

HOBBS OCD

OCT 10 2017

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Lea County, NM (NAD 27 NME)

Endurance 36 State Com

#702H

H&P 659

Plan #3

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: 6.70°
Magnetic Field
Strength: 48016.0anT
Dip Angle: 59.89°
Date: 6/23/2015
Model: IGRF2015

To convert a Magnetic Direction to a Grid Direction, Add 6.70°
To convert a Magnetic Direction to a True Direction, Add 7.13° East
To convert a True Direction to a Grid Direction, Subtract 0.43°

WELL DETAILS: #702H

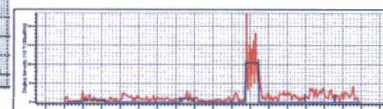
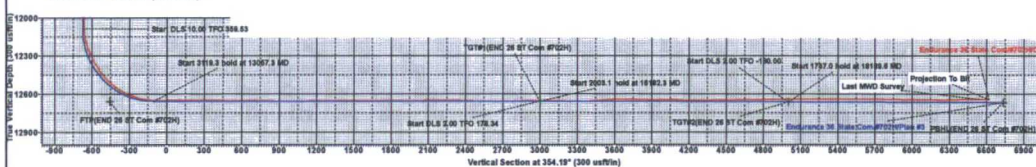
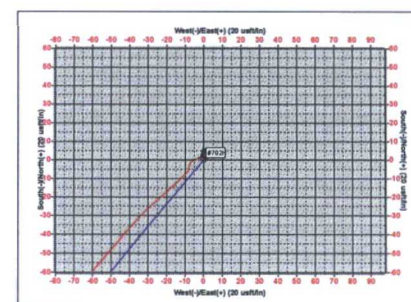
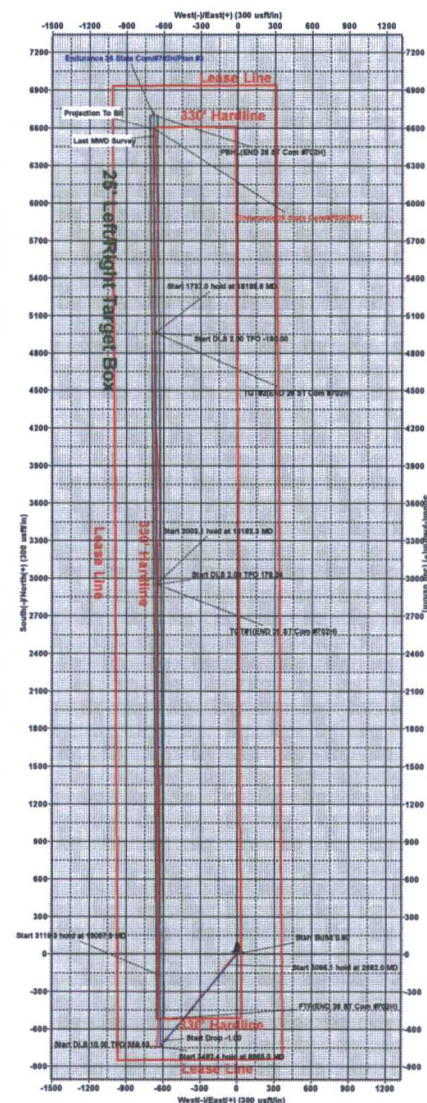
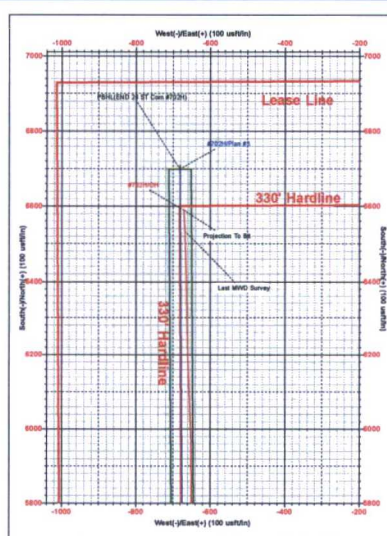
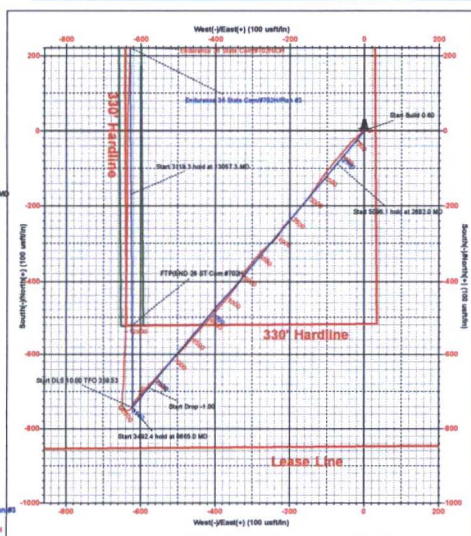
Ground Level: 3351.0
KB = 25 @ 3376.0usft (H&P 659)
Easting: 752472.00 32° 0' 8.888 N Longitude: 103° 31' 5.659 W Slot

