



**APPROVED**

**By Olivia Yu at 7:42 am, Apr 02, 2018**

**NMOCD grants closure  
to 1RP-4356.**

February 22, 2017

Reference No. 088210-30

Ms. Olivia Yu  
New Mexico Oil Conservation Division  
Energy, Minerals and Natural Resources Department  
1625 N. French Dr.  
Hobbs, NM 88240

Ms. Shelly Tucker  
United States Bureau of Land Management  
620 E. Greene St  
Carlsbad, NM 88220

Dear Ms. Yu and Ms. Tucker:

**Re: Closure Request  
Diamond 8 Fed Com No. 1 (API #30-025-30632)  
1RP-4356  
EOG Resources, Inc.  
Site Location: Sec. 8, T 25-S, R 34-E  
(Lat 32.150452°, Long -103.490868°)  
Lea County, New Mexico**

GHD Services, Inc. (GHD), on behalf of EOG Resources (EOG) is requesting that no further action status be granted for the Diamond 8 Fed Com Fed No. 1 (hereafter referred to as the "Site").

In an Assessment Report dated November 14, 2016 (attached) GHD recommended the following scope items be completed following delineation of the soil impacts in order to achieve no further action;

- Placement of a 20 mil polyethylene liner in the bottom of the excavation at a depth of 4 ft bgs at the location indicated on Figure 2.
- Backfilling of the excavation with clean fill material and wheel compacting to grade.
- Fertilizing and reseeding of the disturbed area with a BLM approved seed mix.

The work scope was approved by Mr. Thomas Oberding with the New Mexico Oil Conservation Division on January 3, 2017. The United States Bureau of Land Management approved the report on December 16, 2016. As of the date of this letter, the above scope items have been completed, with the exception of the reseeding, and are documented in the attached completion photos and final C-141 for the Site; therefore, No Further Action is being requested. The reseeding will be done in May 2017 and GHD will notify you when it is completed.

Your timely response to this requested is greatly appreciated. Should you have any questions, or require additional information regarding this submittal, please feel free to contact myself or Bernie Bockisch at (505) 884-0672 or [Bernard.Bockisch@ghd.com](mailto:Bernard.Bockisch@ghd.com).



Sincerely,

GHD

A handwritten signature in black ink that reads "Alan Brandon".

Alan Brandon  
Senior Project Manager

AB/mc/03

A handwritten signature in blue ink that reads "Bernard Bockisch".

Bernard Bockisch  
Senior Project Manager

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 August 8, 2011

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 Resources, Inc.	Contact: Zane Kurtz	
Address: 5509 Champions Drive, Midland, TX 79706	Telephone No.: 432-425-2023	
Facility Name: Diamond 8 Fed Com #1	Facility Type: Oil Well and Tank Battery	
Surface Owner: BLM	Mineral Owner: BLM	API No.: 30-025-30632

### LOCATION OF RELEASE

Unit Letter	Section 8	Township 25S	Range 34E	Feet from the 660'	North/South Line N	Feet from the 2310'	East/West Line E	County Lea
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Latitude 32.1561 Longitude -103.5304

### NATURE OF RELEASE

Type of Release: Produced Water	Volume of Release: 130 BBLs	Volume Recovered: 80 BBLs
Source of Release: Fire melted poly lines	Date and Hour of Occurrence 7-19-2016	Date and Hour of Discovery 1200
Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? NA	
By Whom? NA	Date and Hour	
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.\*  
NA

**APPROVED**

**By Olivia Yu at 7:43 am, Apr 02, 2018**

Describe Cause of Problem and Remedial Action Taken.\*

Fluid was sent to flare scrubber and out the flare. Caused fire out the flare and landed on the ground and burned poly lines and released produced water. Vac truck removed all standing fluid.

Describe Area Affected and Cleanup Action Taken.\*

The release occurred on and adjacent to the western edge of the pad. Approximately 1,554 cubic yards of impacted soil were excavated and disposed of at Sundance. A liner was placed at a depth of approximately four feet below ground surface, and the area was backfilled with clean soil. The area was revegetated with a BLM seed mix.

