



Lea County, NM (NAD 83 NME)

Gem 36 State Com #704H

H&P 466

Plan #1

PROJECT DETAILS: Lea 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: #704H

Ground Level: 3422.0
 KB = 25' @ 3447.0usft (H&P 466)
 Northing 398425.00 Easting 760259.00 Latitude 32° 5' 36.158 N Longitude 103° 37' 35.034 W

SECTION DETAILS

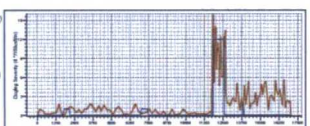
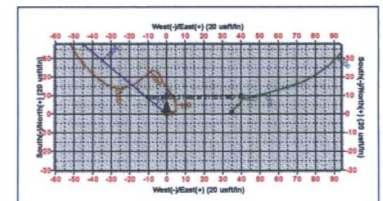
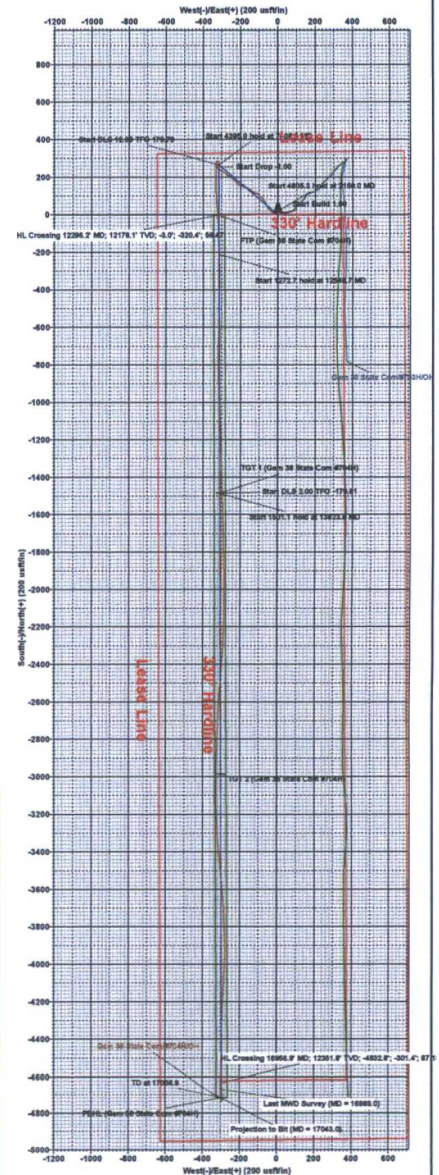
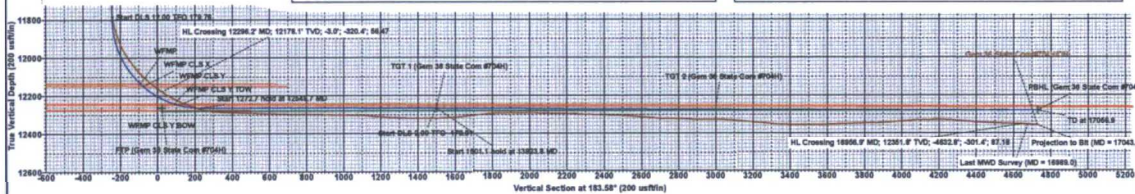
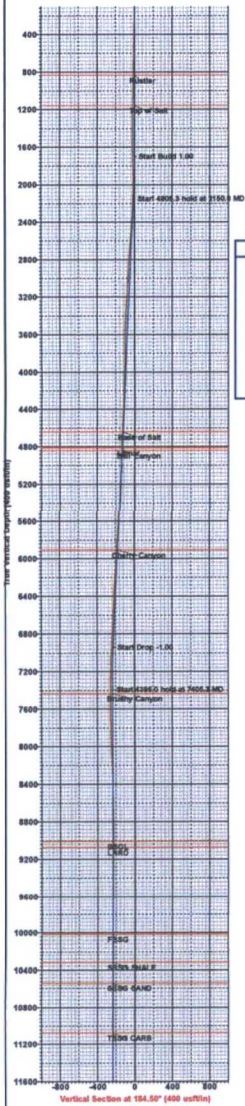
Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VSecl	Target	Annotation
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0		
2	1700.0	0.00	0.00	1700.0	0.0	0.0	0.00	0.00	0.0		
3	2150.0	4.50	310.00	2148.5	11.4	-13.5	1.00	210.00	-10.5		
4	8955.3	4.50	310.00	8940.0	253.7	-302.3	0.00	0.00	-234.3		
6	7405.3	0.00	0.00	7389.5	265.0	-315.9	1.00	180.00	-344.8		
6	11800.2	0.00	0.00	11784.5	265.0	-315.9	0.00	0.00	-244.8		
7	12548.7	89.82	179.76	12262.0	-210.9	-313.9	12.00	179.76	230.1		TGT 1 (Gem 36 State Com #704H)
8	13821.4	89.82	179.76	12266.0	-1483.8	-308.6	0.00	0.00	1600.0		TGT 2 (Gem 36 State Com #704H)
9	13823.8	89.77	179.76	12266.0	-1485.9	-308.5	2.00	-179.81	1502.3		PBH4 (Gem 36 State Com #704H)
10	18324.9	89.77	179.76	12272.0	-2987.0	-302.3	0.00	0.00	3000.0		
11	17056.9	89.77	179.76	12278.0	-4718.0	-296.0	0.00	180.00	4728.2		

