

HOBBS OCD

OCT 10 2017

RECEIVED



Lea County, NM (NAD 27 NME)

Endurance 36 State Com

H&P 610

Plan #2

PROJECT DETAILS: Lea County, NM (NAD 27 NME)

Geodetic System: US State Plane 1927 (Exact solution)
 Datum: NAD 1927 (NADCON CONUS)
 Ellipsoid: Clarke 1866
 Zone: New Mexico East 3001
 System Datum: Mean Sea Level



Azimuths to Grid North
 True North: -0.43°
 Magnetic North: 6.51°
 Magnetic Field
 Strength: 47835.6 nT
 Dip Angle: 59.87°
 Date: 3/22/2017
 Model: IGRF2015

To convert a Magnetic Direction to a Grid Direction, Add 6.51°
 To convert a Magnetic Direction to a True Direction, Add 6.94° East
 To convert a True Direction to a Grid Direction, Subtract 0.43°

WELL DETAILS: #708Y

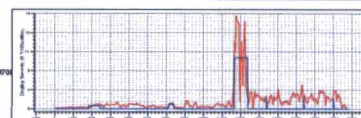
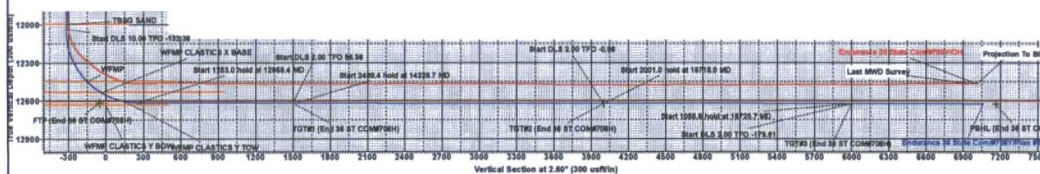
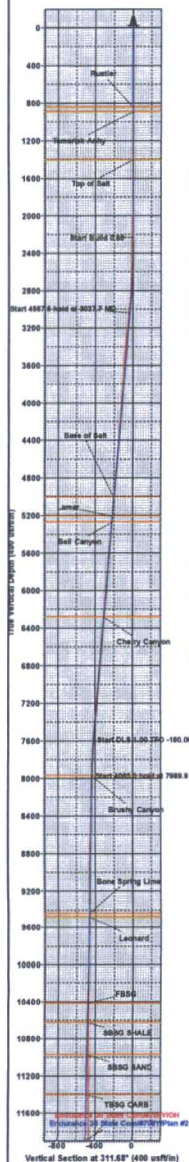
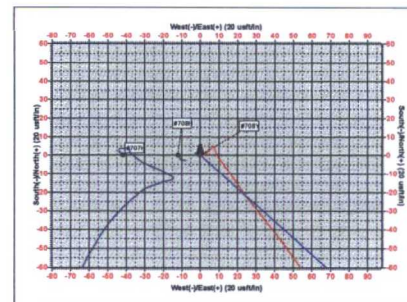
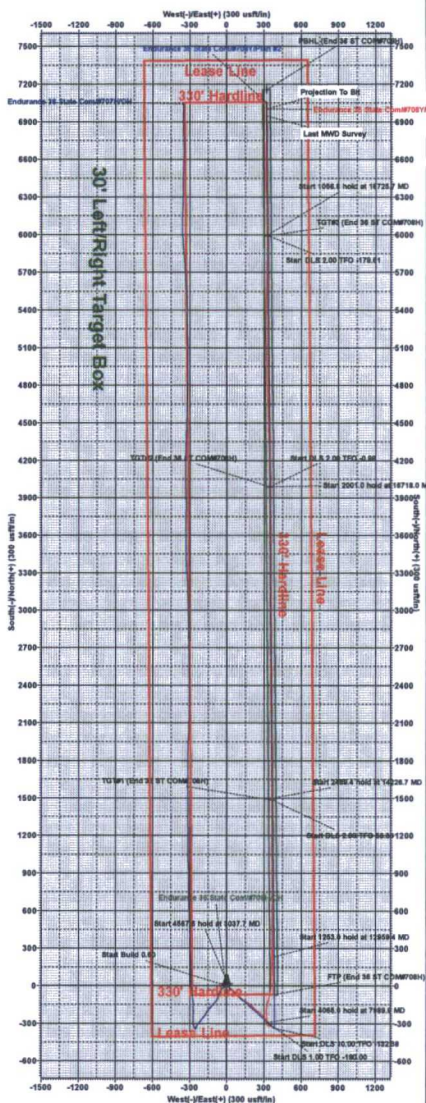
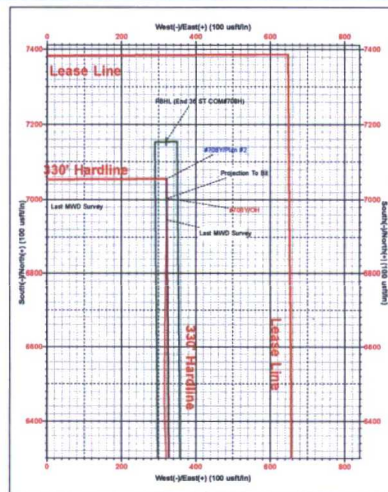
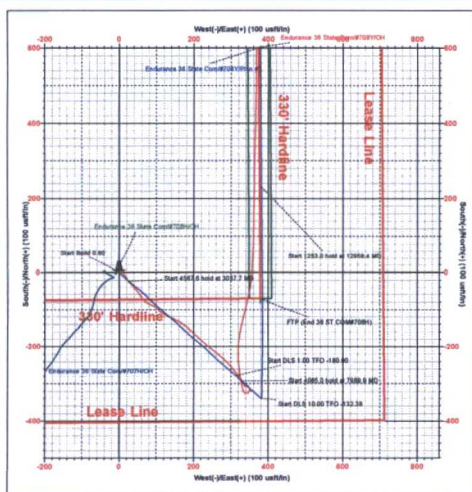
Ground Level: 3348.0
 KB = 25 @ 3373.0 (H&P 610)
 +N-S +E-W Northing Easting Longitude Slot
 0.0 0.0 365121.00 751010.00 32° 0' 4.490 N 103° 31' 24.999 W

