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

KAR5N-200227-C-1410

EOG Resources, Inc.

Characterization &
Remediation Plan

Gissler B #59

30-015-37733

Section 12, T17S-R30E

Eddy County, New Mexico

February 26, 2020

Received by OCD: 2/27/2020 10:02:57 AM

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I. Location

From Artesia, NM travel east on US 82 to Square Lake Road, (CR 220) between MM134 & MM135. Turn left (north) onto Square Lake Road, continue for approximately 2.25 miles, then turn left (west) onto lease road, continue on lease road for approximately 0.25 miles, road curves right (north) and continue for 0.10 miles to the Gissler B #59 well pad.

II. Background

On December 12, 2019, EOG Resources, Inc. submitted to the NMOCD District II office a Form C-141, Release Notification for the release of 9 B/O with 8 B/O recovered. The affected area is approximately 65' X 90' on the well pad. The release was caused by a SDR 11 poly flow line split due to obstruction or paraffin plug, which caused the release. A vacuum truck was called and recovered the remaining oil. A backhoe was dispatched and scraped up the surface of the impacted area, contaminated soils (approximately 64 cubic yards) were disposed at an NMOCD approved facility. The release occurred on the well pad and remained on the well pad

III. Surface and Ground Water

Area surface geology is Eolian and piedmont deposits. Based on information regarding this location (Section 12, T17S-R30E), the United States Geological Survey (USGS) National Water Information System, indicates the depth to groundwater as follows: USGS #325210103580101, (Depth to Water: 361.25', Field groundwater-level measurements: 4/1996, Distance from Location: 2.50 miles), USGS #325216103575701, (Depth to Water: 362.45', Field groundwater-level measurements: 4/1996, Distance from Location: 2.51 miles). The New Mexico Office of the State Engineer (NMOSE) Point of Diversion Summary indicates the depth to groundwater as follows: (NMOSE-RA11914 POD1, Depth to Water: 80', Log File Date: 4/2013, Distance from Location: 3.67 miles),

Watercourses in the area are dry except for infrequent flows in response to major precipitation events, with the distance to nearest significant watercourse being the Pecos River (22.57 miles, west of the location).

IV. NMOCD Table I Criteria

Depth to ground water	>100'
Wellhead Protection Area	> 1000'
Distance to significant watercourse	> 1000'

Depth	Constituent	Method	Limit
>100'	Chloride	EPA 300.0 or SM4500 Cl B	20,000 mg/kg
	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	2,500 mg/kg
	GRO+DRO	EPA SW-846 Method 8015M	1,000 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg

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V. Site Delineation Status

Initial sampling was conducted on August 13, 2019, with samples collected being 5 point composite samples at the following depths & GPS coordinates are shown on Appendix 5, (2/13/2020 sidewall samples collected, are also a 5 point composite).

S- 1.1: 1' (32.848124°; -103.931708°)
S- 2.1: 1' (32.848122°, -103.931776°)
S- 3.1: 1' (32.848119°; -103.931842°)
S- 4.1: 1' (32.848120°; -103.931918°)
S- 5.1: 1' (32.848080°; -103.931902°)
S- 6.1: 1' (32.848076°; -103.931841°)
S- 7.1: 1' (32.848079°; -103.931773°)
S- 8.1: 1' (32.848030°; -103.931799°)
S- 9.1: 1' (32.848028°; -103.931865°)
S- 10.1: 1' (32.847983°; -103.931848°)
S- 11.1: 1' (32.847989°; -103.931805°)

SW-1A: (32.84814°; -103.93193°) (32.84814°; -103.93182°) (32.84815°; -103.93170°) (32.84811°; -103.93168°) (32.84807°; -103.93175°)

SW-1B: (32.84803°; -103.93177°) (32.84797°; -103.93178°) (32.84797°; -103.93186°) (32.84804°; -103.93189°) (32.84810°; -103.93195°)

These samples were sent to an NMOCD approved laboratory and analysis for the following constituents/methods.

Chlorides:	EPA 300.0
TPH (GRO+DRO+MRO):	Method 8015M
BTEX:	Method 8015B
Benzene:	Method 8015B

Appendix 5 contains the Field Data/Sample Data.

Appendix 6 contains Laboratory Data and COC.

VI. Remediation Plan

EOG proposes the following remediation plan.

Based off of the 1/20/2020 and 2/13/2020 enclosed analytical results. EOG will
will notify the appropriate division district office two business days prior to conducting final sampling. Separate representative wall and base 5-point composite samples will be collected to show horizontal and vertical remediation. Each composite sample must not be representative of more than 200 ft^2.

If all composite and grab sample concentrations are less than or equal to the parameters listed in Table I, then the responsible party may proceed to backfill the excavated area(s) with approximately 64 cubic yards of clean/like backfill material.

VII. Site Closure

Upon completion of the remedial and backfilling activities, EOG Resources, Inc. will submit a Form C-141/Closure to the NMOCD, including the Closure Report Attachment Checklist.

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Appendix 1

Site/Topo Map

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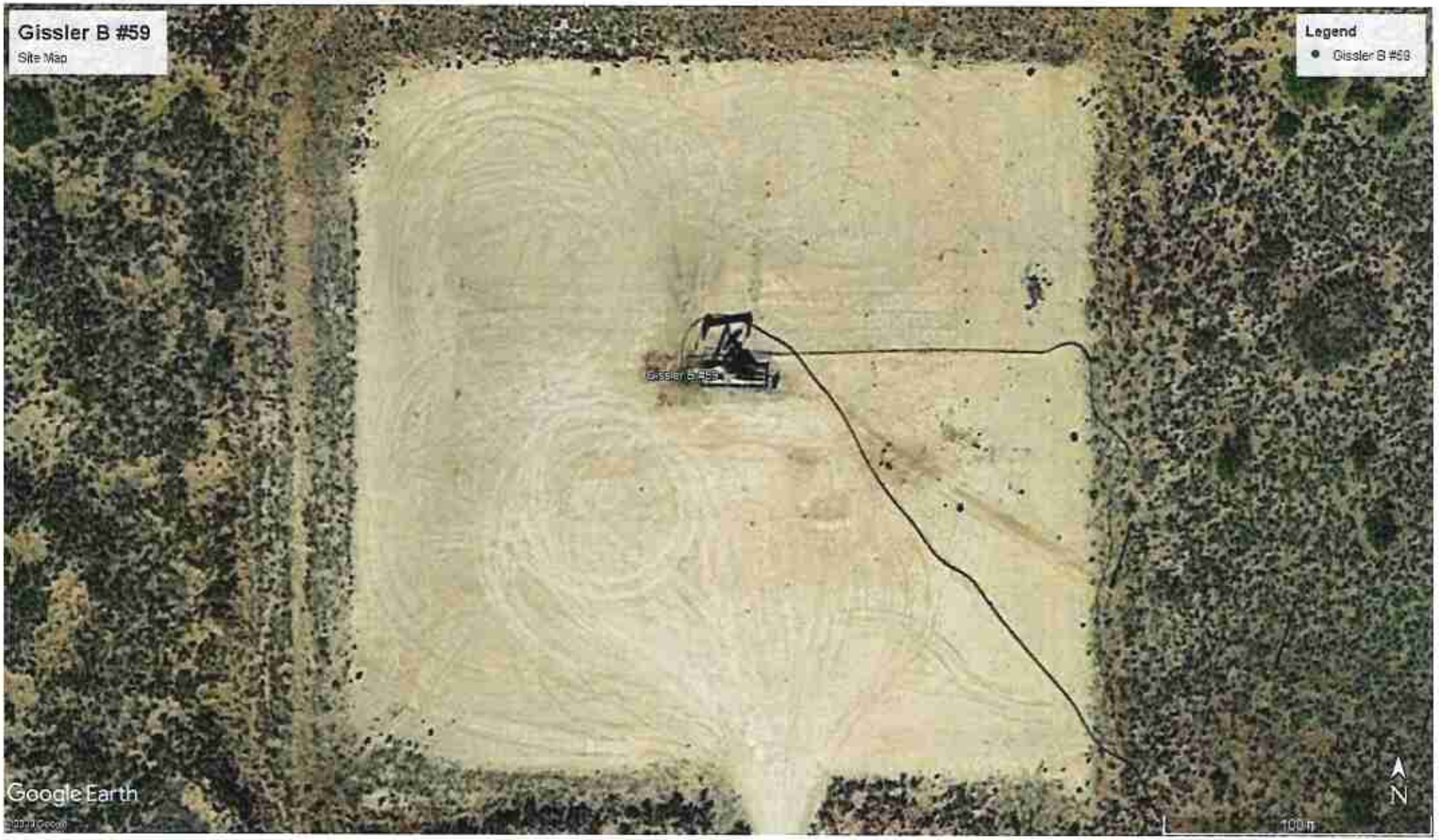
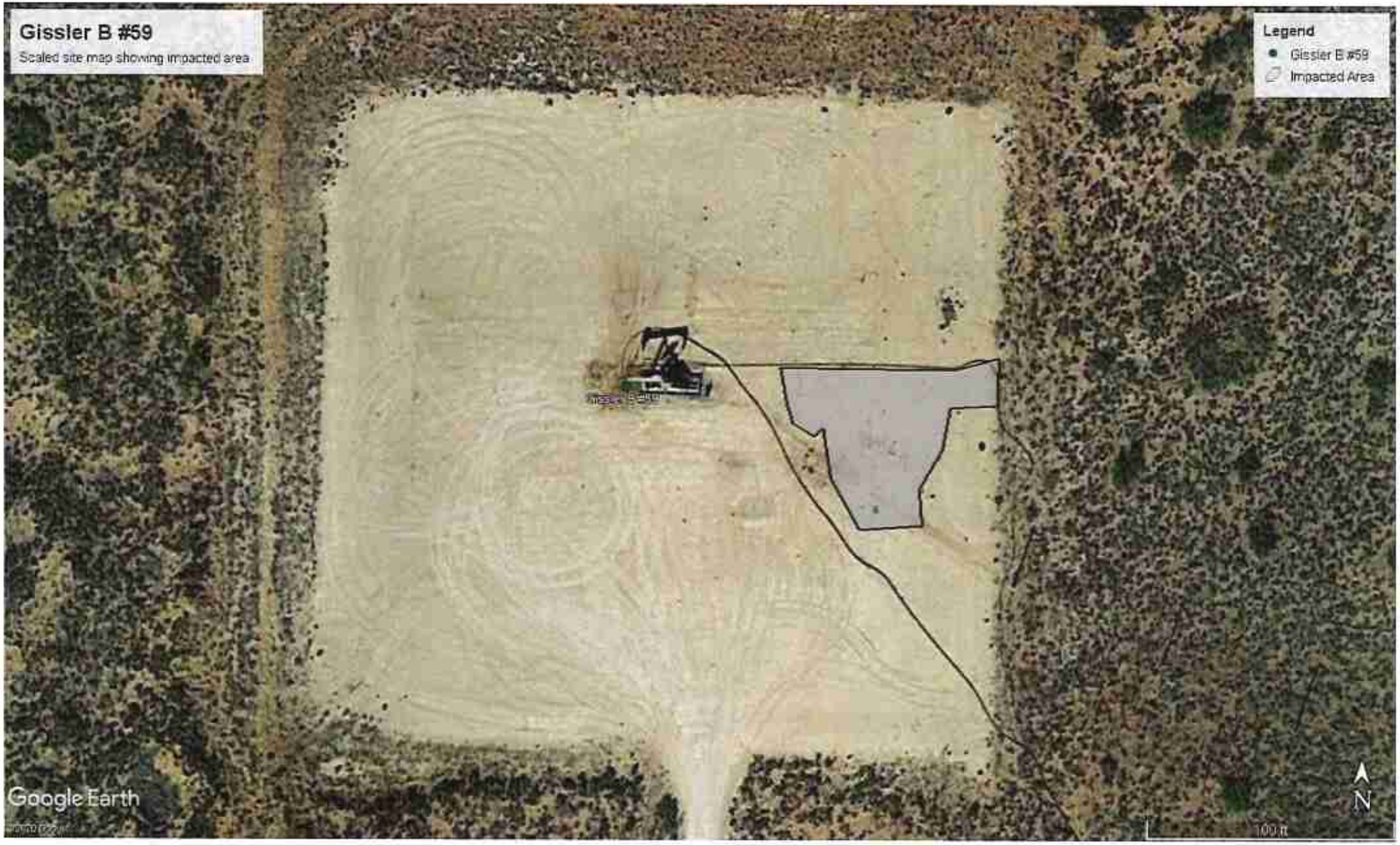
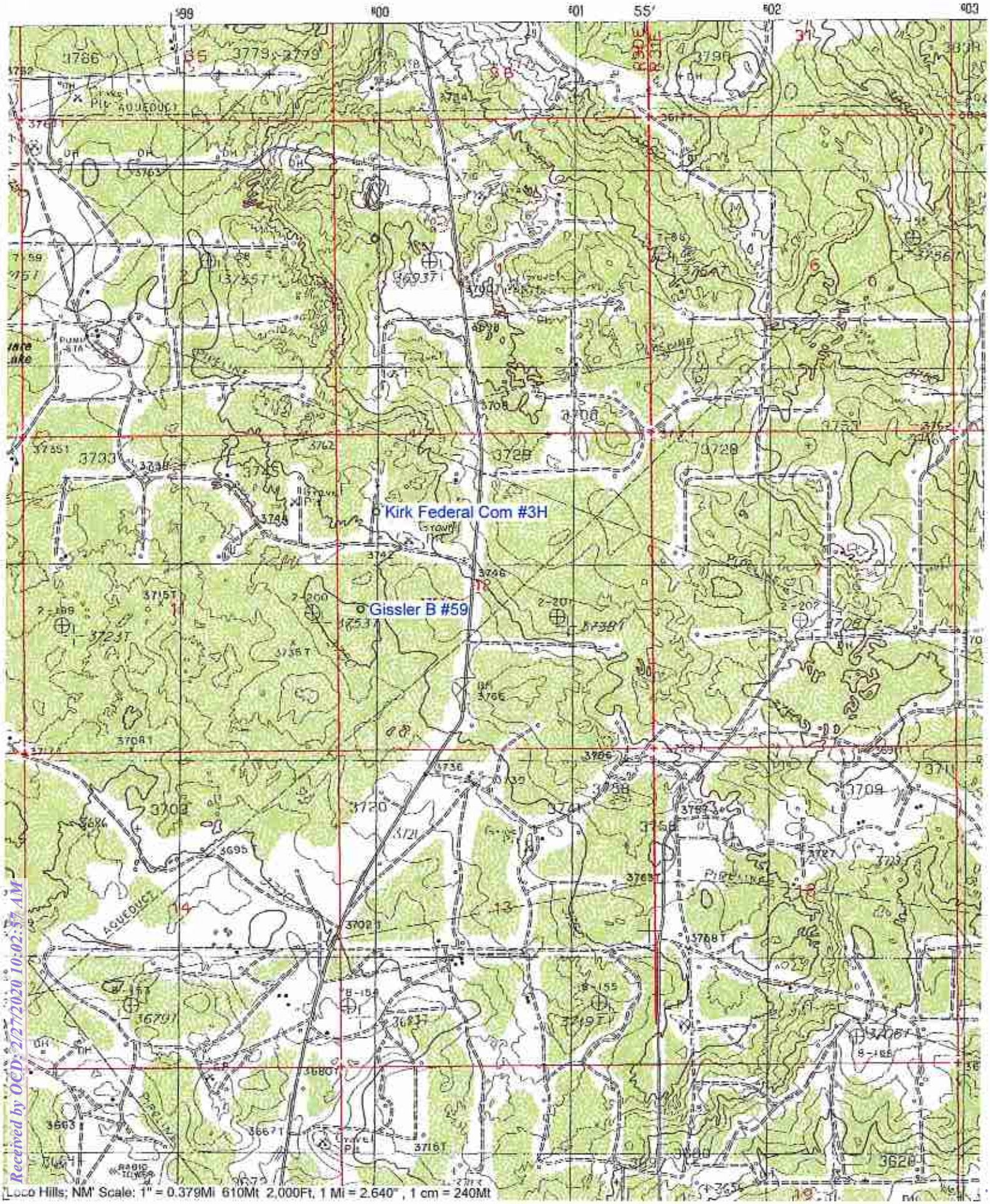
Gissler B #59
Site Map
Legend
Gissler B #59
220
Google Earth
800 ft
N


