



Lea County, NM (NAD 83 NME)

Andele 16 State Com

#704H

HP 647

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



Azimuths to Grid North
True North: -0.45°
Magnetic North: 6.44°
Magnetic Field
Strength: 47878.4nT
Dip Angle: 59.98°
Date: 7/24/2017
Model: IGRF2015

To convert a Magnetic Direction to a Grid Direction, Add 6.44°
To convert a Magnetic Direction to a True Direction, Add 6.89° East
To convert a True Direction to a Grid Direction, Subtract 0.45°

WELL DETAILS: #704H

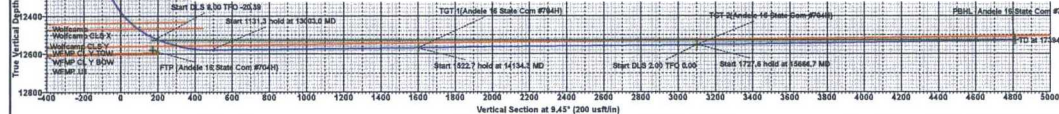
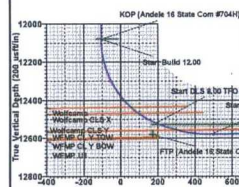
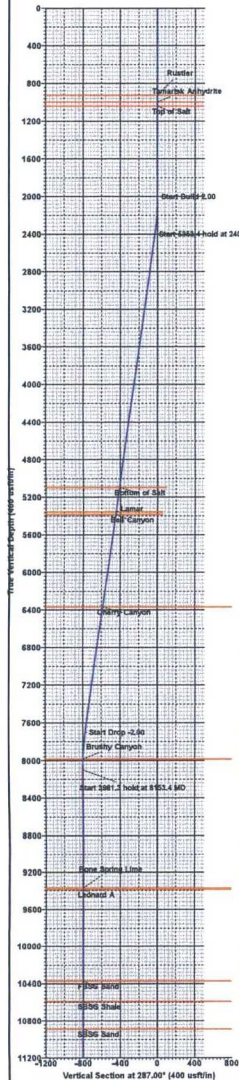
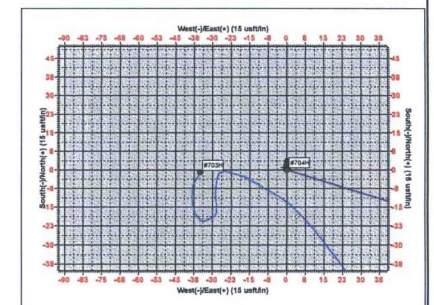
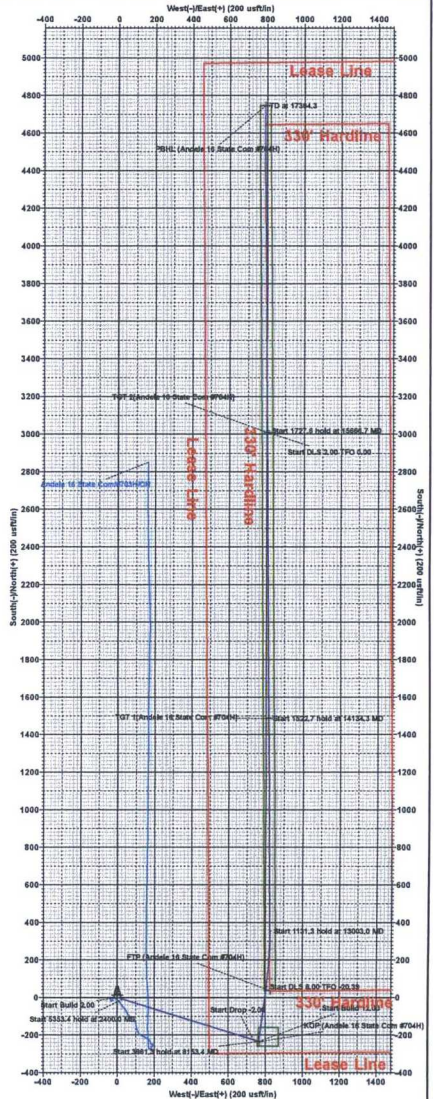
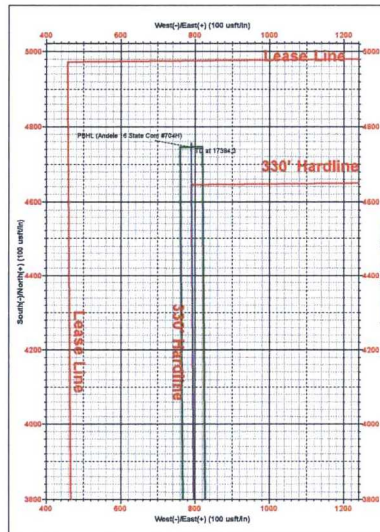
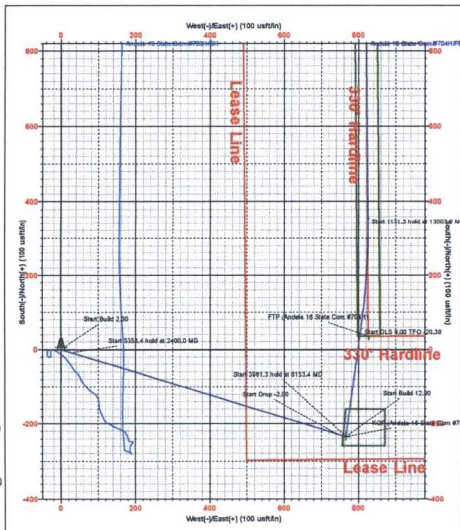
+N/-S +E/-W Northing Easting Longitude Slot
0.0 0.0 409928.00 805267.00 32° 7' 26.762 N 103° 28' 50.803 W