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	1204.0	0.00	0.00	1204.0	0.0	0.0	0.00	0.00	0.0	
3	2662.0	8.87	219.89	2676.1	-87.6	-73.2	0.60	219.89	-79.7	
4	7778.1	8.87	219.89	7741.3	-690.3	-577.1	0.00	0.00	-628.4	
5	8665.0	0.00	0.00	8594.6	-742.9	-621.0	1.00	180.00	-676.2	
6	12167.4	0.00	0.00	12087.0	-742.9	-621.0	0.00	0.00	-676.2	
7	13057.3	90.00	359.53	12660.0	-170.0	-625.7	10.00	359.53	-105.7	
8	16176.6	90.00	359.53	12660.0	2949.2	-651.4	0.00	0.00	3000.0	TGT#1(End 26 ST Com #702H)
9	16182.3	89.89	359.53	12660.0	2954.9	-651.4	2.00	178.34	3005.7	
10	18185.4	89.89	359.53	12664.0	4957.9	-667.8	0.00	0.00	5000.0	TGT#2(End 26 ST Com #702H)
11	18189.6	89.89	359.53	12664.0	4962.1	-667.8	2.00	-180.00	5004.2	
12	19926.6	89.80	359.53	12670.0	6699.0	-682.0	0.00	0.00	6733.6	PBHL(End 26 ST Com #702H)

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
FTPI(End 26 ST Com #702H)	12660.0	-524.0	-623.0	366055.00	762049.00	Point
TGT#1(End 26 ST Com #702H)	12660.0	2949.2	-661.4	368628.20	762020.63	Point
TGT#2(End 26 ST Com #702H)	12664.0	4957.9	-667.8	370536.00	762054.22	Point
PBHL(End 26 ST Com #702H)	12670.0	6699.0	-682.0	372278.00	761990.00	Rectangle (Sides: L0.0 W60.0)





EOG Resources - Midland

Lea County, NM (NAD 27 NME)

Endurance 36 State Com

#702H

OH

Design: OH

PVA

20 April, 2017

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EOG Resources, Inc.

PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #702H
Project:	Lea County, NM (NAD 27 NME)	TVD Reference:	KB = 25 @ 3376.0usft (H&P 659)
Site:	Endurance 36 State Com	MD Reference:	KB = 25 @ 3376.0usft (H&P 659)
Well:	#702H	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	#702H		
Well Position	+N/-S	0.0 usft	Northing:
	+E/-W	0.0 usft	Easting:
Position Uncertainty		0.0 usft	Wellhead Elevation:
			Latitude:
			Longitude:
			Ground Level:

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	6/23/2015	7.13	59.89	48,016

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	354.19



EOG Resources, Inc.

PVA

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 27 NME)
 Site: Endurance 36 State Com
 Well: #702H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #702H
 TVD Reference: KB = 25 @ 3376.0usft (H&P 659)
 MD Reference: KB = 25 @ 3376.0usft (H&P 659)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.1 Single User Db

Survey Program Date 4/20/2017

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
84.0	925.0	Gyro (OH)	NSG-CT_D/P	Continuous north-seeking gyro in drillpipe
1,047.0	19,794.0	Intrepid MWD (OH)	MWD	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
84.0	0.90	326.00	84.0	0.5	-0.4	1.07	1.07	0.00	-0.7	0.0
174.0	0.80	252.00	174.0	0.9	-1.4	1.14	-0.11	-82.22	-1.0	-1.3
293.0	0.80	243.00	293.0	0.3	-2.9	0.11	0.00	-7.56	-2.4	-1.6
388.0	0.90	252.00	388.0	-0.2	-4.2	0.18	0.11	9.47	-4.1	-1.1
483.0	0.80	241.00	483.0	-0.8	-5.5	0.20	-0.11	-11.58	-5.2	-2.0
578.0	0.70	232.00	577.9	-1.5	-6.5	0.16	-0.11	-9.47	-6.0	-2.9
673.0	0.50	212.00	672.9	-2.2	-7.2	0.30	-0.21	-21.05	-5.7	-5.0
793.0	0.50	194.00	792.9	-3.1	-7.6	0.13	0.00	-15.00	-4.9	-6.6
862.0	0.60	210.00	861.9	-3.7	-7.9	0.26	0.14	23.19	-7.2	-4.9
925.0	0.50	199.00	924.9	-4.3	-8.1	0.23	-0.16	-17.46	-6.7	-6.3
1,047.0	0.70	185.30	1,046.9	-5.5	-8.4	0.20	0.16	-11.23	-6.3	-7.8
1,140.0	0.40	189.00	1,139.9	-6.4	-8.5	0.32	-0.32	3.98	-7.6	-7.3
1,232.0	2.60	227.40	1,231.9	-8.1	-10.0	2.50	2.39	41.74	-12.9	-0.8
1,326.0	2.70	223.60	1,325.8	-11.2	-13.1	0.22	0.11	-4.04	-16.4	-1.9
1,419.0	3.90	227.70	1,418.6	-14.9	-17.0	1.31	1.29	4.41	-20.2	-0.7
1,513.0	4.00	227.60	1,512.4	-19.3	-21.8	0.11	0.11	-0.11	-24.1	-1.1
1,606.0	5.20	229.00	1,605.1	-24.2	-27.3	1.30	1.29	1.51	-28.2	-1.0
1,700.0	6.70	222.90	1,698.6	-31.0	-34.3	1.73	1.60	-6.49	-33.2	-4.7
1,794.0	7.10	221.90	1,791.9	-39.4	-41.9	0.44	0.43	-1.06	-39.1	-5.6
1,887.0	6.90	221.50	1,884.2	-47.8	-49.4	0.22	-0.22	-0.43	-44.2	-6.0



