

RECEIVED

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FORM C-102

District I
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District II
811 S. First St., Artesia, NM 88210
Phone: (505) 748-1283 Fax: (505) 748-9720

District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources
Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Revised August 1, 2011

Submit one copy to appropriate
District Office

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-45787	² Pool Code 97814	³ Pool Name WILDCAT G-015 S2630010; BONE SPRING
⁴ Property Code 325165	⁵ Property Name QUAIL 2 STATE COM	⁶ Well Number 581H
⁷ OGRID No. 7377	⁸ Operator Name EOG RESOURCES, INC.	⁹ Elevation 3243'

¹⁰Surface Location

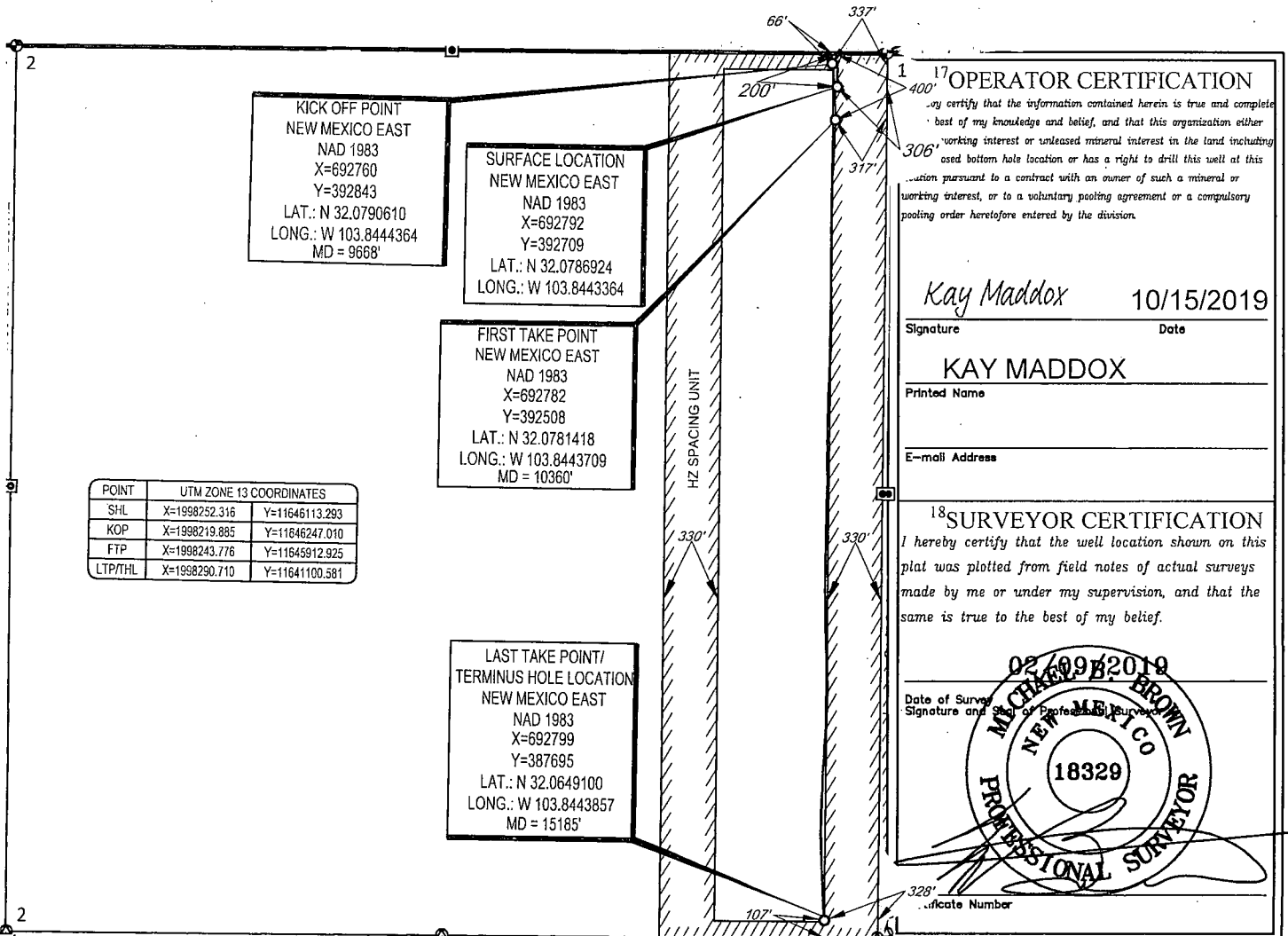
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	2	26-S	30-E	-	200'	NORTH	306'	EAST	EDDY

¹¹Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	2	26-S	30-E	-	107'	SOUTH	328'	EAST	EDDY

¹² Dedicated Acres 160.00	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



Intent ☐ As Drilled ☒ XXX

API # 30-015-45787			
Operator Name: EOG RESOURCES, INC		Property Name: QUAIL 2 STATE COM	Well Number 581H

Kick Off Point (KOP)