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	2000.0	0.00	0.00	2000.0	0.0	0.0	0.00	0.00	0.0	
3	2400.0	8.00	107.00	2398.7	-8.2	26.7	2.00	107.00	-3.7	
4	7753.4	8.00	107.00	7700.0	-226.0	739.2	0.00	0.00	-101.5	
5	8153.4	0.00	0.00	8098.7	-234.1	765.8	2.00	180.00	-105.2	
6	12134.7	0.00	0.00	12080.0	-234.1	765.8	0.00	0.00	-105.2	
7	12696.6	67.42	7.86	12520.9	57.3	806.1	12.00	7.86	188.8	
8	13003.0	90.56	359.55	12579.1	355.1	824.5	8.00	-20.39	485.6	
9	14134.3	90.56	359.55	12568.0	1486.3	815.6	0.00	0.00	1600.0	TGT 1(Andele 16 State Com #704H)
10	15657.0	90.56	359.55	12553.0	3008.9	803.6	0.00	0.00	3100.0	TGT 2(Andele 16 State Com #704H)
11	15666.7	90.76	359.55	12552.9	3018.6	803.6	2.00	0.00	3109.6	
12	17394.3	90.76	359.55	12530.0	4746.0	790.0	0.00	0.00	4811.3	PBHL (Andele 16 State Com #704H)

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
KOP (Andele 16 State Com #704H)	12080.0	-234.5	765.8	409893.50	806032.80	Polygon
PBHL (Andele 16 State Com #704H)	12530.0	4746.0	790.0	414674.00	806057.00	Rectangle (Sides: L0.0 W60.0)
TGT 2(Andele 16 State Com #704H)	12553.0	3008.9	803.6	412936.90	806070.65	Point
TGT 1(Andele 16 State Com #704H)	12568.0	1486.3	815.6	411414.30	806082.61	Point
FTP (Andele 16 State Com #704H)	12696.6	36.0	827.0	409964.00	806094.00	Point



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)

