weaver, Crystal, EMNRD

From: Yvette Moore <Yvette_Moore@eogresources.com>
Sent: Monday, February 12, 2018 10:30 AM
To: Bratcher, Mike, EMNRD; Weaver, Crystal, EMNRD
Cc: Bob Asher; Chase Settle
Subject: C-141 Initial Junior AWW State #4H
Attachments: Form C-141 Initial (Junior AWW State #4H).pdf

Please find the attached C-141 Initial for the location listed below:

Junior AWW State #4H
30-015-36421
2130' FSL & 150' FEL
Sec 17-16S-28E
Eddy County, New Mexico

Thanks,



Yvette Moore

Rep Safety & Environmental II
Safety & Environmental Department
Artesia Division
(575)748-4223
yvette_moore@eogresources.com

Junior AWW State #4H
Closure Report
#nAB1804435837



August 29, 2022

Appendix C

Characterization Plan Approval Email

From: [Bratcher, Mike, EMNRD](#)
To: ["Bob Asher"](#); [Weaver, Crystal, EMNRD](#); [Yvette Moore](#)
Subject: RE: C-141 Initial Junior AWW State #4H
Date: Monday, May 14, 2018 9:29:00 AM
Attachments: [image001.png](#)

RE: EOG Y * Junior AWW St 4H * **2RP-4612** * DOR: 1/25/18

Bob,

Your proposal for liner integrity testing and subsequent sampling should the liner integrity test fail, is approved.

Thank you,

Mike Bratcher
NMOCD District 2
811 South First Street
Artesia, NM 88210
575-748-1283 Ext 108

OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

From: Bob Asher <Bob_Asher@eogresources.com>
Sent: Tuesday, March 20, 2018 3:56 PM
To: Weaver, Crystal, EMNRD <Crystal.Weaver@state.nm.us>; Yvette Moore <Yvette_Moore@eogresources.com>; Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>
Subject: RE: C-141 Initial Junior AWW State #4H

Thank you,

Robert C. "Bob" Asher
Environmental Supervisor
Safety & Environmental Department
EOG Resources, Inc.
Artesia Division
EOG Safety Begins With YOUR Safety



From: Weaver, Crystal, EMNRD [<mailto:Crystal.Weaver@state.nm.us>]
Sent: Thursday, March 15, 2018 12:41 PM

To: Yvette Moore <Yvette_Moore@eogresources.com>; Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>
Cc: Bob Asher <Bob_Asher@eogresources.com>; Chase Settle <Chase_Settle@eogresources.com>
Subject: RE: C-141 Initial Junior AWW State #4H

**** External email. Use caution.****

This sender failed our fraud detection checks and may not be who they appear to be. Learn about [spoofing](#) [Feedback](#)

RE: EOG * Junior AWW State #4H * 30-015-36421 * 2RP-4612

Yvette/Bob,

I have included a scanned copy of the signed Initial C-141 Remediation Permit along with an attached Conditions of Approval (COA). The OCD tracking number for this event is 2RP-4612, please refer to this tracking number on any and all submissions sent in to the OCD. Please remit a site characterization plan (see COA document included in attachment) or advise OCD of plan of action immediately since this one has a due date of 3/12/18 and that has passed.

Thank you,

Crystal Weaver

Environmental Specialist
OCD – Artesia District II
811 S. 1st Street
Artesia, NM 88210
Office: 575-748-1283 ext. 101
Cell: 575-840-5963
Fax: 575-748-9720

From: Yvette Moore [mailto:Yvette_Moore@eogresources.com]
Sent: Monday, February 12, 2018 10:30 AM
To: Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; Weaver, Crystal, EMNRD <Crystal.Weaver@state.nm.us>
Cc: Bob Asher <Bob_Asher@eogresources.com>; Chase Settle <Chase_Settle@eogresources.com>
Subject: C-141 Initial Junior AWW State #4H

Please find the attached C-141 Initial for the location listed below:

