



**EOG Resources, Inc.**  
Artesia Division Office  
104 S. 4<sup>th</sup> Street  
Artesia, N. M. 88210

October 22, 2018

Ms. Maria Pruett  
NMOCD District II  
811 S. 1<sup>st</sup> Street  
Artesia, NM 88210

Re: Link BKT Federal Com #1HY  
30-015-36399  
Section 18, T16S-R25E  
Eddy County, New Mexico  
2RP-4960

Ms. Pruett,

EOG Y Resources, Inc. is submitting the enclosed CLOSURE REPORT and C-141 Final Report for the above captioned location. The report is being submitted in response to the C-141 Initial Report dated 8/23/2018.

Thank you.

EOG Y Resources, Inc.

Robert Asher  
Environmental Supervisor

Cc: Mike Bratcher

**I. Location**

From Artesia, NM, travel west on US Highway 285 for approximately 7.8 miles to W. Funk Road (CR 121). Turn left (East) and continue for approximately 7.0 miles to N. Joy Road (CR 95), turn left (South) and continue approximately 1.0 miles to W. Bittersweet Road (CR 133). Turn left, (NE) and continue approximately 0.5 miles. The road will curve left, but turn right (South) onto unpaved farm/lease road, continue south for approximately 1.2 miles and road curves to the left (East) and continue east for approximately 0.8 miles to a fork in the road, take left fork, continue NE for approximately 0.25 miles and curves to the right (East), continue east for approximately 1.0 miles to a "T" in the road, turn left (North) and continue for approximately 0.4 miles to the southeast corner of the location.

**II. Background**

On August 23, 2018, EOG Y Resources, Inc. submitted to the NMOCD District I Office a Form C-141 for the release of 209 B/PW with 60 B/PW recovered from a produced water tank that was struck by lightning sometime during the early morning hours of 8/4/2018. The affected area is approximately 15' X 10' (north side of the battery) and 15' X 70' (south side of the battery) within the lined containment of the production facility. Those two (2) affected areas were caused by a fire that started from the lightning strike and burnt/melted the synthetic liner inside the battery. A vacuum truck(s) was called to recover the remaining produced water (the majority of the produced water was consumed in the fire). A roustabout crew was dispatched to begin clean-up and removal of the damaged equipment/tank.

**III. Surface and Ground Water**

Area surface geology is Paleozoic Permian. Based on information regarding this location (Section 18, T16S-R34E), the New Mexico Office of the State Engineer (NMOSE) database depth to groundwater is follows: (NMOSE-RA 05414, DTGW @ 100'), the United States Geological Survey National Water Information System, is as follows: (USGS #325634104304801, DTGW @ 57', USGS #325536104295101, DTGW @ 81.05, USGS #325420104320701, DTGW @ 205'. The depth to groundwater is >100', per USGS and NMOSE groundwater level. **Based on this information the Site Ranking is a Zero (0).**

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 (9.53 miles, East/Southeast direction).

**IV. NMOCD Ranking Criteria**

The ranking for this site is Zero (0) based on the following:

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

**V. Liner Integrity**

The battery is bermed and lined with a 20 millimeter liner, but with the fire that started from the lightning strike the synthetic liner inside the battery was compromised.

**VI. Sampling Procedure**

Vertical and horizontal delineation samples (S 1, S 2, S 3 & S 4) were collected within the area effected from the compromised liner. Samples were collected at 1', 2', 3' below grade surface (bgs). The soil samples will be analyzed for Benzene, BTEX, TPH extended and Chlorides. All samples will be sent to a NMOCD approved laboratory for analysis.

Based off of the analytical results (Appendix D), all results are within limits of Table 1, Closure Criteria for Soils Impacted by a Release.

Latitude/Longitude Coordinates for Sample Points

S 1	32.924775°; -104.516798°
S 1	32.924793°; -104.516779°
S 2	32.924785°; -104.516790°
S 3	32.924698°; -104.516825°
S 3	32.924679°; -104.516824°
S 3	32.924679°; -104.516730°
S 3	32.924678°; -104.516729°
S 3	32.924695°; -104.516639°
S 3	32.924673°; -104.516636°
S 4	32.924686°; -104.516802°
S 4	32.924689°; -104.516736°
S 4	32.924685°; -104.516661°

# Figure 1

## Site Map



# Link BKT Federal #1HY

Section: 18, T16S-R25E, Eddy County, New Mexico  
Site Map

## Legend

Link BKT Federal #1HY

Link BKT Federal #1HY

Google Earth

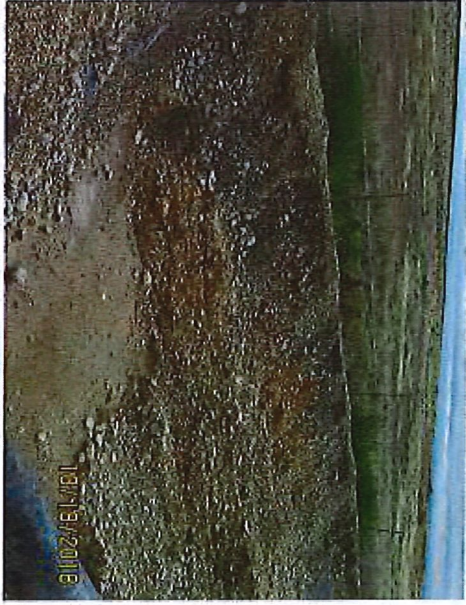
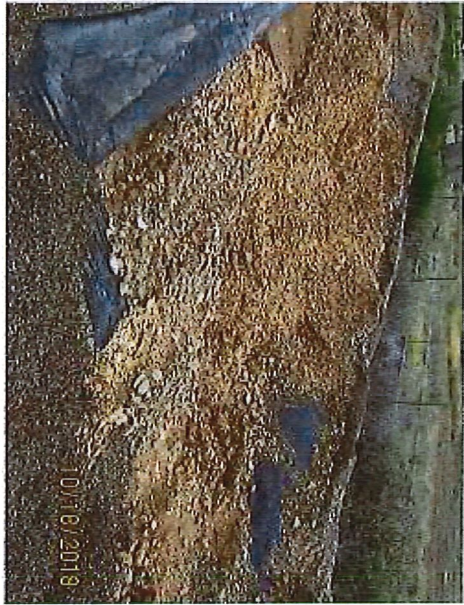
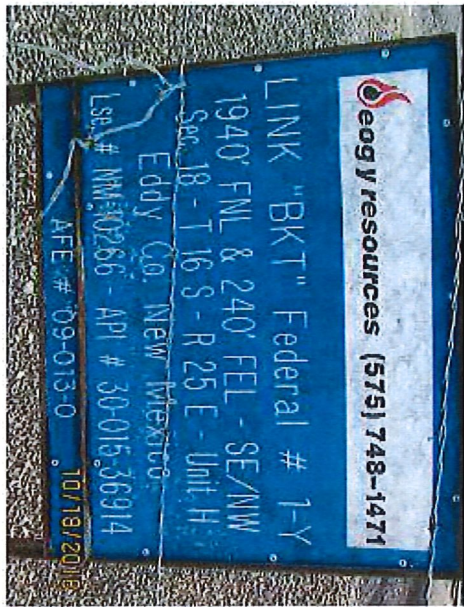
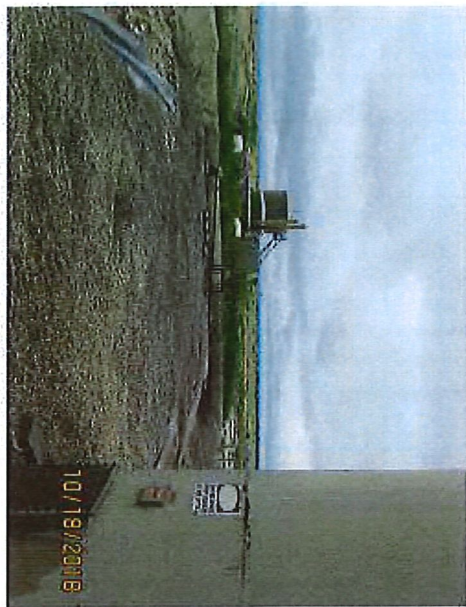