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N-S	+E-W	Northing	Easting
TGT 1 (Gem 36 State Com #704H)	12266.0	-1483.8	-308.6	396491.40	789950.46
TGT 2 (Gem 36 State Com #704H)	12272.0	-2987.0	-302.3	396438.00	789966.74
PBH4 (Gem 36 State Com #704H)	12279.0	-4719.0	-296.0	393706.00	789964.00
FTP (Gem 36 State Com #704H)	12262.0	-3.0	-316.0	396422.00	789943.00





EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Gem 36 State Com

#704H

OH

Survey: QES MWD

Midland PVA

06 September, 2017

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Gem 36 State Com
Well: #704H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #704H
TVD Reference: KB = 25' @ 3447.0usft (H&P 466)
MD Reference: KB = 25' @ 3447.0usft (H&P 466)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.14

Project Lea County, NM (NAD 83 NME)

Map System: US State Plane 1983
Geo Datum: North American Datum 1983
Map Zone: New Mexico Eastern Zone

System Datum: Mean Sea Level

Site Gem 36 State Com

Site Position:		Northing:	393,698.00 usft	Latitude:	32° 4' 49.388 N
From:	Map	Easting:	760,159.00 usft	Longitude:	103° 37' 36.556 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.38 °

Well #704H

Well Position	+N/-S	0.0 usft	Northing:	398,425.00 usft	Latitude:	32° 5' 36.158 N
	+E/-W	0.0 usft	Easting:	760,259.00 usft	Longitude:	103° 37' 35.034 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	3,422.0 usft

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	4/27/2017	6.98	59.94	47,868.99021595

Design OH

Audit Notes:

Version: 1.0 **Phase:** ACTUAL **Tie On Depth:** 0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	183.58

Survey Program Date 9/5/2017

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
152.0	17,043.0	QES MWD (OH)	MWD	MWD - Standard

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Gem 36 State Com
Well: #704H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #704H
TVD Reference: KB = 25' @ 3447.0usft (H&P 466)
MD Reference: KB = 25' @ 3447.0usft (H&P 466)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.14