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>Zane Kurtz</i>	OIL CONSERVATION DIVISION	
Printed Name: Zane Kurtz	Approved by Environmental Specialist: <i>[Signature]</i>	
Title: Environmental Rep	Approval Date: 4/2/2018	Expiration Date: xx/xx/xxxx
E-mail Address: zane-kurtz@eogresources.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 2-24-17	Phone: 432 425 2023	

\* Attach Additional Sheets If Necessary

1RP-4356



Photo 1 - Site location



Photo 2 - Liner placement



## Site Photographs



Photo 3 - Backfilled excavation, wheel compacted, re-seeded



Photo 4 - Backfilled excavation, wheel compacted, re-seeded



## Site Photographs



November 14, 2016

Reference No. 088210-30

Mr. Zane Kurtz  
Sr. Safety and Environmental Representative  
5509 Champions Dr.  
Midland, TX 79706  
VIA E-Mail: [zane\\_kurtz@eogresources.com](mailto:zane_kurtz@eogresources.com)

Dear Mr. Kurtz:

**Re: Assessment Summary Report  
Diamond 8 Fed Com No. 1 (API #30-025-30632)  
1RP-4356  
EOG Resources, Inc.  
Site Location: Sec. 8, T 25-S, R 34-E  
(Lat 32.150452°, Long -103.490868°)  
Lea County, New Mexico**

GHD Services, Inc. (GHD) is pleased to present this report for the above referenced site. Assessment activities were performed at the Diamond 8 Fed Com No. 1 (hereafter referred to as the "Site"), from August 12, 2016 through September 26, 2016 by GHD. The Site is located within Section 8, Township 25 South, Range 34 East, in Lea County, New Mexico (Figure 1).

The Site is an active well site located approximately 18 miles west-northwest of Jal, New Mexico. According to EOG personnel, a release of approximately 130 barrels (bbls) of produced water occurred when fire melted the poly lines containing produced water. Approximately 80 barrels (bbls) of produced water was recovered. The release was discovered on July 19, 2016. A C-141 Form was submitted to the New Mexico Oil Conservation Division (NMOCD) on July 20, 2016 and remediation permit (RP) number 1RP-4356 was assigned.

Initial soil sampling of the release area was performed by GHD on August 12, 2016. Subsequent soil sampling was performed by GHD beginning in August through September of 2016 and is discussed further in this report.

## 1. Introduction

A C-141 Form was submitted to the New Mexico Oil Conservation Division (NMOCD) and remediation permit (RP) number 1RP-4356 was assigned. Approximately 1554 cubic yards (yd<sup>3</sup>) of impacted soil was removed and disposed of at the Sundance Services - Parabo Facility in Eunice, New Mexico (Sundance).

There are relatively few groundwater wells in the area of the Site with which to obtain a depth to groundwater. Based on information available from the United States Geological Survey (USGS) website, the closest USGS gauging site, approximately 2.6 miles south-southeast of the site, indicates groundwater at a depth of approximately 174 feet below ground surface (bgs) in 2013.



There do not appear to be any well head protection areas and no surface water bodies within 200 to 1000 ft of the Site. Therefore, the preliminary total ranking score for the Site is 0 (see table below).

Based on this score, the applicable NMOCD Site-specific Recommended Remediation Action Limits (RRALs) are 10 milligrams per kilogram (mg/kg) for benzene, 50 mg/kg for total benzene, toluene, ethylbenzene, and xylenes (BTEX), 5,000 mg/kg for total petroleum hydrocarbons (TPH), and 500 mg/kg for chlorides.

New Mexico Oil Conservation Division Site Assessment	
Ranking Criteria	Score
Depth to Ground Water (> 100 ft bgs)	0
Wellhead Protection Area (> 1000 ft from water source, > 200 ft from domestic source)	0
Distance to Surface Body Water (200-1000 ft)	0
<b>Ranking Criteria Total Score</b>	<b>0*</b>
*Because the ranking criteria total score is 10, NMOCD established RRALs are 10 mg/kg for benzene, 50 mg/kg for total BTEX, 5,000 mg/kg for TPH <sup>1</sup> , and 500 mg/kg for chlorides.	

1. NMOCD Guidelines for Remediation of Leaks, Spills and Releases, August 13, 1993

## 2. Assessment Activities

Site assessment activities were began on August 15, 2016 by GHD. Excavation activities were performed by SDR Enterprises, LLC (SDS) of Hobbs, New Mexico. Soil samples were analyzed by Hall Environmental Analysis Laboratory (Hall Environmental) of Albuquerque, New Mexico. All analytical data are included in Appendix A. The analytical data obtained from the initial soil samples collected indicated that the horizontal and vertical extent of petroleum hydrocarbon and chloride concentrations within the west side of the spill area had been delineated to below RRALs. However, the horizontal and vertical extent of chloride concentrations in an area denoted as the impacted area was not delineated. The initial soil sample results are summarized in Table 1.

