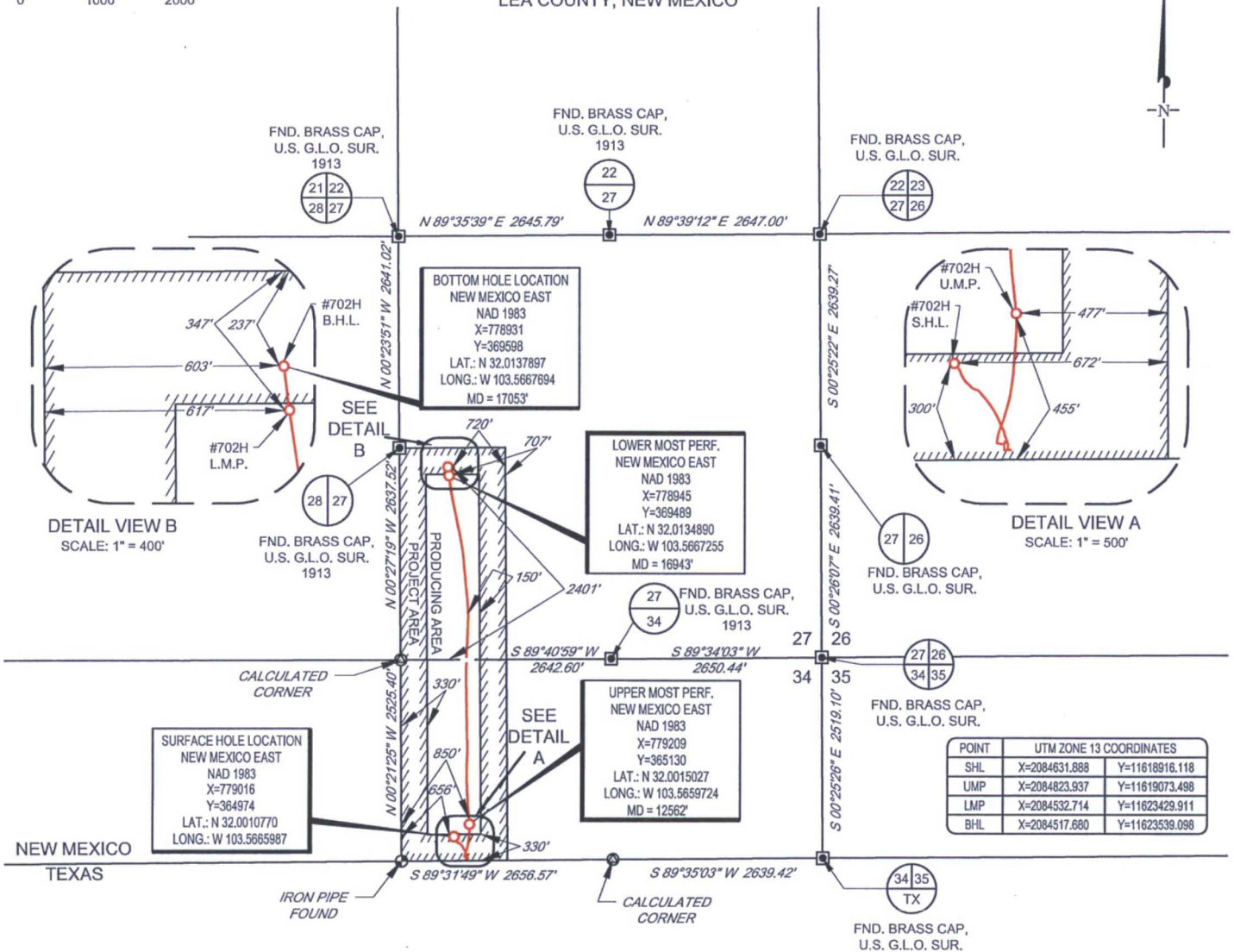


SCALE: 1" = 2000'

0' 1000' 2000'

SECTION 27 & 34, TOWNSHIP 26-S, RANGE 33-E, N.M.P.M.
LEA COUNTY, NEW MEXICO



LEASE NAME & WELL NO.: BARLOW 34 FED COM 702H

SECTION 34 TWP 26-S RGE 33-E SURVEY N.M.P.M.

