



Lea County, NM (NAD 27 NME)

Hearns 34 State Com #705H

Plan #4

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

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1886
Zone: New Mexico East 3001
System Datum: Mean Sea Level

WELL DETAILS: #705H

Ground Level: 3461.0
KB = 25 @ 3486.0usft
Northing 425521.00 Easting 737123.00 Latitude 32° 10' 3.192 N Longitude 103° 34' 1.274 W

SECTION DETAILS

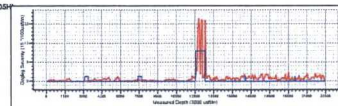
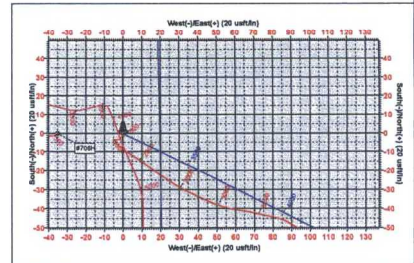
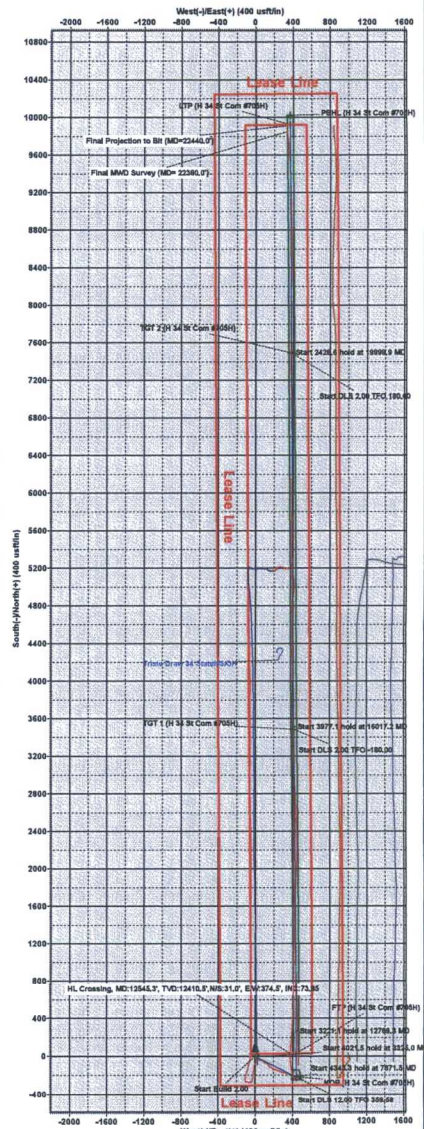
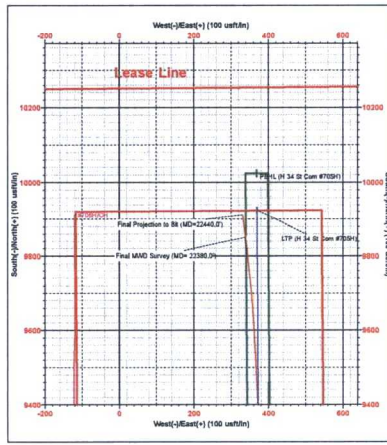
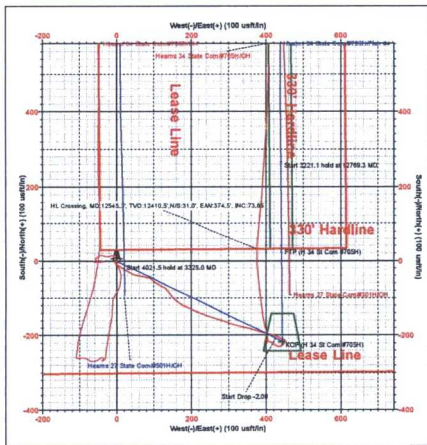
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	3000.0	0.00	0.00	3000.0	0.0	0.0	0.00	0.00	0.0	
3	3325.0	6.50	116.00	3324.3	-8.1	16.6	2.00	116.00	-7.5	
4	7346.5	6.50	116.00	7320.0	-207.6	425.7	0.00	0.00	-191.7	
5	7671.5	0.00	0.00	7644.3	-215.7	442.3	2.00	180.00	-199.2	
6	12014.8	0.00	0.00	11987.6	-215.7	442.3	0.00	0.00	-199.2	
7	12769.3	90.53	359.58	12465.0	266.2	438.7	12.00	359.58	282.3	
8	15990.4	90.53	359.58	12435.0	3487.1	415.1	0.00	0.00	3500.1	TGT 1 (H 34 St Com #705H)
9	16017.2	90.00	359.58	12434.9	3513.9	414.9	2.00	-180.00	3526.9	TGT 2 (H 34 St Com #705H)
10	19994.3	90.00	359.58	12435.0	7490.9	385.6	0.00	0.00	7500.0	
11	19999.9	89.89	359.58	12435.0	7496.5	385.6	2.00	180.00	7505.6	
12	22428.5	89.89	359.58	12439.8	9925.0	367.7	0.00	0.00	9931.8	LTP (H 34 St Com #705H)