100 ft

## Figure 2

### Photos









# **Appendix A**

## **Water Well Date Site Map**

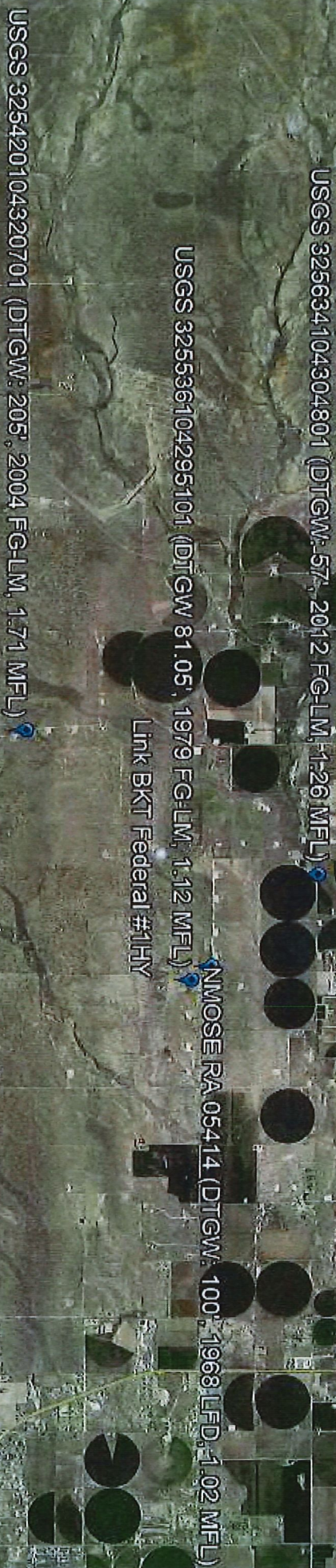


# Link BKT Federal #1HY

Section 18, T16S-R25E; Eddy County, New Mexico  
Water Well Data: Site Ranking is Zero (0). Depth to Ground Water: >100'  
(Approximately 110.75', per NMOSE & USGS Groundwater Levels).  
FG-LM (Field Groundwater-Level Measurement Date)  
LFD (Log File Date)  
MFL (Miles From Location)

## Legend

- Link BKT Federal #1HY
- NMOSE & USGS Water Wells



Google Earth

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## Appendix B

### NMOSE Well Log



## New Mexico Office of the State Engineer Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest)						(NAD83 UTM in meters)	
		Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	RA 05414	2	2	2	17	16S	25E	546738	3643563*
<b>Driller License:</b> 318		<b>Driller Company:</b> WESTERN PUMP & SUPPLY							
<b>Driller Name:</b>									
<b>Drill Start Date:</b>	04/05/1968	<b>Drill Finish Date:</b>		04/06/1968		<b>Plug Date:</b>			
<b>Log File Date:</b>	06/24/1968	<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>		<b>Depth Well:</b>		186 feet		<b>Depth Water:</b> 100 feet			

\*UTM location was derived from PLSS - see Help

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

10/12/18 7:49 AM

Page 1 of 1

POD SUMMARY - RA 05414



## Appendix C

### USGS Groundwater Level Information



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## USGS 325634104304801 16S.25E.08.111432

Available data for this site

SUMMARY OF ALL AVAILABLE DATA ▼

GO

### Well Site

#### DESCRIPTION:

Latitude 32°56'34", Longitude 104°30'48" NAD27  
 Eddy County, New Mexico  
 Well depth: not determined.  
 Land surface altitude: 3,519 feet above NAVD88.  
 Well completed in "Alluvium, Bolson Deposits and Other Surface  
 Deposits" (110AVMB) local aquifer

#### AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
<a href="#">Field groundwater-level measurements</a>	1938-01-17	2013-01-30	49
<a href="#">Revisions</a>	Unavailable (site:0) (timeseries:0)		

#### 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](#)

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Available data for this site