EOG Resources, Inc.

PVA

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Site: Endurance 36 State Com
Well: #702H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #702H
TVD Reference: KB = 25 @ 3376.0usft (H&P 659)
MD Reference: KB = 25 @ 3376.0usft (H&P 659)
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)
1,981.0	8.00	221.40	1,977.4	-57.0	-57.5	1.17	1.17	-0.11	-49.2	-6.3
2,075.0	8.60	220.60	2,070.4	-67.2	-66.4	0.65	0.64	-0.85	-54.6	-7.2
2,169.0	8.60	220.10	2,163.4	-77.9	-75.5	0.08	0.00	-0.53	-59.6	-7.8
2,263.0	8.40	219.80	2,256.4	-88.6	-84.4	0.22	-0.21	-0.32	-63.5	-8.1
2,356.0	8.40	218.40	2,348.4	-99.1	-93.0	0.22	0.00	-1.51	-66.2	-9.5
2,450.0	8.30	216.70	2,441.4	-109.9	-101.3	0.28	-0.11	-1.81	-67.7	-11.0
2,544.0	8.10	215.70	2,534.4	-120.7	-109.2	0.26	-0.21	-1.06	-68.2	-11.3
2,638.0	8.00	215.60	2,627.5	-131.4	-116.9	0.11	-0.11	-0.11	-67.8	-10.4
2,731.0	8.10	213.20	2,719.6	-142.2	-124.3	0.38	0.11	-2.58	-66.1	-11.9
2,824.0	8.10	214.60	2,811.6	-153.1	-131.6	0.21	0.00	1.51	-65.2	-8.8
2,917.0	8.20	215.90	2,903.7	-163.8	-139.2	0.23	0.11	1.40	-64.3	-6.2
3,010.0	8.10	213.80	2,995.7	-174.6	-146.7	0.34	-0.11	-2.26	-62.9	-7.2
3,103.0	8.30	220.90	3,087.8	-185.2	-154.8	1.11	0.22	7.63	-62.2	1.1
3,198.0	7.90	221.00	3,181.9	-195.3	-163.5	0.42	-0.42	0.11	-60.9	0.9
3,291.0	7.30	219.70	3,274.0	-204.6	-171.5	0.67	-0.65	-1.40	-58.8	-0.5
3,385.0	7.20	217.90	3,367.3	-213.9	-178.9	0.26	-0.11	-1.91	-56.2	-2.0
3,479.0	8.00	221.00	3,460.5	-223.5	-186.8	0.96	0.85	3.30	-54.1	1.0
3,572.0	8.00	221.40	3,552.6	-233.2	-195.4	0.06	0.00	0.43	-52.7	1.0
3,667.0	7.90	222.20	3,646.6	-243.0	-204.1	0.16	-0.11	0.84	-51.2	1.3
3,760.0	7.50	221.30	3,738.8	-252.3	-212.4	0.45	-0.43	-0.97	-49.3	0.0
3,854.0	7.80	217.10	3,832.0	-262.0	-220.3	0.67	0.32	-4.47	-47.1	-3.3
3,947.0	7.00	202.00	3,924.2	-272.3	-226.3	2.25	-0.86	-16.24	-42.8	-12.6
4,041.0	7.50	217.30	4,017.5	-282.5	-232.1	2.11	0.53	16.28	-41.8	1.2
4,134.0	6.60	226.60	4,109.8	-291.0	-239.7	1.56	-0.97	10.00	-38.1	7.2
4,228.0	8.00	229.00	4,203.0	-299.0	-248.5	1.52	1.49	2.55	-35.4	6.7
4,322.0	6.80	229.10	4,296.2	-306.9	-257.7	1.28	-1.28	0.11	-33.1	4.4
4,416.0	7.80	228.10	4,389.4	-314.8	-266.6	1.07	1.06	-1.06	-30.8	1.7