Gissler B #59
Site Map
Legend
Gissler B #59
Google Earth
N
100 ft


Gissler B #59
Scaled site map showing impacted area
Legend
Gissler B #59
Impacted Area
Google Earth
N
100 ft



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Appendix 2

Depth to Ground Water

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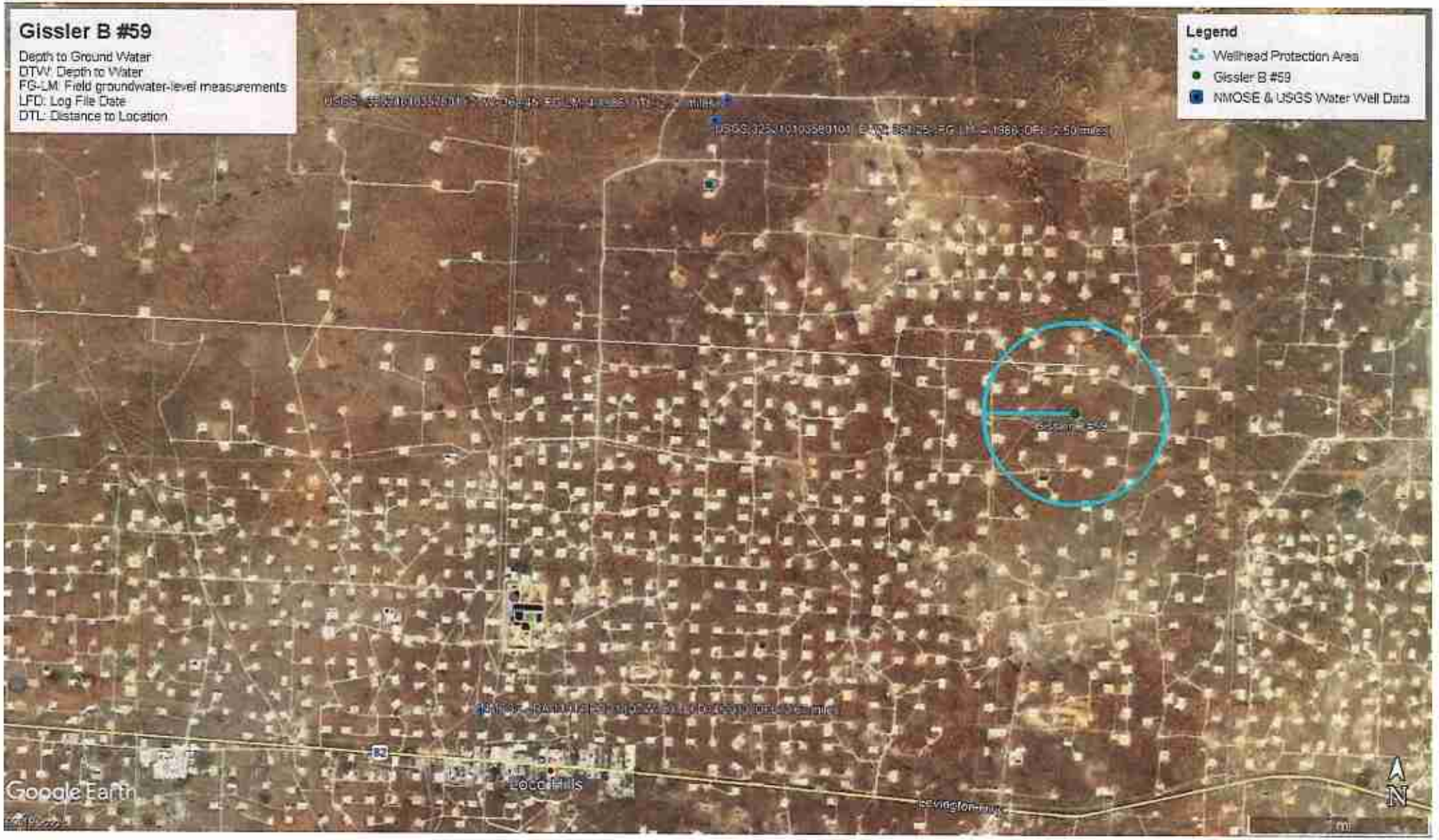
Gissler B #59
Depth to Ground Water
DTW: Depth to Water
FG-LM: Field groundwater-level measurements
LFD: Log File Date
DTL: Distance to Location
Legend
Wellhead Protection Area
Gissler B #59
NMOSE & USGS Water Well Data
Loco Hills
Google Earth
N

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National Water Information System: Web Interface

USGS Water Resources

Data Category: Site Information | Geographic Area: United States | GO

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USGS 325216103575701 16S.30E.33.42443

Available data for this site: SUMMARY OF ALL AVAILABLE DATA | GO

Well Site

DESCRIPTION:

Latitude 32°52'16", Longitude 103°57'57" NAD27
Eddy County, New Mexico , Hydrologic Unit 13060011
Well depth: 385 feet
Land surface altitude: 3,729 feet above NAVD88.
Well completed in "Sunrise Formation" (231SNRS) local aquifer

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1986-04-25	1986-04-25	1
Revisions	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

---

Questions about sites/data?
Feedback on this web site

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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?agency_code=USGS&site_no=325216103575701

Page Contact Information: New Mexico Water Data Support Team
Page Last Modified: 2020-02-05 16:25:57 EST
0.31 0.27 caww01

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Groundwater levels for the Nation

Search Results -- 1 sites found

site_no list =

- 325216103575701

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 325216103575701 16S.30E.33.42443

Available data for this site Groundwater: Field measurements | GO

Eddy County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°52'16", Longitude 103°57'57" NAD27
Land-surface elevation 3,729 feet above NAVD88
The depth of the well is 385 feet below land surface.
This well is completed in the Sunrise Formation (231SNRS) local aquifer.