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VFace	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	2230.0	0.00	0.00	2230.0	0.0	0.0	0.00	0.00	0.0	
3	3037.7	4.85	131.68	3036.7	-22.7	25.5	0.60	131.68	-21.5	
4	7605.3	4.85	131.68	7588.0	-279.3	313.7	0.00	0.00	-264.8	
5	7989.9	1.00	131.68	7972.0	-292.3	328.3	1.00	-180.00	-277.1	
6	12054.9	1.00	131.68	12036.4	-339.5	381.3	0.00	0.00	-321.8	
7	12959.4	89.77	359.29	12616.0	231.2	381.7	10.00	-132.38	248.3	
8	14212.4	89.77	359.29	12621.0	1484.1	366.3	0.00	0.00	1499.2	TGT#1 (End 36 ST COM#708H)
9	14226.7	89.93	359.53	12621.0	1498.4	366.2	2.00	56.36	1513.5	TGT#2 (End 36 ST COM#708H)
10	16716.1	89.93	359.53	12624.0	3987.7	345.9	0.00	0.00	3999.3	TGT#3 (End 36 ST COM#708H)
11	16718.0	89.97	359.53	12624.0	3989.7	345.8	2.00	-0.98	4001.3	
12	18719.0	89.97	359.53	12625.0	5990.6	329.5	0.00	0.00	5999.4	
13	18725.7	89.84	359.53	12625.0	5997.3	329.4	2.00	-179.61	6006.0	
14	19782.5	89.84	359.53	12628.0	7054.0	320.8	0.00	0.00	7061.3	PBHL (End 36 ST COM#708H)