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PVA

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Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #702H
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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)
4,510.0	8.70	222.20	4,482.5	-324.3	-276.2	1.31	0.96	-6.28	-29.8	-2.7
4,603.0	8.50	220.70	4,574.4	-334.8	-285.4	0.32	-0.22	-1.61	-29.2	-3.8
4,697.0	7.60	218.80	4,667.5	-344.9	-293.8	1.00	-0.96	-2.02	-27.8	-4.8
4,791.0	7.70	220.90	4,760.7	-354.5	-301.8	0.32	0.11	2.23	-25.9	-3.8
4,885.0	9.10	219.70	4,853.7	-365.0	-310.7	1.50	1.49	-1.28	-25.1	-4.4
4,977.0	9.30	215.50	4,944.5	-376.6	-319.6	0.76	0.22	-4.57	-25.2	-5.6
5,070.0	8.70	210.60	5,036.3	-388.8	-327.6	1.05	-0.65	-5.27	-25.0	-6.1
5,164.0	8.30	210.70	5,129.3	-400.7	-334.7	0.43	-0.43	0.11	-24.6	-3.7
5,257.0	8.70	212.70	5,221.3	-412.4	-341.9	0.53	0.43	2.15	-24.2	-0.8
5,351.0	8.00	213.70	5,314.3	-423.9	-349.4	0.76	-0.74	1.06	-23.5	1.3
5,445.0	7.60	214.30	5,407.4	-434.4	-356.5	0.43	-0.43	0.64	-21.8	3.0
5,538.0	8.70	218.40	5,499.5	-445.0	-364.3	1.34	1.18	4.41	-20.3	5.4
5,632.0	8.80	219.00	5,592.4	-456.2	-373.3	0.14	0.11	0.64	-20.1	5.9
5,725.0	8.30	218.80	5,684.3	-466.9	-382.0	0.54	-0.54	-0.22	-19.6	6.0
5,818.0	8.00	218.90	5,776.4	-477.2	-390.2	0.32	-0.32	0.11	-18.4	6.3
5,912.0	7.30	219.70	5,869.6	-486.9	-398.2	0.75	-0.74	0.85	-16.3	6.7
6,006.0	8.70	220.90	5,962.6	-496.9	-406.6	1.50	1.49	1.28	-14.8	6.9
6,100.0	8.60	221.30	6,055.6	-507.5	-415.9	0.12	-0.11	0.43	-14.4	6.7
6,193.0	7.70	221.50	6,147.6	-517.4	-424.6	0.97	-0.97	0.22	-13.2	6.4
6,286.0	8.70	222.10	6,239.7	-527.3	-433.5	1.08	1.08	0.65	-12.0	6.1
6,380.0	8.10	221.70	6,332.7	-537.5	-442.7	0.64	-0.64	-0.43	-11.3	5.5
6,473.0	7.60	222.00	6,424.8	-547.0	-451.1	0.54	-0.54	0.32	-9.7	5.0
6,566.0	8.50	219.90	6,516.9	-556.8	-459.7	1.02	0.97	-2.26	-8.5	4.5
6,659.0	8.10	219.30	6,608.9	-567.2	-468.2	0.44	-0.43	-0.65	-7.6	4.4
6,752.0	7.70	220.90	6,701.0	-576.9	-476.4	0.49	-0.43	1.72	-5.9	4.6
6,846.0	7.60	226.70	6,794.2	-586.0	-485.1	0.83	-0.11	6.17	-3.5	4.1
6,940.0	8.50	224.00	6,887.3	-595.2	-494.4	1.04	0.96	-2.87	-2.4	2.6