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Eddy County, New Mexico

Hydrologic Unit Code --

Latitude 32°56'34", Longitude 104°30'48" NAD27

Land-surface elevation 3,519 feet above NAVD88

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

### Output formats

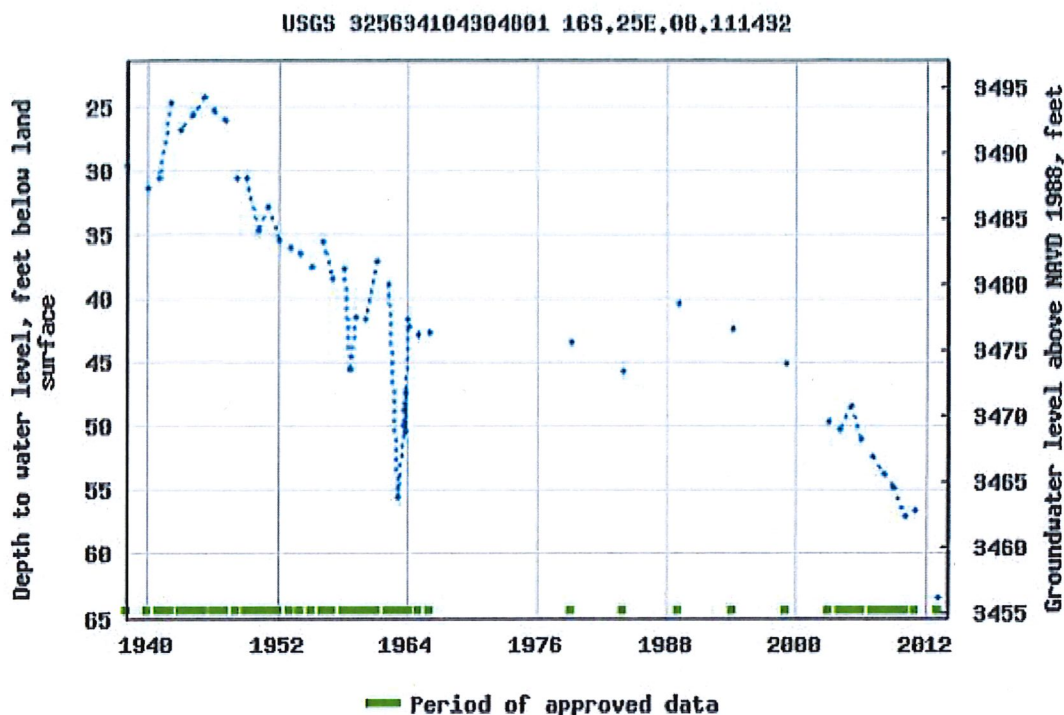
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**URL:** <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>



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1.28 1.12 nadww01

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### Well Site

#### DESCRIPTION:

Latitude 32°55'36", Longitude 104°29'51" NAD27

Eddy County, New Mexico

Well depth: 150 feet

Land surface altitude: 3,521 feet above NAVD88.

Well completed in "Alluvium, Bolson Deposits and Other Surface Deposits" (110AVMB) local aquifer

#### AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
<u><b>Field groundwater-level measurements</b></u>	1979-03-19	1979-03-19	1
<u><b>Revisions</b></u>	Unavailable (site:0) (timeseries:0)		

#### OPERATION:

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Groundwater: Field measurements ▼

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Eddy County, New Mexico

Hydrologic Unit Code --

Latitude 32°55'36", Longitude 104°29'51" NAD27

Land-surface elevation 3,521 feet above NAVD88

The depth of the well is 150 feet below land surface.

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

### Output formats

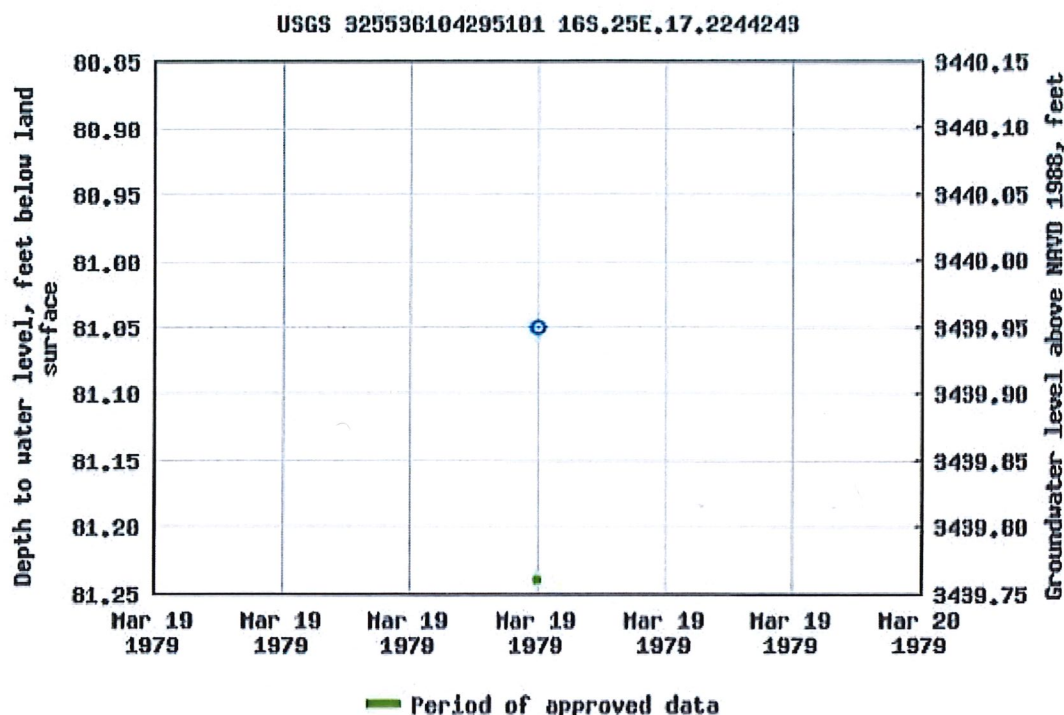
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## USGS 325420104320701 16S.24E.24.42342

Available data for this site

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GO

### Well Site

#### DESCRIPTION:

Latitude 32°54'20", Longitude 104°32'07" NAD27  
 Eddy County, New Mexico , Hydrologic Unit 13060007  
 Well depth: 253 feet  
 Land surface altitude: 3,640 feet above NAVD88.  
 Well completed in "Artesia Group" (313ARTS) local aquifer

#### AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
<a href="#">Field groundwater-level measurements</a>	1989-01-19	2004-02-17	4
<a href="#">Revisions</a>	Unavailable (site:0) (timeseries:0)		

#### OPERATION:

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Available data for this site

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Eddy County, New Mexico

Hydrologic Unit Code 13060007

Latitude 32°54'20", Longitude 104°32'07" NAD27

Land-surface elevation 3,640 feet above NAVD88

The depth of the well is 253 feet below land surface.