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N-S	+E-W	Northing	Easting	Shape
FTP (End 36 ST COM#708H)	12618.0	-71.0	379.0	365050.00	751389.00	Point
TGT#1 (End 36 ST COM#708H)	12621.0	1484.1	366.3	366806.00	751376.30	Point
TGT#2 (End 36 ST COM#708H)	12624.0	3987.7	345.9	369108.70	751355.96	Point
TGT#3 (End 36 ST COM#708H)	12625.0	5990.6	329.5	371111.60	751339.50	Point
PBHL (End 36 ST COM#708H)	12628.0	7154.0	320.0	372275.00	751330.00	Rectangle (Sides: L0.0 W60.0)



Lea County, NM (NAD 27 NME)
 Endurance 36 State Com
 H&P 610
 Plan #2
 Date: 3/22/2017
 Model: IGRF2015



EOG Resources - Midland

Lea County, NM (NAD 27 NME)

Endurance 36 State Com

08Y

OH

Design: OH

PVA

17 May, 2017

HOBBS OCD
OCT 1 0 2017
RECEIVED



EOG Resources, Inc.

PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #708Y
Project:	Lea County, NM (NAD 27 NME)	TVD Reference:	KB = 25 @ 3373.0usft (H&P 610)
Site:	Endurance 36 State Com	MD Reference:	KB = 25 @ 3373.0usft (H&P 610)
Well:	#708Y 608Y	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.1 Single User Db

Project	Lea County, NM (NAD 27 NME)		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	Endurance 36 State Com		
Site Position:		Northing:	365,036.00 usft
From:	Map	Easting:	749,506.00 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 0' 3.760 N
		Longitude:	103° 31' 42.470 W
		Grid Convergence:	0.43 °

Well	#708Y					
Well Position	+N/-S	0.0 usft	Northing:	365,121.00 usft	Latitude:	32° 0' 4.490 N
	+E/-W	0.0 usft	Easting:	751,010.00 usft	Longitude:	103° 31' 24.999 W
Position Uncertainty	0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	3,348.0 usft	

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	3/22/2017	6.94	59.87	47,836

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	2.56

Survey Program		Date 5/17/2017		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
247.0	19,585.0	Intrepid corrected Per geos MWD #1 (OH)	MWD	MWD - Standard



EOG Resources, Inc.

PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Endurance 36 State Com
Well: #708Y **6084**
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #708Y
TVD Reference: KB = 25 @ 3373.0usft (H&P 610)
MD Reference: KB = 25 @ 3373.0usft (H&P 610)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

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)
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0
247.0	0.10	172.90	247.0	-0.2	0.0	0.04	0.04	0.00	-0.2	0.0
431.0	0.10	102.00	431.0	-0.4	0.2	0.06	0.00	-38.53	-0.3	-0.4
621.0	0.30	87.10	621.0	-0.4	0.9	0.11	0.11	-7.84	-0.8	-0.5
806.0	0.20	79.60	806.0	-0.3	1.7	0.06	-0.05	-4.05	-1.6	-0.6
916.0	0.30	66.50	916.0	-0.2	2.1	0.10	0.09	-11.91	-1.9	-1.0
1,062.0	0.70	50.50	1,062.0	0.5	3.2	0.29	0.27	-10.96	-2.8	-1.6
1,248.0	0.70	38.50	1,248.0	2.1	4.7	0.08	0.00	-6.45	-4.6	-2.4
1,434.0	0.50	53.60	1,434.0	3.5	6.1	0.14	-0.11	8.12	-7.0	-0.8
1,622.0	0.30	22.20	1,622.0	4.5	6.9	0.15	-0.11	-16.70	-6.8	-4.7
1,808.0	0.30	139.80	1,808.0	4.5	7.4	0.28	0.00	63.23	-1.3	8.6
1,994.0	0.40	174.10	1,994.0	3.5	7.8	0.12	0.05	18.44	2.7	8.1
2,179.0	0.70	171.70	2,178.9	1.8	8.1	0.16	0.16	-1.30	0.6	8.2
2,366.0	0.80	146.10	2,365.9	-0.5	8.9	0.19	0.05	-13.69	-4.4	6.9
2,552.0	1.80	143.10	2,551.9	-3.9	11.4	0.54	0.54	-1.61	-4.6	5.7
2,737.0	3.20	144.30	2,736.7	-10.4	16.2	0.76	0.76	0.65	-4.7	4.1
2,924.0	4.70	144.80	2,923.3	-20.9	23.6	0.80	0.80	0.27	-6.1	1.6
3,111.0	6.00	139.90	3,109.4	-34.6	34.4	0.74	0.70	-2.62	-8.7	-1.8
3,298.0	6.20	144.10	3,295.4	-50.3	46.6	0.26	0.11	2.25	-13.2	-3.8
3,376.0	5.53	144.17	3,373.0	-56.7	51.2	0.86	-0.86	0.09	-14.8	-5.2
WFMP CLASTICS Y BOW										
3,485.0	4.60	144.30	3,481.5	-64.5	56.9	0.86	-0.86	0.12	-15.4	-7.2
3,671.0	3.60	139.60	3,667.1	-75.0	65.0	0.57	-0.54	-2.53	-12.5	-11.2
3,859.0	4.00	119.30	3,854.7	-82.8	74.6	0.74	0.21	-10.80	-4.4	-13.5
4,046.0	5.00	109.30	4,041.1	-88.6	87.9	0.68	0.53	-5.35	-2.0	-9.2
4,232.0	4.20	135.10	4,226.5	-96.1	100.4	1.18	-0.43	13.87	-4.2	-4.8
4,419.0	3.90	134.50	4,413.0	-105.5	109.8	0.16	-0.16	-0.32	-1.6	-5.7