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting
KOP (H 34 St Com #705H)	11987.6	-215.7	442.3	425505.28	737565.28
TGT 1 (H 34 St Com #705H)	12435.0	3487.1	415.1	429008.10	737538.06
TGT 2 (H 34 St Com #705H)	12435.0	7480.9	385.6	433011.90	737508.63
LTP (H 34 St Com #705H)	12439.8	9925.0	367.7	435446.00	737490.74
PSHL (H 34 St Com #705H)	12440.0	10025.0	367.0	435546.00	737490.00
FTP (H 34 St Com #705H)	12465.0	32.0	440.0	425553.00	737563.00



Lea County, NM (NAD 27 NME)
Hearns 34 State Com #705H
Plan #4
10/10/2017

HOBBS OCD

SEP 21 2017

RECEIVED

EOG Resources - Midland

Lea County, NM (NAD 27 NME)

Hearns 34 State Com

#705H

OH

Design: OH

PVA Report

31 July, 2017

EOG Resources

PVA Report

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #705H
Project:	Lea County, NM (NAD 27 NME)	TVD Reference:	KB = 25 @ 3486.0usft
Site:	Hearns 34 State Com	MD Reference:	KB = 25 @ 3486.0usft
Well:	#705H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14 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	Hearns 34 State Com		
Site Position:		Northing:	425,521.00 usft
From:	Map	Easting:	737,123.00 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 10' 3.192 N
		Longitude:	103° 34' 1.274 W
		Grid Convergence:	0.41 °

Well		#705H				
Well Position	+N/-S	0.0 usft	Northing:	425,521.00 usft	Latitude:	32° 10' 3.192 N
	+E/-W	0.0 usft	Easting:	737,123.00 usft	Longitude:	103° 34' 1.274 W
Position Uncertainty	0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	3,461.0 usft	

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	3/24/2017	6.97	60.01	47,928.76578451

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	2.10	

Survey Program		Date 7/31/2017		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
125.0	22,440.0	Intrepid MWD (OH)	MWD	MWD - Standard