COUNTY LEA STATE NM ELEVATION 3260'

DESCRIPTION 300' FSL & 672' 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) 682-1653 OR (800) 767-1653 • FAX (432) 682-1743
WWW.TOPOGRAPHIC.COM



Michael Blake Brown, P.S. No. 18329
MARCH 21, 2018



BARLOW 34 FED COM
#702H
AS-COMPLETED

REVISION:

DATE: 03/21/18
FILE: AD_BARLOW_34_FED_COM_702H
DRAWN BY: H.B.
SHEET: 1 OF 1

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 OF 1983, EAST ZONE, U.S. SURVEY FEET.
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.



HOBBS OCD
APR 25 2018
RECEIVED

Lea County, NM (NAD 83 NME)

Barlow 34 Fed Com #702H

HP 647

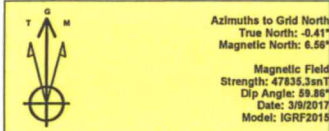
Plan #5

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: #702H

Ground Level: 3260.0
KB= 25' @ 3285.0usft (HP 647)
Northing: 364974.00 Easting: 779016.00 Latitude: 32° 0' 3.876 N Longitude: 103° 33' 59.760 W



To convert a Magnetic Direction to a Grid Direction, Add 6.58°
To convert a Magnetic Direction to a True Direction, Add 6.97° East
To convert a True Direction to a Grid Direction, Subtract 0.41°

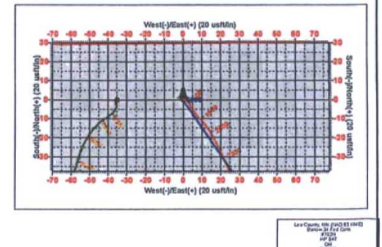
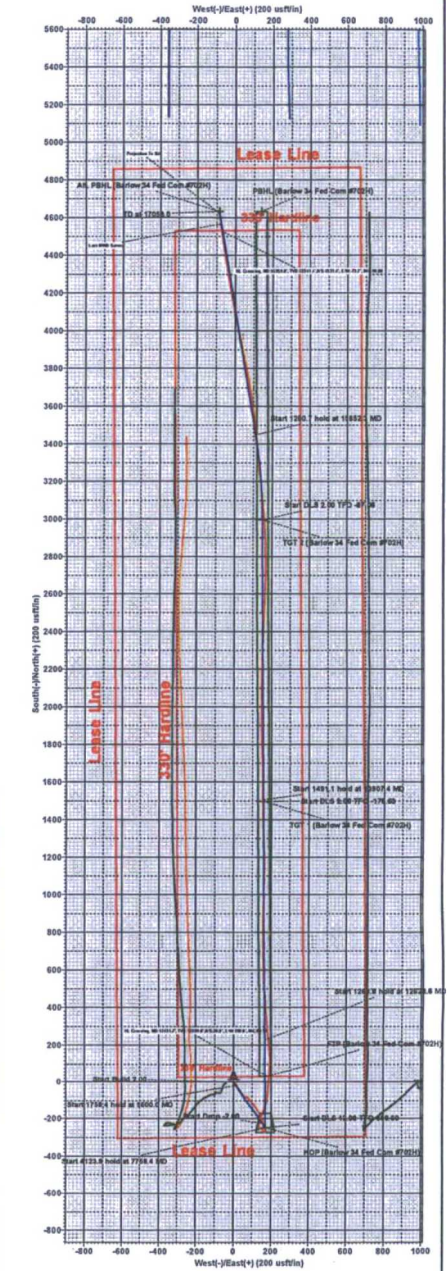
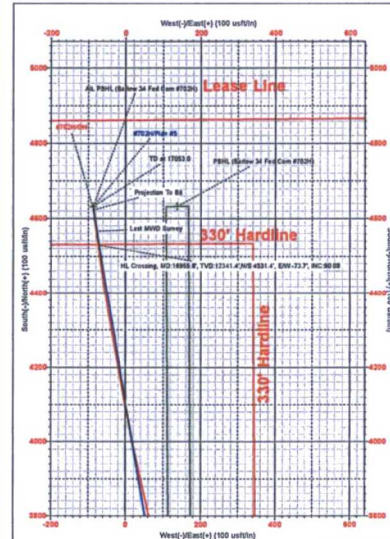
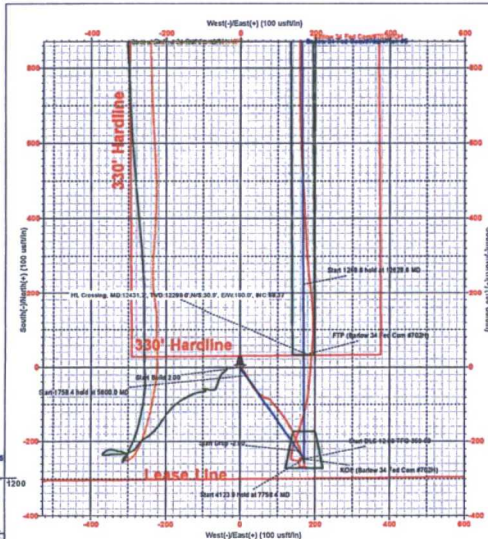
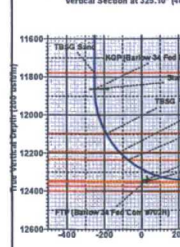
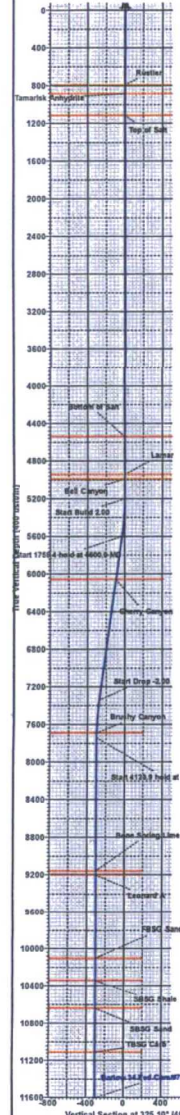
SECTION DETAILS												Target	Annotation
Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VSecl				
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0				
2	5300.0	0.00	0.00	5300.0	0.0	0.0	0.00	0.00	0.0				
3	5600.0	8.00	145.10	5598.7	-22.9	16.0	2.00	145.10	-23.2				
4	7558.4	8.00	145.10	7540.0	-223.6	156.0	0.00	0.00	-236.5				
5	7758.4	0.00	0.00	7738.7	-246.4	171.9	2.00	180.00	-248.6				
6	11852.3	0.00	0.00	11852.6	-246.4	171.9	0.00	0.00	-248.6				
7	12629.6	89.55	359.60	12340.1	227.3	168.7	12.00	359.60	224.1				
8	13997.4	89.55	359.60	12350.0	1496.0	159.9	0.00	0.00	1492.7				
9	13997.4	89.55	359.60	12350.1	1506.0	159.8	2.00	-178.63	1502.7				
10	15398.5	89.55	359.60	12367.0	2997.0	149.4	0.00	0.00	2993.7				
11	16952.3	89.82	350.54	12376.3	3448.7	110.4	2.00	-87.06	3446.0				
12	17053.0	89.82	350.54	12374.0	4633.0	-87.0	0.00	0.00	4633.8				