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

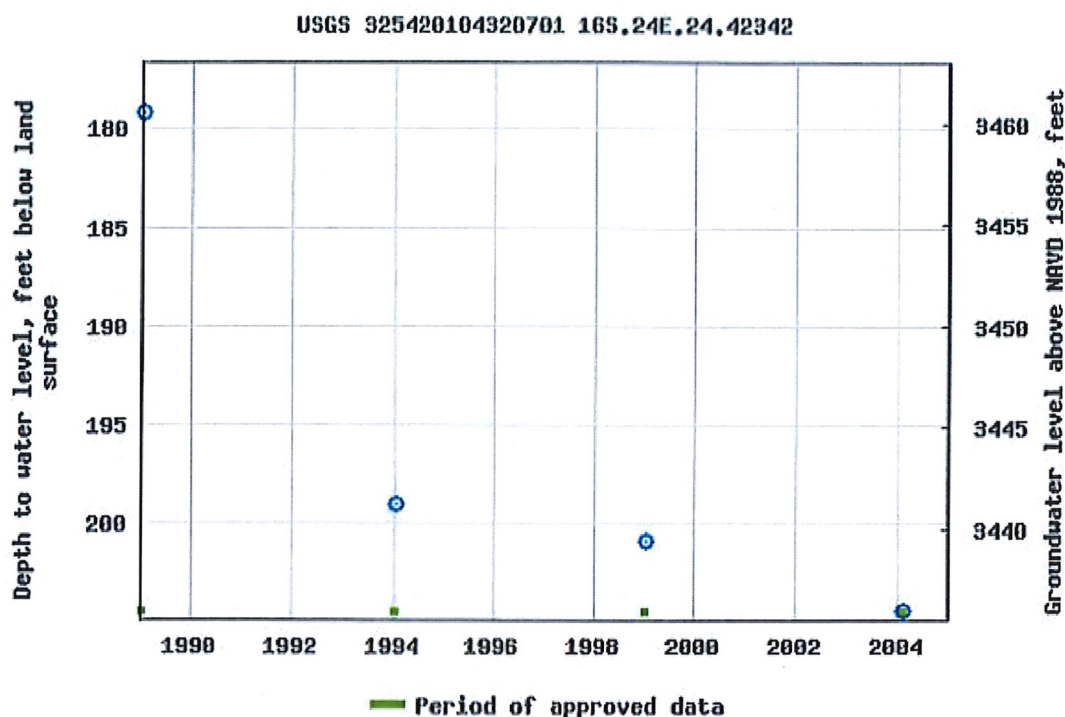
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1.2 1.04 nadww01

# Appendix D

## Sample Analysis Report



Results	Sample Area	Sample Date	Sample Type	Depth	BTEX	GRO	DRO	EXT DRO	Chlorides
S 1.1	East of Battery	8/24/2018	Grab/Backhoe	1'	<0.30	<10.0	<10.0	<10.0	32
S 1.2	East of Battery	8/24/2018	Grab/Backhoe	2'	<0.30	<10.0	<10.0	<10.0	16
S 1.3	East of Battery	8/24/2018	Grab/Backhoe	3'	<0.30	<10.0	<10.0	<10.0	<16.0
Results	Sample Area	Sample Date	Sample Type	Depth	BTEX	GRO	DRO	EXT DRO	Chlorides
S 2.1	East of Battery	8/24/2018	Grab/Backhoe	1'	<0.30	<10.0	<10.0	<10.0	64
S 2.2	East of Battery	8/24/2018	Grab/Backhoe	2'	<0.30	<10.0	<10.0	<10.0	496
S 2.3	East of Battery	8/24/2018	Grab/Backhoe	3'	<0.30	<10.0	<10.0	<10.0	448
Results	Sample Area	Sample Date	Sample Type	Depth	BTEX	GRO	DRO	EXT DRO	Chlorides
S 3.1	West of Battery	8/24/2018	Grab/Backhoe	1'	<0.30	<10.0	<10.0	<10.0	48
S 3.2	West of Battery	8/24/2018	Grab/Backhoe	2'	<0.30	<10.0	<10.0	<10.0	32
S 3.3	West of Battery	8/24/2018	Grab/Backhoe	3'	<0.30	<10.0	<10.0	<10.0	<16.0
Results	Sample Area	Sample Date	Sample Type	Depth	BTEX	GRO	DRO	EXT DRO	Chlorides
S 4.1	West of Battery	8/24/2018	Grab/Backhoe	1'	<0.30	<10.0	<10.0	<10.0	752
S 4.2	West of Battery	8/24/2018	Grab/Backhoe	2'	<0.30	<10.0	<10.0	<10.0	624
S 4.3	West of Battery	8/24/2018	Grab/Backhoe	3'	<0.30	<10.0	<10.0	<10.0	1460
Results	Sample Area	Sample Date	Sample Type	Depth	BTEX	GRO	DRO	EXT DRO	Chlorides
S 4.4	West of Battery	9/19/2018	Grab/Backhoe	4'	<0.30	<10.0	<10.0	<10.0	544
S 4.5	West of Battery	9/19/2018	Grab/Backhoe	5'	<0.30	<10.0	<10.0	<10.0	576
S 4.7	West of Battery	9/19/2018	Grab/Backhoe	7'	<0.30	<10.0	<10.0	<10.0	1260
S 4.9	West of Battery	9/19/2018	Grab/Backhoe	9'	<0.30	<10.0	<10.0	<10.0	224

Site Ranking is Zero (0). Depth to Ground Water >100' (approx. 110.75", per USGS & NMOSE).

All results are ppm. BSL - Below Surface Level



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

August 28, 2018

ROBERT ASHER

EOG Y RESOURCES, INC

105 SOUTH 4TH STREET

ARTESIA, NM 88210

RE: LINK BKT FEDERAL #1HY (S1 & S2)

Enclosed are the results of analyses for samples received by the laboratory on 08/27/18 12:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Caley D. Keene

Lab Director/Quality Manager





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

**Analytical Results For:**

EOG Y RESOURCES, INC  
ROBERT ASHER  
105 SOUTH 4TH STREET  
ARTESIA NM, 88210  
Fax To: (575) 748-4131

Received:	08/27/2018	Sampling Date:	08/24/2018
Reported:	08/28/2018	Sampling Type:	Soil
Project Name:	LINK BKT FEDERAL #1HY (S1 & S2)	Sampling Condition:	Cool & Intact
Project Number:	30-015-36399	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

**Sample ID: S 1.1 (H802394-01)**

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/27/2018	ND	2.00	99.8	2.00	1.23	
Toluene*	<0.050	0.050	08/27/2018	ND	1.94	97.0	2.00	3.80	
Ethylbenzene*	<0.050	0.050	08/27/2018	ND	1.96	98.2	2.00	2.67	
Total Xylenes*	<0.150	0.150	08/27/2018	ND	5.93	98.8	6.00	2.80	
Total BTEX	<0.300	0.300	08/27/2018	ND					

Surrogate: 4-Bromofluorobenzene (PHE) 94.1 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	08/28/2018	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/28/2018	ND	217	108	200	3.27	
DRO >C10-C28*	<10.0	10.0	08/28/2018	ND	226	113	200	10.0	
EXT DRO >C28-C36	<10.0	10.0	08/28/2018	ND					

Surrogate: 1-Chlorooctane 99.5 % 41-142

Surrogate: 1-Chlorooctadecane 100 % 37.6-147

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\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

EOG Y RESOURCES, INC  
ROBERT ASHER  
105 SOUTH 4TH STREET  
ARTESIA NM, 88210  
Fax To: (575) 748-4131

Received:	08/27/2018	Sampling Date:	08/24/2018
Reported:	08/28/2018	Sampling Type:	Soil
Project Name:	LINK BKT FEDERAL #1HY (S1 & S2)	Sampling Condition:	Cool & Intact
Project Number:	30-015-36399	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