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PVA

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Well: #702H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #702H
TVD Reference: KB = 25 @ 3376.0usft (H&P 659)
MD Reference: KB = 25 @ 3376.0usft (H&P 659)
North Reference: Grid
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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)
7,033.0	9.00	223.20	6,979.2	-605.5	-504.2	0.55	0.54	-0.86	-2.3	1.6
7,127.0	8.70	222.80	7,072.1	-616.0	-514.1	0.33	-0.32	-0.43	-2.3	0.8
7,221.0	9.20	222.30	7,164.9	-626.8	-523.9	0.54	0.53	-0.53	-2.4	0.1
7,314.0	9.00	222.10	7,256.7	-637.7	-533.8	0.22	-0.22	-0.22	-2.8	-0.5
7,408.0	8.50	222.50	7,349.7	-648.3	-543.4	0.54	-0.53	0.43	-2.6	-1.1
7,502.0	7.90	221.40	7,442.7	-658.3	-552.4	0.66	-0.64	-1.17	-1.5	-1.6
7,595.0	7.30	222.50	7,534.9	-667.4	-560.6	0.66	-0.65	1.18	0.5	-2.1
7,689.0	6.90	224.80	7,628.2	-675.8	-568.6	0.52	-0.43	2.45	3.3	-3.1
7,783.0	7.70	219.90	7,721.4	-684.7	-576.7	1.08	0.85	-5.21	6.1	-3.3
7,877.0	7.60	220.20	7,814.6	-694.2	-584.7	0.11	-0.11	0.32	7.2	-3.4
7,970.0	7.00	219.70	7,906.8	-703.3	-592.3	0.65	-0.65	-0.54	7.3	-3.4
8,064.0	6.50	221.90	8,000.1	-711.7	-599.5	0.60	-0.53	2.34	6.7	-3.8
8,157.0	5.40	221.90	8,092.6	-718.8	-606.0	1.18	-1.18	0.00	5.9	-4.1
8,251.0	3.00	218.00	8,186.4	-724.1	-610.4	2.57	-2.55	-4.15	6.8	-3.7
8,344.0	3.10	216.80	8,279.3	-728.0	-613.4	0.13	0.11	-1.29	7.8	-3.3
8,438.0	1.20	221.10	8,373.2	-730.8	-615.6	2.03	-2.02	4.57	8.4	-3.8
8,532.0	1.10	224.50	8,467.2	-732.2	-616.9	0.13	-0.11	3.62	9.1	-4.5
8,626.0	1.40	215.10	8,561.1	-733.7	-618.2	0.39	0.32	-10.00	9.0	-3.0
8,719.0	1.60	214.10	8,654.1	-735.8	-619.5	0.22	0.22	-1.08	6.7	-2.8
8,813.0	0.60	223.70	8,748.1	-737.2	-620.6	1.08	-1.06	10.21	4.4	-3.7
8,907.0	0.40	77.90	8,842.1	-737.5	-620.6	1.02	-0.21	-155.11	-1.5	5.2
9,000.0	0.40	111.20	8,935.1	-737.5	-620.0	0.25	0.00	35.81	1.0	5.4
9,093.0	0.40	110.30	9,028.1	-737.8	-619.4	0.01	0.00	-0.97	0.3	5.4
9,186.0	0.30	205.00	9,121.1	-738.1	-619.2	0.56	-0.11	101.83	5.1	-0.4
9,280.0	0.40	224.70	9,215.1	-738.5	-619.5	0.16	0.11	20.96	4.1	-2.0
9,373.0	0.60	197.40	9,308.1	-739.2	-619.9	0.33	0.22	-29.35	3.8	-0.1
9,467.0	0.72	198.10	9,402.1	-740.3	-620.3	0.13	0.13	0.74	2.7	-0.1



EOG Resources, Inc.

PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Endurance 36 State Com
Well: #702H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #702H
TVD Reference: KB = 25 @ 3376.0usft (H&P 659)
MD Reference: KB = 25 @ 3376.0usft (H&P 659)
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)
9,561.0	0.80	209.60	9,496.1	-741.4	-620.8	0.18	0.09	12.23	1.4	-0.5
9,655.0	0.70	208.30	9,590.1	-742.5	-621.4	0.11	-0.11	-1.38	0.2	-0.5
9,748.0	0.90	190.00	9,683.1	-743.7	-621.8	0.35	0.22	-19.68	-0.9	-0.6
9,842.0	1.10	196.90	9,777.0	-745.3	-622.1	0.25	0.21	7.34	-2.6	-0.4
9,936.0	1.20	210.80	9,871.0	-747.0	-622.9	0.31	0.11	14.79	-4.5	0.5
10,030.0	1.30	216.20	9,965.0	-748.7	-624.0	0.16	0.11	5.74	-6.5	1.0
10,124.0	1.30	239.70	10,059.0	-750.1	-625.6	0.56	0.00	25.00	-7.6	3.9
10,217.0	1.40	241.60	10,151.9	-751.2	-627.5	0.12	0.11	2.04	-9.7	4.2
10,310.0	1.10	265.80	10,244.9	-751.8	-629.4	0.65	-0.32	26.02	-9.0	8.2
10,404.0	1.10	242.10	10,338.9	-752.3	-631.1	0.48	0.00	-25.21	-13.3	3.6
10,497.0	1.30	266.40	10,431.9	-752.8	-632.9	0.58	0.22	26.13	-12.5	9.1
10,590.0	1.40	267.60	10,524.9	-752.9	-635.1	0.11	0.11	1.29	-14.5	9.4
10,685.0	1.50	266.90	10,619.8	-753.0	-637.5	0.11	0.11	-0.74	-17.0	9.2
10,779.0	1.50	278.70	10,713.8	-752.9	-640.0	0.33	0.00	12.55	-17.2	12.7
10,872.0	1.40	297.90	10,806.8	-752.2	-642.2	0.53	-0.11	20.65	-14.4	18.1
10,965.0	1.80	301.20	10,899.7	-750.9	-644.4	0.44	0.43	3.55	-15.9	19.0
11,059.0	0.80	274.40	10,993.7	-750.0	-646.3	1.22	-1.06	-28.51	-24.7	9.1
11,153.0	0.70	264.20	11,087.7	-750.1	-647.6	0.18	-0.11	-10.85	-27.2	4.4
11,248.0	0.90	252.50	11,182.7	-750.3	-648.9	0.27	0.21	-12.32	-28.8	-1.3
11,341.0	1.30	252.60	11,275.7	-750.9	-650.6	0.43	0.43	0.11	-30.6	-1.2
11,434.0	2.20	287.80	11,368.6	-750.6	-653.3	1.46	0.97	37.85	-28.4	17.2
11,528.0	2.30	345.10	11,462.6	-748.3	-655.5	2.30	0.11	60.96	-3.7	34.7
11,622.0	1.80	26.50	11,556.5	-745.1	-655.3	1.62	-0.53	44.04	17.3	29.7
11,716.0	1.70	30.20	11,650.5	-742.6	-653.9	0.16	-0.11	3.94	16.3	28.6
11,810.0	1.50	44.80	11,744.4	-740.5	-652.4	0.48	-0.21	15.53	20.4	23.9
11,904.0	1.20	47.40	11,838.4	-739.0	-650.8	0.33	-0.32	2.77	19.3	23.0
11,966.0	1.20	52.00	11,900.4	-738.1	-649.8	0.16	0.00	7.42	19.8	21.5