EOG Resources

PVA Report

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 27 NME)
 Site: Hearn's 34 State Com
 Well: #705H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #705H
 TVD Reference: KB = 25 @ 3486.0usft
 MD Reference: KB = 25 @ 3486.0usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.14 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	
125.0	0.30	359.00	125.0	0.3	0.0	0.24	0.24	0.00	-0.3	0.0	
216.0	0.30	157.00	216.0	0.3	0.1	0.65	0.00	173.63	0.3	0.2	
274.0	0.40	98.00	274.0	0.2	0.3	0.61	0.17	-101.72	-0.3	0.2	
363.0	0.30	182.00	363.0	-0.1	0.6	0.53	-0.11	94.38	-0.1	0.6	
425.0	0.50	119.00	425.0	-0.4	0.9	0.73	0.32	-101.61	-1.0	0.1	
580.0	0.30	282.00	580.0	-0.6	1.1	0.51	-0.13	105.16	1.2	0.4	
767.0	0.10	151.00	767.0	-0.7	0.7	0.20	-0.11	-70.05	-0.9	0.3	
925.0	0.20	288.00	925.0	-0.7	0.5	0.18	0.06	86.71	0.7	0.5	
1,049.0	0.70	220.00	1,049.0	-1.2	-0.2	0.53	0.40	-54.84	-1.1	0.6	
1,206.0	0.90	232.00	1,206.0	-2.7	-1.8	0.17	0.13	7.64	-3.1	1.0	
1,308.0	0.60	274.00	1,308.0	-3.2	-3.0	0.59	-0.29	41.18	-2.7	3.4	
1,440.0	0.70	275.00	1,440.0	-3.1	-4.5	0.08	0.08	0.76	-4.2	3.4	
1,627.0	1.10	152.40	1,626.9	-4.5	-4.8	0.85	0.21	-65.56	-1.8	-6.3	
1,815.0	3.10	121.10	1,814.8	-8.8	0.4	1.19	1.06	-16.65	-4.9	-7.3	
2,003.0	3.10	124.50	2,002.5	-14.3	9.0	0.10	0.00	1.81	-15.5	-6.7	
2,190.0	3.10	126.10	2,189.3	-20.1	17.2	0.05	0.00	0.86	-25.8	-6.1	
2,378.0	2.90	121.80	2,377.0	-25.6	25.4	0.16	-0.11	-2.29	-35.1	-8.4	
2,565.0	2.70	116.70	2,563.8	-30.1	33.3	0.17	-0.11	-2.73	-43.3	-11.9	
2,752.0	2.50	115.50	2,750.6	-33.8	40.9	0.11	-0.11	-0.64	-51.5	-12.9	
2,940.0	2.50	112.40	2,938.4	-37.2	48.4	0.07	0.00	-1.65	-58.9	-15.9	
3,128.0	2.40	103.80	3,126.2	-39.7	56.0	0.20	-0.05	-4.57	-61.1	-24.5	
3,317.0	2.30	93.80	3,315.1	-40.9	63.7	0.22	-0.05	-5.29	-49.8	-29.8	
3,506.0	3.30	105.30	3,503.9	-42.5	72.7	0.60	0.53	6.08	-42.9	-14.5	
3,693.0	2.90	99.30	3,690.6	-44.7	82.6	0.28	-0.21	-3.21	-30.9	-13.4	
3,881.0	4.50	127.00	3,878.2	-49.9	93.1	1.25	0.85	14.73	-24.3	0.6	
4,069.0	4.00	125.50	4,065.7	-58.2	104.4	0.27	-0.27	-0.80	-17.2	-3.8	