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N-S	+E-W	Northing	Easting
TGT 1 (Barlow 34 Fed Com #702H)	12350.0	1496.0	159.9	364970.00	779175.90
TGT 2 (Barlow 34 Fed Com #702H)	12367.0	2997.0	149.4	367971.00	779165.42
Alt. PBHL (Barlow 34 Fed Com #702H)	12374.0	4633.0	-87.0	369606.99	778929.00
FTP (Barlow 34 Fed Com #702H)	12340.0	32.0	170.0	365006.00	779186.00
KOP (Barlow 34 Fed Com #702H)	11852.3	-246.4	171.9	364777.66	779187.52
PBHL (Barlow 34 Fed Com #702H)	12374.0	4633.0	138.0	369607.00	779154.00



Lea County, NM (NAD 83 NME)
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level



EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Barlow 34 Fed Com

#702H

OH

Design: OH

PVA

02 March, 2018

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Barlow 34 Fed Com
Well: #702H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #702H
TVD Reference: KB = 25' @ 3286.0usft
MD Reference: KB = 25' @ 3286.0usft
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 Barlow 34 Fed Com

Site Position:		Northing:	364,974.00 usft	Latitude:	32° 0' 3.879 N
From:	Map	Easting:	778,981.00 usft	Longitude:	103° 34' 0.167 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.41 °

Well #702H

Well Position	+N/-S	0.0 usft	Northing:	364,974.00 usft	Latitude:	32° 0' 3.876 N
	+E/-W	0.0 usft	Easting:	779,016.00 usft	Longitude:	103° 33' 59.760 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	3,260.0 usft