Survey

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)
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0
152.0	1.50	83.20	152.0	0.2	2.0	0.99	0.99	0.00	-2.0	0.0
338.0	1.00	16.40	337.9	2.1	4.9	0.77	-0.27	-35.91	-3.4	-4.1
525.0	1.10	350.60	524.9	5.4	5.0	0.26	0.05	-13.80	-4.5	-5.8
718.0	1.30	331.80	717.9	9.2	3.7	0.23	0.10	-9.74	-6.3	-7.6
908.0	1.60	321.20	907.8	13.1	1.0	0.21	0.16	-5.58	-9.6	-9.0
959.0	1.70	316.80	958.8	14.2	0.0	0.32	0.20	-8.63	-10.4	-9.8
1,086.0	1.50	331.30	1,085.7	17.1	-2.1	0.35	-0.16	11.42	-16.0	-6.4
1,276.0	2.10	342.50	1,275.6	22.6	-4.3	0.36	0.32	5.89	-22.8	-2.7
1,467.0	1.90	227.20	1,466.6	23.8	-7.7	1.77	-0.10	-60.37	10.5	-22.7
1,657.0	1.90	233.90	1,656.5	19.8	-12.5	0.12	0.00	3.53	1.5	-23.4
1,847.0	2.10	230.40	1,846.4	15.7	-17.8	0.12	0.11	-1.84	-3.4	-21.6
2,037.0	3.10	273.10	2,036.2	13.8	-25.6	1.11	0.53	22.47	-18.4	-6.4
2,227.0	4.40	309.10	2,225.8	18.6	-36.4	1.38	0.68	18.95	-16.2	8.8
2,418.0	6.00	323.90	2,416.0	31.3	-47.9	1.09	0.84	7.75	-16.0	11.0
2,608.0	5.90	332.80	2,605.0	48.0	-58.2	0.49	-0.05	4.68	-20.0	9.1
2,798.0	4.20	328.10	2,794.3	62.6	-66.4	0.92	-0.89	-2.47	-23.2	2.0
2,988.0	3.60	328.10	2,983.8	73.6	-73.2	0.32	-0.32	0.00	-21.9	-2.7
3,178.0	5.30	324.20	3,173.2	85.8	-81.5	0.91	0.89	-2.05	-21.9	-8.2
3,369.0	6.00	304.90	3,363.3	98.6	-94.8	1.05	0.37	-10.10	-21.4	-16.6
3,559.0	2.70	323.90	3,552.8	107.9	-105.6	1.87	-1.74	10.00	-25.0	-9.1
3,748.0	3.00	269.20	3,741.6	111.5	-113.2	1.39	0.16	-28.94	-3.4	-19.6
3,938.0	2.40	288.20	3,931.3	112.6	-121.9	0.56	-0.32	10.00	-4.4	-10.3
4,128.0	4.90	312.10	4,121.0	119.3	-131.7	1.51	1.32	12.58	-5.0	-6.5
4,318.0	3.80	302.60	4,310.4	128.2	-143.1	0.69	-0.58	-5.00	-3.4	-6.7
4,508.0	6.90	300.70	4,499.6	137.4	-158.2	1.63	1.63	-1.00	-6.2	-4.6
4,698.0	5.60	292.40	4,688.4	146.7	-176.6	0.83	-0.68	-4.37	-11.8	-2.6



Midland PVA

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Gem 36 State Com
 Well: #704H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #704H
 TVD Reference: KB = 25' @ 3447.0usft (H&P 466)
 MD Reference: KB = 25' @ 3447.0usft (H&P 466)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.14