EOG Resources, Inc.

PVA

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 27 NME)
 Site: Endurance 36 State Com
 Well: ~~#708Y~~ 608Y
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #708Y
 TVD Reference: KB = 25 @ 3373.0usft (H&P 610)
 MD Reference: KB = 25 @ 3373.0usft (H&P 610)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.1 Single User Db

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)
4,606.0	4.70	120.90	4,599.5	-113.8	120.9	0.69	0.43	-7.27	1.5	-4.4
4,792.0	4.70	114.60	4,784.9	-120.9	134.3	0.28	0.00	-3.39	1.8	-0.5
4,980.0	6.30	116.20	4,972.0	-128.7	150.6	0.85	0.85	0.85	-0.9	3.9
5,168.0	4.90	126.30	5,159.1	-138.0	166.3	0.91	-0.74	5.37	-2.6	7.3
5,355.0	3.60	121.60	5,345.6	-145.8	177.8	0.72	-0.70	-2.51	-1.5	9.2
5,542.0	5.10	133.10	5,532.1	-154.6	188.8	0.92	0.80	6.15	2.1	10.1
5,728.0	4.10	132.50	5,717.5	-164.7	199.8	0.54	-0.54	-0.32	2.8	9.8
5,915.0	5.00	131.00	5,903.9	-174.6	210.9	0.49	0.48	-0.80	3.5	9.9
6,100.0	5.00	135.00	6,088.2	-185.6	222.6	0.19	0.00	2.16	3.7	9.3
6,286.0	4.30	134.60	6,273.5	-196.2	233.3	0.38	-0.38	-0.22	4.3	8.4
6,471.0	4.00	125.00	6,458.1	-204.8	243.6	0.41	-0.16	-5.19	5.0	9.7
6,659.0	5.10	129.60	6,645.5	-213.8	255.4	0.62	0.59	2.45	6.8	10.4
6,844.0	4.70	127.40	6,829.8	-223.7	267.7	0.24	-0.22	-1.19	6.2	11.5
7,031.0	5.20	130.90	7,016.1	-233.9	280.2	0.31	0.27	1.87	6.5	11.8
7,217.0	5.30	138.00	7,201.3	-245.8	292.3	0.35	0.05	3.82	6.6	10.2
7,403.0	5.20	141.40	7,386.5	-258.8	303.3	0.18	-0.05	1.83	5.6	7.6
7,591.0	4.70	144.60	7,573.8	-271.7	313.1	0.30	-0.27	1.70	5.3	4.2
7,776.0	3.00	140.10	7,758.4	-281.6	320.6	0.93	-0.92	-2.43	5.5	2.1
7,963.0	1.80	138.70	7,945.2	-287.5	325.7	0.64	-0.64	-0.75	4.8	1.3
8,150.0	1.50	145.50	8,132.2	-291.8	329.0	0.19	-0.16	3.64	2.8	0.2
8,336.0	1.70	154.10	8,318.1	-296.3	331.6	0.17	0.11	4.62	0.6	-1.1
8,523.0	1.90	151.60	8,505.0	-301.5	334.3	0.11	0.11	-1.34	-2.1	-2.3
8,710.0	2.10	149.90	8,691.9	-307.2	337.5	0.11	0.11	-0.91	-5.5	-3.4
8,898.0	1.60	46.10	8,879.8	-308.3	341.1	1.56	-0.27	-55.21	3.1	-4.6
9,085.0	0.80	49.40	9,066.8	-305.7	344.0	0.43	-0.43	1.76	-0.6	-1.4
9,271.0	0.40	43.30	9,252.8	-304.4	345.4	0.22	-0.22	-3.28	-2.3	1.7
9,459.0	1.90	156.20	9,440.7	-306.7	347.1	1.11	0.80	60.05	2.6	0.7