UL A	Section 2	Township 26S	Range 30E	Lot	Feet 66	From N/S NORTH	Feet 337	From E/W EAST	County LEA
Latitude 32.0790610					Longitude 103.8444364			NAD 1983	

First Take Point (FTP)

UL A	Section 2	Township 26S	Range 30E	Lot	Feet 400	From N/S NORTH	Feet 317	From E/W EAST	County LEA
Latitude 32.0781418					Longitude 103.8443709			NAD 1983	

Last Take Point (LTP)

UL P	Section 2	Township 26S	Range 30E	Lot	Feet 107	From N/S SOUTH	Feet 328	From E/W EAST	County LEA
Latitude 32.0649100					Longitude 103.8443857			NAD 1983	

Is this well the defining well for the Horizontal Spacing Unit? ☒ YES

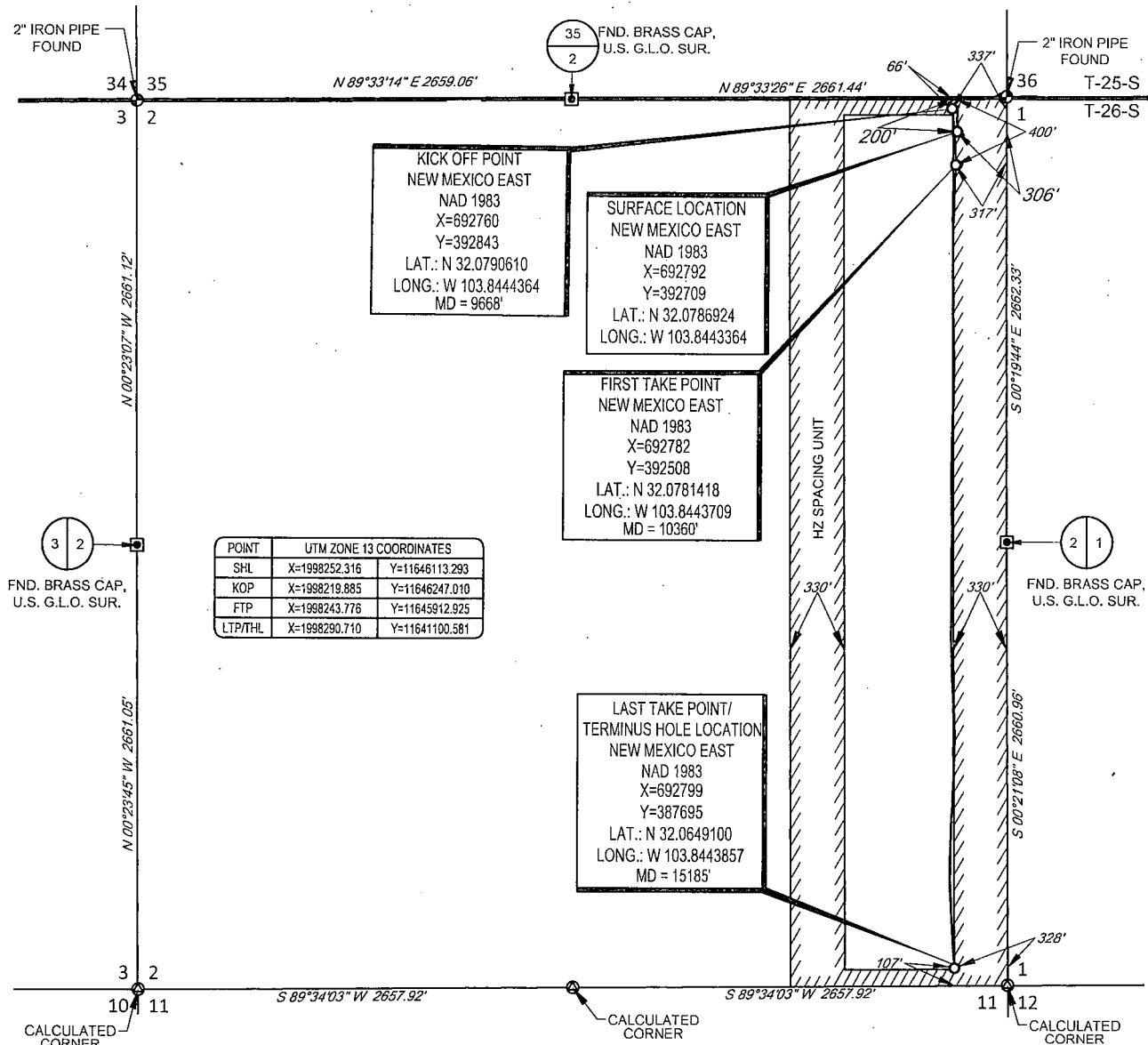
Is this well an infill well? ☐ NO

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #			
Operator Name: EOG RESOURCES, INC		Property Name:	Well Number

SCALE: 1" = 1000'
0' 500' 1000'

SECTION 2, TOWNSHIP 26-S, RANGE 30-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