Further soil sampling and excavation activities were performed by GHD and SDR between August 15 through September 19, 2016 to assess the horizontal and vertical extents of chloride concentrations in the soil in the impacted area. Fifty seven additional soil samples were collected using a hand auger at depths ranging from 2.0 ft bgs to 12.0 ft bgs. The samples were submitted to Hall Environmental for analysis of chloride by EPA Method 300, BTEX by EPA Method 8015, and gasoline and diesel range TPH by EPA Method 8015.

Laboratory analytical results from these events indicate that chloride concentrations in six samples along the eastern portion of the excavation area were above the RRAL for chloride; the remaining samples that were submitted were below the RRAL for chloride (Table 1). Based on this, it appeared that additional soil sampling would be required.



A total of approximately 1554 cubic yards of impacted soil were excavated and transported to Sundance for landfill disposal. Waste manifests are still being collected and will be submitted with the closure request report.

After excavation was completed, 10 additional confirmation soil samples were collected on September 20, 2016 and three additional confirmation soil samples were collected on September 26, 2016 in the area of excavation. The samples were submitted to Hall Environmental for analysis of chloride by EPA Method 300. Laboratory analytical results from this event indicated that chloride concentrations of the excavation area were below the RRAL for chloride (Table 1).

There were two areas where the vertical delineation was not confirmed with a follow-up sample. Confirmation of delineation was not provided for the sample location, S-088210-30-081916-SP-04, in the northeast corner of the excavation and sample location, S-088210-30-091916-SP-02, on the east side of the excavation. The two areas noted will further be delineated for vertical extent prior to backfilling the excavation. In general, it appears that the vertical and horizontal extent of chloride has been fully assessed and confirmed in the remainder of the excavation as shown on Figure 2.

### 3. Summary and Recommendations

Based on the assessment of the petroleum hydrocarbon and chloride concentrations, GHD recommends the following:

- Placement of a 20 mil polyethylene liner in the bottom of the excavation (see Figure 2 for the excavation area) at a depth of 4 ft bgs.
- Backfilling of the excavation with clean fill material and wheel compacting to grade.
- Fertilizing and reseeding of the disturbed area with a BLM-approved seed mix.

Should you have any questions, or require additional information regarding this submittal, please feel free to contact myself or Bernie Bockisch at (505) 884-0672 or [Bernard.Bockisch@ghd.com](mailto:Bernard.Bockisch@ghd.com).

Sincerely,

GHD

A handwritten signature in black ink that reads "Betsy K. Gerwig". The signature is written in a cursive, flowing style.