EOG Resources

PVA Report

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 27 NME)
 Site: Hearn's 34 State Com
 Well: #705H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #705H
 TVD Reference: KB = 25 @ 3486.0usft
 MD Reference: KB = 25 @ 3486.0usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.14 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)
4,256.0	3.10	119.10	4,252.3	-64.4	114.1	0.53	-0.48	-3.42	-7.0	-7.5
4,443.0	4.20	114.10	4,438.9	-69.7	124.8	0.61	0.59	-2.67	3.0	-7.8
4,631.0	3.90	144.70	4,626.5	-77.7	134.7	1.15	-0.16	16.28	5.0	-15.0
4,818.0	5.50	142.10	4,812.9	-90.0	143.9	0.86	0.86	-1.39	9.4	-24.3
5,006.0	2.40	133.50	5,000.4	-99.8	152.3	1.67	-1.65	-4.57	20.3	-30.5
5,193.0	2.00	132.20	5,187.3	-104.7	157.6	0.22	-0.21	-0.70	34.2	-36.0
5,381.0	1.90	133.60	5,375.1	-109.0	162.3	0.06	-0.05	0.74	47.2	-43.2
5,569.0	3.40	123.10	5,562.9	-114.2	169.2	0.84	0.80	-5.59	66.8	-37.0
5,756.0	7.10	115.30	5,749.1	-122.2	184.3	2.01	1.98	-4.17	75.3	-28.1
5,944.0	7.10	113.30	5,935.7	-131.8	205.5	0.13	0.00	-1.06	74.3	-24.9
6,132.0	6.90	111.40	6,122.3	-140.5	226.7	0.16	-0.11	-1.01	73.4	-21.1
6,319.0	6.60	109.30	6,308.0	-148.1	247.3	0.21	-0.16	-1.12	73.1	-16.4
6,506.0	6.00	105.90	6,493.9	-154.4	266.8	0.38	-0.32	-1.82	74.3	-9.0
6,694.0	5.90	110.60	6,680.8	-160.4	285.3	0.26	-0.05	2.50	75.1	-12.2
6,882.0	5.70	108.20	6,867.9	-166.8	303.2	0.17	-0.11	-1.28	77.6	-6.6
7,070.0	5.00	108.60	7,055.1	-172.3	319.8	0.37	-0.37	0.21	81.2	-4.3
7,258.0	4.70	100.00	7,242.4	-176.2	335.2	0.42	-0.16	-4.57	85.6	12.5
7,432.0	6.30	106.90	7,415.6	-180.3	351.3	0.99	0.92	3.97	88.0	6.0
7,620.0	6.00	106.40	7,602.5	-186.0	370.6	0.16	-0.16	-0.27	76.8	8.2
7,807.0	4.70	105.30	7,788.7	-190.8	387.4	0.70	-0.70	-0.59	59.5	9.6
7,996.0	3.80	102.20	7,977.2	-194.2	401.0	0.49	-0.48	-1.64	44.9	12.4
8,183.0	3.70	106.90	8,163.8	-197.2	412.8	0.17	-0.05	2.51	33.5	9.1
8,370.0	2.90	105.40	8,350.5	-200.3	423.2	0.43	-0.43	-0.80	22.5	9.8
8,557.0	2.20	119.10	8,537.3	-203.3	430.9	0.49	-0.37	7.33	16.0	5.3
8,744.0	2.00	123.50	8,724.1	-206.8	436.7	0.14	-0.11	2.35	9.6	4.4
8,930.0	1.20	109.00	8,910.1	-209.2	441.3	0.48	-0.43	-7.80	3.1	5.8
9,118.0	1.10	98.90	9,098.0	-210.1	444.9	0.12	-0.05	-5.37	-1.7	5.9

EOG Resources

PVA Report

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #705H
Project:	Lea County, NM (NAD 27 NME)	TVD Reference:	KB = 25 @ 3486.0usft
Site:	Hearns 34 State Com	MD Reference:	KB = 25 @ 3486.0usft
Well:	#705H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14 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)
9,306.0	1.00	104.80	9,286.0	-210.8	448.3	0.08	-0.05	3.14	-4.6	6.2
9,493.0	0.80	129.30	9,473.0	-212.1	450.9	0.23	-0.11	13.10	-4.3	8.2
9,680.0	1.30	214.60	9,660.0	-214.7	450.7	0.79	0.27	45.61	5.6	6.3
9,867.0	2.60	205.10	9,846.8	-220.2	447.7	0.71	0.70	-5.08	-1.8	6.8
10,055.0	2.60	236.10	10,034.7	-226.5	442.3	0.74	0.00	16.49	-6.0	9.0
10,242.0	2.50	275.40	10,221.5	-228.5	434.7	0.92	-0.05	21.02	-6.3	13.4
10,429.0	2.10	295.30	10,408.3	-226.6	427.6	0.47	-0.21	10.64	-8.6	16.1
10,617.0	1.90	311.50	10,596.2	-223.1	422.1	0.32	-0.11	8.62	-10.2	18.9
10,805.0	1.70	305.70	10,784.1	-219.4	417.5	0.14	-0.11	-3.09	-18.0	17.4
10,993.0	1.30	288.30	10,972.1	-217.1	413.2	0.32	-0.21	-9.26	-27.1	10.4
11,180.0	1.50	289.60	11,159.0	-215.6	408.9	0.11	0.11	0.70	-31.5	11.1
11,367.0	1.20	311.70	11,346.0	-213.5	405.2	0.32	-0.16	11.82	-29.2	23.0
11,557.0	2.20	274.10	11,535.9	-211.9	400.0	0.76	0.53	-19.79	-42.4	-0.8
11,726.0	0.50	282.20	11,704.8	-211.5	396.1	1.01	-1.01	4.79	-46.1	5.7
11,762.0	0.30	86.50	11,740.8	-211.5	396.0	2.20	-0.56	456.39	45.9	7.1
11,855.0	1.60	157.30	11,833.8	-212.7	396.8	1.64	1.40	76.13	20.4	-40.8
11,949.0	2.80	152.40	11,927.7	-215.9	398.3	1.29	1.28	-5.21	20.2	-39.0
12,043.0	2.00	84.70	12,021.7	-217.8	401.0	2.93	-0.85	-72.02	41.4	0.6
12,090.0	3.30	29.50	12,068.6	-216.5	402.5	5.77	2.77	-117.45	26.1	30.9
12,138.0	5.10	15.80	12,116.5	-213.3	403.8	4.27	3.75	-28.54	24.4	33.1
12,185.0	10.90	355.40	12,163.0	-206.8	404.0	13.55	12.34	-43.40	19.6	39.9
12,232.0	20.60	345.30	12,208.2	-194.4	401.5	21.37	20.64	-21.49	18.9	46.2
12,279.0	32.20	345.90	12,250.2	-174.2	396.4	24.69	24.68	1.28	21.5	50.9
12,325.0	41.90	352.90	12,286.9	-147.0	391.5	22.97	21.09	15.22	24.2	52.7
12,372.0	48.40	352.80	12,320.1	-113.9	387.3	13.83	13.83	-0.21	19.4	56.0
12,420.0	49.80	353.00	12,351.5	-77.9	382.8	2.93	2.92	0.42	15.7	59.8
12,467.0	57.50	354.30	12,379.3	-40.3	378.7	16.53	16.38	2.77	13.8	63.1