Survey											
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)	
4,888.0	4.00	290.60	4,877.8	152.6	-191.4	0.85	-0.84	-0.95	-13.6	1.7	
5,078.0	4.10	292.60	5,067.3	157.5	-203.8	0.09	0.05	1.05	-12.7	6.9	
5,268.0	3.70	318.90	5,256.9	164.8	-214.1	0.96	-0.21	13.84	-5.9	12.5	
5,458.0	6.30	315.60	5,446.1	176.8	-225.5	1.38	1.37	-1.74	-8.3	10.3	
5,648.0	7.40	306.30	5,634.8	191.5	-242.6	0.82	0.58	-4.89	-17.5	8.1	
5,838.0	7.20	307.20	5,823.2	206.0	-262.0	0.12	-0.11	0.47	-26.7	9.3	
6,028.0	6.90	303.50	6,011.8	219.5	-281.0	0.29	-0.16	-1.95	-35.8	8.5	
6,219.0	7.00	303.50	6,201.4	232.2	-300.2	0.05	0.05	0.00	-44.0	10.2	
6,409.0	5.60	303.00	6,390.2	243.7	-317.7	0.74	-0.74	-0.26	-50.2	11.5	
6,599.0	3.30	337.90	6,579.7	253.8	-327.5	1.82	-1.21	18.37	-34.5	36.4	
6,789.0	2.80	4.30	6,769.4	263.5	-329.2	0.78	-0.26	13.89	-15.6	38.3	
6,979.0	2.40	7.80	6,959.2	272.1	-328.3	0.23	-0.21	1.84	-13.9	26.9	
7,169.0	1.90	22.20	7,149.1	278.9	-326.6	0.39	-0.26	7.58	-10.4	19.9	
7,359.0	1.10	10.30	7,339.0	283.6	-325.1	0.45	-0.42	-6.26	-16.7	12.6	
7,549.0	1.40	110.50	7,529.0	284.6	-322.6	1.01	0.16	52.74	13.1	16.0	
7,739.0	1.90	114.90	7,718.9	282.5	-317.5	0.27	0.26	2.32	8.8	15.1	
7,929.0	1.90	170.80	7,908.8	278.0	-314.2	0.94	0.00	29.42	12.5	3.8	
8,119.0	2.00	190.30	8,098.7	271.7	-314.3	0.35	0.05	10.26	6.8	0.4	
8,309.0	1.90	188.90	8,288.6	265.3	-315.3	0.06	-0.05	-0.74	0.3	0.5	
8,499.0	1.00	224.90	8,478.6	261.0	-317.0	0.65	-0.47	18.95	-3.7	2.1	
8,689.0	1.00	237.20	8,668.5	258.9	-319.6	0.11	0.00	6.47	-6.4	3.1	
8,879.0	1.10	236.00	8,858.5	257.0	-322.5	0.05	0.05	-0.63	-10.0	3.0	
9,069.0	0.70	43.70	9,048.5	256.8	-323.2	0.94	-0.21	88.26	11.0	-0.4	
9,259.0	0.90	52.60	9,238.5	258.6	-321.2	0.12	0.11	4.68	8.2	-1.9	
9,449.0	1.00	71.40	9,428.4	260.0	-318.4	0.17	0.05	9.89	4.0	-4.0	
9,639.0	1.70	64.80	9,618.4	261.7	-314.3	0.38	0.37	-3.47	0.0	-3.7	
9,829.0	0.20	284.10	9,808.4	263.0	-312.1	0.98	-0.79	-74.05	4.2	1.0	



Midland PVA

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Gem 36 State Com
 Well: #704H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #704H
 TVD Reference: KB = 25' @ 3447.0usft (H&P 466)
 MD Reference: KB = 25' @ 3447.0usft (H&P 466)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.14