Andele 16 State Com

#704H

OH

Survey: Intrepid MWD

Midland PVA

13 September, 2017

HOBBBS OGD
NOV 02 2017
RECEIVED



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #704H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25' @ 3379.0usft (HP 647)
Site:	Andele 16 State Com	MD Reference:	KB = 25' @ 3379.0usft (HP 647)
Well:	#704H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Project	Lea 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	Andele 16 State Com		
Site Position:		Northing:	409,927.00 usft
From:	Map	Easting:	805,232.00 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 7' 26.755 N
		Longitude:	103° 28' 51.210 W
		Grid Convergence:	0.45 °

Well	#704H		
Well Position	+N/-S	0.0 usft	Northing:
	+E/-W	0.0 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	32° 7' 26.762 N
		Longitude:	103° 28' 50.803 W
		Ground Level:	3,354.0 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2015	7/24/2017	6.89
			59.98
			47,878.37869600

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)
	0.0	0.0	0.0
		Direction (°)	9.45



Midland PVA

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Andele 16 State Com
 Well: #704H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #704H
 TVD Reference: KB = 25' @ 3379.0usft (HP 647)
 MD Reference: KB = 25' @ 3379.0usft (HP 647)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.14

Survey Program Date 9/13/2017

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
159.0	966.0	Invictus MWD (OH)	MWD	MWD - Standard
1,078.0	17,427.0	Intrepid MWD (OH)	MWD	MWD - Standard

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)
966.0	0.80	112.91	966.0	-4.2	4.2	0.00	0.00	0.00	-5.5	-2.3
1,078.0	0.70	131.50	1,077.9	-5.0	5.4	0.23	-0.09	16.60	-7.4	-0.2
1,263.0	0.50	108.10	1,262.9	-6.0	7.0	0.17	-0.11	-12.65	-8.5	-3.5
1,450.0	0.40	94.40	1,449.9	-6.3	8.4	0.08	-0.05	-7.33	-8.9	-5.6
1,637.0	0.40	82.50	1,636.9	-6.3	9.7	0.04	0.00	-6.36	-8.8	-7.5
1,823.0	0.50	53.50	1,822.9	-5.7	11.0	0.13	0.05	-15.59	-5.5	-11.1
2,011.0	2.70	111.80	2,010.8	-6.8	15.8	1.32	1.17	31.01	-17.2	-0.5
2,199.0	7.30	103.50	2,198.1	-11.3	31.5	2.47	2.45	-4.41	-26.4	-3.2
2,386.0	7.30	102.40	2,383.6	-16.6	54.7	0.07	0.00	-0.59	-31.0	-2.4
2,574.0	7.30	100.90	2,570.0	-21.4	78.1	0.10	0.00	-0.80	-28.8	-0.7
2,761.0	7.60	99.60	2,755.5	-25.7	102.0	0.18	0.16	-0.70	-27.2	1.7
2,950.0	8.40	102.00	2,942.6	-30.7	127.8	0.46	0.42	1.27	-27.2	5.7
3,138.0	10.20	102.80	3,128.1	-37.2	157.4	0.96	0.96	0.43	-31.4	8.2
3,325.0	10.90	97.90	3,312.0	-43.3	191.1	0.61	0.37	-2.62	-40.6	8.2
3,511.0	12.00	94.10	3,494.3	-47.1	227.8	0.72	0.59	-2.04	-52.8	10.1
3,699.0	10.70	96.30	3,678.6	-50.4	264.7	0.73	-0.69	1.17	-63.8	17.7
3,886.0	7.90	107.10	3,863.1	-56.1	294.2	1.76	-1.50	5.78	-63.4	32.4
4,074.0	7.40	101.70	4,049.5	-62.4	318.4	0.47	-0.27	-2.87	-65.0	27.6
4,262.0	6.60	107.20	4,236.1	-68.0	340.6	0.55	-0.43	2.93	-58.8	34.7
4,449.0	7.10	118.10	4,421.7	-76.7	361.0	0.74	0.27	5.83	-47.8	42.1
4,637.0	7.80	118.10	4,608.2	-88.1	382.5	0.37	0.37	0.00	-46.5	37.1