EOG Resources

PVA Report

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 27 NME)
 Site: Hearn's 34 State Com
 Well: #705H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #705H
 TVD Reference: KB = 25 @ 3486.0usft
 MD Reference: KB = 25 @ 3486.0usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.14 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)
12,513.0	68.60	355.80	12,400.1	0.5	375.2	24.30	24.13	3.26	8.8	65.8
12,545.3	73.85	1.82	12,410.5	31.0	374.5	23.97	16.25	18.63	4.7	65.9
HL Crossing, MD:12545.3', TVD:12410.5', N/S:31.0', E/W:374.5', INC:73.85										
12,566.0	77.30	5.50	12,415.7	51.0	375.8	23.97	16.67	17.79	1.0	64.5
12,607.0	77.90	5.90	12,424.5	90.9	379.8	1.75	1.46	0.98	-7.0	60.4
12,654.0	77.70	5.20	12,434.4	136.6	384.3	1.52	-0.43	-1.49	-12.4	55.7
12,702.0	77.30	4.50	12,444.8	183.3	388.2	1.65	-0.83	-1.46	-12.7	51.4
12,749.0	78.60	3.70	12,454.6	229.1	391.5	3.23	2.77	-1.70	-8.6	47.6
12,796.0	89.90	4.10	12,459.3	275.7	394.7	24.06	24.04	0.85	-5.6	44.0
12,888.0	92.00	3.00	12,457.8	367.5	400.4	2.58	2.28	-1.20	-6.4	37.6
12,950.0	91.80	2.30	12,455.8	429.4	403.2	1.17	-0.32	-1.13	-7.8	34.3
13,044.0	89.70	1.50	12,454.5	523.3	406.4	2.39	-2.23	-0.85	-8.1	30.5
13,137.0	87.70	0.90	12,456.6	616.3	408.3	2.25	-2.15	-0.65	-5.1	27.9
13,231.0	87.30	0.20	12,460.7	710.2	409.2	0.86	-0.43	-0.74	-0.1	26.3
13,324.0	86.80	0.10	12,465.5	803.1	409.4	0.55	-0.54	-0.11	5.5	25.3
13,418.0	87.30	359.70	12,470.4	897.0	409.3	0.68	0.53	-0.43	11.2	24.8
13,512.0	88.80	0.10	12,473.6	990.9	409.1	1.65	1.60	0.43	15.3	24.3
13,606.0	88.60	0.30	12,475.7	1,084.9	409.4	0.30	-0.21	0.21	18.3	23.3
13,700.0	89.30	2.00	12,477.4	1,178.8	411.3	1.96	0.74	1.81	20.9	20.7
13,794.0	90.20	2.00	12,477.8	1,272.8	414.6	0.96	0.96	0.00	22.2	16.7
13,888.0	90.10	2.30	12,477.6	1,366.7	418.1	0.34	-0.11	0.32	22.8	12.5
13,983.0	90.20	2.00	12,477.3	1,461.6	421.7	0.33	0.11	-0.32	23.4	8.2
14,076.0	90.60	1.40	12,476.7	1,554.6	424.5	0.78	0.43	-0.65	23.7	4.8
14,170.0	91.20	1.40	12,475.2	1,648.6	426.8	0.64	0.64	0.00	23.1	1.8
14,264.0	91.70	2.00	12,472.8	1,742.5	429.5	0.83	0.53	0.64	21.6	-1.7
14,358.0	92.00	2.20	12,469.8	1,836.4	433.0	0.38	0.32	0.21	19.4	-5.8
14,451.0	91.50	2.60	12,467.0	1,929.2	436.9	0.69	-0.54	0.43	17.4	-10.3