Output formats

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

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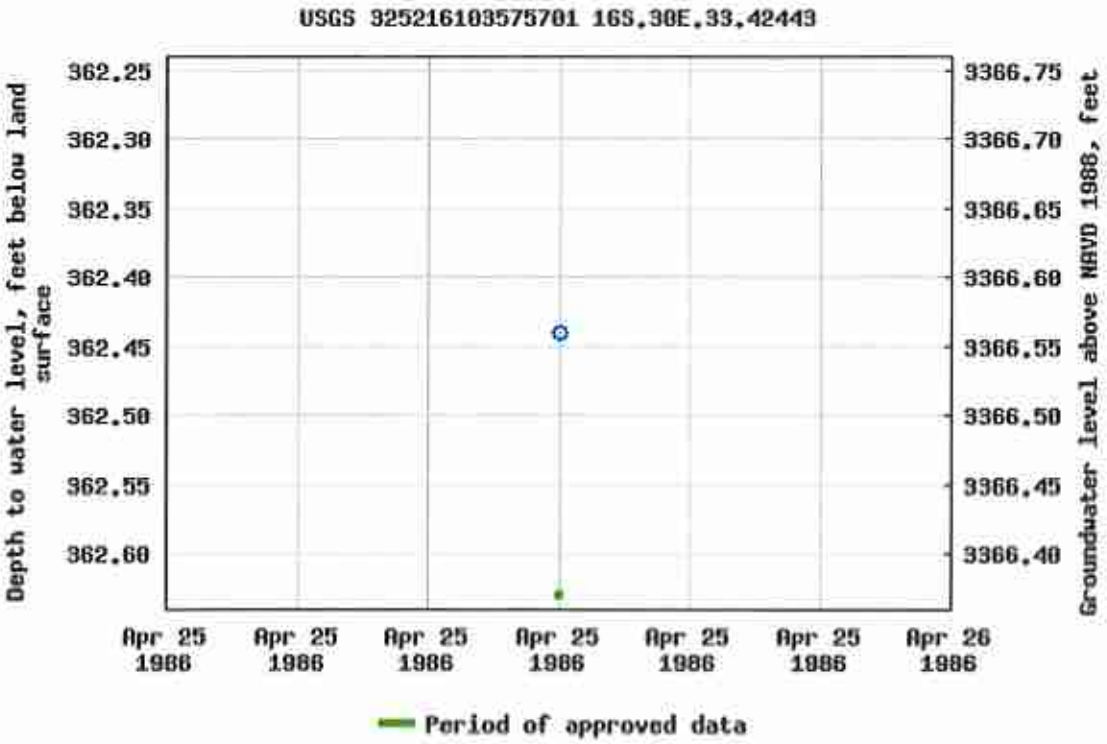

Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

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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: 2020-02-05 16:26:02 EST
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National Water Information System: Web Interface

USGS Water Resources

Data Category: Site Information | Geographic Area: United States | GO

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USGS 325210103580101 16S.30E.33.44233

Available data for this site: SUMMARY OF ALL AVAILABLE DATA | GO

Well Site

DESCRIPTION:

Latitude 32°52'10", Longitude 103°58'01" NAD27
Eddy County, New Mexico , Hydrologic Unit 13060011
Well depth: 433 feet
Land surface altitude: 3,725 feet above NAVD88.
Well completed in "Sunrise Formation" (231SNRS) local aquifer

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1986-04-25	1986-04-25	1
Revisions	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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Questions about sites/data?
Feedback on this web site

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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?agency_code=USGS&site_no=325210103580101

Page Contact Information: New Mexico Water Data Support Team
Page Last Modified: 2020-02-05 16:24:53 EST
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Data Category: Groundwater | Geographic Area: United States | GO

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Groundwater levels for the Nation

Search Results -- 1 sites found

site_no list =

- 325210103580101

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 325210103580101 16S.30E.33.44233

Available data for this site Groundwater: Field measurements | GO

Eddy County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°52'10", Longitude 103°58'01" NAD27
Land-surface elevation 3,725 feet above NAVD88
The depth of the well is 433 feet below land surface.
This well is completed in the Sunrise Formation (231SNRS) local aquifer.

Output formats

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

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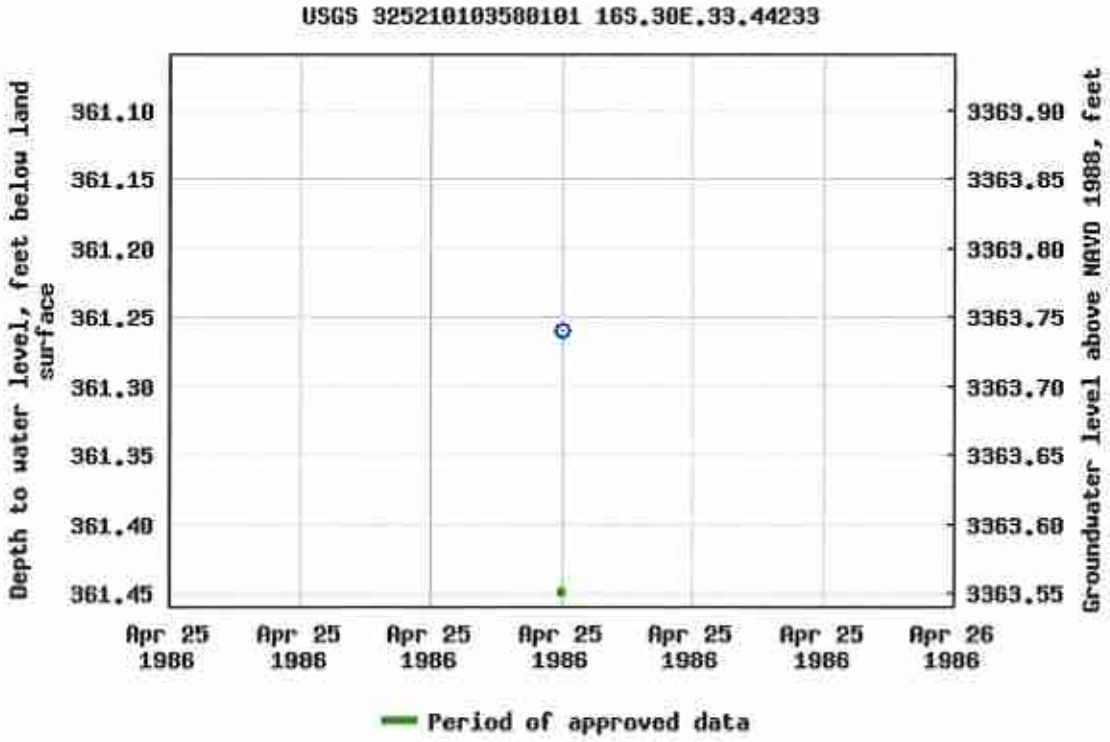

Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

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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: 2020-02-05 16:25:10 EST
0.65 0.49 nadww01

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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) Q64	Q16	Q4	Sec	Twws	Rng	(NAD83 UTM in meters) X	Y
	RA 11914 POD1	2	4	2	20	17S	30E	594801	3632002

Driller License:	1682	**Driller Company:**	HUNGRY HORSE, LLC.		
Driller Name:	JOHN NORRIS				
Drill Start Date:	03/19/2013	**Drill Finish Date:**	03/19/2013	**Plug Date:**	
Log File Date:	04/09/2013	**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	
Casing Size:		**Depth Well:**	85 feet	**Depth Water:**	80 feet

Water Bearing Stratifications:	Top	Bottom	Description
	11	85	Sandstone/Gravel/Conglomerate

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.