Survey											
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)	
10,019.0	1.10	236.30	9,998.3	262.1	-313.9	0.51	0.47	-25.16	0.0	3.5	
10,209.0	1.00	249.30	10,188.3	260.5	-317.0	0.14	-0.05	6.84	-2.7	3.9	
10,399.0	0.90	287.80	10,378.3	260.4	-320.0	0.33	-0.05	20.26	-2.5	5.7	
10,589.0	0.20	334.80	10,568.3	261.1	-321.5	0.41	-0.37	24.74	1.1	6.8	
10,779.0	0.50	289.40	10,758.3	261.7	-322.5	0.20	0.16	-23.89	-5.1	5.3	
10,969.0	0.90	272.00	10,948.3	262.0	-324.7	0.24	0.21	-9.16	-8.7	3.3	
11,159.0	0.60	304.50	11,138.2	262.6	-327.0	0.27	-0.16	17.11	-7.8	8.3	
11,349.0	0.90	303.50	11,328.2	264.0	-329.1	0.16	0.16	-0.53	-10.5	8.2	
11,539.0	0.40	352.70	11,518.2	265.5	-330.4	0.37	-0.26	25.89	-2.3	14.4	
11,639.0	1.00	356.60	11,618.2	266.7	-330.5	0.60	0.60	3.90	-2.5	14.5	
11,734.0	1.20	352.50	11,713.2	268.5	-330.7	0.23	0.21	-4.32	-5.4	14.3	
11,781.0	4.40	180.30	11,760.2	267.2	-330.8	11.90	6.81	-366.38	2.1	-14.9	
11,829.0	12.00	179.20	11,807.6	260.4	-330.7	15.84	15.83	-2.29	-3.8	-14.9	
11,876.0	17.40	179.00	11,853.1	248.5	-330.5	11.49	11.49	-0.43	-11.2	-14.9	
11,924.0	19.80	181.10	11,898.6	233.2	-330.6	5.19	5.00	4.37	-17.8	-14.5	
11,971.0	26.40	181.70	11,941.8	214.7	-331.0	14.05	14.04	1.28	-22.7	-14.7	
12,019.0	32.90	179.20	11,983.5	191.0	-331.2	13.78	13.54	-5.21	-27.4	-15.9	
12,066.0	36.30	180.10	12,022.1	164.3	-331.0	7.32	7.23	1.91	-32.0	-15.4	
12,114.0	40.90	178.00	12,059.7	134.4	-330.5	9.96	9.58	-4.37	-34.3	-16.0	
12,161.0	46.10	175.90	12,093.7	102.1	-328.7	11.48	11.06	-4.47	-35.7	-15.3	
12,209.0	50.60	174.60	12,125.6	66.4	-325.7	9.59	9.37	-2.71	-36.2	-12.8	
12,256.0	52.70	175.40	12,154.8	29.7	-322.5	4.66	4.47	1.70	-34.7	-9.1	
12,296.2	56.47	176.97	12,178.1	-3.0	-320.4	9.91	9.38	3.92	-31.5	-6.4	
HL Crossing 12296.2' MD; 12178.1' TVD; -3.0'; -320.4'; 56.47											
12,305.0	57.30	177.30	12,182.9	-10.4	-320.0	9.91	9.41	3.70	-30.7	-5.9	
12,352.0	63.10	177.60	12,206.2	-51.1	-318.2	12.35	12.34	0.64	-25.9	-4.0	
12,400.0	66.00	178.00	12,226.9	-94.4	-316.5	6.09	6.04	0.83	-19.6	-2.3	

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Gem 36 State Com
Well: #704H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #704H
TVD Reference: KB = 25' @ 3447.0usft (H&P 466)
MD Reference: KB = 25' @ 3447.0usft (H&P 466)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.14