EOG Resources

PVA Report

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Hearn 34 State Com
Well: #705H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #705H
TVD Reference: KB = 25 @ 3486.0usft
MD Reference: KB = 25 @ 3486.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.14 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)
14,545.0	89.60	2.10	12,466.1	2,023.2	440.7	2.09	-2.02	-0.53	17.4	-14.9
14,640.0	88.80	1.60	12,467.4	2,118.1	443.8	0.99	-0.84	-0.53	19.6	-18.7
14,734.0	88.90	0.00	12,469.3	2,212.1	445.1	1.71	0.11	-1.70	22.4	-20.7
14,828.0	89.50	359.20	12,470.6	2,306.1	444.5	1.06	0.64	-0.85	24.6	-20.7
14,922.0	90.10	359.10	12,470.9	2,400.0	443.1	0.65	0.64	-0.11	25.8	-20.0
15,015.0	90.80	358.10	12,470.2	2,493.0	440.8	1.31	0.75	-1.08	25.9	-18.4
15,109.0	91.50	357.00	12,468.3	2,586.9	436.8	1.39	0.74	-1.17	24.9	-15.1
15,203.0	92.00	356.90	12,465.4	2,680.7	431.8	0.54	0.53	-0.11	22.9	-10.8
15,297.0	90.70	357.00	12,463.2	2,774.6	426.8	1.39	-1.38	0.11	21.6	-6.5
15,391.0	89.80	357.90	12,462.8	2,868.5	422.6	1.35	-0.96	0.96	22.0	-3.0
15,485.0	90.60	357.20	12,462.5	2,962.4	418.6	1.13	0.85	-0.74	22.6	0.3
15,579.0	90.70	357.00	12,461.4	3,056.3	413.8	0.24	0.11	-0.21	22.4	4.4
15,672.0	92.20	356.50	12,459.0	3,149.1	408.5	1.70	1.61	-0.54	20.9	9.0
15,766.0	92.80	358.50	12,454.9	3,242.9	404.5	2.22	0.64	2.13	17.7	12.4
15,860.0	92.60	0.00	12,450.5	3,336.8	403.2	1.61	-0.21	1.60	14.1	12.9
15,953.0	90.10	0.50	12,448.3	3,429.7	403.6	2.74	-2.69	0.54	12.8	11.9
16,047.0	90.50	1.50	12,447.8	3,523.7	405.3	1.15	0.43	1.06	13.0	9.5
16,142.0	91.70	1.20	12,446.0	3,618.7	407.5	1.30	1.26	-0.32	11.1	6.6
16,235.0	91.40	359.90	12,443.5	3,711.6	408.4	1.43	-0.32	-1.40	8.6	5.0
16,329.0	89.30	0.20	12,442.9	3,805.6	408.5	2.26	-2.23	0.32	8.0	4.2
16,423.0	88.10	0.10	12,445.1	3,899.6	408.7	1.28	-1.28	-0.11	10.2	3.3
16,517.0	89.20	359.40	12,447.3	3,993.6	408.3	1.39	1.17	-0.74	12.4	3.0
16,611.0	90.70	357.40	12,447.3	4,087.5	405.7	2.66	1.60	-2.13	12.5	5.0
16,704.0	90.70	356.80	12,446.2	4,180.4	401.0	0.65	0.00	-0.65	11.3	9.0
16,798.0	91.30	359.00	12,444.6	4,274.3	397.5	2.43	0.64	2.34	9.7	11.7
16,892.0	92.40	359.00	12,441.5	4,368.3	395.9	1.17	1.17	0.00	6.6	12.7
16,986.0	92.80	359.60	12,437.3	4,462.2	394.8	0.77	0.43	0.64	2.4	13.1