EOG Resources, Inc.

PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Endurance 36 State Com
Well: #708Y **608Y**
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #708Y
TVD Reference: KB = 25 @ 3373.0usft (H&P 610)
MD Reference: KB = 25 @ 3373.0usft (H&P 610)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

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)
9,645.0	1.80	156.70	9,626.6	-312.2	349.5	0.05	-0.05	0.27	-0.5	-0.6
9,824.0	1.10	164.80	9,805.6	-316.5	351.1	0.41	-0.39	4.53	-2.5	-1.9
10,010.0	0.60	156.40	9,991.6	-319.1	351.9	0.28	-0.27	-4.52	-2.0	-3.8
10,196.0	0.20	311.10	10,177.6	-319.8	352.1	0.42	-0.22	83.17	-2.6	4.7
10,383.0	0.40	87.50	10,364.6	-319.5	352.5	0.30	0.11	72.94	7.0	0.9
10,579.0	0.20	43.90	10,560.6	-319.3	353.4	0.15	-0.10	-22.24	3.7	8.4
10,768.0	0.80	186.20	10,749.6	-320.3	353.5	0.51	0.32	75.29	3.0	-11.4
10,955.0	1.60	286.70	10,936.5	-320.9	350.8	1.02	0.43	53.74	-17.1	-1.0
11,143.0	0.70	268.20	11,124.5	-320.2	347.2	0.51	-0.48	-9.84	-21.9	-9.5
11,329.0	1.00	159.90	11,310.5	-321.7	346.6	0.75	0.16	-58.23	17.5	-20.5
11,517.0	1.10	174.30	11,498.4	-325.1	347.4	0.15	0.05	7.66	10.9	-26.0
11,704.0	2.10	283.80	11,685.4	-326.0	344.2	1.43	0.53	58.56	-33.8	-1.4
11,887.0	1.70	275.70	11,868.3	-325.0	338.2	0.26	-0.22	-4.43	-41.9	-8.5
11,943.0	1.70	290.00	11,924.3	-324.6	336.6	0.76	0.00	25.54	-45.2	2.0
12,036.0	5.70	332.80	12,017.1	-320.0	333.2	4.95	4.30	46.02	-38.9	33.9
12,083.0	11.60	346.30	12,063.5	-313.3	331.0	13.19	12.55	28.72	-36.7	43.4
12,129.0	16.90	347.10	12,108.1	-302.3	328.5	11.53	11.52	1.74	-43.9	45.5
12,176.0	25.30	351.70	12,151.9	-285.7	325.5	18.20	17.87	9.79	-49.3	51.6
12,223.0	33.70	352.50	12,192.8	-262.8	322.3	17.89	17.87	1.70	-60.3	55.3
12,269.0	41.50	354.70	12,229.2	-234.9	319.2	17.20	16.96	4.78	-72.1	60.8
12,316.0	46.90	3.30	12,262.9	-202.2	318.8	17.15	11.49	18.30	-79.5	71.7
12,363.0	51.80	11.30	12,293.5	-166.9	323.4	16.58	10.43	17.02	-88.1	78.0
12,409.0	53.60	13.50	12,321.4	-131.2	331.3	5.46	3.91	4.78	-102.1	73.9
12,455.0	54.20	13.80	12,348.5	-95.1	340.0	1.41	1.30	0.65	-114.8	65.3
12,503.0	58.80	11.30	12,375.0	-56.0	348.7	10.52	9.58	-5.21	-126.9	52.5
12,550.0	63.00	6.10	12,397.9	-15.4	354.9	13.16	8.94	-11.06	-137.5	38.1
12,597.0	65.90	2.50	12,418.2	26.8	358.0	9.26	6.17	-7.66	-144.2	29.2