Survey											
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)	
12,448.0	69.00	178.00	12,245.2	-138.7	-315.0	6.25	6.25	0.00	-10.9	-0.9	
12,495.0	71.80	178.20	12,261.0	-183.0	-313.5	5.97	5.96	0.43	-0.1	0.5	
12,543.0	77.70	179.00	12,273.6	-229.3	-312.4	12.40	12.29	1.67	11.6	1.4	
12,590.0	82.70	179.00	12,281.6	-275.6	-311.6	10.64	10.64	0.00	19.4	2.0	
12,639.0	89.10	180.30	12,285.1	-324.4	-311.3	13.33	13.06	2.65	22.8	2.1	
12,686.0	87.90	179.20	12,286.3	-371.4	-311.1	3.46	-2.55	-2.34	23.9	2.1	
12,781.0	87.40	181.00	12,290.2	-466.3	-311.2	1.96	-0.53	1.89	27.5	1.6	
12,876.0	89.00	181.90	12,293.2	-561.2	-313.7	1.93	1.68	0.95	30.1	-1.2	
12,971.0	87.60	181.60	12,296.0	-656.1	-316.6	1.51	-1.47	-0.32	32.7	-4.5	
13,066.0	89.60	180.80	12,298.4	-751.1	-318.5	2.27	2.11	-0.84	34.7	-6.9	
13,161.0	90.00	178.20	12,298.7	-846.1	-317.7	2.77	0.42	-2.74	34.7	-6.5	
13,256.0	87.80	177.60	12,300.5	-941.0	-314.2	2.40	-2.32	-0.63	36.2	-3.4	
13,351.0	89.80	177.80	12,302.5	-1,035.9	-310.4	2.12	2.11	0.21	37.9	0.0	
13,447.0	85.00	177.60	12,306.9	-1,131.7	-306.6	5.00	-5.00	-0.21	42.0	3.5	
13,542.0	87.40	177.80	12,313.2	-1,226.4	-302.8	2.54	2.53	0.21	48.0	6.9	
13,637.0	88.00	178.30	12,317.0	-1,321.2	-299.5	0.82	0.63	0.53	51.5	9.7	
13,731.0	90.50	178.30	12,318.2	-1,415.2	-296.7	2.66	2.66	0.00	52.4	12.1	
13,826.0	91.10	178.00	12,316.9	-1,510.1	-293.7	0.71	0.63	-0.32	50.8	14.8	
13,921.0	95.40	178.90	12,311.5	-1,604.9	-291.1	4.62	4.53	0.95	45.0	17.0	
14,016.0	97.00	178.70	12,301.2	-1,699.3	-289.1	1.70	1.68	-0.21	34.3	18.6	
14,112.0	94.00	179.60	12,292.0	-1,794.9	-287.7	3.26	-3.12	0.94	24.8	19.6	
14,207.0	88.90	179.00	12,289.6	-1,889.8	-286.6	5.41	-5.37	-0.63	22.0	20.3	
14,302.0	89.60	179.70	12,290.9	-1,984.8	-285.5	1.04	0.74	0.74	22.9	21.0	
14,397.0	87.80	179.90	12,293.0	-2,079.8	-285.2	1.91	-1.89	0.21	24.6	20.9	
14,492.0	89.10	181.10	12,295.6	-2,174.7	-286.0	1.86	1.37	1.26	26.8	19.7	
14,586.0	87.40	182.20	12,298.5	-2,268.6	-288.7	2.15	-1.81	1.17	29.3	16.6	
14,682.0	88.60	185.40	12,301.8	-2,364.3	-295.0	3.56	1.25	3.33	32.3	9.8	



Midland PVA

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Gem 36 State Com
 Well: #704H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #704H
 TVD Reference: KB = 25' @ 3447.0usft (H&P 466)
 MD Reference: KB = 25' @ 3447.0usft (H&P 466)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.14