**Sample ID: S 1.2 (H802394-02)**

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/27/2018	ND	2.00	99.8	2.00	1.23	
Toluene*	<0.050	0.050	08/27/2018	ND	1.94	97.0	2.00	3.80	
Ethylbenzene*	<0.050	0.050	08/27/2018	ND	1.96	98.2	2.00	2.67	
Total Xylenes*	<0.150	0.150	08/27/2018	ND	5.93	98.8	6.00	2.80	
Total BTEX	<0.300	0.300	08/27/2018	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 95.8 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	08/28/2018	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/28/2018	ND	217	108	200	3.27	
DRO >C10-C28*	<10.0	10.0	08/28/2018	ND	226	113	200	10.0	
EXT DRO >C28-C36	<10.0	10.0	08/28/2018	ND					

Surrogate: 1-Chlorooctane 99.9 % 41-142

Surrogate: 1-Chlorooctadecane 97.8 % 37.6-147

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\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

EOG Y RESOURCES, INC  
 ROBERT ASHER  
 105 SOUTH 4TH STREET  
 ARTESIA NM, 88210  
 Fax To: (575) 748-4131

Received:	08/27/2018	Sampling Date:	08/24/2018
Reported:	08/28/2018	Sampling Type:	Soil
Project Name:	LINK BKT FEDERAL #JHY (S1 & S2)	Sampling Condition:	Cool & Intact
Project Number:	30-015-36399	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

**Sample ID: S 1.3 (H802394-03)**

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/27/2018	ND	2.00	99.8	2.00	1.23	
Toluene*	<0.050	0.050	08/27/2018	ND	1.94	97.0	2.00	3.80	
Ethylbenzene*	<0.050	0.050	08/27/2018	ND	1.96	98.2	2.00	2.67	
Total Xylenes*	<0.150	0.150	08/27/2018	ND	5.93	98.8	6.00	2.80	
Total BTEX	<0.300	0.300	08/27/2018	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 96.6 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	08/28/2018	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/28/2018	ND	217	108	200	3.27	
DRO >C10-C28*	<10.0	10.0	08/28/2018	ND	226	113	200	10.0	
EXT DRO >C28-C36	<10.0	10.0	08/28/2018	ND					

Surrogate: 1-Chlorooctane 97.6 % 41-142

Surrogate: 1-Chlorooctadecane 94.9 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

EOG Y RESOURCES, INC  
ROBERT ASHER  
105 SOUTH 4TH STREET  
ARTESTA NM, 88210  
Fax To: (575) 748-4131

Received:	08/27/2018	Sampling Date:	08/24/2018
Reported:	08/28/2018	Sampling Type:	Soil
Project Name:	LINK BKT FEDERAL #1HY (S1 & S2)	Sampling Condition:	Cool & Intact
Project Number:	30-015-36399	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

**Sample ID: S 2.1 (H802394-04)**

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/27/2018	ND	2.00	99.8	2.00	1.23	
Toluene*	<0.050	0.050	08/27/2018	ND	1.94	97.0	2.00	3.80	
Ethylbenzene*	<0.050	0.050	08/27/2018	ND	1.96	98.2	2.00	2.67	
Total Xylenes*	<0.150	0.150	08/27/2018	ND	5.93	98.8	6.00	2.80	
Total BTEX	<0.300	0.300	08/27/2018	ND					

Surrogate: 4-Bromofluorobenzene (PH) 94.8 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	08/28/2018	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/28/2018	ND	217	108	200	3.27	
DRO >C10-C28*	<10.0	10.0	08/28/2018	ND	226	113	200	10.0	
EXT DRO >C28-C36	<10.0	10.0	08/28/2018	ND					

Surrogate: 1-Chlorooctane 98.4 % 41-142

Surrogate: 1-Chlorooctadecane 95.7 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

EOG Y RESOURCES, INC  
ROBERT ASHER  
105 SOUTH 4TH STREET  
ARTESIA NM, 88210  
Fax To: (575) 748-4131

Received:	08/27/2018	Sampling Date:	08/24/2018
Reported:	08/28/2018	Sampling Type:	Soil
Project Name:	LINK BKT FEDERAL #1HY (S1 & S2)	Sampling Condition:	Cool & Intact
Project Number:	30-015-36399	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

**Sample ID: S 2.2 (H802394-05)**

BTEX 80218		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/27/2018	ND	2.00	99.8	2.00	1.23	
Toluene*	<0.050	0.050	08/27/2018	ND	1.94	97.0	2.00	3.80	
Ethylbenzene*	<0.050	0.050	08/27/2018	ND	1.96	98.2	2.00	2.67	
Total Xylenes*	<0.150	0.150	08/27/2018	ND	5.93	98.8	6.00	2.80	
Total BTEX	<0.300	0.300	08/27/2018	ND					

Surrogate: 4-Bromofluorobenzene (PFC) 95.6 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	496	16.0	08/28/2018	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/28/2018	ND	217	108	200	3.27	
DRO >C10-C28*	<10.0	10.0	08/28/2018	ND	226	113	200	10.0	
EXT DRO >C28-C36	<10.0	10.0	08/28/2018	ND					

Surrogate: 1-Chlorooctane 97.4 % 41-142

Surrogate: 1-Chlorooctadecane 94.3 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

EOG Y RESOURCES, INC  
ROBERT ASHER  
105 SOUTH 4TH STREET  
ARTESIA NM, 88210  
Fax To: (575) 748-4131

Received:	08/27/2018	Sampling Date:	08/24/2018
Reported:	08/28/2018	Sampling Type:	Soil
Project Name:	LINK BKT FEDERAL #1HY (S1 & S2)	Sampling Condition:	Cool & Intact
Project Number:	30-015-36399	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

**Sample ID: S 2.3 (H802394-06)**

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/27/2018	ND	2.00	99.8	2.00	1.23	
Toluene*	<0.050	0.050	08/27/2018	ND	1.94	97.0	2.00	3.80	
Ethylbenzene*	<0.050	0.050	08/27/2018	ND	1.96	98.2	2.00	2.67	
Total Xylenes*	<0.150	0.150	08/27/2018	ND	5.93	98.8	6.00	2.80	
Total BTEX	<0.300	0.300	08/27/2018	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 94.5 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	448	16.0	08/28/2018	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/28/2018	ND	217	108	200	3.27	
DRO >C10-C28*	<10.0	10.0	08/28/2018	ND	226	113	200	10.0	
EXT DRO >C28-C36	<10.0	10.0	08/28/2018	ND					

Surrogate: 1-Chlorooctane 96.5 % 41-142

Surrogate: 1-Chlorooctadecane 94.5 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager





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## Notes and Definitions

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

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**ARDINAL LABORATORIES**  
101 East Martindale, Hobbs, NM 88240

(505) 393-2326 FAX (505) 393-2475

# CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Robert Asher

Project Name: Link BKT Federal #1HY (S 1 & S 2)

Company Name: EOG Resources, Inc.