Junior AWW State #4H
30-015-36421
2130' FSL & 150' FEL
Sec 17-16S-28E

Eddy County, New Mexico

Thanks,



Yvette Moore

Rep Safety & Environmental II
Safety & Environmental Department

Artesia Division

(575)748-4223

yvette_moore@eogresources.com

Junior AWW State #4H
Closure Report
#nAB1804435837



August 29, 2022

Appendix D

Original Closure Report

Bob Asher

From: Bob Asher
Sent: Tuesday, November 20, 2018 11:03 AM
To: Bradford.Billings@state.nm.us
Cc: mike.bratcher@state.nm.us; Katie Jamison (Katie_Jamison@eogresources.com); Chase Settle
Subject: Closure Report (Junior AWW State #4H)
Attachments: Closure Report (Junior AWW State #4H, 11-20-2018).pdf

Brad,

Attached is the Closure Report for the above location. This release occurred prior to 8/14/2018.

Thank you,

Robert C. "Bob" Asher
Environmental Supervisor
 Safety & Environmental Department
 EOG Resources, Inc.
 Artesia Division
 Artesia, NM 88210
 575-748-4217 (Office)
 575-365-4021 (Cell)

EOG Safety Begins With YOUR Safety





EOG Resources, Inc.
Artesia Division Office
104 S. 4th Street
Artesia, N. M. 88210

November 20, 2018

Mr. Bradford Billings
NMOCD District IV
1220 South Saint Francis Drive
Santa Fe, NM 87505

Re: Junior AWW State #4H
30-015-36421
Section 17, T16S-R28E
Eddy County, New Mexico
2RP-4612

Mr. Billings,

EOG Y Resources, Inc. is submitting to the NMOCD District IV, a closure report on form C-141, including required attachments, to document all closure activities where applicable. EOG Y Resources, Inc. is certifying that all information in the closure report and attachments are correct and that the responsible party has complied with all applicable closure requirements and conditions specified in division rules or directives.

The report is being submitted in response to the C-141 Initial Report dated 2/12/2018.

Thank you.

EOG Y Resources, Inc.

Robert Asher
Environmental Supervisor

Cc: Mike Bratcher

I. Location

GO EAST OF ARTESIA ON HWY 82 FOR APPROX. 13 MILES TO COUNTY ROAD 214 (BARNAVAL DRAW ROAD). TURN NORTH ON BARNAVAL DRAW ROAD AND GO APPROX. 6.2 MILES, ROAD WILL FORK HERE (OLD WELL SIGNS). TAKE LEFT FORK AND GO APPROX. 2.2 MILES AND TAKE RIGHT FORK IN ROAD AND GO APPROX. 4.4 MILES. AGAIN TAKE RIGHT FORK IN ROAD AND GO APPROX. 3.1 MILES TO A PIT THAT THE ROAD GOES THROUGH. GO DOWN HILL AND TAKE LEFT FORK, GO 3.1 MILES AND TAKE RIGHT FORK (GOES UNDER POWERLINE) AND GO 1.2 MILES (THERE WILL BE A BIG DIRT TANK WEST OF THIS POINT). GO LEFT HERE AND FOLLOW LEASE ROAD FOR 0.1 OF A MILE TO A WELL LOCATION. THE NEW ROAD WILL START HERE ON THE NORTH SIDE OF THIS WELL PAD GOING WEST FOR APPROX. 0.1 OF A MILE TO THE NORTHEAST CORNER OF THE LOCATION.

II. Background

On February 12, 2018, EOG Y Resources, Inc. submitted to the NMOCD District I Office a Form C-141 for the release of 1 B/O and 5 B/PW with 1 B/O and 5 B/PW recovered. This release occurred when the weld on the bottom water leg of the heater rusted out on 1/25/2018. The affected area is approximately 20' X 50' (with in the bermed and lined heater/knockout containment which measures, 165' X 35'. This containment is located west of the battery) on the production pad/facility. A vacuum truck(s) was called, and recovered all of the oil and produced water. A roustabout crew was dispatched, the affected material (gravel) was removed and the affected area of the liner was exposed to inspect and demonstrate liner integrity.