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Appendix 3

Wellhead Protection Area

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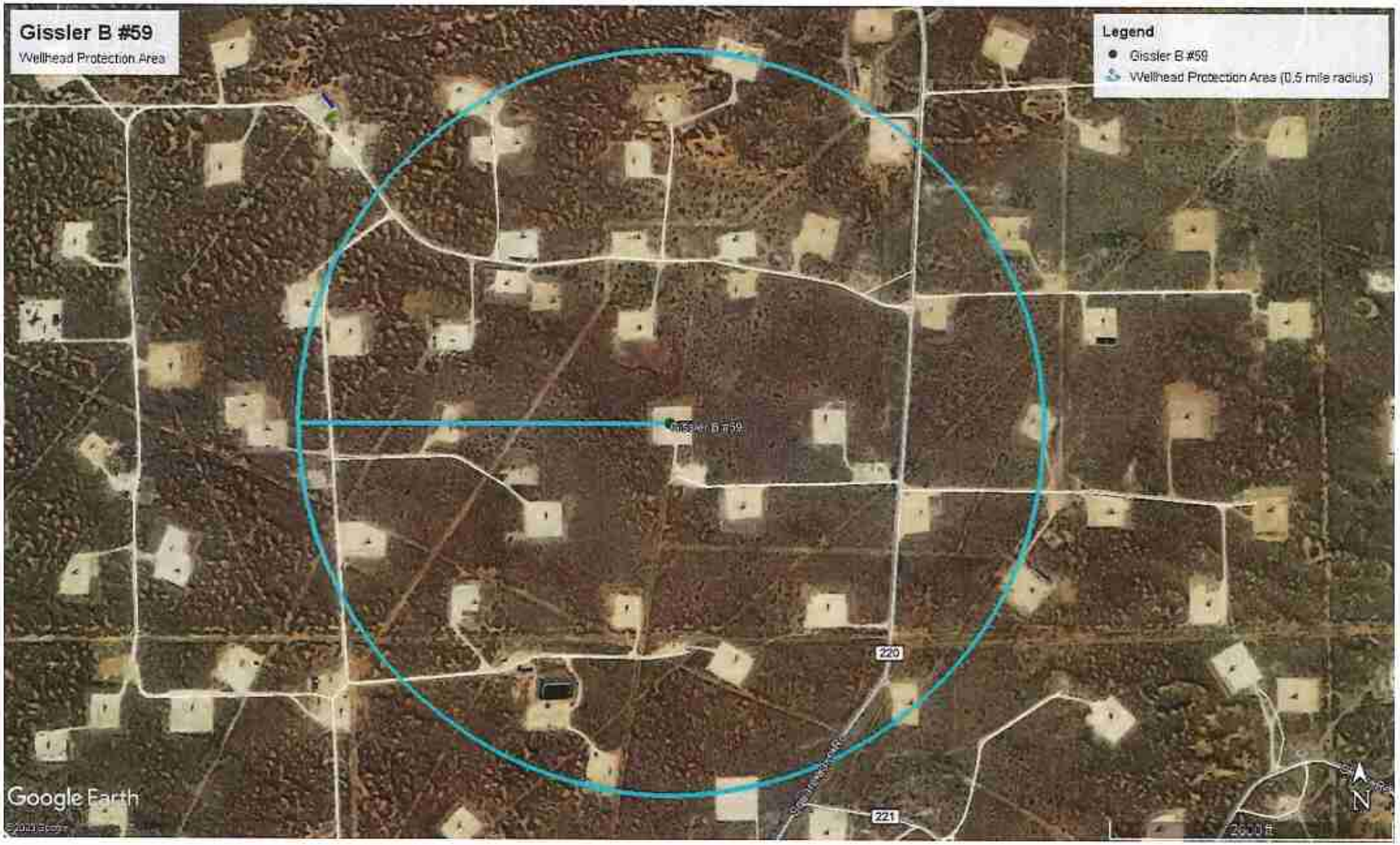
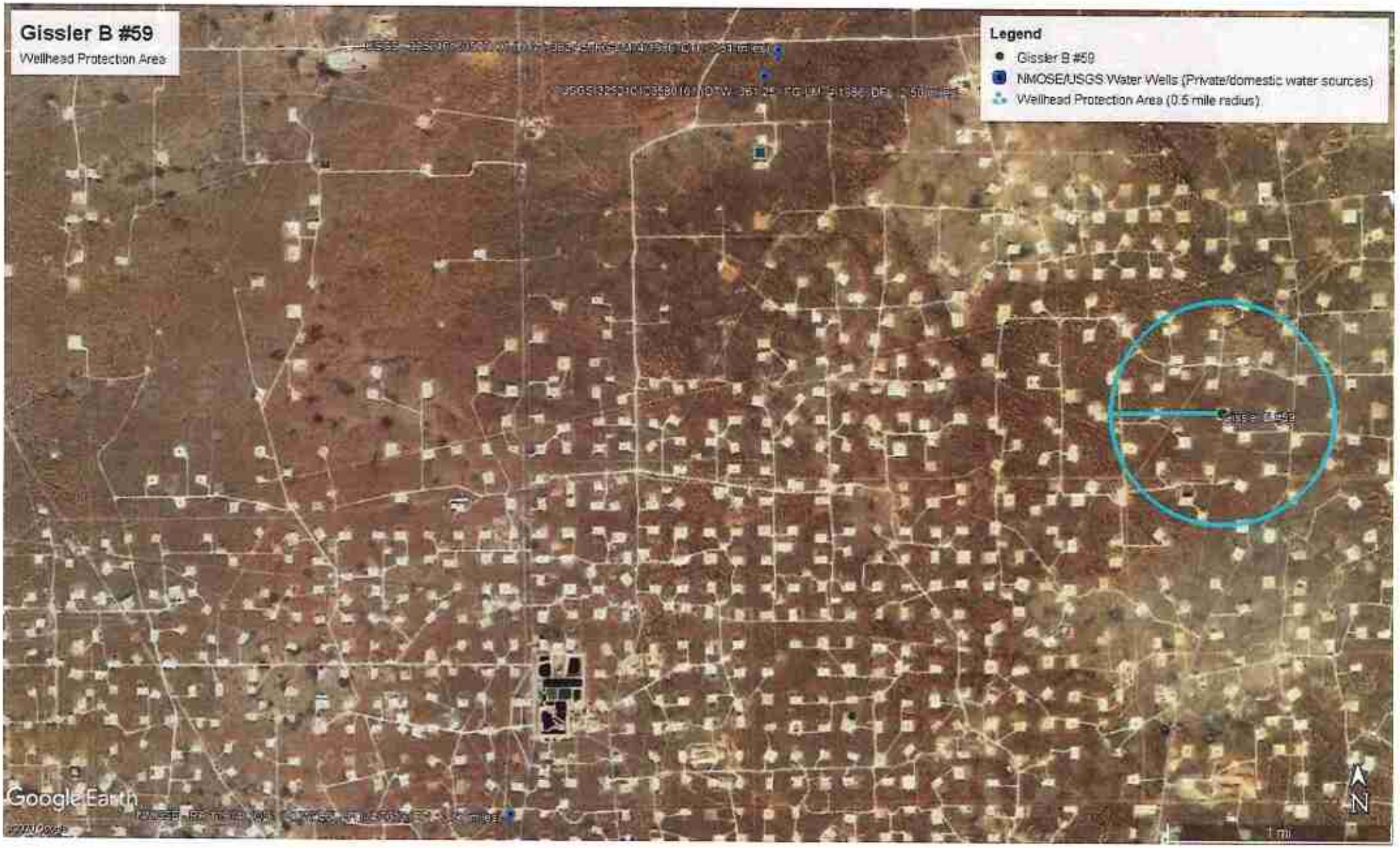

Gissler B #59
Wellhead Protection Area
Legend
Gissler B #59
Wellhead Protection Area (0.5 mile radius)
220
221
Google Earth
N


Gissler B #59
Wellhead Protection Area
Legend
Gissler B #59
NMOSE/USGS Water Wells (Private/domestic water sources)
Wellhead Protection Area (0.5 mile radius)
Google Earth
1 mi
N

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Appendix 4

Distance to Nearest Significant Watercourse

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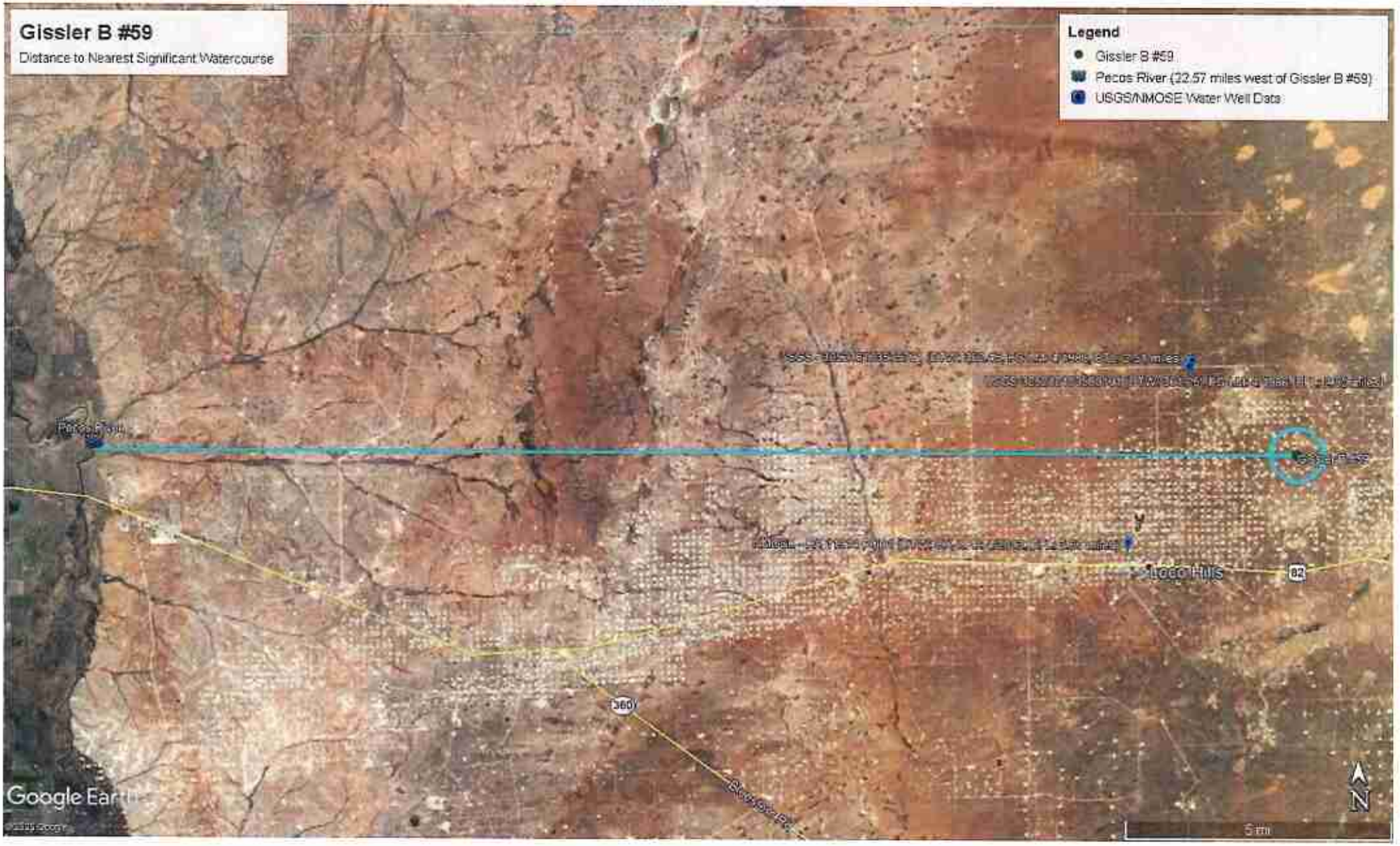
Gissler B #59
Distance to Nearest Significant Watercourse
Legend
Gissler B #59
Pecos River (22.57 miles west of Gissler B #59)
USGS/NMOSE Water Well Data
Hobbs
82
360
Google Earth
5 mi
N