Midland PVA

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Andele 16 State Com
 Well: #704H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #704H
 TVD Reference: KB = 25' @ 3379.0usft (HP 647)
 MD Reference: KB = 25' @ 3379.0usft (HP 647)
 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)	
4,824.0	5.70	132.60	4,793.9	-100.4	400.6	1.44	-1.12	7.75	-33.8	39.4	
5,011.0	6.50	131.00	4,979.8	-113.6	415.4	0.44	0.43	-0.86	-31.0	27.6	
5,199.0	5.30	124.50	5,166.8	-125.5	430.6	0.73	-0.64	-3.46	-28.1	14.9	
5,386.0	3.20	122.60	5,353.3	-133.2	442.1	1.13	-1.12	-1.02	-17.3	6.7	
5,574.0	6.10	107.30	5,540.6	-139.0	456.1	1.66	1.54	-8.14	-7.3	0.4	
5,762.0	8.30	104.90	5,727.2	-145.5	478.7	1.18	1.17	-1.28	-4.7	0.7	
5,948.0	8.40	104.30	5,911.2	-152.3	504.9	0.07	0.05	-0.32	-5.8	1.7	
6,136.0	8.00	102.50	6,097.3	-158.5	530.9	0.25	-0.21	-0.96	-6.6	3.1	
6,324.0	6.70	99.90	6,283.7	-163.2	554.5	0.71	-0.69	-1.38	-4.8	5.5	
6,511.0	6.60	101.60	6,469.5	-167.3	575.8	0.12	-0.05	0.91	-0.3	8.4	
6,699.0	5.50	110.00	6,656.4	-172.5	594.8	0.75	-0.59	4.47	7.4	8.5	
6,887.0	8.20	116.00	6,843.0	-181.5	615.4	1.48	1.44	3.19	11.7	4.6	
7,076.0	9.10	113.50	7,029.9	-193.4	641.2	0.52	0.48	-1.32	9.2	1.5	
7,264.0	8.60	112.70	7,215.7	-204.7	667.8	0.27	-0.27	-0.43	6.3	-1.2	
7,452.0	7.60	112.00	7,401.8	-214.8	692.3	0.53	-0.53	-0.37	5.8	-3.5	
7,640.0	6.40	112.10	7,588.4	-223.4	713.5	0.64	-0.64	0.05	9.0	-5.8	
7,827.0	6.20	111.00	7,774.2	-230.9	732.6	0.12	-0.11	-0.59	13.7	-7.6	
8,014.0	5.50	93.30	7,960.3	-235.1	751.0	1.03	-0.37	-9.47	11.5	-2.6	
8,201.0	4.90	86.80	8,146.5	-235.1	767.9	0.45	-0.32	-3.48	-2.0	-1.1	
8,388.0	3.90	81.60	8,333.0	-233.8	782.2	0.58	-0.53	-2.78	-16.2	-2.0	
8,576.0	2.70	98.40	8,520.7	-233.5	792.9	0.81	-0.64	8.94	-26.7	4.6	
8,760.0	2.20	90.10	8,704.5	-234.1	800.7	0.33	-0.27	-4.51	-34.9	0.1	
8,948.0	1.90	88.70	8,892.4	-234.1	807.4	0.16	-0.16	-0.74	-41.6	-0.9	
9,134.0	2.20	89.40	9,078.2	-234.0	814.1	0.16	0.16	0.38	-48.2	-0.3	
9,323.0	2.30	77.10	9,267.1	-233.1	821.4	0.26	0.05	-6.51	-54.4	-11.4	
9,510.0	1.90	78.10	9,454.0	-231.6	828.1	0.21	-0.21	0.53	-61.4	-10.4	
9,698.0	1.20	77.60	9,641.9	-230.5	833.0	0.37	-0.37	-0.27	-66.4	-10.9	