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	3/9/2017	6.97	59.86	47,835.25584693

Design OH

Audit Notes:

Version:	1.0	Phase:	ACTUAL	Tie On Depth:
-----------------	-----	---------------	--------	----------------------

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	1.71

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Barlow 34 Fed Com
Well: #702H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #702H
TVD Reference: KB = 25' @ 3286.0usft
MD Reference: KB = 25' @ 3286.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.14

Survey Program **Date** 3/2/2018

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
101.0	1,281.0	Invictus MWD (OH)	MWD	OWSG MWD - Standard
1,346.0	17,054.0	Intrepid MWD (OH)	MWD	OWSG MWD - Standard

MD (usft)	Inc (°)	Azi (grid_north_azim)	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
101.0	0.90	332.50	101.0	0.7	-0.4	0.89	0.89	0.00	-0.8	0.0
160.0	1.00	132.50	160.0	0.8	-0.2	3.17	0.17	271.19	0.7	0.4
188.0	0.70	140.50	188.0	0.5	0.1	1.15	-1.07	28.57	0.3	0.4
216.0	0.90	124.50	216.0	0.2	0.4	1.06	0.71	-57.14	-0.2	0.4
278.0	0.80	118.50	278.0	-0.3	1.2	0.22	-0.16	-9.68	-1.1	0.3
309.0	0.80	114.50	309.0	-0.5	1.5	0.18	0.00	-12.90	-1.6	0.2
341.0	0.60	135.50	341.0	-0.7	1.9	1.01	-0.62	65.62	-1.8	0.9
372.0	0.60	140.50	372.0	-0.9	2.1	0.17	0.00	16.13	-2.0	1.0
403.0	0.80	118.50	403.0	-1.1	2.4	1.07	0.65	-70.97	-2.6	0.1
435.0	0.90	134.50	435.0	-1.4	2.8	0.80	0.31	50.00	-3.0	0.9
466.0	0.70	154.50	466.0	-1.8	3.0	1.10	-0.65	64.52	-2.9	2.0
497.0	0.50	124.50	497.0	-2.0	3.2	1.18	-0.65	-96.77	-3.8	0.2
529.0	0.80	143.50	529.0	-2.3	3.4	1.14	0.94	59.37	-3.9	1.4
560.0	0.80	138.50	560.0	-2.6	3.7	0.23	0.00	-16.13	-4.4	1.1
591.0	0.90	161.50	591.0	-3.0	3.9	1.14	0.32	74.19	-4.1	2.8
686.0	0.40	172.50	685.9	-4.0	4.2	0.54	-0.53	11.58	-4.6	3.7
717.0	0.60	143.50	716.9	-4.3	4.3	1.02	0.65	-93.55	-6.0	0.9
749.0	0.50	147.50	748.9	-4.5	4.5	0.33	-0.31	12.50	-6.2	1.4
780.0	0.50	147.50	779.9	-4.8	4.7	0.00	0.00	0.00	-6.5	1.4
811.0	0.30	121.50	810.9	-4.9	4.8	0.86	-0.65	-83.87	-6.7	-1.7

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Barlow 34 Fed Com
Well: #702H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #702H
TVD Reference: KB = 25' @ 3286.0usft
MD Reference: KB = 25' @ 3286.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.14