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Appendix 5

Field Data/Sample Data

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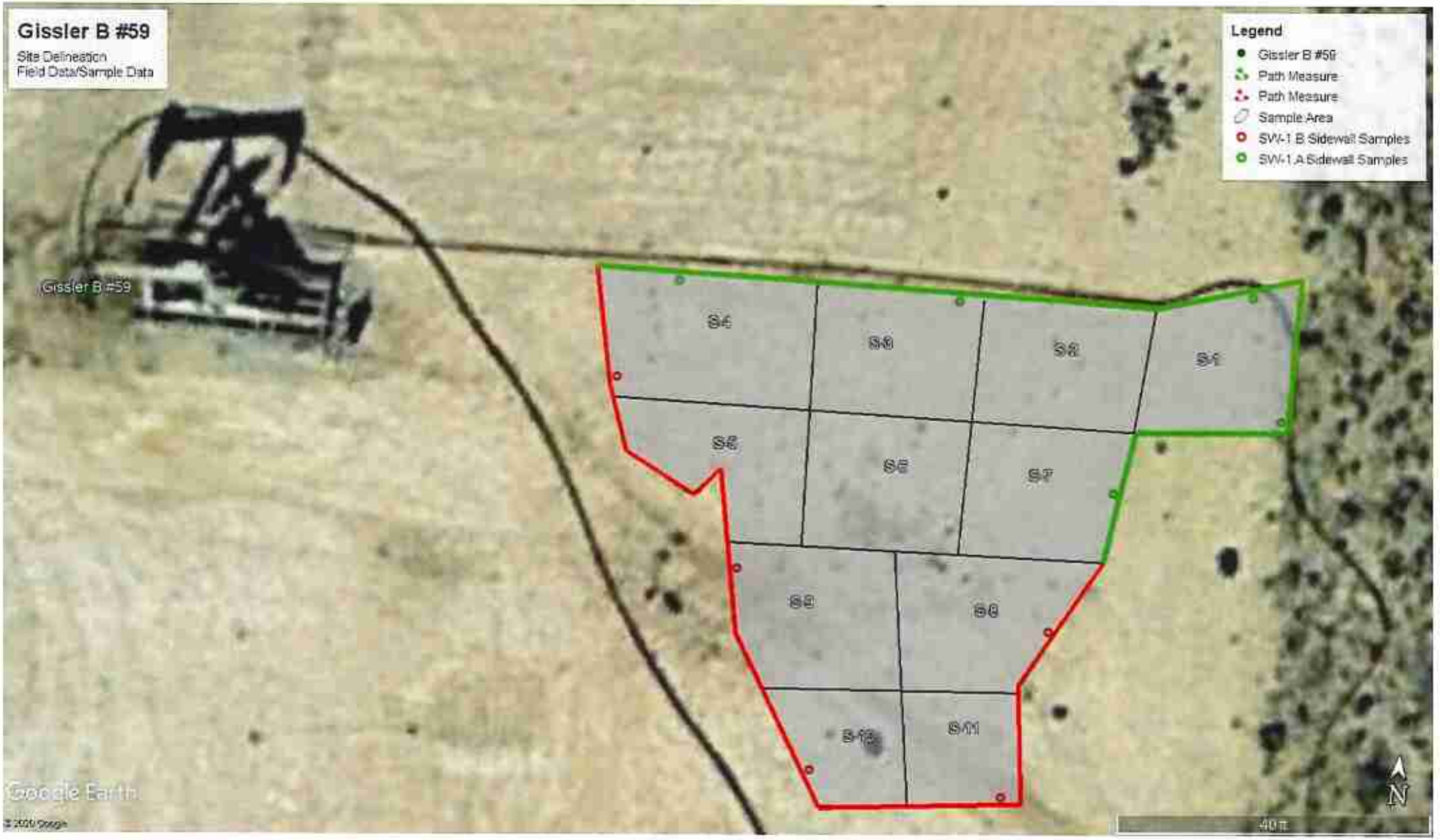
Gissler B #59
Site Delineation
Field Data/Sample Data
Legend
Gissler B #59
Path Measure
Path Measure
Sample Area
SW-1 B Sidewall Samples
SW-1 A Sidewall Samples
Gissler B #59
S4
S3
S2
S1
S5
S6
S7
S9
S8
S10
S11
Google Earth
N
40 ft

Gissler B #59
Sample Data
Per NMOCD Table I Criteria

Sample ID	Depth (ft. bgs)	Date	Chloride	TPH (GRO+DRO+ MRO)	GRO+DRO	BTEX	Benzene
S-1.1	1'	1/20/20	1940	188.5	121	0.0000	0.0000
S-2.1	1'	1/20/20	738	47.9	47.9	0.0000	0.0000
S-3.1	1'	1/20/20	516	32.1	32.1	0.0000	0.0000
S-4.1	1'	1/20/20	510	0	0	0.0000	0.0000
S-5.1	1'	1/20/20	1060	0	0	0.0000	0.0000
S-6.1	1'	1/20/20	1340	879	648	0.2190	0.0000
S-7.1	1'	1/20/20	417	0	0	0.0254	0.0000
S-8.1	1'	1/20/20	682	0	0	0.0000	0.0000
S-9.1	1'	1/20/20	608	243.8	169	0.0000	0.0000
S-10.1	1'	1/20/20	563	782	569	0.0000	0.0000
S-11.1	1'	1/20/20	159	31.7	31.7	0.0000	0.0000
Sample ID	Depth (ft. bgs)	Date	Chloride	TPH (GRO+DRO+ MRO)	GRO+DRO	BTEX	Benzene
SW-1.A	1'	2/13/20	301	0	0	0.0000	0.0000
SW-1.B	1'	2/13/20	60.4	0	0	0.0000	0.0000

NMOCD Table I Criteria

Depth	Constituent	Method	Limit
>100'	Chloride	EPA 300.0 or SM4500 Cl B	20,000 mg/kg
	TPH (GRO+DRO +MRO)	EPA SW-846 Method 8015M	2,500 mg/kg
	GRO+DRO	EPA SW-846 Method 8015M	1,000 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg

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Appendix 6

Laboratory Data and COC

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envirotech
Analytical Laboratory

Analytical Report

Report Summary

Client: EOG Resources Inc. - Carlsbad

Samples Received: 1/28/2020
Job Number: 19034-0001
Work Order: P001082
Project Name/Location: Gissler B #59

Report Reviewed By: Walter Hinchman Date: 1/30/20

Walter Hinchman, Laboratory Director

Envirotech Inc. certifies the test results meet all requirements of TNI unless footnoted otherwise.
Statement of Data Authenticity: Envirotech, Inc, attests the data reported has not been altered in any way.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.
Envirotech, Inc, holds the Utah TNI certification NM009792018-1 for the data reported.
Envirotech, Inc, holds the Texas TNI certification T104704557-19-2 for the data reported.

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envirotech
Analytical Laboratory

EOG Resources Inc. - Carlsbad	Project Name:	Gissler B #59	
104 South 4th Street	Project Number:	19034-0001	Reported:
Artesia NM, 88210	Project Manager:	Robert Asher	01/30/20 14:31

Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
S-1.1	P001082-01A	Soil	01/20/20	01/28/20	Glass Jar, 4 oz.
S-2.1	P001082-02A	Soil	01/20/20	01/28/20	Glass Jar, 4 oz.
S-3.1	P001082-03A	Soil	01/20/20	01/28/20	Glass Jar, 4 oz.
S-4.1	P001082-04A	Soil	01/20/20	01/28/20	Glass Jar, 4 oz.
S-5.1	P001082-05A	Soil	01/20/20	01/28/20	Glass Jar, 4 oz.
S-6.1	P001082-06A	Soil	01/20/20	01/28/20	Glass Jar, 4 oz.
S-7.1	P001082-07A	Soil	01/20/20	01/28/20	Glass Jar, 4 oz.
S-8.1	P001082-08A	Soil	01/20/20	01/28/20	Glass Jar, 4 oz.
S-9.1	P001082-09A	Soil	01/20/20	01/28/20	Glass Jar, 4 oz.
S-10.1	P001082-10A	Soil	01/20/20	01/28/20	Glass Jar, 4 oz.
S-11.1	P001082-11A	Soil	01/20/20	01/28/20	Glass Jar, 4 oz.

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envirotech
Analytical Laboratory

EOG Resources Inc. - Carlsbad	Project Name:	Gissler B #59	
104 South 4th Street	Project Number:	19034-0001	Reported:
Artesia NM, 88210	Project Manager:	Robert Asher	01/30/20 14:31

S-1.1
P001082-01 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*106 %*	*50-150*		*2005015*	*01/28/20*	*01/30/20*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	121	25.0	mg/kg	1	2005018	01/28/20	01/29/20	EPA 8015D	
Oil Range Organics (C28-C40)	67.5	50.0	mg/kg	1	2005018	01/28/20	01/29/20	EPA 8015D	
Surrogate: n-Nonane		*95.5 %*	*50-200*		*2005018*	*01/28/20*	*01/29/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*95.0 %*	*50-150*		*2005015*	*01/28/20*	*01/30/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	1940	20.0	mg/kg	1	2005017	01/28/20	01/28/20	EPA 300.0/9056A	

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EOG Resources Inc. - Carlsbad	Project Name:	Giesler B #59	
104 South 4th Street	Project Number:	19034-0001	**Reported:**
Artesia NM, 88210	Project Manager:	Robert Asher	01/30/20 14:31

S-2.1
P001082-02 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
Surrogate: 1-Bromochlorobenzene-PID		*106 %*		*50-150*	*2005015*	*01/28/20*	*01/30/20*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	47.9	25.0	mg/kg	1	2005018	01/28/20	01/29/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2005018	01/28/20	01/29/20	EPA 8015D	
Surrogate: n-Nonane		*94.9 %*		*50-200*	*2005018*	*01/28/20*	*01/29/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*94.1 %*		*50-150*	*2005015*	*01/28/20*	*01/30/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	738	20.0	mg/kg	1	2005017	01/28/20	01/28/20	EPA 300.0/9056A	

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104 South 4th Street	Project Number:	19034-0001	**Reported:**
Artesia NM, 88210	Project Manager:	Robert Asher	01/30/20 14:31

S-3.1
P001082-03 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*107 %*		*50-150*	*2005015*	*01/28/20*	*01/30/20*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	**32.1**	25.0	mg/kg	1	2005018	01/28/20	01/29/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2005018	01/28/20	01/29/20	EPA 8015D	
Surrogate: n-Nonane		*93.8 %*		*50-200*	*2005018*	*01/28/20*	*01/29/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005013	01/28/20	01/30/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*93.2 %*		*50-150*	*2005013*	*01/28/20*	*01/30/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	**516**	20.0	mg/kg	1	2005017	01/28/20	01/28/20	EPA 300.0/9056A	

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Artesia NM, 88210	Project Manager:	Robert Asher	01/30/20 14:31

S-4.1
P001082-04 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*106 %*	*50-150*		*2005015*	*01/28/20*	*01/30/20*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2005018	01/28/20	01/29/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2005018	01/28/20	01/29/20	EPA 8015D	
Surrogate: n-Nonane		*94.2 %*	*50-200*		*2005018*	*01/28/20*	*01/29/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*93.9 %*	*50-150*		*2005015*	*01/28/20*	*01/30/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	510	20.0	mg/kg	1	2005017	01/28/20	01/28/20	EPA 300.0/9056A	

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S-5.1
P001082-05 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*105 %*	*50-150*		*2005015*	*01/28/20*	*01/30/20*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2005018	01/28/20	01/29/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2005018	01/28/20	01/29/20	EPA 8015D	
Surrogate: n-Nonane		*90.1 %*	*50-200*		*2005018*	*01/28/20*	*01/29/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*93.2 %*	*50-150*		*2005015*	*01/28/20*	*01/30/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	1060	20.0	mg/kg	1	2005017	01/28/20	01/28/20	EPA 300.0/9056A	