III. Surface and Ground Water

Area surface geology is Salado Formation. Based on information regarding this location (Section 17, T16S-R28E), the New Mexico Office of the State Engineer (NMOSE) database depth to groundwater is follows: (NMOSE-RA 12299 POD1, DTGW @ 70', 3.86 miles southeast), the United States Geological Survey (USGS) National Water Information System, is as follows: (USGS #325638104072801, DTGW @ 49.25', 4.10 miles northeast). The depth to groundwater is approximately 59.625', per NMOSE and USGS groundwater level.

Watercourses in the area are dry except for infrequent flows in response to major precipitation events, with the nearest body of surface water is the Pecos River (9.13 miles, west of the location).

IV. NMOCD Ranking Criteria

The ranking for this site is Ten (10), based on the following:

Depth to ground water	<100'
Wellhead Protection Area	> 1000'
Distance to surface water body	> 1000'

V. Liner Integrity

The release occurred within a lined containment area, EOG Y Resources, Inc. demonstrated liner integrity after affected material is removed and the affected area of the liner is exposed and is providing certification on form C-141.

EOG Y Resources, Inc. has visually inspected the liner where the release occurred and the liner remains intact and had the ability to contain the leak in question.

On November 6, 2018, a two business days' notice was emailed to the NMOCD Division II Office before conducting the liner inspection on 11/8/2018.