Survey											
MD (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
843.0	0.40	179.50	842.9	-5.1	4.9	1.10	0.31	181.25	-5.1	4.8	
1,359.0	0.80	126.20	1,358.9	-9.0	7.8	0.13	0.08	-10.33	-11.6	-2.7	
1,544.0	0.90	138.30	1,543.9	-10.8	9.8	0.11	0.05	6.54	-14.6	0.1	
1,732.0	1.00	141.30	1,731.9	-13.2	11.8	0.06	0.05	1.60	-17.7	0.9	
1,919.0	1.10	144.40	1,918.8	-16.0	13.9	0.06	0.05	1.66	-21.1	2.0	
2,106.0	1.30	151.90	2,105.8	-19.3	15.9	0.14	0.11	4.01	-24.5	5.0	
2,294.0	1.80	153.60	2,293.7	-23.8	18.2	0.27	0.27	0.90	-29.4	5.7	
2,481.0	2.00	154.30	2,480.6	-29.4	21.0	0.11	0.11	0.37	-35.6	6.1	
2,668.0	2.30	155.20	2,667.5	-35.7	23.9	0.16	0.16	0.48	-42.5	6.8	
2,855.0	2.40	155.10	2,854.3	-42.7	27.2	0.05	0.05	-0.05	-50.2	6.7	
3,042.0	2.80	147.30	3,041.1	-50.1	31.3	0.29	0.21	-4.17	-59.1	-0.7	
3,136.0	3.20	143.60	3,135.0	-54.1	34.1	0.47	0.43	-3.94	-63.8	-4.7	
3,324.0	3.40	132.10	3,322.7	-62.1	41.3	0.37	0.11	-6.12	-72.3	-18.4	
3,512.0	3.10	133.40	3,510.4	-69.3	49.2	0.16	-0.16	0.69	-83.3	-16.6	
3,699.0	2.30	132.90	3,697.2	-75.4	55.6	0.43	-0.43	-0.27	-92.0	-17.4	
3,886.0	2.60	114.70	3,884.0	-79.7	62.2	0.44	0.16	-9.73	-89.8	-46.4	
4,074.0	2.50	106.70	4,071.8	-82.6	70.0	0.20	-0.05	-4.26	-90.8	-59.1	
4,262.0	1.50	107.80	4,259.7	-84.6	76.3	0.53	-0.53	0.59	-98.4	-57.2	
4,450.0	1.10	151.50	4,447.7	-86.9	79.5	0.55	-0.21	23.24	-114.3	28.4	
4,638.0	1.60	136.70	4,635.6	-90.4	82.1	0.32	0.27	-7.87	-122.1	-2.2	
4,801.0	2.60	141.10	4,798.5	-94.9	86.0	0.62	0.61	2.70	-127.9	7.3	
4,909.0	3.30	140.20	4,906.4	-99.2	89.5	0.65	0.65	-0.83	-133.5	5.3	
5,096.0	3.10	138.60	5,093.1	-107.2	96.3	0.12	-0.11	-0.86	-144.1	1.4	
5,283.0	4.40	143.00	5,279.7	-116.7	104.0	0.71	0.70	2.35	-154.6	12.9	
5,470.0	5.30	142.80	5,466.0	-129.3	113.5	0.48	0.48	-0.11	-158.6	12.8	
5,658.0	6.20	147.90	5,653.1	-144.8	124.2	0.55	0.48	2.71	-151.8	26.4	
5,846.0	6.70	151.70	5,839.9	-163.1	134.8	0.35	0.27	2.02	-144.8	33.9	

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Barlow 34 Fed Com
Well: #702H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #702H
TVD Reference: KB = 25' @ 3286.0usft
MD Reference: KB = 25' @ 3286.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.14