EOG Resources, Inc.

PVA

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Local Co-ordinate Reference: Well #702H
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North Reference: Grid
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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)
12,025.0	1.00	51.90	11,959.4	-737.4	-648.9	0.34	-0.34	-0.17	18.6	21.5
12,119.0	0.40	58.50	12,053.4	-736.8	-648.0	0.64	-0.64	7.02	19.8	19.3
12,212.0	7.90	356.00	12,146.1	-730.2	-648.1	8.30	8.06	-67.20	-11.4	26.4
12,259.0	18.10	2.90	12,191.8	-719.7	-648.0	21.91	21.70	14.68	-11.9	27.6
12,305.0	20.40	3.90	12,235.2	-704.5	-647.1	5.05	5.00	2.17	-16.4	27.1
12,350.0	21.70	5.00	12,277.2	-688.4	-645.8	3.02	2.89	2.44	-18.6	26.1
12,398.0	25.50	1.20	12,321.2	-669.2	-644.8	8.52	7.92	-7.92	-21.0	23.8
12,445.0	32.20	0.70	12,362.4	-646.6	-644.5	14.26	14.26	-1.06	-22.3	23.1
12,491.0	34.90	3.50	12,400.7	-621.2	-643.5	6.76	5.87	6.09	-22.3	22.8
12,538.0	36.70	3.80	12,438.8	-593.7	-641.8	3.85	3.83	0.64	-21.1	20.8
12,584.0	42.50	0.80	12,474.2	-564.5	-640.6	13.27	12.61	-6.52	-20.0	18.5
12,632.0	45.80	0.00	12,508.7	-531.0	-640.4	6.97	6.87	-1.66	-17.8	17.8
12,678.0	51.50	0.80	12,539.1	-496.5	-640.2	12.46	12.39	1.73	-15.1	17.3
12,726.0	58.80	2.10	12,566.5	-457.2	-639.1	15.37	15.21	2.71	-13.7	16.1
12,772.0	60.90	1.50	12,589.6	-417.4	-637.9	4.70	4.57	-1.30	-12.6	14.4
12,819.0	65.20	0.70	12,610.9	-375.5	-637.1	9.27	9.15	-1.70	-10.1	13.2
12,865.0	73.10	0.40	12,627.2	-332.6	-636.7	17.18	17.17	-0.65	-8.8	12.4
12,913.0	77.70	1.20	12,639.3	-286.2	-636.0	9.72	9.58	1.67	-8.5	11.3
12,959.0	80.90	0.70	12,647.9	-241.0	-635.3	7.04	6.96	-1.09	-7.6	10.2
13,007.0	83.30	0.00	12,654.5	-193.4	-635.0	5.20	5.00	-1.45	-5.0	9.5
13,053.0	88.10	359.10	12,657.9	-147.6	-635.4	10.62	10.43	-1.97	-2.1	9.5
13,147.0	92.40	0.50	12,657.5	-53.6	-635.7	4.81	4.57	1.49	-2.5	9.0
13,248.0	89.80	1.40	12,655.6	47.4	-634.0	2.72	-2.57	0.89	-4.4	6.5
13,341.0	90.10	2.00	12,655.6	140.3	-631.3	0.72	0.32	0.65	-4.3	3.0
13,435.0	89.90	0.90	12,655.6	234.3	-628.9	1.19	-0.21	-1.17	-4.3	-0.2
13,529.0	89.40	0.80	12,656.2	328.3	-627.5	0.54	-0.53	-0.11	-3.8	-2.3
13,623.0	89.50	1.80	12,657.1	422.2	-625.3	1.07	0.11	1.06	-2.9	-5.2



EOG Resources, Inc.