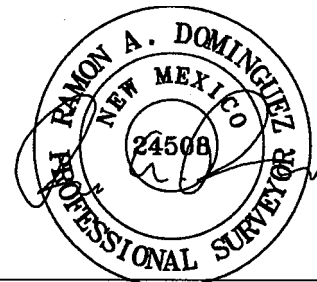


LEASE NAME & WELL NO.: QUAIL 2 STATE COM 581H
SECTION 2 TWP 26-S RGE 30-E SURVEY N.M.P.M.
COUNTY EDDY STATE NM ELEVATION 3243'
DESCRIPTION 200' FNL & 306' FEL



TOPOGRAPHIC
LOYALTY INNOVATION LEGACY

1400 EVERMAN PARKWAY, Ste. 146 • FT. WORTH, TEXAS 76140
TELEPHONE: (817) 744-7512 • FAX (817) 744-7554
2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705
TELEPHONE: (432) 682-1853 OR (800) 767-1653 • FAX (432) 682-1743
WWW.TOPOGRAPHIC.COM



Ramon A. Dominguez, PS No. 24508
SEPTEMBER 13, 2019

Geog resources, Inc.

QUAIL 2 STATE COM 581H AS-COMplete <i>As Drilled</i> DATE: 09/13/2019 FILE: AD_QUAIL 2 STATE_COM_581H DRAWN BY: JLS SHEET: 1 OF 1	REVISION:	NOTES: 1. ORIGINAL DOCUMENT SIZE: 8.5" X 11" 2. ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREIN ARE GRID BASED UPON THE NEW MEXICO COORDINATE SYSTEM, EAST ZONE, U.S. SURVEY FEET, NORTH AMERICAN DATUM 1983. 3. THIS WELL LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY EOG RESOURCES, INC. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.



EOG Resources - Midland

Eddy County, NM (NAD 83 NME)

Quail 2 State Com

#581H

OH

Design: OH

Midland PVA

10 June, 2019



Midland PVA

Company:	Eog Resources - Midland	Local Co-ordinate Reference:	Well #581H
Project:	Eddy County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3268.0usft
Site:	Quail 2 State Com	MD Reference:	KB = 25 @ 3268.0usft
Well:	#581H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Project:	Eddy County, NM (NAD 83 NME)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site:	Quail 2 State Com		
Site Position:		Northing:	392,709.00 usft
From:	Map	Easting:	692,792.00 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 4' 43.295 N
		Longitude:	103° 50' 39.610 W
		Grid Convergence:	0.26 °

Well	#581H					
Well Position	+N-S	0.0 usft	Northing:	392,709.00 usft	Latitude:	32° 4' 43.295 N
	+E-W	0.0 usft	Easting:	692,792.00 usft	Longitude:	103° 50' 39.610 W
Position Uncertainty	0.0 usft		Wellhead Elevation:	usft	Ground Level:	3,243.0 usft

Wellbore		OH			
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	3/5/2019	6.88	59.86	47,648.41244324

Design:	OH				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N-S	+E-W	Direction	
	(usft)	(usft)	(usft)	(°)	
	0.0	0.0	0.0	179.93	

Survey Program	Date	6/10/2019		
From	To	Survey (Wellbore)	Tool Name	Description
(usft)	(usft)			
130.0	15,185.0	Total MWD (OH)	MWD	OWSG MWD - Standard