Survey											
MD (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
6,034.0	5.60	158.20	6,026.8	-181.2	143.4	0.69	-0.59	3.46	-134.6	45.3	
6,220.0	4.70	157.60	6,212.0	-196.7	149.6	0.48	-0.48	-0.32	-126.5	38.2	
6,408.0	4.30	155.30	6,399.5	-210.2	155.5	0.23	-0.21	-1.22	-116.8	28.2	
6,597.0	3.50	165.90	6,588.0	-222.3	159.9	0.57	-0.42	5.61	-97.7	41.1	
6,783.0	2.00	155.40	6,773.8	-230.7	162.6	0.85	-0.81	-5.65	-86.9	17.1	
6,971.0	1.20	151.70	6,961.7	-235.4	164.9	0.43	-0.43	-1.97	-67.0	8.3	
7,159.0	1.80	160.30	7,149.7	-240.0	166.8	0.34	0.32	4.57	-44.6	11.6	
7,347.0	1.80	160.90	7,337.6	-245.5	168.8	0.01	0.00	0.32	-25.2	5.0	
7,534.0	1.90	172.00	7,524.5	-251.4	170.2	0.20	0.05	5.94	-11.8	1.2	
7,721.0	1.90	182.20	7,711.4	-257.5	170.5	0.18	0.00	5.45	-11.3	-0.9	
7,908.0	2.30	181.40	7,898.2	-264.4	170.3	0.21	0.21	-0.43	-18.0	-1.2	
8,096.0	0.80	153.90	8,086.2	-269.3	170.8	0.87	-0.80	-14.63	-20.1	-11.1	
8,283.0	1.10	76.70	8,273.1	-270.1	173.1	0.65	0.16	-41.28	4.3	-23.3	
8,470.0	0.70	90.00	8,460.1	-269.7	176.0	0.24	-0.21	7.11	-4.1	-23.2	
8,658.0	0.40	66.60	8,648.1	-269.4	177.7	0.20	-0.16	-12.45	3.8	-23.4	
8,846.0	0.30	236.20	8,836.1	-269.4	177.9	0.37	-0.05	90.21	-7.8	22.5	
9,032.0	0.70	273.30	9,022.1	-269.6	176.4	0.27	0.22	19.95	5.8	22.9	
9,219.0	1.20	286.00	9,209.1	-269.0	173.4	0.29	0.27	6.79	7.6	21.3	
9,406.0	1.80	281.20	9,396.0	-267.9	168.6	0.33	0.32	-2.57	0.9	21.7	
9,594.0	2.40	251.10	9,583.9	-268.6	162.0	0.66	0.32	-16.01	-16.6	17.8	
9,782.0	0.90	338.40	9,771.8	-268.5	157.7	1.34	-0.80	46.44	15.3	21.3	
9,969.0	2.00	10.10	9,958.8	-263.9	157.8	0.71	0.59	16.95	19.7	10.9	
10,156.0	1.40	341.60	10,145.7	-258.6	157.6	0.54	-0.32	-15.24	7.0	17.4	
10,343.0	2.10	0.00	10,332.6	-253.0	156.9	0.48	0.37	9.84	6.5	15.0	
10,531.0	1.40	19.30	10,520.5	-247.4	157.6	0.48	-0.37	10.27	5.6	13.2	
10,719.0	2.30	47.00	10,708.4	-242.6	161.2	0.66	0.48	14.73	5.3	10.1	
10,906.0	1.40	111.80	10,895.3	-240.9	166.0	1.14	-0.48	34.65	7.5	2.9	

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Barlow 34 Fed Com
Well: #702H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #702H
TVD Reference: KB = 25' @ 3286.0usft
MD Reference: KB = 25' @ 3286.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.14

Survey										
MD (usft)	Inc (")	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
11,094.0	1.70	216.10	11,083.3	-244.0	166.5	1.31	0.16	55.48	-1.2	-5.8
11,282.0	4.00	237.90	11,271.1	-249.8	159.3	1.33	1.22	11.60	-12.4	-3.9
11,469.0	3.30	292.40	11,457.7	-251.2	148.8	1.82	-0.37	29.14	-19.5	13.2
11,656.0	2.20	289.80	11,644.5	-247.9	140.5	0.59	-0.59	-1.39	-29.1	12.0
11,750.0	1.60	285.00	11,738.5	-247.0	137.5	0.66	-0.64	-5.11	-33.1	9.4
11,844.0	1.00	257.40	11,832.4	-246.8	135.4	0.91	-0.64	-29.36	-35.7	-7.6
11,891.0	0.50	220.30	11,879.4	-247.0	134.9	1.43	-1.06	-78.94	-24.6	-27.7
11,938.0	2.80	11.20	11,926.4	-246.1	135.0	6.91	4.89	321.06	10.8	35.5
11,985.0	11.80	8.50	11,973.0	-240.2	135.9	19.16	19.15	-5.74	11.4	34.6
12,032.0	19.00	12.50	12,018.3	-227.9	138.3	15.48	15.32	8.51	13.6	31.3
12,079.0	24.00	16.50	12,062.0	-211.3	142.7	11.08	10.64	8.51	14.7	26.0
12,126.0	27.30	20.30	12,104.4	-192.0	149.1	7.84	7.02	8.09	15.8	18.3
12,173.0	35.70	17.80	12,144.4	-168.8	157.1	18.08	17.87	-5.32	14.4	10.9
12,220.0	41.50	17.00	12,181.1	-140.8	165.8	12.39	12.34	-1.70	12.4	2.5
12,267.0	47.90	13.30	12,214.5	-108.9	174.4	14.70	13.62	-7.87	10.4	-5.2
12,314.0	55.70	8.50	12,243.6	-72.7	181.3	18.43	16.60	-10.21	8.0	-11.3
12,361.0	60.40	3.80	12,268.4	-33.1	185.5	13.11	10.00	-10.00	5.4	-15.3
12,408.0	65.70	4.30	12,289.7	8.7	188.5	11.32	11.28	1.06	2.6	-18.4
12,431.7	68.17	4.51	12,299.0	30.4	190.2	10.46	10.43	0.87	1.3	-20.2
HL Crossing, MD:12431.7", TVD:12299.0", N/S:30.9", E/W:190.0", INC:68.17										
12,455.0	70.60	4.70	12,307.2	52.2	191.9	10.46	10.43	0.84	0.2	-22.1
12,501.0	74.80	2.20	12,320.9	96.0	194.5	10.50	9.13	-5.43	-0.9	-25.0
12,548.0	80.20	356.90	12,331.1	141.9	194.2	15.91	11.49	-11.28	-1.3	-24.9
12,595.0	86.10	354.30	12,336.7	188.4	190.6	13.70	12.55	-5.53	-2.3	-21.7
12,642.0	91.40	353.70	12,337.7	235.1	185.7	11.35	11.28	-1.28	-3.5	-17.0
12,688.0	92.80	353.40	12,336.0	280.7	180.5	3.11	3.04	-0.65	-5.5	-12.2
12,735.0	91.10	356.70	12,334.4	327.5	176.4	7.89	-3.62	7.02	-7.4	-8.5