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S-6.1
P001082-06 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
Ethylbenzene	0.0390	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
p,m-Xylene	0.119	0.0500	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
o-Xylene	0.0615	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
Total Xylenes	0.180	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*109 %*	*50-150*		*2005015*	*01/28/20*	*01/30/20*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	648	25.0	mg/kg	1	2005018	01/28/20	01/29/20	EPA 8015D	
Oil Range Organics (C28-C40)	231	50.0	mg/kg	1	2005018	01/28/20	01/29/20	EPA 8015D	
Surrogate: n-Nonane		*114 %*	*50-200*		*2005018*	*01/28/20*	*01/29/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*93.3 %*	*50-150*		*2005015*	*01/28/20*	*01/30/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	1340	20.0	mg/kg	1	2005017	01/28/20	01/28/20	EPA 300.0/9056A	

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Artesia NM, 88210	Project Manager:	Robert Asher	01/30/20 14:31

S-7.1
P001082-07 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
Ethylbenzene	0.0254	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*108 %*	*50-150*		*2005015*	*01/28/20*	*01/30/20*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2005018	01/28/20	01/29/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2005018	01/28/20	01/29/20	EPA 8015D	
Surrogate: o-Nonane		*89.8 %*	*50-200*		*2005018*	*01/28/20*	*01/29/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*93.8 %*	*50-150*		*2005015*	*01/28/20*	*01/30/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	417	20.0	mg/kg	1	2005017	01/28/20	01/28/20	EPA 300.0/9056A	

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S-8.1
P001082-08 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*107 %*	*50-150*		*2005015*	*01/28/20*	*01/30/20*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2005018	01/28/20	01/29/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2005018	01/28/20	01/29/20	EPA 8015D	
Surrogate: n-Nonane		*88.4 %*	*50-200*		*2005018*	*01/28/20*	*01/29/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*94.3 %*	*50-150*		*2005015*	*01/28/20*	*01/30/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	682	20.0	mg/kg	1	2005017	01/28/20	01/28/20	EPA 300.0/9056A	

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Artesia NM, 88210	Project Manager:	Robert Asher	01/30/20 14:31

S-9.1
P001082-09 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*106 %*	*50-150*		*2005015*	*01/28/20*	*01/30/20*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	169	25.0	mg/kg	1	2005018	01/28/20	01/29/20	EPA 8015D	
Oil Range Organics (C28-C40)	74.8	50.0	mg/kg	1	2005018	01/28/20	01/29/20	EPA 8015D	
Surrogate: n-Nonane		*93.5 %*	*50-200*		*2005018*	*01/28/20*	*01/29/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*93.9 %*	*50-150*		*2005015*	*01/28/20*	*01/30/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	608	20.0	mg/kg	1	3001017	01/28/20	01/28/20	EPA 300.0/9056A	

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Artesia NM, 88210	Project Manager:	Robert Asher	01/30/20 14:31

S-10.1
P001082-10 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*107 %*	*50-150*		*2005015*	*01/28/20*	*01/30/20*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	569	25.0	mg/kg	1	2005018	01/28/20	01/29/20	EPA 8015D	
Oil Range Organics (C28-C40)	213	50.0	mg/kg	1	2005018	01/28/20	01/29/20	EPA 8015D	
Surrogate: n-Nonane		*113 %*	*50-200*		*2005018*	*01/28/20*	*01/29/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*93.9 %*	*50-150*		*2005015*	*01/28/20*	*01/30/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	563	20.0	mg/kg	1	2005017	01/28/20	01/28/20	EPA 300.0/9056A	

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Artesia NM, 88210	Project Manager:	Robert Asher	01/30/20 14:31

S-11.1
P001082-11 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*106 %*	*50-150*		*2005015*	*01/28/20*	*01/30/20*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	31.7	25.0	mg/kg	1	2005018	01/28/20	01/29/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2005018	01/28/20	01/29/20	EPA 8015D	
Surrogate: n-Nonane		*89.1 %*	*50-200*		*2005018*	*01/28/20*	*01/29/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005015	01/28/20	01/30/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*94.1 %*	*50-150*		*2005015*	*01/28/20*	*01/30/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	159	20.0	mg/kg	1	2005017	01/28/20	01/28/20	EPA 300.0/9056A	

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Analytical Laboratory

EOG Resources Inc. - Carlsbad	Project Name:	Gissler B #59	
104 South 4th Street	Project Number:	19034-0001	Reported:
Artesia NM, 88210	Project Manager:	Robert Asher	01/30/20 14:31

Volatile Organics by EPA 8021 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2005015 - Purge and Trap EPA 5030A										
Blank (2005015-BLK1)				Prepared: 01/28/20 1 Analyzed: 01/29/20 1						
Benzene	ND	0.0250	mg/kg							
Toluene	ND	0.0250	"							
Ethylbenzene	ND	0.0250	"							
p,m-Xylene	ND	0.0500	"							
o-Xylene	ND	0.0250	"							
Total Xylenes	ND	0.0350	"							
Surrogate: 4-Bromochlorobenzene-PID	*8.49*		"	*8.00*		*106*	*50-150*			
LCS (2005015-BS1)				Prepared: 01/28/20 1 Analyzed: 01/29/20 1						
Benzene	5.34	0.0250	mg/kg	5.00		107	70-130			
Toluene	5.34	0.0250	"	5.00		107	70-130			
Ethylbenzene	5.31	0.0250	"	5.00		106	70-130			
p,m-Xylene	10.6	0.0500	"	10.0		106	70-130			
o-Xylene	5.34	0.0250	"	5.00		107	70-130			
Total Xylenes	15.9	0.0250	"	15.0		106	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*8.56*		"	*8.00*		*107*	*50-150*			
Matrix Spike (2005015-MS1)	**Source: P001075-01**			Prepared: 01/28/20 1 Analyzed: 01/29/20 1						
Benzene	5.05	0.0250	mg/kg	5.00	ND	101	54.3-133			
Toluene	5.05	0.0250	"	5.00	ND	101	61.4-130			
Ethylbenzene	5.01	0.0250	"	5.00	ND	100	61.4-133			
p,m-Xylene	10.0	0.0500	"	10.0	ND	100	63.3-131			
o-Xylene	5.05	0.0250	"	5.00	ND	101	63.3-131			
Total Xylenes	15.1	0.0250	"	15.0	ND	100	63.3-131			
Surrogate: 4-Bromochlorobenzene-PID	*8.66*		"	*8.00*		*108*	*50-150*			
Matrix Spike Dup (2005015-MSD1)	**Source: P001075-01**			Prepared: 01/28/20 1 Analyzed: 01/29/20 1						
Benzene	5.17	0.0250	mg/kg	5.00	ND	103	54.3-133	2.31	20	
Toluene	5.13	0.0250	"	5.00	ND	103	61.4-130	1.99	20	
Ethylbenzene	5.12	0.0250	"	5.00	ND	102	61.4-133	2.14	20	
p,m-Xylene	10.2	0.0500	"	10.0	ND	102	63.3-131	2.07	20	
o-Xylene	5.15	0.0250	"	5.00	ND	103	63.3-131	1.98	20	
Total Xylenes	15.4	0.0250	"	15.0	ND	103	63.3-131	2.04	20	
Surrogate: 4-Bromochlorobenzene-PID	*8.63*		"	*8.00*		*108*	*50-150*			

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EOG Resources Inc. - Carlsbad	Project Name:	Gissler B #59	
104 South 4th Street	Project Number:	19034-0001	**Reported:**
Artesia NM, 88210	Project Manager:	Robert Asher	01/30/20 14:31

Nonhalogenated Organics by 8015 - DRO/ORO - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2005018 - DRO Extraction EPA 3570										
Blank (2005018-BLK1)				Prepared: 01/28/20 1 Analyzed: 01/29/20 0						
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg							
Oil Range Organics (C28-C40)	ND	50.0	"							
Surrogate: n-Nonane	*53.9*		"	*50.0*		*108*	*50-200*			
LCS (2005018-BS1)				Prepared: 01/28/20 1 Analyzed: 01/29/20 0						
Diesel Range Organics (C10-C28)	442	25.0	mg/kg	500		88.3	38-132			
Surrogate: n-Nonane	*43.4*		"	*50.0*		*86.9*	*50-200*			
Matrix Spike (2005018-MS1)	**Source: P001084-01**			Prepared: 01/28/20 1 Analyzed: 01/29/20 0						
Diesel Range Organics (C10-C28)	1490	25.0	mg/kg	500	270	244	38-132			M2
Surrogate: n-Nonane	*47.3*		"	*50.0*		*93.0*	*50-200*			
Matrix Spike Dup (2005018-MSD1)	**Source: P001084-01**			Prepared: 01/28/20 1 Analyzed: 01/29/20 0						
Diesel Range Organics (C10-C28)	1520	25.0	mg/kg	500	270	250	38-132	2.10	20	M2
Surrogate: n-Nonane	*47.3*		"	*50.0*		*94.5*	*50-200*			

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EOG Resources Inc. - Carlsbad	Project Name:	Gissler D #59	
104 South 4th Street	Project Number:	19034-0001	Reported:
Artesia NM, 88210	Project Manager:	Robert Asher	01/30/20 14:31

Nonhalogenated Organics by 8015 - GRO - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2005015 - Purge and Trap EPA 5030A										
Blank (2005015-BLK1)				Prepared: 01/28/20 1 Analyzed: 01/29/20 1						
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.60*		"	*8.00*		*95.0*	*50-150*			
LCS (2005015-BS2)				Prepared: 01/28/20 1 Analyzed: 01/29/20 1						
Gasoline Range Organics (C6-C10)	44.5	20.0	mg/kg	50.0		88.9	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.66*		"	*8.00*		*95.7*	*50-150*			
Matrix Spike (2005015-MS2)		**Source: P001075-01**		Prepared: 01/28/20 1 Analyzed: 01/29/20 1						
Gasoline Range Organics (C6-C10)	45.0	20.0	mg/kg	50.0	ND	89.9	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.71*		"	*8.00*		*96.8*	*50-150*			
Matrix Spike Dup (2005015-MSD2)		**Source: P001075-01**		Prepared: 01/28/20 1 Analyzed: 01/29/20 1						
Gasoline Range Organics (C6-C10)	44.3	20.0	mg/kg	50.0	ND	88.6	70-130	1.49	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.60*		"	*8.00*		*95.0*	*50-150*			

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EOG Resources Inc. - Carlsbad	Project Name:	Gissler B #59	
104 South 4th Street	Project Number:	19034-0001	Reported:
Artesia NM, 88210	Project Manager:	Robert Asher	01/30/20 14:31

Anions by 300.0/9056A - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2005017 - Anion Extraction EPA 300.0/9056A										
Blank (2005017-BLK1)				Prepared & Analyzed: 01/28/20 1						
Chloride	ND	20.0	mg/kg							
LCS (2005017-BS1)				Prepared & Analyzed: 01/28/20 1						
Chloride	247	20.0	mg/kg	250		98.8	90-110			
Matrix Spike (2005017-MS1)		Source: P001075-01		Prepared & Analyzed: 01/28/20 1						
Chloride	1100	20.0	mg/kg	250	869	90.7	80-120			
Matrix Spike Dup (2005017-MSD1)		Source: P001075-01		Prepared & Analyzed: 01/28/20 1						
Chloride	1150	20.0	mg/kg	250	869	112	80-120	4.27	20	

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

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Analytical Laboratory

EOG Resources Inc. - Carlsbad	Project Name:	Gissler B #59	
104 South 4th Street	Project Number:	19034-0001	Reported:
Artesia NM, 88210	Project Manager:	Robert Asher	01/30/20 14:31

Notes and Definitions

M2	Matrix spike recovery was outside quality control limits. The associated LCS spike recovery was acceptable.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
**	Methods marked with ** are non-accredited methods.