Project #: 30-015-36399

Company Address: 104 South 4th Street

Project Loc: Eddy County

City/State/Zip: Artesia, NM 88210

PO #: 205632

Telephone No: 575-748-4171

Fax No:

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

Sampler Signature: Robert Asher

e-mail:

robert\_asher@eogresources.com

ORDER #: H800394

(Lab use only)				Preservation & # of Containers										Matrix										Analyze For:									
LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Ice	HNO <sub>3</sub>	HCl	H <sub>2</sub> SO <sub>4</sub>	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	None	Other (Specify)	DW-Drinking Water 6L-8L Jug	GW-Groundwater 5-Gallon Solid	NP-Non-Potable Specify Other	TPH: 8015M Extended	TPH: TX 1005	TX 1008	Cations (Ca, Mg, Na, K)	Anions (Cl)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B 5030 or BTEX 8260	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) 24 hrs	Standard TAT	
1	S 1.1	1'	1'	8/24/2018	7:05 AM		1													X			X										
2	S 1.2	2'	2'	8/24/2018	7:08 AM		1													X			X										
3	S 1.3	3'	3'	8/24/2018	7:10 AM		1													X			X										
4	S 2.1	1'	1'	8/24/2018	7:15 AM		1													X			X										
5	S 2.2	2'	2'	8/24/2018	7:18 AM		1													X			X										
6	S 2.3	3'	3'	8/24/2018	7:20 AM		1													X			X										
24 HR TAT PLEASE.																																	
Special Instructions: <b>TPH Extended Please.</b> ALL results in mg/kg. Thank you.																																	
Requested by:	Date	Time	Received by:	Date	Time	Laboratory Comments:																											
Requested by:	08/25/18	7:52 AM	Received by:	8-27-18	12:00	Sample Containers Intact? <input checked="" type="checkbox"/> N VOCs Free of Headspace? <input checked="" type="checkbox"/> N Labels on containers? <input checked="" type="checkbox"/> N Custody seals on containers? <input checked="" type="checkbox"/> N Custody seals on cooler(s) <input checked="" type="checkbox"/> N Sample Hand Delivered by Sampler/Client Rep. ? <input checked="" type="checkbox"/> N by Courier? <input checked="" type="checkbox"/> UPS <input checked="" type="checkbox"/> DHL <input checked="" type="checkbox"/> FedEx <input checked="" type="checkbox"/> Lora Star Temperature Upon Receipt: <u>41.4°C</u> <u>105.3°F</u>																											
Requested by:	Date	Time	Received by:	Date	Time																												





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August 28, 2018

ROBERT ASHER

EOG Y RESOURCES, INC

105 SOUTH 4TH STREET

ARTESIA, NM 88210

RE: LINK BKT FEDERAL #1HY (S3 & S4)

Enclosed are the results of analyses for samples received by the laboratory on 08/27/18 12:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



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**Analytical Results For:**

EOG Y RESOURCES, INC  
ROBERT ASHER  
105 SOUTH 4TH STREET  
ARTESIA NM, 88210  
Fax To: (575) 748-1131

Received:	08/27/2018	Sampling Date:	08/24/2018
Reported:	08/28/2018	Sampling Type:	Soil
Project Name:	LINK BKT FEDERAL #1HY (S3 & S4)	Sampling Condition:	Cool & Intact
Project Number:	30-015-36399	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

**Sample ID: S 3.1 (H802395-01)**

BTEX 80218		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/27/2018	ND	2.00	99.8	2.00	1.23	
Toluene*	<0.050	0.050	08/27/2018	ND	1.94	97.0	2.00	3.80	
Ethylbenzene*	<0.050	0.050	08/27/2018	ND	1.96	98.2	2.00	2.67	
Total Xylenes*	<0.150	0.150	08/27/2018	ND	5.93	98.8	6.00	2.80	
Total BTEX	<0.300	0.300	08/27/2018	ND					

Surrogate: 4-Bromofluorobenzene (PHE) 95.1 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	08/28/2018	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/28/2018	ND	217	108	200	3.27	
DRO >C10-C28*	<10.0	10.0	08/28/2018	ND	226	113	200	10.0	
EXT DRO >C28-C36	<10.0	10.0	08/28/2018	ND					

Surrogate: 1-Chlorooctane 102 % 41-142

Surrogate: 1-Chlorooctadecane 99.8 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

EOG Y RESOURCES, INC  
 ROBERT ASHER  
 105 SOUTH 4TH STREET  
 ARTESIA NM, 88210  
 Fax To: (575) 748-4131

Received:	08/27/2018	Sampling Date:	08/24/2018
Reported:	08/28/2018	Sampling Type:	Soil
Project Name:	LINK BKT FEDERAL #1HY (S3 & S4)	Sampling Condition:	Cool & Intact
Project Number:	30-015-36399	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

**Sample ID: S 3.2 (H802395-02)**

BTX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/27/2018	ND	2.00	99.8	2.00	1.23	
Toluene*	<0.050	0.050	08/27/2018	ND	1.94	97.0	2.00	3.80	
Ethylbenzene*	<0.050	0.050	08/27/2018	ND	1.96	98.2	2.00	2.67	
Total Xylenes*	<0.150	0.150	08/27/2018	ND	5.93	98.8	6.00	2.80	
Total BTX	<0.300	0.300	08/27/2018	ND					

Surrogate: 4-Bromofluorobenzene (PII) 95.6 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	08/28/2018	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/28/2018	ND	217	108	200	3.27	
DRO >C10-C28*	<10.0	10.0	08/28/2018	ND	226	113	200	10.0	
EXT DRO >C28-C36	<10.0	10.0	08/28/2018	ND					

Surrogate: 1-Chlorooctane 99.7 % 41-142

Surrogate: 1-Chloronadecane 97.2 % 37.6-147

**Cardinal Laboratories**

\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

EOG Y RESOURCES, INC  
ROBERT ASHER  
105 SOUTH 4TH STREET  
ARTESIA NM, 88210  
Fax To: (575) 748-4131

Received: 08/27/2018  
Reported: 08/28/2018  
Project Name: LINK BKT FEDERAL #1HY (S3 & S4)  
Project Number: 30-015-36399  
Project Location: EDDY CO NM

Sampling Date: 08/24/2018  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: S 3.3 (H802395-03)**