Midland PVA

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Andele 16 State Com
 Well: #704H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #704H
 TVD Reference: KB = 25' @ 3379.0usft (HP 647)
 MD Reference: KB = 25' @ 3379.0usft (HP 647)
 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)
9,886.0	1.10	341.60	9,829.9	-228.4	834.4	0.91	-0.05	-51.06	16.2	-66.9
10,073.0	0.80	342.50	10,016.9	-225.4	833.4	0.16	-0.16	0.48	12.0	-67.1
10,260.0	1.10	313.10	10,203.8	-223.0	831.7	0.30	0.16	-15.72	40.5	-53.2
10,448.0	0.80	313.80	10,391.8	-220.8	829.5	0.16	-0.16	0.37	36.7	-53.7
10,635.0	1.40	210.80	10,578.8	-221.9	827.4	0.94	0.32	-55.08	42.0	46.6
10,823.0	1.50	222.00	10,766.7	-225.7	824.5	0.16	0.05	5.96	45.6	38.0
11,009.0	1.70	220.00	10,952.7	-229.6	821.1	0.11	0.11	-1.08	39.0	39.5
11,198.0	1.50	219.70	11,141.6	-233.7	817.8	0.11	-0.11	-0.16	33.5	39.7
11,383.0	2.40	259.10	11,326.5	-236.3	812.4	0.85	0.49	21.30	45.3	10.9
11,571.0	2.80	263.50	11,514.3	-237.5	804.0	0.24	0.21	2.34	37.5	7.7
11,758.0	1.10	267.60	11,701.2	-238.1	797.6	0.91	-0.91	2.19	31.6	5.3
11,897.0	1.60	185.70	11,840.1	-240.1	796.1	1.30	0.36	-58.92	-2.9	30.7
12,042.0	2.30	183.90	11,985.1	-245.0	795.7	0.48	0.48	-1.24	-8.8	30.6
12,135.0	1.60	189.10	12,078.0	-248.2	795.4	0.78	-0.75	5.59	-9.2	31.4
12,182.0	4.90	0.10	12,125.0	-246.8	795.3	13.80	7.02	363.83	14.7	-29.2
12,229.0	10.70	6.80	12,171.5	-240.5	795.8	12.47	12.34	14.26	11.4	-30.4
12,276.0	16.20	358.50	12,217.2	-229.6	796.2	12.37	11.70	-17.66	15.5	-27.3
12,323.0	21.10	359.00	12,261.7	-214.5	795.8	10.43	10.43	1.06	15.3	-25.1
12,370.0	25.20	357.10	12,304.9	-196.1	795.2	8.87	8.72	-4.04	16.8	-21.3
12,416.0	29.80	359.60	12,345.7	-174.9	794.6	10.31	10.00	5.43	17.6	-18.4
12,463.0	35.20	3.40	12,385.3	-149.6	795.3	12.28	11.49	8.09	18.7	-16.5
12,510.0	40.70	6.00	12,422.4	-120.8	797.7	12.18	11.70	5.53	20.3	-15.6
12,557.0	44.10	6.30	12,457.1	-89.3	801.1	7.25	7.23	0.64	23.3	-14.8
12,604.0	50.90	5.50	12,488.8	-54.9	804.7	14.52	14.47	-1.70	26.7	-13.3
12,651.0	58.00	4.40	12,516.1	-16.8	808.0	15.23	15.11	-2.34	28.8	-11.1
12,697.0	64.60	3.10	12,538.2	23.4	810.6	14.56	14.35	-2.83	29.5	-8.0