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Site:	Quail 2 State Com	MD Reference:	KB = 25 @ 3268.0usft
Well:	#581H	North Reference:	Gnd
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	EW (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0
130.0	0.00	0.00	130.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0
180.0	0.10	111.30	180.0	0.0	0.0	0.20	0.20	0.00	0.0	0.0	0.0
358.0	0.30	128.30	358.0	-0.4	0.6	0.12	0.11	9.55	-0.7	0.1	0.1
536.0	0.30	121.50	536.0	-0.9	1.3	0.02	0.00	-3.82	-1.6	-0.1	-0.1
631.0	0.10	93.80	631.0	-1.0	1.6	0.23	-0.21	-29.16	-1.7	-0.9	-0.9
787.0	0.70	16.40	787.0	-0.1	2.0	0.44	0.38	-49.62	-0.4	-2.0	-2.0
974.0	1.50	64.60	974.0	2.0	4.5	0.62	0.43	25.78	-5.0	-0.1	-0.1
1,074.0	1.90	76.70	1,073.9	3.0	7.3	0.54	0.40	12.10	-7.8	1.2	1.2
1,254.0	2.70	116.40	1,253.8	1.8	14.0	0.96	0.44	22.06	-11.8	7.8	7.8
1,347.0	2.80	115.90	1,346.7	-0.2	18.1	0.11	0.11	-0.54	-16.3	7.7	7.7
1,440.0	2.20	118.70	1,439.6	-2.0	21.7	0.66	-0.65	3.01	-20.0	8.6	8.6
1,534.0	1.40	124.50	1,533.5	-3.6	24.2	0.87	-0.85	6.17	-22.0	10.8	10.8
1,627.0	0.20	229.20	1,626.5	-4.3	25.0	1.57	-1.29	112.58	16.1	19.6	19.6
1,817.0	0.10	164.60	1,816.5	-4.7	24.8	0.10	-0.05	-34.00	-11.1	22.7	22.7
1,912.0	0.30	186.40	1,911.5	-5.0	24.8	0.22	0.21	22.95	-2.2	25.2	25.2
2,100.0	0.80	162.60	2,099.5	-6.8	25.1	0.29	0.27	-12.66	-14.0	22.0	22.0
2,195.0	1.00	162.90	2,194.5	-8.2	25.6	0.21	0.21	0.32	-15.3	22.0	22.0
2,290.0	1.10	133.80	2,289.5	-9.6	26.5	0.56	0.11	-30.63	-25.8	11.4	11.4
2,384.0	0.90	134.30	2,383.5	-10.7	27.7	0.21	-0.21	0.53	-27.3	11.6	11.6
2,479.0	0.70	116.10	2,478.5	-11.5	28.7	0.34	-0.21	-19.16	-30.8	2.3	2.3
2,573.0	0.80	120.00	2,572.5	-12.1	29.8	0.12	0.11	4.15	-31.9	4.4	4.4
2,667.0	0.80	169.20	2,666.5	-13.1	30.5	0.71	0.00	52.34	-18.6	27.5	27.5
2,762.0	1.00	215.00	2,761.4	-14.4	30.1	0.76	0.21	48.21	5.5	32.9	32.9
2,856.0	0.90	221.20	2,855.4	-15.6	29.2	0.15	-0.11	6.60	7.4	32.3	32.3
2,951.0	0.80	218.90	2,950.4	-16.7	28.3	0.11	-0.11	-2.42	4.7	32.5	32.5
3,046.0	0.40	217.50	3,045.4	-17.5	27.6	0.42	-0.42	-1.47	3.0	32.6	32.6



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #581H
Project:	Eddy County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3268.0usft
Site:	Quail 2 State Com	MD Reference:	KB = 25 @ 3268.0usft
Well:	#581H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	EW (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
3,141.0	0.20	348.10	3,140.4	-17.6	27.4	0.58	-0.21	137.47	22.9	-23.2	
3,235.0	0.70	63.50	3,234.4	-17.2	27.9	0.72	0.53	80.21	-17.3	-27.8	
3,330.0	1.50	80.60	3,329.4	-16.7	29.6	0.90	0.84	18.00	-26.5	-21.3	
3,424.0	1.90	76.40	3,423.3	-16.1	32.4	0.45	0.43	-4.47	-27.7	-23.3	
3,519.0	1.90	110.30	3,518.3	-16.3	35.4	1.17	0.00	35.68	-38.8	-3.0	
3,613.0	2.60	152.10	3,612.2	-18.8	37.8	1.84	0.74	44.47	-34.3	24.7	
3,708.0	2.50	169.70	3,707.1	-22.7	39.2	0.83	-0.11	18.53	-29.3	34.5	
3,763.0	1.10	218.20	3,762.1	-24.3	39.1	3.55	-2.55	88.18	5.1	45.7	
3,878.0	1.30	238.10	3,877.1	-25.8	37.3	0.40	0.17	17.30	18.0	41.7	
3,973.0	2.80	313.60	3,972.0	-24.8	34.7	2.92	1.58	79.47	42.7	-5.6	
4,068.0	5.30	330.00	4,068.8	-19.4	30.8	2.87	2.63	17.26	35.9	-15.7	
4,162.0	6.80	337.90	4,160.3	-10.5	26.6	1.82	1.60	8.40	29.8	-18.4	
4,256.0	7.00	335.30	4,253.6	-0.1	22.1	0.39	0.21	-2.77	27.2	-15.2	
4,351.0	7.30	335.90	4,347.9	10.6	17.2	0.33	0.32	0.63	23.2	-13.3	
4,446.0	7.10	336.80	4,442.1	21.5	12.4	0.24	-0.21	0.95	19.1	-11.6	
4,540.0	7.10	335.80	4,535.4	32.2	7.8	0.13	0.00	-1.06	15.6	-9.3	
4,635.0	7.20	334.30	4,629.6	42.9	2.8	0.22	0.11	-1.58	11.9	-6.7	
4,730.0	6.60	339.50	4,724.0	53.4	-1.7	0.91	-0.63	5.47	8.0	-5.6	
4,825.0	5.50	358.70	4,818.4	63.0	-3.7	2.41	-1.16	20.21	4.2	-7.3	
4,919.0	5.10	11.70	4,912.0	71.6	-3.0	1.34	-0.43	13.83	1.5	-10.0	
5,014.0	5.10	8.50	5,006.7	79.9	-1.5	0.30	0.00	-3.37	1.5	-12.7	
5,109.0	4.70	7.80	5,101.3	88.0	-0.4	0.43	-0.42	-0.74	1.5	-15.2	
5,204.0	4.70	4.40	5,196.0	95.7	0.5	0.29	0.00	-3.58	2.6	-17.3	
5,298.0	4.80	359.80	5,289.7	103.5	0.7	0.42	0.11	-4.89	4.3	-18.7	
5,392.0	4.50	358.10	5,383.4	111.1	0.6	0.35	-0.32	-1.81	5.4	-19.7	
5,487.0	4.30	355.00	5,478.1	118.4	0.2	0.33	-0.21	-3.26	7.4	-20.3	
5,581.0	3.90	353.50	5,571.8	125.1	-0.5	0.44	-0.43	-1.60	9.4	-20.6	