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/27/2018	ND	2.00	99.8	2.00	1.23	
Toluene*	<0.050	0.050	08/27/2018	ND	1.94	97.0	2.00	3.80	
Ethylbenzene*	<0.050	0.050	08/27/2018	ND	1.96	98.2	2.00	2.67	
Total Xylenes*	<0.150	0.150	08/27/2018	ND	5.93	98.8	6.00	2.80	
Total BTEX	<0.300	0.300	08/27/2018	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 95.4 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	08/28/2018	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/28/2018	ND	217	108	200	3.27	
DRO >C10-C28*	<10.0	10.0	08/28/2018	ND	226	113	200	10.0	
EXT DRO >C28-C36	<10.0	10.0	08/28/2018	ND					

Surrogate: 1-Chlorooctane 101 % 41-142

Surrogate: 1-Chlorooctadecane 98.2 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

EOG Y RESOURCES, INC  
ROBERT ASHER  
105 SOUTH 4TH STREET  
ARTESIA NM, 88210  
Fax To: (575) 748-4131

Received:	08/27/2018	Sampling Date:	08/24/2018
Reported:	08/28/2018	Sampling Type:	Soil
Project Name:	LINK BKT FEDERAL #1HY (S3 & S4)	Sampling Condition:	Cool & Intact
Project Number:	30-015-36399	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

**Sample ID: S 4.1 (H802395-04)**

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/27/2018	ND	2.00	99.8	2.00	1.23	
Toluene*	<0.050	0.050	08/27/2018	ND	1.94	97.0	2.00	3.80	
Ethylbenzene*	<0.050	0.050	08/27/2018	ND	1.96	98.2	2.00	2.67	
Total Xylenes*	<0.150	0.150	08/27/2018	ND	5.93	98.8	6.00	2.80	
Total BTEX	<0.300	0.300	08/27/2018	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 93.7 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	752	16.0	08/28/2018	ND	432	108	400	0.00	

TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/28/2018	ND	217	108	200	3.27	
DRO >C10-C28*	<10.0	10.0	08/28/2018	ND	226	113	200	10.0	
EXT DRO >C28-C36	<10.0	10.0	08/28/2018	ND					

Surrogate: 1-Chlorooctane 102 % 41-142

Surrogate: 1-Chlorooctadecane 99.6 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

EOG Y RESOURCES, INC  
ROBERT ASHER  
105 SOUTH 4TH STREET  
ARTESIA NM, 88210  
Fax To: (575) 748-4131

Received:	08/27/2018	Sampling Date:	08/24/2018
Reported:	08/28/2018	Sampling Type:	Soil
Project Name:	LINK BKT FEDERAL #1HY (S3 & S4)	Sampling Condition:	Cool & Intact
Project Number:	30-015-36399	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

**Sample ID: S 4.2 (H802395-05)**

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/28/2018	ND	2.00	99.8	2.00	1.23	
Toluene*	<0.050	0.050	08/28/2018	ND	1.94	97.0	2.00	3.80	
Ethylbenzene*	<0.050	0.050	08/28/2018	ND	1.96	98.2	2.00	2.67	
Total Xylenes*	<0.150	0.150	08/28/2018	ND	5.93	98.8	6.00	2.80	
Total BTEX	<0.300	0.300	08/28/2018	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 95.0 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	624	16.0	08/28/2018	ND	432	108	400	0.00	

TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/28/2018	ND	217	108	200	3.27	
DRO >C10-C28*	<10.0	10.0	08/28/2018	ND	226	113	200	10.0	
EXT DRO >C28-C36	<10.0	10.0	08/28/2018	ND					

Surrogate: 1-Chlorooctane 98.7 % 41-142

Surrogate: 1-Chlorononadecane 96.0 % 37.6-147

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\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

EOG Y RESOURCES, INC  
 ROBERT ASHER  
 105 SOUTH 4TH STREET  
 ARTESIA NM, 88210  
 Fax To: (575) 748-4131

Received:	08/27/2018	Sampling Date:	08/24/2018
Reported:	08/28/2018	Sampling Type:	Soil
Project Name:	LINK BKT FEDERAL # 1HY (S3 & S4)	Sampling Condition:	Cool & Intact
Project Number:	30-015-36399	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

**Sample ID: S 4.3 (H802395-06)**

BTX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/28/2018	ND	2.00	99.8	2.00	1.23	
Toluene*	<0.050	0.050	08/28/2018	ND	1.94	97.0	2.00	3.80	
Ethylbenzene*	<0.050	0.050	08/28/2018	ND	1.96	98.2	2.00	2.67	
Total Xylenes*	<0.150	0.150	08/28/2018	ND	5.93	98.8	6.00	2.80	
Total BTX	<0.300	0.300	08/28/2018	ND					

Surrogate: 4-Bromofluorobenzene (PIT) 91.7 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1460	16.0	08/28/2018	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/28/2018	ND	217	108	200	3.27	
DRO >C10-C28*	<10.0	10.0	08/28/2018	ND	226	113	200	10.0	
EXT DRO >C28-C36	<10.0	10.0	08/28/2018	ND					

Surrogate: 1-Chlorooctane 92.9 % 41-142

Surrogate: 1-Chlorooctadecane 90.8 % 37.6-147

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Coley D. Keene, Lab Director/Quality Manager



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### Notes and Definitions

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

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Celey D. Keene, Lab Director/Quality Manager



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ARDINAL LABORATORIES  
101 East Mainland, Hobbs, NM 88240

(505) 393-2326 FAX (505) 393-2476

## CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Robert Asher

Project Name: Link BKT Federal #1 HY (S 3 &amp; S 4)

Company Name: EOG Resources, Inc.

Project #: 30-015-36399

Company Address: 104 South 4th Street

Project Loc: Eddy County

City/State/Zip: Artesia, NM 88210

PO #: 205632

Telephone No: 575-748-4171

Fax No:

Report Format: ☒ Standard ☐ TRRP ☐ NPDESSampler Signature: *Robert Asher*

e-mail:

robert.asher@eogresources.com

(lab use only)

ORDER #: H802395

LAB # (lab use only)											
FIELD CODE											
Beginning Depth											
Ending Depth											
Date Sampled											
Time Sampled											
Field Filled											
Total #. of Containers											
ICA											
HNO <sub>3</sub>											
HCl											
H <sub>2</sub> SO <sub>4</sub>											
NaOH											
Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>											
None											
Other (Specify)											
DW=Drinking Water SL=Sludge CW=Condewater S=Solids NP=Non-Potable Specify Other											
TPH: 8015M Extended											
TPH: TX 1005 TX 1006											
Gallons (Ca, Mg, Na, K)											
Anions (Cl)											
SAR / ESP / CEC											
Metals: As Ag Ba Cd Cr Pb Hg Bi											
Volatiles											
Semi-volatiles											
BTEX 8071B 5030 or BTEX 8260											
RCI											
N.O.R.M.											
RUSH TAT (Pre-Schedule) 24 h											
Standard TAT											

24 HR TAT PLEASE.

Special Instructions:

TPH Extended Please. ALL results in mg/kg. Thank you.