Midland PVA

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Andele 16 State Com
 Well: #704H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #704H
 TVD Reference: KB = 25' @ 3379.0usft (HP 647)
 MD Reference: KB = 25' @ 3379.0usft (HP 647)
 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)
12,710.8	67.12	2.95	12,543.9	36.0	811.2	18.32	18.30	-1.11	29.3	-7.0
HL Crossing 12710.8' MD; 12543.9' TVD; 36.0'; 811.2'; 67.12										
12,744.0	73.20	2.60	12,555.1	67.2	812.8	18.32	18.30	-1.04	27.9	-4.5
12,791.0	80.40	3.40	12,565.9	112.8	815.2	15.41	15.32	1.70	23.0	-2.0
12,838.0	84.90	2.50	12,571.9	159.4	817.5	9.76	9.57	-1.91	16.0	-0.1
12,884.0	90.10	0.10	12,573.9	205.3	818.6	12.45	11.30	-5.22	8.1	2.1
12,977.0	89.60	359.70	12,574.1	298.3	818.4	0.69	-0.54	-0.43	-3.4	5.8
13,071.0	89.80	359.10	12,574.6	392.3	817.4	0.67	0.21	-0.64	-4.2	6.8
13,165.0	91.10	359.10	12,573.9	486.3	816.0	1.38	1.38	0.00	-4.0	7.5
13,259.0	92.10	1.20	12,571.2	580.2	816.2	2.47	1.06	2.23	-5.7	6.5
13,353.0	90.60	1.70	12,569.0	674.2	818.6	1.68	-1.60	0.53	-7.0	3.4
13,447.0	90.90	1.80	12,567.8	768.1	821.5	0.34	0.32	0.11	-7.3	-0.2
13,538.0	90.40	1.60	12,566.8	859.1	824.2	0.59	-0.55	-0.22	-7.4	-3.6
13,631.0	90.50	1.70	12,566.0	952.0	826.8	0.15	0.11	0.11	-7.2	-7.0
13,725.0	90.20	1.90	12,565.5	1,046.0	829.8	0.38	-0.32	0.21	-6.9	-10.7
13,819.0	89.20	359.70	12,566.0	1,140.0	831.1	2.57	-1.06	-2.34	-5.5	-12.8
13,914.0	88.60	359.20	12,567.8	1,234.9	830.2	0.82	-0.63	-0.53	-2.7	-12.6
14,007.0	89.10	359.80	12,569.6	1,327.9	829.4	0.84	0.54	0.65	0.1	-12.5
14,101.0	89.90	359.30	12,570.5	1,421.9	828.6	1.00	0.85	-0.53	1.8	-12.5
14,194.0	90.60	358.80	12,570.1	1,514.9	827.1	0.92	0.75	-0.54	2.3	-11.7
14,287.0	90.30	359.00	12,569.3	1,607.9	825.3	0.39	-0.32	0.22	2.5	-10.7
14,381.0	90.50	358.60	12,568.7	1,701.9	823.3	0.48	0.21	-0.43	2.8	-9.4
14,475.0	90.90	359.10	12,567.5	1,795.8	821.5	0.68	0.43	0.53	2.6	-8.3
14,568.0	90.40	359.00	12,566.5	1,888.8	819.9	0.55	-0.54	-0.11	2.4	-7.5
14,662.0	90.90	358.80	12,565.4	1,982.8	818.1	0.57	0.53	-0.21	2.3	-6.4
14,755.0	91.20	358.10	12,563.7	2,075.7	815.6	0.82	0.32	-0.75	1.5	-4.6
14,849.0	90.40	357.60	12,562.4	2,169.7	812.1	1.00	-0.85	-0.53	1.1	-1.8