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Barlow 34 Fed Com
Well: #702H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #702H
TVD Reference: KB = 25' @ 3286.0usft
MD Reference: KB = 25' @ 3286.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.14

Survey										
MD (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
12,782.0	89.70	357.30	12,334.1	374.5	174.0	3.24	-2.98	1.28	-8.1	-6.3
12,876.0	89.50	356.60	12,334.7	468.3	169.0	0.77	-0.21	-0.74	-8.2	-2.0
12,970.0	90.80	357.00	12,334.5	562.2	163.7	1.45	1.38	0.43	-9.2	2.6
13,064.0	90.40	358.10	12,333.5	656.1	159.7	1.25	-0.43	1.17	-10.9	6.0
13,158.0	90.90	359.50	12,332.4	750.1	157.8	1.58	0.53	1.49	-12.7	7.3
13,252.0	87.90	1.10	12,333.4	844.0	158.2	3.62	-3.19	1.70	-12.5	6.2
13,344.0	88.60	1.80	12,336.2	936.0	160.6	1.08	0.76	0.76	-10.4	3.2
13,437.0	88.10	2.00	12,338.9	1,028.9	163.7	0.58	-0.54	0.22	-8.4	-0.5
13,531.0	89.00	359.60	12,341.3	1,122.8	165.0	2.73	0.96	-2.55	-6.8	-2.5
13,625.0	89.10	359.30	12,342.9	1,216.8	164.1	0.34	0.11	-0.32	-6.0	-2.2
13,719.0	89.00	357.40	12,344.4	1,310.8	161.4	2.02	-0.11	-2.02	-5.1	-0.2
13,813.0	92.70	358.60	12,343.0	1,404.7	158.1	4.14	3.94	1.28	-7.3	2.5
13,906.0	92.30	358.80	12,339.0	1,497.6	156.0	0.48	-0.43	0.22	-12.1	3.9
14,000.0	91.60	359.60	12,335.8	1,591.5	154.7	1.13	-0.74	0.85	-16.3	4.6
14,094.0	89.20	359.20	12,335.1	1,685.5	153.7	2.59	-2.55	-0.43	-18.0	4.9
14,187.0	90.70	358.10	12,335.2	1,778.5	151.5	2.00	1.61	-1.18	-19.0	6.4
14,281.0	89.20	358.50	12,335.3	1,872.4	148.7	1.65	-1.60	0.43	-20.0	8.6
14,375.0	88.10	359.50	12,337.5	1,966.4	147.1	1.58	-1.17	1.06	-18.8	9.6
14,468.0	88.90	0.90	12,339.9	2,059.3	147.4	1.73	0.86	1.51	-17.4	8.6
14,562.0	90.10	1.20	12,340.7	2,153.3	149.1	1.32	1.28	0.32	-17.7	6.2
14,656.0	90.50	1.70	12,340.2	2,247.3	151.5	0.68	0.43	0.53	-19.3	3.2
14,749.0	90.90	2.50	12,339.1	2,340.2	154.9	0.96	0.43	0.86	-21.4	-0.9
14,842.0	90.10	2.20	12,338.3	2,433.1	158.7	0.92	-0.86	-0.32	-23.3	-5.3
14,935.0	90.00	2.60	12,338.2	2,526.0	162.6	0.44	-0.11	0.43	-24.4	-9.9
15,029.0	89.40	2.40	12,338.7	2,620.0	166.7	0.67	-0.64	-0.21	-25.0	-14.6
15,122.0	89.40	0.40	12,339.7	2,712.9	169.0	2.15	0.00	-2.15	-25.1	-17.6
15,216.0	89.80	359.30	12,340.3	2,806.9	168.7	1.25	0.43	-1.17	-25.5	-18.0