Midland PVA

Company: EOG Resources - Midland		Local Co-ordinate Reference:		Well #581H	
Project: Eddy County, NM (NAD 83 NME)		TVD Reference:		KB = 25 @ 3268.0usft	
Site: Quail 2 State Com		MD Reference:		KB = 25 @ 3268.0usft	
Well: #581H		North Reference:		Grid	
Wellbore: OH		Survey Calculation Method:		Minimum Curvature	
Design: OH		Database:		EDM 5000.14	

MD (usft)	Inc (")	Azi (azimuth) (")	TVD (usft)	N/S (usft)	E/W (usft)	DLeg ("100usft)	Build ("100usft)	Turn ("100usft)	High to Plan (usft)	Right to Plan (usft)
5,677.0	3.30	356.90	5,667.7	131.1	-1.0	0.66	-0.62	3.54	10.5	-21.8
5,771.0	2.20	10.30	5,761.5	135.5	-0.8	1.35	-1.17	14.26	6.6	-25.2
5,866.0	1.50	48.50	5,856.5	138.2	0.4	1.45	-0.74	40.21	-11.4	-25.4
5,961.0	1.70	45.40	5,951.5	140.0	2.4	0.23	0.21	-3.26	-12.4	-26.3
6,055.0	1.00	23.80	6,045.4	141.7	3.7	0.91	-0.74	-22.98	-4.0	-29.6
6,150.0	0.90	17.30	6,140.4	143.2	4.2	0.15	-0.11	-6.84	-2.2	-29.9
6,245.0	0.90	19.60	6,235.4	144.6	4.7	0.04	0.00	2.42	-4.9	-29.8
6,339.0	0.70	15.50	6,329.4	145.8	5.1	0.22	-0.21	-4.36	-4.0	-30.1
6,434.0	0.60	27.70	6,424.4	146.8	5.5	0.18	-0.11	12.84	-11.4	-28.5
6,528.0	0.40	13.60	6,518.4	147.6	5.8	0.25	-0.21	-15.00	-4.9	-30.5
6,623.0	0.30	3.20	6,613.4	148.2	5.9	0.12	-0.11	-10.95	0.1	-30.9
6,718.0	0.20	343.10	6,708.4	148.6	5.9	0.14	-0.11	-21.16	10.3	-29.1
6,813.0	0.30	23.80	6,803.4	149.0	5.9	0.21	0.11	42.84	-11.5	-28.7
6,907.0	0.30	10.20	6,897.4	149.4	6.1	0.08	0.00	-14.47	-4.9	-30.7
7,002.0	0.10	133.00	6,992.4	149.6	6.2	0.38	-0.21	129.26	-23.0	21.0
7,096.0	0.20	177.20	7,086.4	149.4	6.2	0.16	0.11	47.02	-2.1	31.2
7,191.0	0.10	168.50	7,181.4	149.1	6.3	0.11	-0.11	-9.16	-7.1	30.5
7,286.0	0.40	195.90	7,276.4	148.7	6.2	0.33	0.32	28.84	7.3	30.3
7,381.0	0.60	208.70	7,371.4	148.0	5.8	0.24	0.21	13.47	13.1	28.0
7,476.0	0.90	214.10	7,466.4	146.9	5.2	0.32	0.32	5.68	14.4	26.7
7,570.0	1.30	211.90	7,560.4	145.4	4.2	0.43	0.43	-2.34	11.5	27.2
7,664.0	1.60	218.80	7,654.3	143.5	2.8	0.37	0.32	7.34	12.4	25.8
7,759.0	1.90	221.00	7,749.3	141.3	1.0	0.32	0.32	2.32	10.4	25.3
7,853.0	1.90	216.10	7,843.2	138.8	-1.0	0.17	0.00	-5.21	5.1	26.0
7,948.0	1.40	222.60	7,938.2	136.7	-2.7	0.56	-0.53	6.84	5.3	25.4
8,042.0	1.20	236.40	8,032.2	135.3	-4.3	0.39	-0.21	14.68	9.1	23.7
8,136.0	1.60	233.60	8,126.1	134.0	-6.2	0.43	0.43	-2.98	5.7	24.1