Midland PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Andele 16 State Com
Well: #704H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #704H
TVD Reference: KB = 25' @ 3379.0usft (HP 647)
MD Reference: KB = 25' @ 3379.0usft (HP 647)
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)
14,943.0	91.30	357.50	12,561.0	2,263.6	808.1	0.96	0.96	-0.11	0.6	1.4
15,037.0	93.40	357.90	12,557.1	2,357.4	804.3	2.27	2.23	0.43	-2.3	4.5
15,131.0	92.60	357.60	12,552.2	2,451.2	800.6	0.91	-0.85	-0.32	-6.3	7.4
15,225.0	93.40	359.30	12,547.3	2,545.0	798.1	2.00	0.85	1.81	-10.3	9.2
15,319.0	91.70	0.20	12,543.1	2,638.9	797.6	2.05	-1.81	0.96	-13.5	8.9
15,413.0	92.20	0.70	12,539.9	2,732.9	798.4	0.75	0.53	0.53	-15.8	7.4
15,507.0	90.90	2.20	12,537.4	2,826.8	800.8	2.11	-1.38	1.60	-17.4	4.3
15,601.0	89.60	1.70	12,537.0	2,920.8	804.0	1.48	-1.38	-0.53	-16.9	0.4
15,694.0	89.00	1.90	12,538.1	3,013.7	806.9	0.68	-0.65	0.22	-14.9	-3.3
15,787.0	90.20	1.70	12,538.7	3,106.6	809.8	1.31	1.29	-0.22	-13.0	-6.9
15,881.0	89.00	1.30	12,539.4	3,200.6	812.3	1.35	-1.28	-0.43	-11.1	-10.1
15,975.0	89.00	1.40	12,541.0	3,294.6	814.5	0.11	0.00	0.11	-8.2	-13.1
16,069.0	89.50	0.10	12,542.3	3,388.6	815.7	1.48	0.53	-1.38	-5.7	-15.0
16,163.0	92.20	359.60	12,540.9	3,482.5	815.5	2.92	2.87	-0.53	-5.9	-15.5
16,256.0	92.00	2.50	12,537.5	3,575.4	817.2	3.12	-0.22	3.12	-8.0	-18.0
16,350.0	88.40	358.90	12,537.1	3,669.4	818.3	5.42	-3.83	-3.83	-7.1	-19.9
16,444.0	88.00	358.90	12,540.1	3,763.3	816.5	0.43	-0.43	0.00	-2.9	-18.8
16,537.0	93.10	359.20	12,539.2	3,856.3	815.0	5.49	5.48	0.32	-2.6	-18.0
16,631.0	91.00	359.90	12,535.8	3,950.2	814.2	2.35	-2.23	0.74	-4.7	-18.0
16,725.0	91.80	1.20	12,533.5	4,044.2	815.1	1.62	0.85	1.38	-5.7	-19.6
16,839.0	90.20	358.90	12,531.6	4,158.2	815.2	2.46	-1.40	-2.02	-6.2	-20.6
16,933.0	90.50	358.60	12,531.0	4,252.1	813.2	0.45	0.32	-0.32	-5.6	-19.3
17,026.0	89.60	357.80	12,530.9	4,345.1	810.3	1.29	-0.97	-0.86	-4.4	-17.1
17,120.0	87.90	356.80	12,532.9	4,439.0	805.8	2.10	-1.81	-1.06	-1.1	-13.4
17,214.0	88.70	356.90	12,535.7	4,532.8	800.7	0.86	0.85	0.11	2.9	-9.0
17,307.0	89.70	356.40	12,537.0	4,625.6	795.2	1.20	1.08	-0.54	5.4	-4.3

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Andele 16 State Com
Well: #704H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #704H
TVD Reference: KB = 25' @ 3379.0usft (HP 647)
MD Reference: KB = 25' @ 3379.0usft (HP 647)
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)
17,327.4	90.37	356.81	12,537.0	4,646.0	794.0	3.84	3.27	2.00	5.7	-3.2
HL Crossing 17327.4' MD; 12537.0' TVD; 4646.0'; 794.0'; 90.37										
17,362.0	91.50	357.50	12,536.5	4,680.5	792.3	3.84	3.27	2.00	5.6	-1.8
Last MWD Survey (MD = 17362.0)										
17,427.0	91.50	357.50	12,534.8	4,745.4	789.5	0.00	0.00	0.00	4.8	0.5
Projection to Bit (MD = 17427.0)										

Survey Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
12,710.8	12,543.9	36.0	811.2	HL Crossing 12710.8' MD; 12543.9' TVD; 36.0'; 811.2'; 67.12
17,327.4	12,537.0	4,646.0	794.0	HL Crossing 17327.4' MD; 12537.0' TVD; 4646.0'; 794.0'; 90.37
17,362.0	12,536.5	4,680.5	792.3	Last MWD Survey (MD = 17362.0)
17,427.0	12,534.8	4,745.4	789.5	Projection to Bit (MD = 17427.0)

Checked By: _____ Approved By: _____ Date: _____