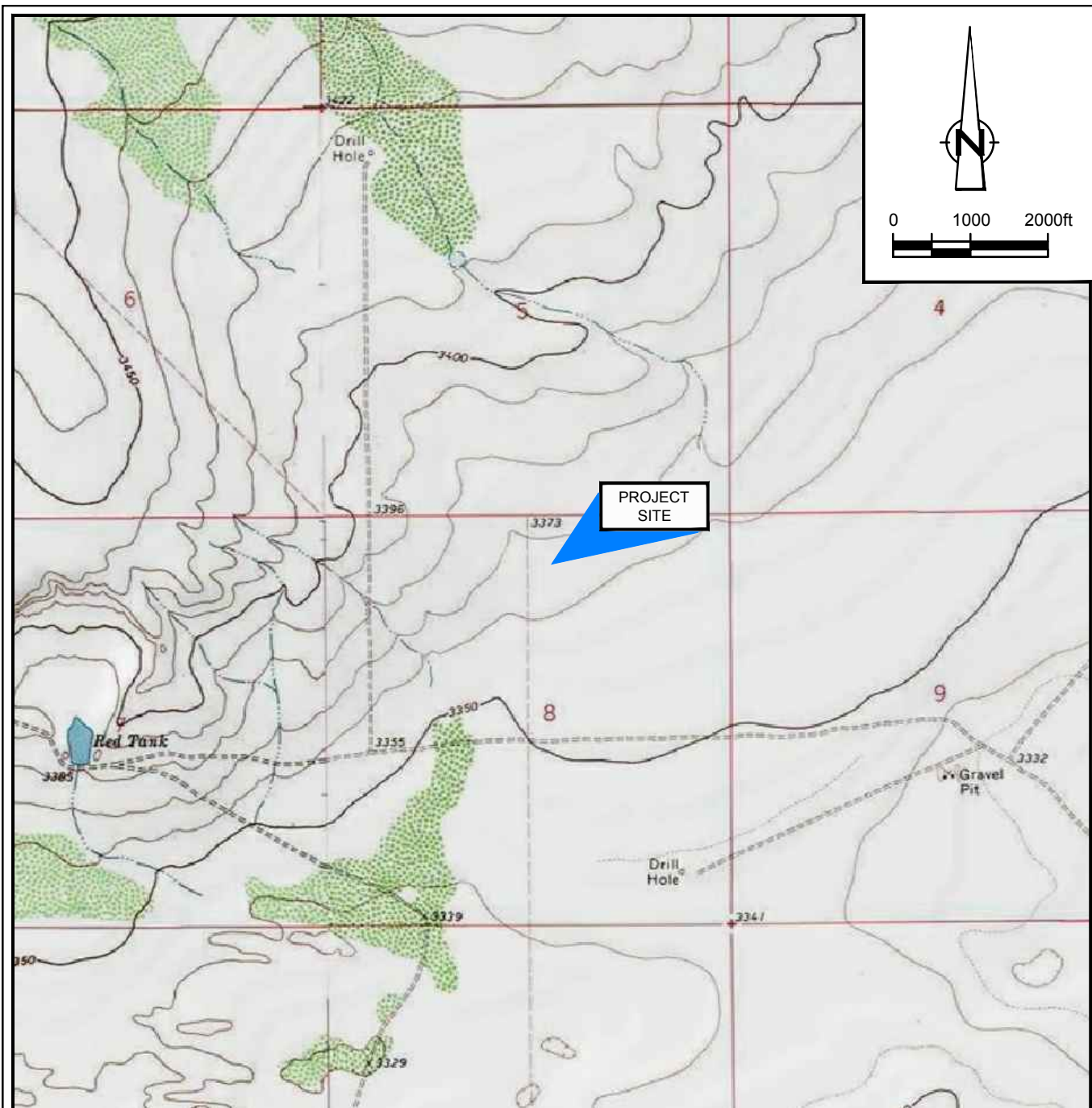
Betsy Gerwig  
Senior Project Manager

A handwritten signature in blue ink that reads "Bernard Bockisch". The signature is written in a cursive, flowing style.