Soil data is reported on an "as received" weight basis, unless reported otherwise.

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Project Information | Chain of Custody | Page 1 of 2

Client: EOG Resources, Inc.	Report Attention
Project: Gissler B #59	Report due by: 1/30/2020
Project Manager: Robert Asher	Attention: Robert Asher
Address: 104 South 4th Street	Address: 104 South 4th Street
City, State, Zip Artesia, NM 88210	City, State, Zip Artesia, NM 88210
Phone: (575) 748-4217	Phone: (575) 748-4217
Email: robert_asher@eogresources.com	Email: robert_asher@eogresources.com

Lab Use Only: Lab WO# P001082 | Job Number 19034-0001

TAT: 1D | 3D (X) | EPA Program: RCRA | CWA | SDWA

State: NM (X) | CO | UT | AZ

Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number	GRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	Remarks
12:33 PM	1/20/20	S	1	S-1.1	1	X	X	X			X	BGDOC
12:41 PM	1/20/20	S	1	S-2.1	2	X	X	X			X	BGDOC
12:44 PM	1/20/20	S	1	S-3.1	3	X	X	X			X	BGDOC
12:47 PM	1/20/20	S	1	S-4.1	4	X	X	X			X	BGDOC
12:51 PM	1/20/20	S	1	S-5.1	5	X	X	X			X	BGDOC
12:55 PM	1/20/20	S	1	S-6.1	6	X	X	X			X	BGDOC
1:00 PM	1/20/20	S	1	S-7.1	7	X	X	X			X	BGDOC
1:05 PM	1/20/20	S	1	S-8.1	8	X	X	X			X	BGDOC
						X	X	X			X	BGDOC
						X	X	X			X	BGDOC

Additional Instructions:
PO# 205632

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by:

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

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	1/22/2020	3:27 PM		1/23/20	9.30
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

Lab Use Only: Received on ice: (Y) N; T1 ____ T2 ____ T3 ____; AVG Temp °C 4

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

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

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

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Ph (505) 632-0615 FX (505) 632-1865
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labadmin@envirotech-inc.com

Project Information

Chain of Custody

Page 2 of 2

Client: EOG Resources, Inc.	
Project: Gissler B #59	
Project Manager: Robert Asher	
Address: 104 South 4th Street	
City, State, Zip Artesia, NM 88210	
Phone: (575) 748-4217	
Email: robert_asher@eogresources.com	

Report Attention

Report due by:	1/30/2020
Attention:	Robert Asher
Address:	104 South 4th Street
City, State, Zip	Artesia, NM 88210
Phone:	(575) 748-4217
Email:	robert_asher@eogresources.com

Lab Use Only

Lab WO# P001082

Job Number 19034-0001

TAT: 1D — 3D: X

EPA Program: RCRA — CWA — SDWA

State: NM: X — CO — UT — AZ

Analysis and Method

Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	Remarks
1:09 PM	1/20/20	S	1	S-9.1	9	X	X	X			X	BGDOC
1:13 PM	1/20/20	S	1	S-10.1	10	X	X	X			X	BGDOC
1:16 PM	1/20/20	S	1	S-11.1	11	X	X	X			X	BGDOC
						X	X	X			X	BGDOC
						X	X	X			X	BGDOC
						X	X	X			X	BGDOC
						X	X	X			X	BGDOC
						X	X	X			X	BGDOC
						X	X	X			X	BGDOC
						X	X	X			X	BGDOC

Additional Instructions:

PO# 205632

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by:

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

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	1/22/2020	3:28 PM	Raiza Lopez	1/28/20	9:30
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

Lab Use Only

Received on ice: (Y) / N

T1 ____ T2 ____ T3 ____

AVG Temp °C 4

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

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

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

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Analytical Report

Report Summary

Client: EOG Resources Inc. - Carlsbad

Samples Received: 2/14/2020
Job Number: 19034-0001
Work Order: P002037
Project Name/Location: Gissler B #59

Report Reviewed By: Walter Hinchman Date: 2/18/20

Walter Hinchman, Laboratory Director

NELAP ACCREDITED TNI LABORATORY

Envirotech Inc. certifies the test results meet all requirements of TNI unless footnoted otherwise.
Statement of Data Authenticity: Envirotech, Inc, attests the data reported has not been altered in any way.
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Envirotech, Inc, holds the Utah TNI certification NM009792018-1 for the data reported.
Envirotech, Inc, holds the Texas TNI certification T104704557-19-2 for the data reported.

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EOG Resources Inc. - Carlsbad	Project Name:	Gissler B #59	
104 South 4th Street	Project Number:	19034-0001	Reported:
Artesia NM, 88210	Project Manager:	Robert Asher	02/18/20 13:29

Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW-1.A	P002037-01A	Soil	02/12/20	02/14/20	Glass Jar, 4 oz.
SW-1.B	P002037-02A	Soil	02/12/20	02/14/20	Glass Jar, 4 oz.

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EOG Resources Inc. - Carlsbad	Project Name:	Gissler B #59	
104 South 4th Street	Project Number:	19034-0001	**Reported:**
Artesia NM, 88210	Project Manager:	Robert Asher	02/18/20 13:29

SW-1.A
P002037-01 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2007023	02/14/20	02/16/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2007023	02/14/20	02/16/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2007023	02/14/20	02/16/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2007023	02/14/20	02/16/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2007023	02/14/20	02/16/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2007023	02/14/20	02/16/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*101 %*		*50-150*	*2007023*	*02/14/20*	*02/16/20*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2007025	02/14/20	02/14/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2007025	02/14/20	02/14/20	EPA 8015D	
Surrogate: n-Nonane		*99.7 %*		*50-200*	*2007025*	*02/14/20*	*02/14/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2007023	02/14/20	02/16/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*88.1 %*		*50-150*	*2007023*	*02/14/20*	*02/16/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	**301**	20.0	mg/kg	1	2007028	02/14/20	02/14/20	EPA 300.0/9056A	

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EOG Resources Inc. - Carlsbad	Project Name:	Gissler B #59	
104 South 4th Street	Project Number:	19034-0001	**Reported:**
Artesia NM, 88210	Project Manager:	Robert Asher	02/18/20 13:29

SW-1.B
P002037-02 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2007023	02/14/20	02/16/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2007023	02/14/20	02/16/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2007023	02/14/20	02/16/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2007023	02/14/20	02/16/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2007023	02/14/20	02/16/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2007023	02/14/20	02/16/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*101 %*	*50-150*		*2007023*	*02/14/20*	*02/16/20*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2007025	02/14/20	02/14/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2007025	02/14/20	02/14/20	EPA 8015D	
Surrogate: n-Nonane		*92.5 %*	*50-200*		*2007025*	*02/14/20*	*02/14/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2007023	02/14/20	02/16/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*87.9 %*	*50-150*		*2007023*	*02/14/20*	*02/16/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	60.4	20.0	mg/kg	1	2007028	02/14/20	02/14/20	EPA 300.0/9056A	

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Received by OCD: 2/27/2020 10:02:57 AM

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Analytical Laboratory

EOG Resources Inc. - Carlshad	Project Name:	Gissler B #59	
104 South 4th Street	Project Number:	19034-0001	Reported:
Artesia NM, 88210	Project Manager:	Robert Asher	02/18/20 13:29

Volatile Organics by EPA 8021 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2007023 - Purge and Trap EPA 5030A										
Blank (2007023-BLK1)				Prepared: 02/14/20 0 Analyzed: 02/16/20 1						
Benzene	ND	0.0250	mg/kg							
Toluene	ND	0.0250	"							
Ethylbenzene	ND	0.0250	"							
p,m-Xylene	ND	0.0500	"							
o-Xylene	ND	0.0250	"							
Total Xylenes	ND	0.0250	"							
Surrogate: 4-Bromochlorobenzene-PID	*8.01*		"	*8.00*		*100*	*50-150*			
LCS (2007023-BS1)				Prepared: 02/14/20 0 Analyzed: 02/16/20 1						
Benzene	4.70	0.0250	mg/kg	5.00		93.9	70-130			
Toluene	4.83	0.0250	"	5.00		96.7	70-130			
Ethylbenzene	4.76	0.0250	"	5.00		95.2	70-130			
p,m-Xylene	9.48	0.0500	"	10.0		94.8	70-130			
o-Xylene	4.72	0.0250	"	5.00		94.4	70-130			
Total Xylenes	14.2	0.0250	"	15.0		94.6	0-200			
Surrogate: 4-Bromochlorobenzene-PID	*8.33*		"	*8.00*		*104*	*50-150*			
Matrix Spike (2007023-MS1)		**Source: P002033-01**		Prepared: 02/14/20 0 Analyzed: 02/16/20 1						
Benzene	4.98	0.0250	mg/kg	5.00	0.0478	98.7	54.3-133			
Toluene	5.03	0.0250	"	5.00	0.0263	100	61.4-130			
Ethylbenzene	4.95	0.0250	"	5.00	ND	99.1	61.4-133			
p,m-Xylene	9.85	0.0500	"	10.0	ND	98.5	63.3-131			
o-Xylene	4.90	0.0250	"	5.00	ND	98.0	63.3-131			
Total Xylenes	14.7	0.0250	"	15.0	ND	98.3	0-200			
Surrogate: 4-Bromochlorobenzene-PID	*8.14*		"	*8.00*		*102*	*50-150*			
Matrix Spike Dup (2007023-MSD1)		**Source: P002033-01**		Prepared: 02/14/20 0 Analyzed: 02/16/20 1						
Benzene	5.02	0.0250	mg/kg	5.00	0.0478	99.4	54.3-133	0.690	20	
Toluene	5.12	0.0250	"	5.00	0.0263	102	61.4-130	1.69	20	
Ethylbenzene	5.03	0.0250	"	5.00	ND	101	61.4-133	1.54	20	
p,m-Xylene	10.0	0.0500	"	10.0	ND	100	63.3-131	1.71	20	
o-Xylene	5.03	0.0250	"	5.00	ND	101	63.3-131	2.61	20	
Total Xylenes	15.0	0.0250	"	15.0	ND	100	0-200	2.01	200	
Surrogate: 4-Bromochlorobenzene-PID	*8.18*		"	*8.00*		*102*	*50-150*			