EOG Resources, Inc.

PVA

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 27 NME)
 Site: Endurance 36 State Com
 Well: ~~#708Y~~ 6084
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #708Y
 TVD Reference: KB = 25 @ 3373.0usft (H&P 610)
 MD Reference: KB = 25 @ 3373.0usft (H&P 610)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.1 Single User Db

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)
12,644.0	67.90	1.80	12,436.6	70.0	359.7	4.47	4.26	-1.49	-146.6	25.9
12,685.9	71.82	1.09	12,451.0	109.3	360.6	9.50	9.36	-1.71	-146.4	23.6
WFMP										
12,691.0	72.30	1.00	12,452.6	114.2	360.7	9.50	9.36	-1.66	-146.3	23.4
12,738.0	79.60	1.00	12,464.0	159.8	361.5	15.53	15.53	0.00	-145.6	21.7
12,780.0	86.80	0.30	12,469.0	201.4	362.0	17.22	17.14	-1.67	-145.9	20.3
12,874.0	91.00	0.80	12,470.8	295.4	362.9	4.50	4.47	0.53	-145.5	18.0
12,968.0	92.80	1.80	12,467.6	389.3	365.0	2.19	1.91	1.06	-149.0	14.8
13,060.0	92.10	1.10	12,463.7	481.2	367.4	1.08	-0.76	-0.76	-153.3	11.3
13,154.0	90.00	358.90	12,462.0	575.2	367.4	3.24	-2.23	-2.34	-155.4	10.1
13,248.0	87.30	359.70	12,464.2	669.1	366.2	3.00	-2.87	0.85	-153.6	10.1
13,342.0	87.20	359.70	12,468.7	763.0	365.7	0.11	-0.11	0.00	-149.4	9.5
13,436.0	90.10	0.40	12,470.9	857.0	365.8	3.17	3.09	0.74	-147.6	8.2
13,529.0	92.10	0.60	12,469.1	949.9	366.6	2.16	2.15	0.22	-149.7	6.3
13,623.0	89.70	359.70	12,467.7	1,043.9	366.9	2.73	-2.55	-0.96	-151.6	4.9
13,716.0	87.80	358.50	12,469.7	1,136.9	365.4	2.42	-2.04	-1.29	-149.9	5.2
13,810.0	89.50	359.70	12,471.9	1,230.8	363.9	2.21	1.81	1.28	-148.1	5.5
13,904.0	90.90	0.20	12,471.6	1,324.8	363.8	1.58	1.49	0.53	-148.8	4.4
13,997.0	89.10	359.80	12,471.6	1,417.8	363.8	1.98	-1.94	-0.43	-149.2	3.3
14,091.0	90.10	0.40	12,472.2	1,511.8	364.0	1.24	1.06	0.64	-148.8	2.0
14,185.0	89.80	358.20	12,472.3	1,605.8	362.9	2.36	-0.32	-2.34	-148.8	2.4
14,279.0	90.50	358.50	12,472.1	1,699.8	360.1	0.81	0.74	0.32	-149.2	4.4
14,373.0	91.20	359.20	12,470.7	1,793.8	358.3	1.05	0.74	0.74	-150.7	5.5
14,466.0	89.10	358.70	12,470.4	1,886.7	356.6	2.32	-2.26	-0.54	-151.1	6.4
14,561.0	90.20	0.90	12,471.0	1,981.7	356.2	2.59	1.16	2.32	-150.6	6.0
14,655.0	90.50	0.10	12,470.4	2,075.7	357.0	0.91	0.32	-0.85	-151.3	4.4
14,749.0	88.90	358.60	12,470.9	2,169.7	356.0	2.33	-1.70	-1.60	-150.9	4.7



EOG Resources, Inc.

PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Endurance 36 State Corn
Well: #708Y **608Y**
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #708Y
TVD Reference: KB = 25 @ 3373.0usft (H&P 610)
MD Reference: KB = 25 @ 3373.0usft (H&P 610)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

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)
14,843.0	90.40	358.40	12,471.5	2,263.7	353.5	1.61	1.60	-0.21	-150.4	6.4
14,936.0	92.20	359.00	12,469.4	2,356.6	351.4	2.04	1.94	0.65	-152.7	7.8
15,029.0	88.70	359.30	12,468.7	2,449.6	350.0	3.78	-3.76	0.32	-153.5	8.4
15,122.0	89.80	0.80	12,469.9	2,542.6	350.1	2.00	1.18	1.61	-152.4	7.5
15,216.0	90.60	0.90	12,469.6	2,636.6	351.5	0.86	0.85	0.11	-152.8	5.4
15,310.0	90.70	0.40	12,468.5	2,730.5	352.6	0.54	0.11	-0.53	-154.0	3.5
15,403.0	90.50	359.20	12,467.5	2,823.5	352.2	1.31	-0.22	-1.29	-155.1	3.1
15,517.0	89.60	358.40	12,467.4	2,937.5	349.9	1.06	-0.79	-0.70	-155.3	4.6
15,610.0	90.30	359.70	12,467.5	3,030.5	348.3	1.59	0.75	1.40	-155.4	5.3
15,703.0	89.80	359.00	12,467.4	3,123.5	347.3	0.92	-0.54	-0.75	-155.6	5.6
15,796.0	89.60	359.60	12,467.9	3,216.5	346.1	0.68	-0.22	0.65	-155.2	6.0
15,889.0	88.30	1.10	12,469.6	3,309.5	346.7	2.13	-1.40	1.61	-153.6	4.7
15,983.0	89.60	3.40	12,471.3	3,403.4	350.4	2.81	1.38	2.45	-152.0	0.2
16,077.0	87.30	1.70	12,473.9	3,497.2	354.6	3.04	-2.45	-1.81	-149.5	-4.7
16,170.0	88.10	359.80	12,477.6	3,590.1	355.8	2.22	0.86	-2.04	-145.9	-6.7
16,263.0	89.10	357.50	12,479.9	3,683.1	353.6	2.70	1.08	-2.47	-143.8	-5.3
16,355.0	91.10	359.10	12,479.7	3,775.0	350.9	2.78	2.17	1.74	-144.0	-3.3
16,448.0	89.90	358.70	12,478.9	3,868.0	349.1	1.36	-1.29	-0.43	-145.0	-2.2
16,541.0	91.20	0.60	12,478.0	3,961.0	348.5	2.48	1.40	2.04	-146.0	-2.4
16,634.0	87.50	358.40	12,479.1	4,054.0	347.7	4.63	-3.98	-2.37	-145.0	-2.4
16,728.0	88.60	358.20	12,482.3	4,147.9	344.9	1.19	1.17	-0.21	-141.8	-0.4
16,820.0	91.00	358.20	12,482.6	4,239.8	342.0	2.61	2.61	0.00	-141.5	1.8
16,914.0	90.10	357.50	12,481.7	4,333.7	338.5	1.21	-0.96	-0.74	-142.5	4.5
17,007.0	91.00	357.80	12,480.8	4,426.7	334.7	1.02	0.97	0.32	-143.4	7.6
17,100.0	92.90	358.70	12,477.6	4,519.6	331.8	2.26	2.04	0.97	-146.6	9.7
17,193.0	90.90	358.50	12,474.5	4,612.5	329.6	2.16	-2.15	-0.22	-149.8	11.2
17,287.0	88.20	357.80	12,475.3	4,706.4	326.5	2.97	-2.87	-0.74	-149.1	13.4



EOG Resources, Inc.

PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Endurance 36 State Corn
Well: #708Y 6084
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #708Y
TVD Reference: KB = 25 @ 3373.0usft (H&P 610)
MD Reference: KB = 25 @ 3373.0usft (H&P 610)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

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)
17,380.0	89.00	359.00	12,477.6	4,799.3	323.9	1.55	0.86	1.29	-146.8	15.3
17,474.0	90.90	359.60	12,477.6	4,893.3	322.8	2.12	2.02	0.64	-146.8	15.7
17,566.0	89.40	358.80	12,477.4	4,985.3	321.5	1.85	-1.63	-0.87	-147.1	16.2
17,660.0	89.70	358.00	12,478.1	5,079.3	318.9	0.91	0.32	-0.85	-146.4	18.0
17,754.0	91.60	358.70	12,477.1	5,173.2	316.2	2.15	2.02	0.74	-147.5	20.0
17,847.0	88.30	358.20	12,477.2	5,266.2	313.7	3.59	-3.55	-0.54	-147.5	21.8
17,940.0	89.60	0.70	12,478.9	5,359.2	312.8	3.03	1.40	2.69	-145.8	21.9
18,034.0	90.90	3.70	12,478.4	5,453.1	316.4	3.48	1.38	3.19	-146.3	17.5
18,127.0	90.30	1.10	12,477.5	5,546.0	320.3	2.87	-0.65	-2.80	-147.3	12.9
18,220.0	90.80	1.40	12,476.6	5,638.9	322.3	0.63	0.54	0.32	-148.2	10.1
18,314.0	88.70	0.50	12,477.0	5,732.9	323.9	2.43	-2.23	-0.96	-147.9	7.7
18,407.0	90.60	1.20	12,477.6	5,825.9	325.2	2.18	2.04	0.75	-147.4	5.6
18,500.0	89.20	0.70	12,477.7	5,918.9	326.8	1.60	-1.51	-0.54	-147.2	3.3
18,594.0	90.50	1.50	12,478.0	6,012.9	328.6	1.62	1.38	0.85	-147.1	0.7
18,688.0	90.60	359.70	12,477.1	6,106.9	329.6	1.92	0.11	-1.91	-148.3	-1.0
18,782.0	89.10	356.80	12,477.3	6,200.8	326.7	3.47	-1.60	-3.09	-148.3	1.1
18,875.0	92.30	356.40	12,476.2	6,293.6	321.2	3.47	3.44	-0.43	-149.7	5.8
18,972.0	92.00	357.70	12,472.5	6,390.4	316.2	1.37	-0.31	1.34	-153.6	10.0
19,062.0	91.80	0.20	12,469.5	6,480.4	314.5	2.79	-0.22	2.78	-156.8	11.0
19,155.0	89.80	0.30	12,468.3	6,573.3	315.0	2.15	-2.15	0.11	-158.4	9.8
19,248.0	90.20	1.00	12,468.3	6,666.3	316.0	0.87	0.43	0.75	-158.7	8.0
19,342.0	90.30	1.10	12,467.8	6,760.3	317.7	0.15	0.11	0.11	-159.3	5.5
19,435.0	89.80	1.70	12,467.8	6,853.3	320.0	0.84	-0.54	0.65	-159.7	2.5
19,528.0	90.40	1.60	12,467.6	6,946.2	322.7	0.65	0.65	-0.11	-160.1	-1.0
Last MWD Survey										
19,585.0	90.40	1.60	12,467.2	7,003.2	324.3	0.00	0.00	0.00	-160.7	-3.0
Projection To Bit										



EOG Resources, Inc.

PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Endurance 36 State Com
Well: #Z08Y **6084**
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #708Y
TVD Reference: KB = 25 @ 3373.0usft (H&P 610)
MD Reference: KB = 25 @ 3373.0usft (H&P 610)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
12,685.9	12,451.0	WFMP			
3,376.0	3,373.0	WFMP CLASTICS Y BOW			

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
19,528.0	12,467.6	6,946.2	322.7	Last MWD Survey
19,585.0	12,467.2	7,003.2	324.3	Projection To Bit

Checked By: _____ Approved By: _____ Date: _____