Figure 1

Site Map

Junior AWW State #4H
Section 17, T16S-R28E
Eddy County, New Mexico

Legend

- Junior AWW State #4H
- Release affected area



Junior AWW State #4H

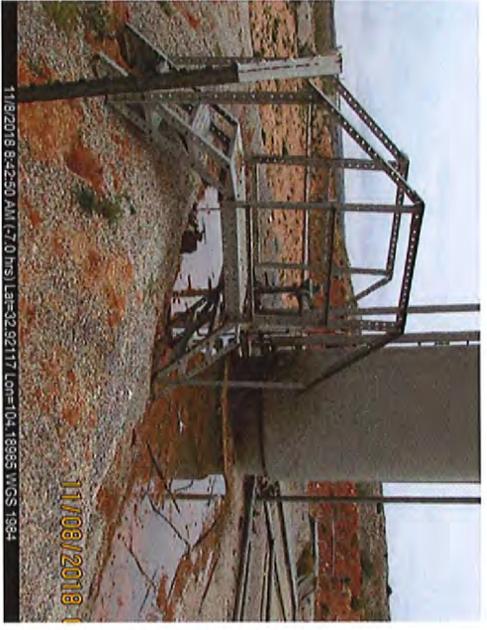
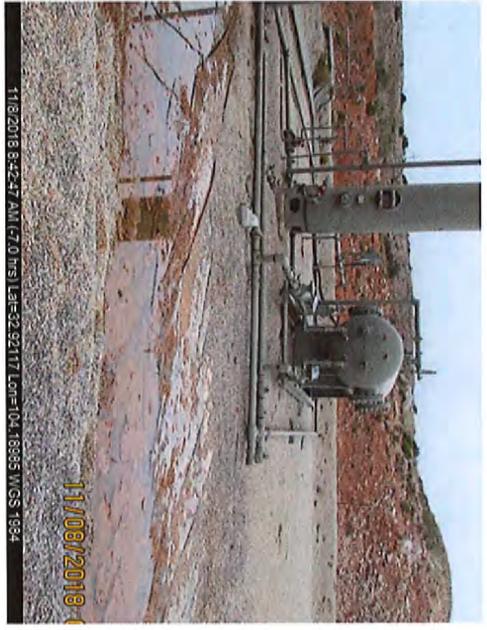
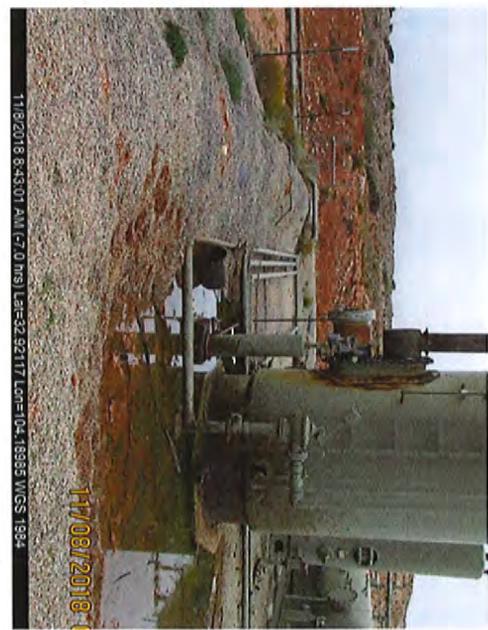
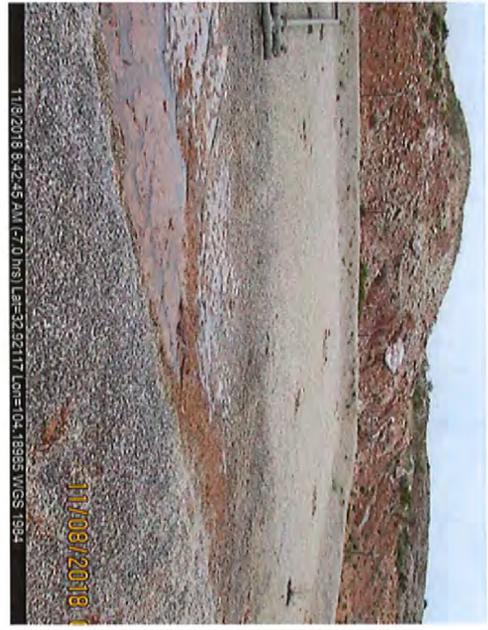
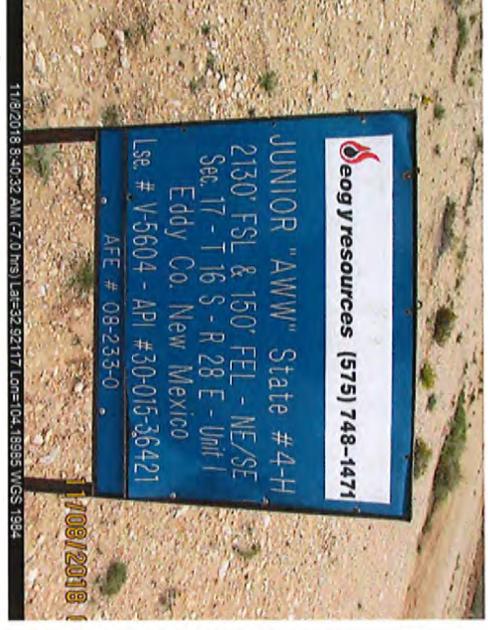
Google Earth

200 ft



Figure 2

Photos



Appendix A

NMOCD Liner Inspection Notification

Bob Asher

From: Bob Asher
Sent: Tuesday, November 6, 2018 6:52 AM
To: maria.pruett@state.nm.us
Cc: mike.bratcher@state.nm.us; Katie Jamison (Katie_Jamison@eogresources.com)
Subject: Liner Inspections

EOG Resources, Inc. will be conducting a liner inspection at the following locations on November 8, 2018 at 7:00 AM.

Sears BRS #2H
Mucho Luck BBW Federal Com #2H
Junior AWW State #4H

EOG will start at the Sears BRS #2H.

EOG FR/PPE Policy is as follows.

All EOG employees, contractors and Regulatory personnel or other Non-EOG personnel are required to wear approved FR clothing and PPE on all EOG locations.

FR Clothing:
Approved FR pants or jeans
Approved FR shirts are to be long sleeves and shirts tucked in.