Survey

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)
14,777.0	88.20	184.10	12,304.5	-2,459.0	-302.9	1.43	-0.42	-1.37	34.6	1.5
14,872.0	85.40	184.70	12,309.8	-2,553.5	-310.2	3.01	-2.95	0.63	39.5	-6.1
14,967.0	85.20	181.90	12,317.6	-2,648.1	-315.6	2.94	-0.21	-2.95	46.9	-12.0
15,062.0	89.80	182.60	12,321.7	-2,742.9	-319.4	4.90	4.84	0.74	50.7	-16.1
15,157.0	86.80	181.70	12,324.5	-2,837.7	-322.9	3.30	-3.16	-0.95	53.1	-20.1
15,252.0	91.40	182.70	12,326.0	-2,932.6	-326.6	4.96	4.84	1.05	54.2	-24.1
15,347.0	87.30	179.70	12,327.1	-3,027.6	-328.6	5.35	-4.32	-3.16	54.9	-26.5
15,442.0	84.10	178.50	12,334.2	-3,122.3	-327.1	3.60	-3.37	-1.26	61.6	-25.5
15,537.0	84.90	178.20	12,343.3	-3,216.8	-324.4	0.90	0.84	-0.32	70.4	-23.1
15,632.0	86.30	175.90	12,350.6	-3,311.4	-319.5	2.83	1.47	-2.42	77.3	-18.5
15,726.0	89.00	174.60	12,354.5	-3,405.0	-311.7	3.19	2.87	-1.38	80.8	-11.1
15,821.0	91.50	175.40	12,354.0	-3,499.6	-303.4	2.76	2.63	0.84	80.0	-3.3
15,916.0	90.00	173.90	12,352.8	-3,594.2	-294.6	2.23	-1.58	-1.58	78.4	5.2
16,011.0	93.70	177.50	12,349.7	-3,688.8	-287.4	5.43	3.89	3.79	74.9	11.9
16,106.0	90.20	177.10	12,346.5	-3,783.7	-283.0	3.71	-3.68	-0.42	71.3	15.9
16,201.0	92.60	179.00	12,344.2	-3,878.6	-279.7	3.22	2.53	2.00	68.6	18.8
16,296.0	95.10	182.00	12,337.8	-3,973.3	-280.6	4.10	2.63	3.16	61.8	17.6
16,391.0	92.50	182.40	12,331.5	-4,068.0	-284.2	2.77	-2.74	0.42	55.2	13.5
16,486.0	91.30	183.30	12,328.4	-4,162.9	-288.9	1.58	-1.26	0.95	51.6	8.4
16,582.0	86.10	182.20	12,330.5	-4,258.7	-293.5	5.54	-5.42	-1.15	53.4	3.4
16,677.0	85.10	181.70	12,337.8	-4,353.4	-296.7	1.18	-1.05	-0.53	60.3	-0.2
16,772.0	86.70	180.30	12,344.6	-4,448.1	-298.4	2.24	1.68	-1.47	66.7	-2.3
16,867.0	88.60	181.50	12,348.5	-4,543.0	-299.9	2.36	2.00	1.26	70.2	-4.2
16,956.9	87.18	180.46	12,351.8	-4,632.8	-301.4	1.96	-1.58	-1.16	73.2	-6.1
HL Crossing 16956.9' MD; 12351.8' TVD; -4632.8'; -301.4'; 87.18										
16,962.0	87.10	180.40	12,352.1	-4,637.9	-301.5	1.96	-1.58	-1.16	73.4	-6.1



Midland PVA

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Gem 36 State Com
 Well: #704H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #704H
 TVD Reference: KB = 25' @ 3447.0usft (H&P 466)
 MD Reference: KB = 25' @ 3447.0usft (H&P 466)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.14

Survey

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)
16,989.0	87.20	181.00	12,353.4	-4,664.9	-301.8	2.25	0.37	2.22	74.6	-6.6
Last MWD Survey (MD = 16989.0)										
17,043.0	87.20	181.00	12,356.0	-4,718.8	-302.7	0.00	0.00	0.00	77.0	-7.7
Projection to Bit (MD = 17043.0)										

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
12,296.2	12,178.1	-3.0	-320.4	HL Crossing 12296.2' MD; 12178.1' TVD; -3.0'; -320.4'; 56.47
16,956.9	12,351.8	-4,632.8	-301.4	HL Crossing 16956.9' MD; 12351.8' TVD; -4632.8'; -301.4'; 87.18
16,989.0	12,353.4	-4,664.9	-301.8	Last MWD Survey (MD = 16989.0)
17,043.0	12,356.0	-4,718.8	-302.7	Projection to Bit (MD = 17043.0)

Checked By: _____ Approved By: _____ Date: _____