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Barlow 34 Fed Com
Well: #702H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #702H
TVD Reference: KB = 25' @ 3286.0usft
MD Reference: KB = 25' @ 3286.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.14

Survey											
MD (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
15,310.0	87.80	357.10	12,342.3	2,900.8	165.8	3.16	-2.13	-2.34	-24.6	-15.7	
15,404.0	89.10	355.00	12,344.9	2,994.6	159.3	2.63	1.38	-2.23	-23.1	-9.9	
15,498.0	91.90	354.60	12,344.0	3,088.2	150.8	3.01	2.98	-0.43	-24.9	-3.4	
15,591.0	89.60	354.30	12,342.8	3,180.7	141.8	2.49	-2.47	-0.32	-27.0	0.5	
15,684.0	88.70	354.20	12,344.2	3,273.2	132.5	0.97	-0.97	-0.11	-26.3	1.7	
15,778.0	89.10	354.30	12,346.0	3,366.7	123.1	0.44	0.43	0.11	-25.0	-0.2	
15,871.0	89.10	354.50	12,347.5	3,459.3	114.0	0.22	0.00	0.22	-23.9	-5.2	
15,965.0	89.60	352.60	12,348.5	3,552.7	103.4	2.09	0.53	-2.02	-23.1	-10.2	
16,058.0	90.20	351.10	12,348.7	3,644.7	90.2	1.74	0.65	-1.61	-23.2	-12.3	
16,152.0	88.80	349.00	12,349.5	3,737.3	74.0	2.68	-1.49	-2.23	-22.7	-11.5	
16,246.0	88.00	348.00	12,352.1	3,829.4	55.3	1.36	-0.85	-1.06	-20.3	-8.2	
16,340.0	89.70	347.70	12,354.0	3,921.3	35.5	1.84	1.81	-0.32	-18.7	-3.8	
16,433.0	88.40	348.40	12,355.6	4,012.2	16.2	1.59	-1.40	0.75	-17.5	0.3	
16,528.0	90.90	349.30	12,356.1	4,105.4	-2.1	2.80	2.63	0.95	-17.2	3.0	
16,621.0	90.10	350.10	12,355.3	4,196.9	-18.8	1.22	-0.86	0.86	-18.3	4.4	
16,714.0	92.70	349.70	12,353.1	4,288.5	-35.1	2.83	2.80	-0.43	-20.9	5.4	
16,808.0	93.30	350.70	12,348.1	4,381.0	-51.0	1.24	0.64	1.06	-26.1	6.0	
16,902.0	93.00	351.60	12,343.0	4,473.7	-65.5	1.01	-0.32	0.96	-31.5	5.0	
16,959.8	90.08	352.27	12,341.4	4,530.9	-73.6	5.18	-5.05	1.16	-33.3	3.6	
HL Crossing, MD:16959.8', TVD:12341.4', N/S:4531.4', E/W:-73.7', INC:90.08											
16,997.0	88.20	352.70	12,342.0	4,567.8	-78.5	5.18	-5.05	1.16	-32.8	2.3	
Last MWD Survey											
17,054.0	88.20	352.70	12,343.8	4,624.3	-85.7	0.00	0.00	0.00	-31.2	0.2	
Projection To Bit											

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Barlow 34 Fed Com
Well: #702H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #702H
TVD Reference: KB = 25' @ 3286.0usft
MD Reference: KB = 25' @ 3286.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.14

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
12,431.7	12,299.0	30.4	190.2	HL Crossing, MD:12431.7', TVD:12299.0', N/S:30.9', E/W:190.0', INC:68.17
16,959.8	12,341.4	4,530.9	-73.6	HL Crossing, MD:16959.8', TVD:12341.4', N/S:4531.4', E/W:-73.7', INC:90.08
16,997.0	12,342.0	4,567.8	-78.5	Last MWD Survey
17,054.0	12,343.8	4,624.3	-85.7	Projection To Bit

Checked By: _____ Approved By: _____ Date: _____