PPE includes:
H2S Monitors
Safety Glasses
Hard Hat
Steel toed or closed toe leather shoes.

If Non-EOG personnel do not have these items (excluding footwear), items can be provided by EOG.

Thank you,

Robert C. "Bob" Asher
Environmental Supervisor
Safety & Environmental Department
EOG Resources, Inc.
Artesia Division
Artesia, NM 88210
575-748-4217 (Office)
575-365-4021 (Cell)
EOG Safety Begins With YOUR Safety



Appendix B

Form C-141 Initial Report

NM OIL CONSERVATION

ARTESIA DISTRICT

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

FEB 12 2018

Form C-141
Revised April 3, 2017

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

Submit 1 Copy to appropriate District Office in
RECEIVED accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

[X] Initial Report [] Final Report

NAB1804435837

Name of Company: EOG Y Resources, Inc.
Address: 104 S. 4th Street Artesia NM 88210
Facility Name: Junior AWW State #4H
Contact: Robert Asher
Telephone No.: 575-748-1471
Facility Type: Battery

Surface Owner State: Private
Mineral Owner State:
API No.: 30-015-36421

LOCATION OF RELEASE

Table with 9 columns: Unit Letter, Section, Township, Range, Feet from the, North/South Line, Feet from the, East/West Line, County. Values: I, 17, 16S, 28E, 2130, South, 150, East, Eddy.

Latitude 32.92112 Longitude -104.18951 NAD83

NATURE OF RELEASE

Type of Release: Crude Oil/Produced Water
Source of Release: Heater Treater
Volume of Release: 1 B/O & 5 B/PW
Date and Hour of Occurrence: 1/25/2018; PM
Was Immediate Notice Given? [X] Not Required

If a Watercourse was Impacted, Describe Fully.* N/A
Describe Cause of Problem and Remedial Action Taken.*
Welding around the swedge on the bottom water leg of heater rusted out. Vacuum truck and roustabout crew called.

Describe Area Affected and Cleanup Action Taken.*
The impacted area was approximately 75' X 45' within the secondary containment of the production pad (this containment is bermed with a 20 mil liner). Vacuum truck recovered all oil and produced water released. A liner integrity test will be conducted, if results are within the allowable limits to affirm integrity a Final Report, C-141 will be submitted to the NMOCD requesting closure. If the results indicate integrity failure a characterization plan will be submitted to the NMOCD. Depth to Ground Water: 50-99' (70' per NMOSE & 79.25' per USGS), Wellhead Protection Area: No, Distance to Surface Water Body: >1000', SITE RANKING IS 10.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature: Robert Asher
Printed Name: Robert Asher
Title: Environmental Supervisor
E-mail Address: robert.asher@eogresources.com
Date: February 12, 2018
Phone: 575-748-4217
OIL CONSERVATION DIVISION
Accepted for record only
Approval Date: 2/13/18
Expiration Date: N/A
Conditions of Approval: see attached
Attached: [X]

* Attach Additional Sheets If Necessary

Site assessments on initial C-141 will not be accepted.

Operator/Responsible Party,

The OCD has received the form C-141 you provided on **2/12/18** regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number 2RP-4012 has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC. [emphasis added]

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District II office in Artesia on or before 3/12/18. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

- Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C₆ thru C₃₆), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.
- Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C₆ thru C₃₆), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.
- Nominal detection limits for field and laboratory analyses must be provided.
- Composite sampling is not generally allowed.
- Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

- Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

- If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

- Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.