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #581H
Project:	Eddy County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3268.0usft
Site:	Quail 2 State Com	MD Reference:	KB = 25 @ 3268.0usft
Well:	#581H	North Reference:	Gnd
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Buile (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
8,230.0	1.20	253.10	8,220.1	132.9	-8.2	0.66	-0.43	20.74	11.1	21.2	
8,325.0	1.50	253.70	8,315.1	132.3	-10.3	0.32	0.32	0.63	9.1	21.1	
8,420.0	1.60	265.90	8,410.0	131.8	-12.8	0.36	0.11	12.84	10.8	19.0	
8,514.0	1.80	276.20	8,504.0	131.9	-15.6	0.39	0.21	10.96	11.3	17.0	
8,608.0	1.90	262.50	8,598.0	131.9	-18.6	0.48	0.11	-14.57	4.0	18.8	
8,703.0	1.40	318.50	8,692.9	132.5	-20.9	1.70	-0.53	58.95	15.8	8.5	
8,797.0	1.50	321.30	8,786.9	134.4	-22.5	0.13	0.11	2.98	13.8	7.8	
8,892.0	1.70	319.70	8,881.9	136.4	-24.2	0.22	0.21	-1.68	10.9	8.2	
8,986.0	2.00	313.60	8,975.8	138.6	-26.3	0.38	0.32	-6.49	7.0	9.1	
9,081.0	1.90	328.40	9,070.8	141.1	-28.3	0.54	-0.11	15.58	5.9	7.5	
9,175.0	0.80	319.10	9,164.7	142.9	-29.5	1.19	-1.17	-9.89	2.4	8.1	
9,269.0	0.50	246.00	9,258.7	143.2	-30.3	0.86	-0.32	-77.77	-7.6	4.0	
9,364.0	1.00	200.40	9,353.7	142.3	-31.0	0.78	0.53	-48.00	-9.3	-2.9	
9,458.0	1.50	198.50	9,447.7	140.4	-31.7	0.53	0.53	-2.02	-11.3	-3.3	
9,546.0	1.20	183.30	9,535.7	138.3	-32.1	0.53	-0.34	-17.27	-12.0	-6.4	
9,683.0	3.20	169.20	9,672.6	133.2	-31.5	1.50	1.46	-10.29	-15.3	-9.5	
9,730.0	8.60	171.90	9,719.3	128.4	-30.7	11.50	11.49	5.74	-18.0	-8.3	
9,778.0	11.20	172.00	9,766.6	120.2	-29.6	5.42	5.42	0.21	-19.6	-7.4	
9,872.0	17.70	174.10	9,857.6	96.9	-26.8	6.94	6.91	2.23	-18.4	-3.8	
9,966.0	24.80	173.90	9,945.1	63.1	-23.3	7.55	7.55	-0.21	-12.3	0.2	
10,061.0	34.50	173.00	10,027.6	16.4	-17.8	10.22	10.21	-0.95	-4.1	6.0	
10,156.0	43.60	177.00	10,101.3	-43.1	-12.8	9.94	9.58	4.21	4.8	11.2	
10,251.0	47.70	179.50	10,167.7	-111.0	-10.8	4.71	4.32	2.63	18.2	12.8	
10,344.0	59.00	179.10	10,223.1	-185.5	-9.9	12.16	12.15	-0.43	33.1	13.3	
10,391.0	68.40	180.00	10,243.9	-227.6	-9.6	20.07	20.00	1.91	37.6	13.1	
10,439.0	78.30	181.60	10,257.6	-273.5	-10.2	20.87	20.62	3.33	37.9	11.9	
10,533.0	89.70	182.30	10,267.4	-366.8	-13.4	12.15	12.13	0.74	31.7	8.4	



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:				Well #581H	
Project:	Eddy County, NM (NAD 83 NME)	TVD Reference:				KB = 25 @ 3268.0usft	
Site:	Quail 2 State Com	MD Reference:				KB = 25 @ 3268.0usft	
Well:	#581H	North Reference:				Grid	
Wellbore:	OH	Survey Calculation Method:				Minimum Curvature	
Design:	OH	Database:				EDM 5000.14	