Bernard Bockisch  
Senior Project Manager

BB/mc/30

## Figures



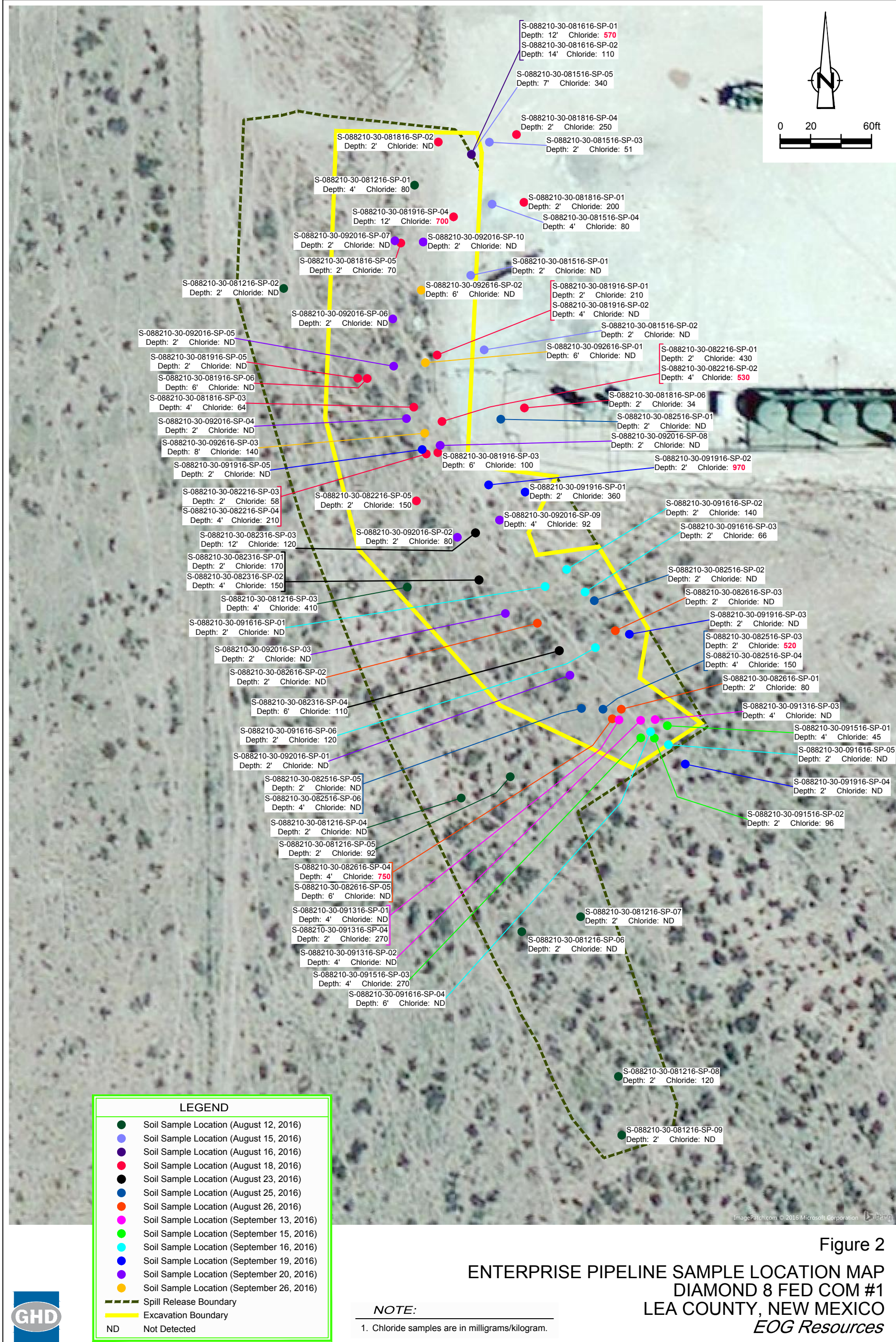
SOURCE: USGS 7.5 MINUTE QUAD  
"WOODLEY FLAT AND BELL LAKE, NEW MEXICO"