PVA

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Local Co-ordinate Reference: Well #702H
TVD Reference: KB = 25 @ 3376.0usft (H&P 659)
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North Reference: Grid
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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)
13,716.0	88.90	359.70	12,658.4	515.2	-624.1	2.35	-0.65	-2.26	-1.6	-7.2
13,809.0	89.20	0.10	12,660.0	608.2	-624.3	0.54	0.32	0.43	0.0	-7.8
13,903.0	90.00	359.10	12,660.6	702.2	-624.9	1.36	0.85	-1.06	0.6	-7.9
13,997.0	90.20	359.10	12,660.4	796.2	-626.4	0.21	0.21	0.00	0.5	-7.2
14,090.0	90.90	359.20	12,659.6	889.2	-627.8	0.76	0.75	0.11	-0.4	-6.6
14,184.0	89.90	359.80	12,658.9	983.2	-628.6	1.24	-1.06	0.64	-1.1	-6.6
14,278.0	90.60	359.90	12,658.5	1,077.2	-628.9	0.75	0.74	0.11	-1.5	-7.1
14,372.0	90.80	359.70	12,657.3	1,171.2	-629.2	0.30	0.21	-0.21	-2.6	-7.5
14,465.0	88.90	359.60	12,657.6	1,264.2	-629.8	2.05	-2.04	-0.11	-2.4	-7.7
14,559.0	90.60	359.20	12,658.0	1,358.1	-630.8	1.86	1.81	-0.43	-2.0	-7.5
14,653.0	91.20	357.70	12,656.5	1,452.1	-633.3	1.72	0.64	-1.60	-3.5	-5.8
14,746.0	89.20	356.30	12,656.2	1,545.0	-638.2	2.63	-2.15	-1.51	-3.8	-1.7
14,839.0	90.50	356.70	12,656.4	1,637.8	-643.8	1.46	1.40	0.43	-3.5	3.3
14,933.0	90.20	358.70	12,655.9	1,731.7	-647.6	2.15	-0.32	2.13	-4.1	6.3
15,026.0	88.80	358.40	12,656.7	1,824.7	-650.0	1.54	-1.51	-0.32	-3.3	7.8
15,120.0	90.50	359.80	12,657.2	1,918.6	-651.4	2.34	1.81	1.49	-2.7	8.5
15,213.0	91.00	1.40	12,656.0	2,011.6	-650.5	1.80	0.54	1.72	-4.0	6.8
15,307.0	91.10	0.90	12,654.3	2,105.6	-648.6	0.54	0.11	-0.53	-5.7	4.1
15,401.0	89.40	0.90	12,653.9	2,199.6	-647.1	1.81	-1.81	0.00	-6.1	1.9
15,513.0	87.70	0.00	12,656.7	2,311.5	-646.2	1.72	-1.52	-0.80	-3.3	0.1
15,607.0	88.50	359.60	12,659.8	2,405.5	-646.5	0.95	0.85	-0.43	-0.1	-0.4
15,701.0	89.60	359.80	12,661.4	2,499.5	-647.0	1.19	1.17	0.21	1.4	-0.6
15,796.0	89.90	359.70	12,661.8	2,594.5	-647.4	0.33	0.32	-0.11	1.8	-1.0
15,889.0	90.80	359.90	12,661.3	2,687.5	-647.8	0.99	0.97	0.22	1.3	-1.4
15,982.0	91.10	0.00	12,659.7	2,780.4	-647.9	0.34	0.32	0.11	-0.3	-2.1
16,075.0	91.10	1.10	12,657.9	2,873.4	-647.0	1.18	0.00	1.18	-2.1	-3.8
16,169.0	90.60	1.30	12,656.5	2,967.4	-645.0	0.57	-0.53	0.21	-3.5	-6.5



EOG Resources, Inc.