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EOG Resources Inc. - Carlshad	Project Name:	Gissler B #59	
104 South 4th Street	Project Number:	19034-0001	Reported:
Artesia NM, 88210	Project Manager:	Robert Asher	02/18/20 13:29

Nonhalogenated Organics by 8015 - DRO/ORO - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2007025 - DRO Extraction EPA 3570										
Blank (2007025-BLK1)				Prepared: 02/14/20 0 Analyzed: 02/14/20 1						
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg							
Oil Range Organics (C28-C40)	ND	50.0	"							
Surrogate: n-Nonane	*51.7*		"	*50.0*		*103*	*50-200*			
LCS (2007025-BS1)				Prepared: 02/14/20 0 Analyzed: 02/14/20 1						
Diesel Range Organics (C10-C28)	436	25.0	mg/kg	500		87.3	38-132			
Surrogate: n-Nonane	*48.5*		"	*50.0*		*96.9*	*50-200*			
Matrix Spike (2007025-MS1)	**Source: P002033-01**			Prepared: 02/14/20 0 Analyzed: 02/14/20 1						
Diesel Range Organics (C10-C28)	473	25.0	mg/kg	500	ND	94.5	38-132			
Surrogate: n-Nonane	*51.0*		"	*50.0*		*102*	*50-200*			
Matrix Spike Dup (2007025-MSD1)	**Source: P002033-01**			Prepared: 02/14/20 0 Analyzed: 02/17/20 1						
Diesel Range Organics (C10-C28)	465	25.0	mg/kg	500	ND	93.0	38-132	1.68	20	
Surrogate: n-Nonane	*49.6*		"	*50.0*		*99.1*	*50-200*			

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EOG Resources Inc. - Carlsbad	Project Name:	Gissler B #59	
104 South 4th Street	Project Number:	19034-0001	Reported:
Artesia NM, 88210	Project Manager:	Robert Asher	02/18/20 13:29

Nonhalogenated Organics by 8015 - GRO - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2007023 - Purge and Trap EPA 5030A										
Blank (2007023-BLK1)				Prepared: 02/14/20 0 Analyzed: 02/16/20 1						
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.03*		"	*8.00*		*87.9*	*50-150*			
LCS (2007023-BS2)				Prepared: 02/14/20 0 Analyzed: 02/16/20 1						
Gasoline Range Organics (C6-C10)	48.5	20.0	mg/kg	50.0		97.1	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.14*		"	*8.00*		*89.3*	*50-150*			
Matrix Spike (2007023-MS2)		**Source: P002033-01**		Prepared: 02/14/20 0 Analyzed: 02/16/20 1						
Gasoline Range Organics (C6-C10)	49.2	20.0	mg/kg	50.0	ND	98.4	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.04*		"	*8.00*		*88.0*	*50-150*			
Matrix Spike Dup (2007023-MSD2)		**Source: P002033-01**		Prepared: 02/14/20 0 Analyzed: 02/16/20 1						
Gasoline Range Organics (C6-C10)	46.7	20.0	mg/kg	50.0	ND	93.5	70-130	5.16	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.15*		"	*8.00*		*89.4*	*50-150*			

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EOG Resources Inc. - Carlsbad	Project Name:	Gissler B #59	
104 South 4th Street	Project Number:	19034-0001	Reported:
Artesia NM, 88210	Project Manager:	Robert Asher	02/18/20 13:29

Anions by 300.0/9056A - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2007028 - Anion Extraction EPA 300.0/9056A										
Blank (2007028-BLK1)				Prepared & Analyzed: 02/14/20 1						
Chloride	ND	20.0	mg/kg							
LCS (2007028-BS1)				Prepared & Analyzed: 02/14/20 1						
Chloride	248	20.0	mg/kg	250		99.2	90-110			
Matrix Spike (2007028-MS1)		Source: P002033-01		Prepared & Analyzed: 02/14/20 1						
Chloride	2280	20.0	mg/kg	250	1720	217	80-120			M2
Matrix Spike Dup (2007028-MSD1)		Source: P002033-01		Prepared & Analyzed: 02/14/20 1						
Chloride	1950	20.0	mg/kg	250	1720	92.7	80-120	14.8	20	

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

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EOG Resources Inc. - Carlsbad	Project Name:	Gissler B #59	
104 South 4th Street	Project Number:	19034-0001	**Reported:**
Artesia NM, 88210	Project Manager:	Robert Asher	02/18/20 13:29

Notes and Definitions

M2	Matrix spike recovery was outside quality control limits. The associated LCS spike recovery was acceptable.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
**	Methods marked with ** are non-accredited methods.

Soil data is reported on an "as received" weight basis, unless reported otherwise.

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Project Information | Chain of Custody | Page 1 of 1

Client: EOG Resources, Inc.	Report Attention
Project: Gissler B #59	Report due by: 2/18/2020
Project Manager: Robert Asher	Attention: Robert Asher
Address: 104 South 4th Street	Address: 104 South 4th Street
City, State, Zip Artesia, NM 88210	City, State, Zip Artesia, NM 88210
Phone: (575) 748-4217	Phone: (575) 748-4217
Email: robert_asher@eogresources.com	Email: robert_asher@eogresources.com

Lab Use Only: Lab WO# P002037 | Job Number 19034-0001

TAT: 1D | 3D (X)

EPA Program: RCRA | CWA | SDWA

State: NM (X) | CO | UT | AZ

Analysis and Method: GRO/DRO by 8015 | GRO/DRO by 8015 | BTEX by 8021 | VOC by 8260 | Metals 6010 | Chloride 300.0

Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number	Remarks
11:56 AM	2/12/20	S	1	SW-1.A	1	BGDOC
12:02 PM	2/12/20	S	1	SW-1.B	2	BGDOC

Additional Instructions:
PO# 205632

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by:

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

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	2/12/2020	2:15 PM	Raina Lopez	2/14/20	9:30
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

Lab Use Only: Received on ice: (Y) N; T1 ____ T2 ____ T3 ____; AVG Temp °C 4

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

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

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

envirotech
Analytical Laboratory

5795 US Highway 64, Farmington, NM 87401
24 hour Emergency Response Phone (800) 362-1879
Ph (505) 632-0615 FX (505) 632-1865

envirotech-inc.com
labadmin@envirotech-inc.com

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Appendix 7

Photos

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eog y resources (575) 748-1471
LEASE # NM 074939
GISSLER B #59
SH/BH: 2317' FSL & 559' FWL
SEC.12-T17S-R30E, NMPM
EDDY COUNTY, NEW MEXICO


02/25/2020 10:42


eog y resources (575) 748-1471
LEASE # NM 074939
GISSLER B #59
SH/BH: 2317' FSL & 559' FWL
SEC.12-T17S-R30E, NMPM
EDDY COUNTY, NEW MEXICO
12/12/2019 09:44


12/12/2019 09:44


12/12/2019 09:45


12/12/2019 09:44


12/12/2019 09 45
12/12/2019 9:45:02 AM (-7.0 hrs) Lat=32.64611 Lon=-103.93217 WGS 1984


12/12/2019 09 44
12/12/2019 9:44:59 AM (-7.0 hrs) Lat=32.64611 Lon=-103.93217 WGS 1984

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Appendix 8

Form C-141
Release Notification

Received by OCD: 2/27/2020 10:02:57 AM

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	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party EOG Y Resources, Inc.	OGRID 25575
Contact Name Robert Asher	Contact Telephone 575-748-4217
Contact email bob_asher@eogresources.com	Incident # *(assigned by OCD)*
Contact mailing address 104 S. 4th	

Location of Release Source

Latitude 32.84814 Longitude -103.93229
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Gissler B #59	Site Type: Well Pad
Date Release Discovered: 12/3/2019	API# 30-015-37733

Unit Letter	Section	Township	Range	County
L	12	17S	30E	Eddy

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

Nature and Volume of Release

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

☒ Crude Oil	Volume Released (bbls) 9	Volume Recovered (bbls) 8
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water > 10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release
SDR 11 poly flow line split due to obstruction or paraffin plug, east of pumping unit on location.

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State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☒ 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

☒ The source of the release has been stopped.
☒ The impacted area has been secured to protect human health and the environment.
☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not 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: Robert Asher Title: Environmental Supervisor

Signature: Date: 12/17/2019

email: bob_asher@cogresources.com Telephone: 575-748-4217

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Bob Asher

From: Katie Jamison
Sent: Tuesday, December 17, 2019 8:47 AM
To: Bob Asher; Yvette Moore
Subject: FW: OCD Receipt of Fee Application Payment
Attachments: OCDReceiptOfFeePayment.pdf

Receipt for the Gissler B #59 Initial C-141 submission

From: OCDOnline@state.nm.us <OCDOnline@state.nm.us>
Sent: Tuesday, December 17, 2019 8:44 AM
To: Katie Jamison <Katie_Jamison@eogresources.com>
Subject: OCD Receipt of Fee Application Payment

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Thank you for your fee application payment! Your receipt is attached.

PO Number: 46TB4-191217-C-1410
Payment Date: 12/17/2019
Payment Amount: $150.00
Payment Type: Credit Card

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

OGRID: 7377
First Name: Katie
Last Name: Jamison
Email: katie_jamison@eogresources.com

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

Oil Conservation Division * 1220 South St. Francis Drive * Santa Fe, New Mexico 87505
(505) 476-3441 * ocd.fees@state.nm.us * www.emnrd.state.nm.us/OCD

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12/17/2019

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

Receipt of Fee Application Payment

PO Number: 46TB4-191217-C-1410

Payment Date:	12/17/2019 8:43:49 AM
Payment Amount:	$150.00
Payment Type:	Credit Card
Application Type:	Application for administrative approval of a release notification and corrective action.
Fee Amount:	$150.00
Application Status:	Under OCD Review
OGRID:	7377
First Name:	Katie
Last Name:	Jamison
Email:	katie_jamison@cogresources.com

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

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Appendix 9

Form C-141
Site Assessment/Characterization/Remediation Plan

Received by OCD: 2/27/2020 10:02:57 AM

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	361.25' (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

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

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

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

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

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State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: Robert Asher Title: Environmental Supervisor

Signature: Date: 2/26/2020

email: bob_asher@eogresources.com Telephone: 575-748-4217

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State of New Mexico
Oil Conservation Division

Incident ID	NRM2002942397
District RP	
Facility ID	
Application ID	

Remediation Plan

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

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

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

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

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

Printed Name: Robert Asher Title: Environmental Supervisor

Signature: Date: 2/26/2020

email: bob_asher@eogresources.com Telephone: 575-748-4217

OCD Only

Received by: Date:

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

Signature: Date:

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