Jim Griswold
OCD Environmental Bureau Chief
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
505-476-3465
jim.griswold@state.nm.us

Appendix C

Form C-141 Final Report

Page 72 of 77
Received by OGD: 8/30/2022 10:54:04 AM
Released to Imaging: 9/29/2022 9:39:31 AM

District I
625 N. French Dr., Hobbs, NM 88240
District II
11 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

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

Form C-141
Revised April 3, 2017

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

**Release Notification and Corrective Action
OPERATOR**

Initial Report Final Report

Name of Company EOG Y Resources, Inc.		Contact Robert Asher
Address 104 S. 4 th Street Artesia NM 88210		Telephone No. 575-748-1471
Facility Name Junior AWW State #4H		Facility Type Battery
Surface Owner State	Mineral Owner State	API No. 30-015-36421

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
L	17	16S	28E	2130	South	150	East	Eddy

Latitude 32.92112 Longitude -104.18951 NAD83

NATURE OF RELEASE

Type of Release Crude Oil/Produced Water	Volume of Release 1 B/O & 5 B/PW	Volume Recovered 1 B/O & 5 B/PW
Source of Release Heater Treater	Date and Hour of Occurrence 1/25/2018; PM	Date and Hour of Discovery 1/26/2018; 3:30 PM
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom? N/A	
By Whom? N/A	Date and Hour N/A	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.* N/A

Describe Cause of Problem and Remedial Action Taken.*
Welding around the swedge on the bottom water leg of heater rusted out. Vacuum truck and roustabout crew called.

Describe Area Affected and Cleanup Action Taken.*
The impacted area was approximately 75' X 45' within the secondary containment of the production pad (this containment is bermed with a 20 mil liner). Vacuum truck recovered all oil and produced water released. A liner integrity test will be conducted, to affirm integrity a Final Report, C-141 will be submitted to the NMOCD requesting closure. **Depth to Ground Water: 50-99' (70' per NMOSE & 49.25' per USGS), Wellhead Protection Area: No, Distance to Surface Water Body: >1000', SITE RANKING IS 10. Based off of demonstrated and documented liner integrity, EOG Y Resources, Inc. requests closure.**

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature: 	OIL CONSERVATION DIVISION		
Printed Name: Robert Asher	Approved by Environmental Specialist:		
Title: Environmental Supervisor	Approval Date:	Expiration Date:	
E-mail Address: bob_asher@eogresources.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: November 20, 2018 Phone: 575-748-4217	2RP-4612		

Attach Additional Sheets If Necessary

Junior AWW State #4H
Closure Report
#nAB1804435837



August 29, 2022

Appendix E

Current C-141 Closure

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	nAB1804435837
District RP	2RP-4612
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party EOG Resources, Inc.	OGRID 7377
Contact Name Chase Settle	Contact Telephone 575-748-1471
Contact email Chase_Settle@eogresources.com	Incident # (assigned by OCD) nAB1804435837
Contact mailing address 104 S. 4th Street, Artesia, NM 88210	

Location of Release Source

Latitude 32.92082 Longitude -104.18991
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Junior AWW State #4H	Site Type Battery
Date Release Discovered 1/25/2018	API# (if applicable) 30-015-36421

Unit Letter	Section	Township	Range	County
I	17	16S	28E	Eddy

Surface Owner: State Federal Tribal Private (Name: COG Operating)

Nature and Volume of Release

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

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls) 1	Volume Recovered (bbls) 1
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 5	Volume Recovered (bbls) 5
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release **Please refer to the original C-141 for details of 2RP-4612.**

Oil Conservation Division

Incident ID	nAB1804435837
District RP	2RP-4612
Facility ID	
Application ID	

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>Chase Settle</u> Title: <u>Rep Safety & Environmental Sr</u> Signature: <u>Chase Settle</u> Date: <u>08/29/2022</u> email: <u>Chase_Settle@eogresources.com</u> Telephone: <u>575-748-1471</u>
<u>OCD Only</u> Received by: _____ Date: _____

Incident ID	nAB1804435837
District RP	2RP-4612
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: Chase Settle Title: Rep Safety & Environmental Sr
 Signature: Chase Settle Date: 08/29/2022
 email: Chase_Settle@eogresources.com Telephone: 575-748-1471

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: Brittany Hall Date: 09/29/2022
 Printed Name: Brittany Hall Title: Environmental Specialist

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 139396

CONDITIONS

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 139396
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
bhall	None	9/29/2022