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	EW (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
10,628.0	92.10	181.80	10,266.0	-461.7	-16.8	2.58	2.53	-0.53	27.8	4.5	
10,722.0	91.80	181.90	10,262.8	-555.6	-19.8	0.34	-0.32	0.11	25.1	0.9	
10,817.0	92.90	180.20	10,258.9	-650.5	-21.6	2.13	1.16	-1.79	22.0	-1.4	
10,911.0	92.40	179.40	10,254.5	-744.4	-21.3	1.00	-0.53	-0.85	18.5	-1.6	
11,006.0	91.80	179.40	10,251.0	-839.3	-20.3	0.63	-0.63	0.00	15.8	-1.2	
11,101.0	90.50	179.30	10,249.1	-934.3	-19.2	1.37	-1.37	-0.11	14.7	-0.7	
11,195.0	90.50	179.40	10,248.3	-1,028.3	-18.1	0.11	0.00	0.11	14.7	-0.2	
11,289.0	89.80	178.80	10,248.1	-1,122.3	-16.6	0.98	-0.74	-0.64	15.2	0.7	
11,384.0	90.50	179.60	10,247.8	-1,217.2	-15.3	1.12	0.74	0.84	15.8	1.5	
11,479.0	90.10	179.60	10,247.3	-1,312.2	-14.6	0.42	-0.42	0.00	16.1	1.6	
11,574.0	89.40	179.10	10,247.7	-1,407.2	-13.6	0.91	-0.74	-0.53	17.3	2.1	
11,669.0	89.20	180.20	10,248.9	-1,502.2	-13.0	1.18	-0.21	1.16	19.3	2.1	
11,763.0	92.00	181.40	10,247.9	-1,596.2	-14.3	3.24	2.98	1.28	19.1	0.2	
11,858.0	91.10	181.50	10,245.3	-1,691.1	-16.7	0.95	-0.95	0.11	17.3	-2.8	
11,953.0	90.10	181.10	10,244.3	-1,786.1	-18.9	1.13	-1.05	-0.42	16.8	-5.5	
12,047.0	91.90	181.00	10,242.7	-1,880.1	-20.6	1.92	1.91	-0.11	15.5	-7.8	
12,142.0	91.40	180.60	10,240.0	-1,975.0	-21.9	0.67	-0.53	-0.42	13.2	-9.7	
12,236.0	90.90	179.90	10,238.1	-2,069.0	-22.3	0.92	-0.53	-0.74	11.7	-10.6	
12,331.0	90.20	179.70	10,237.2	-2,164.0	-22.0	0.77	-0.74	-0.21	11.2	-10.9	
12,426.0	89.40	179.30	10,237.5	-2,259.0	-21.2	0.94	-0.84	-0.42	11.9	-10.6	
12,521.0	88.20	178.70	10,239.5	-2,353.9	-19.5	1.41	-1.26	-0.63	14.3	-9.5	
12,615.0	89.30	180.50	10,241.5	-2,447.9	-18.8	2.24	1.17	1.91	16.8	-9.4	
12,709.0	91.90	180.90	10,240.6	-2,541.9	-20.0	2.80	2.77	0.43	16.2	-11.1	
12,804.0	91.70	180.60	10,237.6	-2,636.8	-21.2	0.38	-0.21	-0.32	13.6	-13.0	
12,899.0	89.80	179.20	10,236.3	-2,731.8	-21.1	2.48	-2.00	-1.47	12.7	-13.4	
12,993.0	92.30	180.20	10,234.6	-2,825.8	-20.6	2.86	2.66	1.06	11.4	-13.4	
13,087.0	91.60	180.60	10,231.4	-2,919.7	-21.2	0.86	-0.74	0.43	8.6	-14.7	



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:				Well #581H
Project:	Eddy County NM (NAD 83 NME)	TVD Reference:				KB = 25 @ 3268.0usft
Site:	Quail 2 State Com	MD Reference:				KB = 25 @ 3268.0usft
Well:	#581H	North Reference:				Gnd
Wellbore:	OH	Survey Calculation Method:				Minimum Curvature
Design:	OH	Database:				EDM 5000.14

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	EW (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
13,182.0	92.80	179.10	10,227.8	-3,014.7	-21.0	2.02	1.26	-1.58	5.4	-15.0	
13,277.0	92.10	179.00	10,223.7	-3,109.6	-19.4	0.74	-0.74	-0.11	1.7	-14.0	
13,372.0	90.90	177.70	10,221.2	-3,204.5	-16.7	1.86	-1.26	-1.37	-0.4	-11.8	
13,466.0	90.10	177.30	10,220.4	-3,298.4	-12.6	0.95	-0.85	-0.43	-0.8	-8.3	
13,560.0	89.10	176.90	10,221.0	-3,392.3	-7.8	1.15	-1.06	-0.43	0.3	-4.1	
13,655.0	88.00	176.30	10,223.5	-3,487.1	-2.2	1.32	-1.16	-0.63	3.1	1.0	
13,749.0	88.80	179.30	10,226.1	-3,581.0	1.4	3.30	0.85	3.19	6.1	4.0	
13,843.0	90.20	180.70	10,226.9	-3,674.9	1.4	2.11	1.49	1.49	7.3	3.5	
13,938.0	91.10	181.90	10,225.8	-3,769.9	-0.7	1.58	0.95	1.26	6.6	0.7	
14,032.0	89.70	182.00	10,225.2	-3,863.9	-3.9	1.49	-1.49	0.11	6.4	-3.0	
14,127.0	92.60	182.20	10,223.3	-3,958.8	-7.4	3.06	3.05	0.21	4.9	-7.1	
14,221.0	92.00	182.60	10,219.5	-4,052.6	-11.3	0.77	-0.64	0.43	1.5	-11.6	
14,316.0	91.20	182.20	10,216.8	-4,147.5	-15.3	0.94	-0.84	-0.42	-0.7	-16.1	
14,411.0	90.10	182.20	10,215.8	-4,242.4	-19.0	1.16	-1.16	0.00	-1.3	-20.3	
14,506.0	89.70	181.40	10,215.9	-4,337.4	-22.0	0.94	-0.42	-0.84	-0.6	-23.9	
14,600.0	92.10	180.60	10,214.4	-4,431.3	-23.6	2.69	2.55	-0.85	-1.6	-26.1	
14,695.0	93.00	176.10	10,210.2	-4,526.2	-20.9	4.83	0.95	-4.74	-5.4	-23.9	
14,789.0	90.70	177.10	10,207.2	-4,619.9	-15.3	2.67	-2.45	1.06	-7.9	-18.9	
14,884.0	89.80	177.30	10,206.8	-4,714.8	-10.7	0.97	-0.95	0.21	-7.8	-14.9	
14,978.0	89.00	176.90	10,207.8	-4,808.7	-5.9	0.95	-0.85	-0.43	-6.3	-10.7	
15,073.0	88.00	176.10	10,210.2	-4,903.5	-0.1	1.35	-1.05	-0.84	-3.3	-5.4	
15,132.0	87.40	176.10	10,212.6	-4,962.3	3.9	1.02	-1.02	0.00	-0.7	-1.8	
15,185.0	87.00	176.10	10,215.2	-5,015.1	7.5	0.75	-0.75	0.00	2.2	1.5	