PVA

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Design: OH

Local Co-ordinate Reference: Well #702H
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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)
16,262.0	89.40	1.30	12,656.5	3,060.4	-642.9	1.29	-1.29	0.00	-3.7	-9.4
16,356.0	88.40	1.20	12,658.3	3,154.3	-640.8	1.07	-1.06	-0.11	-2.1	-12.2
16,450.0	88.90	1.60	12,660.6	3,248.3	-638.5	0.68	0.53	0.43	0.0	-15.3
16,555.0	92.10	3.20	12,659.6	3,353.2	-634.1	3.41	3.05	1.52	-1.1	-20.5
16,648.0	93.50	1.20	12,655.1	3,446.0	-630.6	2.62	1.51	-2.15	-5.8	-24.9
16,742.0	92.10	358.40	12,650.5	3,539.8	-630.9	3.33	-1.49	-2.98	-10.7	-25.3
16,836.0	91.00	358.20	12,648.0	3,633.8	-633.7	1.19	-1.17	-0.21	-13.4	-23.3
16,930.0	88.10	358.10	12,648.7	3,727.7	-636.7	3.09	-3.09	-0.11	-12.8	-21.0
17,024.0	89.10	357.60	12,651.0	3,821.6	-640.2	1.19	1.06	-0.53	-10.7	-18.3
17,117.0	91.20	357.50	12,650.7	3,914.5	-644.2	2.26	2.26	-0.11	-11.2	-15.0
17,210.0	88.90	356.50	12,650.7	4,007.4	-649.1	2.70	-2.47	-1.08	-11.4	-10.9
17,304.0	87.50	355.20	12,653.6	4,101.1	-655.9	2.03	-1.49	-1.38	-8.7	-4.9
17,398.0	90.00	357.20	12,655.7	4,194.8	-662.1	3.41	2.66	2.13	-6.8	0.6
17,492.0	91.10	359.30	12,654.8	4,288.8	-665.0	2.52	1.17	2.23	-7.9	2.7
17,586.0	90.40	358.40	12,653.5	4,382.8	-666.9	1.21	-0.74	-0.96	-9.3	3.8
17,680.0	91.30	357.90	12,652.1	4,476.7	-669.9	1.10	0.96	-0.53	-10.9	6.1
17,774.0	91.30	358.60	12,650.0	4,570.6	-672.8	0.74	0.00	0.74	-13.2	8.2
17,867.0	89.10	357.50	12,649.7	4,663.6	-675.9	2.64	-2.37	-1.18	-13.7	10.6
17,960.0	90.70	359.80	12,649.8	4,756.5	-678.1	3.01	1.72	2.47	-13.8	12.0
18,054.0	91.60	359.70	12,648.0	4,850.5	-678.5	0.96	0.96	-0.11	-15.8	11.6
18,147.0	90.70	0.80	12,646.1	4,943.5	-678.1	1.53	-0.97	1.18	-17.9	10.5
18,240.0	91.10	0.40	12,644.6	5,036.5	-677.2	0.61	0.43	-0.43	-19.6	8.7
18,334.0	89.70	1.30	12,644.0	5,130.5	-675.8	1.77	-1.49	0.96	-20.6	6.6
18,428.0	90.20	2.50	12,644.1	5,224.4	-672.6	1.38	0.53	1.28	-20.9	2.7
18,521.0	90.00	2.50	12,643.9	5,317.3	-668.6	0.22	-0.22	0.00	-21.3	-2.1
18,615.0	88.80	2.30	12,644.9	5,411.2	-664.7	1.29	-1.28	-0.21	-20.7	-6.8
18,709.0	91.00	2.30	12,645.0	5,505.1	-660.9	2.34	2.34	0.00	-20.8	-11.4



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18,802.0	90.40	2.60	12,643.9	5,598.1	-656.9	0.72	-0.65	0.32	-22.3	-16.1
18,896.0	88.10	2.60	12,645.1	5,691.9	-652.6	2.45	-2.45	0.00	-21.4	-21.1
18,990.0	89.30	1.00	12,647.3	5,785.9	-649.7	2.13	1.28	-1.70	-19.6	-24.8
19,083.0	89.50	359.00	12,648.2	5,878.9	-649.7	2.16	0.22	-2.15	-18.9	-25.6
19,177.0	88.90	358.30	12,649.6	5,972.8	-651.9	0.98	-0.64	-0.74	-17.9	-24.2
19,271.0	90.20	357.90	12,650.3	6,066.8	-655.0	1.45	1.38	-0.43	-17.5	-21.8
19,364.0	88.40	357.80	12,651.4	6,159.7	-658.5	1.94	-1.94	-0.11	-16.7	-19.1
19,458.0	91.90	358.90	12,651.2	6,253.6	-661.2	3.90	3.72	1.17	-17.3	-17.1
19,551.0	91.40	358.90	12,648.5	6,346.6	-663.0	0.54	-0.54	0.00	-20.3	-16.1
19,644.0	90.70	358.60	12,646.8	6,439.5	-665.0	0.82	-0.75	-0.32	-22.3	-14.8
19,738.0	89.90	357.80	12,646.3	6,533.5	-668.0	1.20	-0.85	-0.85	-23.1	-12.7
Last MWD Survey										
19,794.0	89.90	357.80	12,646.4	6,589.4	-670.1	0.00	0.00	0.00	-23.2	-11.0
Projection To Bit										

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
19,738.0	12,646.3	6,533.5	-668.0	Last MWD Survey
19,794.0	12,646.4	6,589.4	-670.1	Projection To Bit

Checked By: _____ Approved By: _____ Date: _____