LAT/LONG: 32.150452° NORTH, 103.490868° WEST  
COORDINATE: NAD83 DATUM, U.S. FOOT  
STATE PLANE ZONE - NEW MEXICO EAST

Figure 1

SITE LOCATION MAP  
DIAMOND 8 FED COM #1  
LEA COUNTY, NEW MEXICO  
*EOG Resources*





## Tables

## Diamond 8 Fed Com #1 - Soil Analytical Data

Sample ID	Depth (ft. bgs)	Date	Benzene	Toluene	Ethylbenzene	Xylenes	BTEX	TPH (GRO)	TPH (DRO)	Total TPH	Chloride
S-088210-30-081216-SP-01	4.0	12/08/2016	<0.023	<0.047	<0.047	<0.094	<0.211	<4.7	<9.7	<14.4	80
S-088210-30-081216-SP-02	2.0	12/08/2016	<0.023	<0.047	<0.047	<0.094	<0.211	<4.7	<9.2	<13.9	<30
S-088210-30-081216-SP-03	4.0	12/08/2016	<0.024	<0.048	<0.048	<0.096	<0.216	<4.8	<9.5	<14.3	410
S-088210-30-081216-SP-04	2.0	12/08/2016	<0.024	<0.049	<0.049	<0.097	<0.219	<4.9	<9.8	<14.7	<30
S-088210-30-081216-SP-05	2.0	12/08/2016	<0.023	<0.046	<0.046	<0.092	<0.207	<4.6	<9.8	<14.4	92
S-088210-30-081216-SP-06	2.0	12/08/2016	<0.023	<0.047	<0.047	<0.094	<0.211	<4.7	<9.9	<14.6	<30
S-088210-30-081216-SP-07	2.0	12/08/2016	<0.024	<0.048	<0.048	<0.097	<0.217	<4.8	<9.7	<14.5	<30
S-088210-30-081216-SP-08	2.0	12/08/2016	<0.025	<0.050	<0.050	<0.099	<0.224	<5.0	<10	<15	120
S-088210-30-081216-SP-09	2.0	12/08/2016	<0.024	<0.048	<0.048	<0.096	<0.216	<4.8	<9.9	<14.7	<30
S-088210-30-081516-SP-01	2.0	15/08/2016	<0.023	<0.046	<0.046	<0.092	<0.207	<4.6	<9.9	<14.5	<30
S-088210-30-081516-SP-02	2.0	15/08/2016	<0.024	<0.048	<0.048	<0.096	<0.216	<4.8	<9.9	<14.7	<30
S-088210-30-081516-SP-03	2.0	15/08/2016	<0.023	<0.046	<0.046	<0.093	<0.208	<4.6	<9.2	<13.8	51
S-088210-30-081516-SP-04	4.0	15/08/2016	<0.024	<0.049	<0.049	<0.097	<0.219	<4.9	<9.6	<14.5	80
S-088210-30-081516-SP-05	7.0	15/08/2016	<0.024	<0.049	<0.049	<0.097	<0.219	<4.9	<9.2	<14.1	340
S-088210-30-081616-SP-01	12.0	16/08/2016	--	--	--	--	--	--	--	--	570
S-088210-30-081616-SP-02	14.0	16/08/2016	--	--	--	--	--	--	--	--	110
S-088210-30-081816-SP-01	2.0	18/08/2016	--	--	--	--	--	--	--	--	200
S-088210-30-081816-SP-02	2.0	18/08/2016	--	--	--	--	--	--	--	--	<30
S-088210-30-081816-SP-03	4.0	18/08/2016	--	--	--	--	--	--	--	--	64
S-088210-30-081816-SP-04	2.0	18/08/2016	--	--	--	--	--	--	--	--	250
S-088210-30-081816-SP-05	2.0	18/08/2016	--	--	--	--	--	--	--	--	70
S-088210-30-081816-SP-06	2.0	18/08/2016	--	--	--	--	--	--	--	--	34
S-088210-30-081916-SP-01	2.0	19/08/2016	--	--	--	--	--	--	--	--	210
S-088210-30-081916-SP-02	4.0	19/08/2016	--	--	--	--	--	--	--	--	<30
S-088210-30-081916-SP-03	6.0	19/08/2016	--	--	--	--	--	--	--	--	100
S-088210-30-081916-SP-04	12.0	19/08/2016	--	--	--	--	--	--	--	--	700
S-088210-30-081916-SP-05	2.0	19/08/2016	--	--	--	--	--	--	--	--	<30
S-088210-30-081916-SP-06	6.0	19/08/2016	--	--	--	--	--	--	--	--	<30
S-088210-30-082216-SP-01	2.0	22/08/2016	--	--	--	--	--	--	--	--	430
S-088210-30-082216-SP-02	4.0	22/08/2016	--	--	--	--	--	--	--	--	530
S-088210-30-082216-SP-03	2.0	22/08/2016	--	--	--	--	--	--	--	--	58
S-088210-30-082216-SP-04	4.0	22/08/2016	--	--	--	--	--	--	--	--	210
S-088210-30-082216-SP-05	2.0	22/08/2016	--	--	--	--	--	--	--	--	150
S-088210-30-082316-SP-01	2.0	23/08/2016	--	--	--	--	--	--	--	--	170
S-088210-30-082316-SP-02	4.0	23/08/2016	--	--	--	--	--	--	--	--	150
S-088210-30-082316-SP-03	12.0	23/08/2016	--	--	--	--	--	--	--	--	120
S-088210-30-082316-SP-04	6.0	23/08/2016	--	--	--	--	--	--	--	--	110
S-088210-30-082516-SP-01	2.0	25/08/2016	--	--	--	--	--	--	--	--	<30
S-088210-30-082516-SP-02	2.0	25/08/2016	--	--	--	--	--	--	--	--	<30
S-088210-30-082516-SP-03	2.0	25/08/2016	--	--	--	--	--	--	--	--	520
S-088210-30-082516-SP-04	4.0	25/08/2016	--	--	--	--	--	--	--	--	150
S-088210-30-082516-SP-05	2.0	25/08/2016	--	--	--	--	--	--	--	--	<30
S-088210-30-082516-SP-06	4.0	25/08/2016	--	--	--	--	--	--	--	--	<30