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #581H
Project:	Eddy County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3268.0usft
Site:	Quail 2 State Corn	MD Reference:	KB = 25 @ 3268.0usft
Well:	#581H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N-S (usft)	+E-W (usft)	
9,668.0	9,657.6	133.9	-31.6	KOP, MD:9668.0', TVD:9657.6', N/S:133.9', E/W:-31.6', INC:2.98
9,861.6	9,847.6	100.0	-27.1	FTP Crossing, MD:9861.6', TVD:9847.6', N/S:100.0', E/W:-27.1', INC:16.98
15,132.0	10,212.6	-4,962.3	3.9	Last MWD Survey (MD=15132.0')
15,185.0	10,215.2	-5,015.1	7.5	Projection to Bit (MD=15185.0')

Checked By: _____ Approved By: _____ Date: _____

I certify this survey to be true and correct to the best of my belief and knowledge.

Kay Maddox 11/07/2019
Signed Date



Eddy County, NM (NAD 83 NME)

Quail 2 State Com #581H

Plan #1

PROJECT DETAILS: Eddy County, NM (NAD 83 NME)

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level

WELL DETAILS: #581H

KB = 25 @ 3268.0usft 3243.0
Northing 392709.00 Easting 692792.00 Latitude 32° 4' 43.295 N Longitude 103° 50' 39.610 W



Azimuths to Grid North
True North: -0.26°
Magnetic North: 6.62°
Magnetic Field
Strength: 47648.4nT
Dip Angle: 59.86°
Date: 3/5/2015
Model: IGRF2015

To convert a Magnetic Direction to a Grid Direction, Add 6.62°
To convert a Magnetic Direction to a True Direction, Add 6.88° East
To convert a True Direction to a Grid Direction, Subtract 6.26°

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.0	
3916.0	0.00	0.00	3916.0	0.0	0.0	0.0	0.00	0.0	
4166.1	5.00	350.54	4165.7	10.8	-1.8	2.00	350.54	-10.8	
5660.3	5.00	350.54	5654.3	139.2	-23.2	0.00	0.00	-139.3	
5910.3	0.00	0.00	5904.0	150.0	-25.0	2.00	180.00	-150.0	
9671.7	0.00	0.00	9665.4	150.0	-25.0	0.00	0.00	-150.0	
10574.2	90.24	179.66	10238.4	-425.4	-21.5	10.00	179.66	425.4	TGT#1(Quail 2 State Com #581H)
10656.8	90.24	179.66	10238.0	-508.0	-21.0	0.00	0.00	508.0	TGT#2(Quail 2 State Com #581H)
10668.8	90.49	179.66	10237.9	-520.0	-21.0	2.00	0.00	520.0	TGT#3(Quail 2 State Com #581H)
11840.8	90.49	179.66	10228.0	-1692.0	-13.9	0.00	0.00	1692.0	PBHL(Quail 2 State Com #581H)
11853.0	90.24	179.66	10227.9	-1704.2	-13.9	2.00	-180.00	1704.1	
14203.9	90.24	179.66	10218.0	-4055.0	0.2	0.00	0.00	4055.0	
14206.8	90.30	179.66	10218.0	-4057.8	0.3	2.00	0.00	4057.8	
15162.9	90.30	179.66	10213.0	-5014.0	6.0	0.00	0.00	5014.0	

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting
TGT#1(Quail 2 State Com #581H)	10238.0	-508.0	-21.0	392201.00	692770.55
TGT#2(Quail 2 State Com #581H)	10228.0	-1692.0	-13.9	391017.00	692778.06
TGT#3(Quail 2 State Com #581H)	10218.0	-4055.0	0.2	389654.00	692782.24
PBHL(Quail 2 State Com #581H)	10213.0	-5014.0	6.0	387835.00	692798.00
Brushy Top(Quail 2 State Com #581H)	6162.0	150.0	-25.0	392859.00	692767.00
FTP(Quail 2 State Com #581H)	10240.0	100.0	-25.0	392809.00	692767.00