Relinquished by: <i>Robert Asher</i>	Date: 08/25/18	Time: 7:52 AM	Received by: <i>Jamesa White</i>	Date: 8-27-18	Time: 12:00
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

## Laboratory Comments:

Sample Containers Intact?

VOCs Free of Headspace?

Labels on container(s)

Custody seals on container(s)

Custody seals on cooler(s)

Sample Hand Delivered

by Sample/Clean Rep.?

by Courier? UPS DHL FedEx Lane Star

Temperature Upon Receipt

4.4°C #97R





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September 20, 2018

ROBERT ASHER

EOG Y RESOURCES, INC

105 SOUTH 4TH STREET

ARTESIA, NM 88210

RE: LINK BKT FEDERAL #1HY (S 4)

Enclosed are the results of analyses for samples received by the laboratory on 09/19/18 15:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/ga/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/ga/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



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**Analytical Results For:**

EOG Y RESOURCES, INC  
 ROBERT ASHER  
 105 SOUTH 4TH STREET  
 ARTESIA NM, 88210  
 Fax To: (575) 748-1131

Received:	09/19/2018	Sampling Date:	09/19/2018
Reported:	09/20/2018	Sampling Type:	Soil
Project Name:	LINK BKT FEDERAL # 11Y (S 4)	Sampling Condition:	** (See Notes)
Project Number:	30-015-36399	Sample Received By:	Jodi Henson
Project Location:	EDDY CO NM		

**Sample ID: S 4. 4 (H802648-01)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	544	16.0	09/20/2018	ND	416	104	400	3.77	

**Sample ID: S 4. 5 (H802648-02)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	576	16.0	09/20/2018	ND	416	104	400	3.77	

**Sample ID: S 4. 7 (H802648-03)**

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1260	16.0	09/20/2018	ND	416	104	400	3.77	

**Sample ID: S 4. 9 (H802648-04)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	09/20/2018	ND	416	104	400	3.77	

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Notes and Definitions

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

Cardinal Laboratories \*=Accredited Analyte

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\_\_\_\_\_  
Celey D. Keene, Lab Director/Quality Manager



CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Received by OCD: 4/14/2023 9:36:16 AM

# Appendix E

## Form C-141 Initial Report



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

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.	OGRID Number 25575	Contact Robert Asher
Address 104 S. 4 <sup>th</sup> Street Artesia NM 88210	Telephone No. 575-748-1471	
Facility Name Link BKT Federal Com #1HY	Facility Type Battery	
Surface Owner Private	Mineral Owner Federal	API No. 30-015-36399

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
H	18	16S	25E	1880	North	240	East	Eddy

Latitude 32.9251938 Longitude -104.5169907 NAD83

**NATURE OF RELEASE**

Type of Release Produced Water	Volume of Release 209 B/PW	Volume Recovered 60 B/PW
Source of Release Fiberglass Tank	Date and Hour of Occurrence 8/4/18; 12:30 AM	Date and Hour of Discovery 8/4/18; 9:20 AM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? M. Bratcher/NMOCD II & J. Griswold/Santa Fe	
By Whom? Robert Asher/EOG Y Resources, Inc.	Date and Hour 8/5/2018; 6:28 AM	
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.

Fiberglass produced water tank was struck by lightning. Vacuum truck(s) were called.

Describe Area Affected and Cleanup Action Taken.

The impacted area is approximately 35' X 85' within the bermed/lined of the battery. The effected tank has been removed with other effected equipment involved in the lightning strike and fire. There are two portions of the liner that were burned/melted in the fire, those portions of liners have been removed to expose the battery/pad material. Soil samples will be collected and a Characterization Plan will be developed.

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: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Robert Asher	Approved by Environmental Specialist:	
Title: Environmental Supervisor	Approval Date:	Expiration Date:
E-mail Address: Robert_Asher@eogresources.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: August 23, 2018	Phone: 575-748-4217	

\* Attach Additional Sheets If Necessary



# Appendix F

## Form C-141 Final Report

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

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

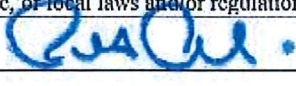
Name of Company EOG Y Resources, Inc.	OGRID Number 25575	Contact Robert Asher
Address 104 S. 4 <sup>th</sup> Street Artesia NM 88210	Telephone No. 575-748-1471	
Facility Name Link BKT Federal Com #IIIY	Facility Type Battery	
Surface Owner Private	Mineral Owner Federal	API No. 30-015-36399

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
H	18	16S	25E	1880	North	240	East	Eddy

Latitude 32.9251938 Longitude -104.5169907 NAD83

**NATURE OF RELEASE**

Type of Release Produced Water	Volume of Release 209 B/PW	Volume Recovered 60 B/PW
Source of Release Fiberglass Tank	Date and Hour of Occurrence 8/4/18; 12:30 AM	Date and Hour of Discovery 8/4/18; 9:20 AM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? M. Bratcher/NMOCD II & J. Griswold/Santa Fe	
By Whom? Robert Asher/EOG Y Resources, Inc.	Date and Hour 8/5/2018; 6:28 AM	
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. Fiberglass produced water tank was struck by lightning. Vacuum truck(s) were called.		
Describe Area Affected and Cleanup Action Taken. The impacted area is approximately 35' X 85' within the bermed/lined of the battery. The effected tank has been removed with other effected equipment involved in the lightning strike and fire. There are two portions of the liner that were burned/melted in the fire, those portions of liners have been removed to expose the battery/pad material. Depth to Ground Water: >100' (approximately 110.75', per USGS & NMOSE Water Well Data), Wellhead Protection Area: No, Distance to Surface Water Body: > 1000', SITE RANKING IS 0. Based on Closure Report, EOG Resources 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: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Robert Asher	Approved by Environmental Specialist:	
Title: Environmental Supervisor	Approval Date:	Expiration Date:
E-mail Address: bob_asher@egoresources.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: August 23, 2018	Phone: 575-748-4217	

Attach Additional Sheets If Necessary

**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 207856

CONDITIONS

Operator: EOG Y RESOURCES, INC. 104 S 4th St Artesia, NM 88210	OGRID: 25575
	Action Number: 207856
	Action Type: [IM-SD] Admin Order Support Doc (ENV) (IM-BAO)

CONDITIONS

Created By	Condition	Condition Date
bhall	None	4/17/2023