Diamond 8 Fed Com #1 - Soil Analytical Data

Sample ID	Depth (ft. bgs)	Date	Benzene	Toluene	Ethylbenzene	Xylenes	BTEX	TPH (GRO)	TPH (DRO)	Total TPH	Chloride
S-088210-30-082616-SP-01	2.0	26/08/2016	--	--	--	--	--	--	--	--	80
S-088210-30-082616-SP-02	2.0	26/08/2016	--	--	--	--	--	--	--	--	<30
S-088210-30-082616-SP-03	2.0	26/08/2016	--	--	--	--	--	--	--	--	<30
S-088210-30-082616-SP-04	4.0	26/08/2016	--	--	--	--	--	--	--	--	<b>750</b>
S-088210-30-082616-SP-05	6.0	26/08/2016	--	--	--	--	--	--	--	--	<30
S-088210-30-091316-SP-01	4.0	13/09/2016	--	--	--	--	--	--	--	--	<30
S-088210-30-091316-SP-02	4.0	13/09/2016	--	--	--	--	--	--	--	--	<30
S-088210-30-091316-SP-03	4.0	13/09/2016	--	--	--	--	--	--	--	--	<30
S-088210-30-091316-SP-04	2.0	13/09/2016	--	--	--	--	--	--	--	--	270
S-088210-30-091516-SP-01	4.0	15/09/2016	--	--	--	--	--	--	--	--	45
S-088210-30-091516-SP-02	2.0	15/09/2016	--	--	--	--	--	--	--	--	96
S-088210-30-091516-SP-03	4.0	15/09/2016	--	--	--	--	--	--	--	--	270
S-088210-30-091616-SP-01	2.0	16/09/2016	--	--	--	--	--	--	--	--	<30
S-088210-30-091616-SP-02	2.0	16/09/2016	--	--	--	--	--	--	--	--	140
S-088210-30-091616-SP-03	2.0	16/09/2016	--	--	--	--	--	--	--	--	66
S-088210-30-091616-SP-04	6.0	16/09/2016	--	--	--	--	--	--	--	--	<30
S-088210-30-091616-SP-05	2.0	16/09/2016	--	--	--	--	--	--	--	--	<30
S-088210-30-091616-SP-06	2.0	16/09/2016	--	--	--	--	--	--	--	--	120
S-088210-30-091916-SP-01	2.0	19/09/2016	--	--	--	--	--	--	--	--	360
S-088210-30-091916-SP-02	2.0	19/09/2016	--	--	--	--	--	--	--	--	<b>970</b>
S-088210-30-091916-SP-03	2.0	19/09/2016	--	--	--	--	--	--	--	--	<30
S-088210-30-091916-SP-04	2.0	19/09/2016	--	--	--	--	--	--	--	--	<30
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S-088210-30-092016-SP-03	2.0	20/09/2016	--	--	--	--	--	--	--	--	<30
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S-088210-30-092016-SP-06	2.0	20/09/2016	--	--	--	--	--	--	--	--	<30
S-088210-30-092016-SP-07	2.0	20/09/2016	--	--	--	--	--	--	--	--	<30
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S-088210-30-092016-SP-09	4.0	20/09/2016	--	--	--	--	--	--	--	--	92
S-088210-30-092016-SP-10	2.0	20/09/2016	--	--	--	--	--	--	--	--	<30
S-088210-30-092616-SP-01	6.0	26/09/2016	--	--	--	--	--	--	--	--	<30
S-088210-30-092616-SP-02	6.0	26/09/2016	--	--	--	--	--	--	--	--	<30
S-088210-30-092616-SP-03-mix-1	stockpile mix ratio 2:1	26/09/2016	--	--	--	--	--	--	--	--	830
S-088210-30-092616-SP-04-mix-2	stockpile mix ratio 3:1	26/09/2016	--	--	--	--	--	--	--	--	710
S-088210-30-092616-SP-05	8.0	26/09/2016	--	--	--	--	--	--	--	--	140
<b>Recommended Remediation Action Limits</b>			<b>10</b>	<b>Total BTEX: 50</b>				<b>Total TPH: 5000</b>		<b>500</b>	

## Notes:

All samples are in milligrams per kilogram

Bolded numbers are above the RRAL