EOG Resources

PVA Report

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 27 NME)
 Site: Hearn's 34 State Com
 Well: #705H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #705H
 TVD Reference: KB = 25 @ 3486.0usft
 MD Reference: KB = 25 @ 3486.0usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.14 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)
17,080.0	93.40	0.20	12,432.2	4,556.0	394.6	0.90	0.64	0.64	-2.7	12.6
17,174.0	92.70	1.50	12,427.2	4,649.9	396.0	1.57	-0.74	1.38	-7.7	10.5
17,269.0	90.30	1.60	12,424.7	4,744.8	398.6	2.53	-2.53	0.11	-10.2	7.3
17,363.0	88.70	359.30	12,425.5	4,838.8	399.3	2.98	-1.70	-2.45	-9.4	5.8
17,458.0	88.50	359.20	12,427.8	4,933.7	398.1	0.24	-0.21	-0.11	-7.1	6.4
17,552.0	88.40	358.00	12,430.4	5,027.7	395.8	1.28	-0.11	-1.28	-4.5	8.0
17,646.0	86.00	358.00	12,435.0	5,121.5	392.5	2.55	-2.55	0.00	0.0	10.6
17,739.0	88.40	358.90	12,439.5	5,214.3	390.0	2.76	2.58	0.97	4.6	12.4
17,833.0	90.90	359.90	12,440.1	5,308.3	389.0	2.86	2.66	1.06	5.2	12.7
17,926.0	91.80	359.70	12,437.9	5,401.3	388.7	0.99	0.97	-0.22	3.0	12.3
18,020.0	90.20	0.60	12,436.3	5,495.3	388.9	1.95	-1.70	0.96	1.3	11.4
18,114.0	89.40	0.50	12,436.6	5,589.3	389.8	0.86	-0.85	-0.11	1.7	9.8
18,208.0	88.70	359.50	12,438.2	5,683.3	389.8	1.30	-0.74	-1.06	3.2	9.1
18,301.0	90.00	359.10	12,439.2	5,776.3	388.7	1.46	1.40	-0.43	4.3	9.6
18,395.0	90.90	359.30	12,438.5	5,870.2	387.4	0.98	0.96	0.21	3.5	10.2
18,488.0	89.20	0.80	12,438.4	5,963.2	387.4	2.44	-1.83	1.61	3.4	9.4
18,582.0	89.20	0.90	12,439.7	6,057.2	388.8	0.11	0.00	0.11	4.7	7.3
18,677.0	90.10	1.00	12,440.3	6,152.2	390.4	0.95	0.95	0.11	5.3	5.1
18,771.0	90.30	0.70	12,440.0	6,246.2	391.8	0.38	0.21	-0.32	5.0	3.0
18,864.0	90.80	0.00	12,439.1	6,339.2	392.4	0.92	0.54	-0.75	4.1	1.7
18,959.0	91.80	0.30	12,436.9	6,434.2	392.6	1.10	1.05	0.32	1.9	0.8
19,053.0	90.30	0.00	12,435.2	6,528.1	392.9	1.63	-1.60	-0.32	0.2	-0.2
19,147.0	91.10	359.80	12,434.0	6,622.1	392.7	0.88	0.85	-0.21	-0.9	-0.7
19,241.0	88.60	359.40	12,434.3	6,716.1	392.0	2.69	-2.66	-0.43	-0.7	-0.7
19,335.0	88.60	359.20	12,436.6	6,810.1	390.9	0.21	0.00	-0.21	1.6	-0.3
19,428.0	87.50	358.20	12,439.7	6,903.0	388.8	1.60	-1.18	-1.08	4.8	1.2
19,520.0	90.60	359.00	12,441.3	6,994.9	386.5	3.48	3.37	0.87	6.3	2.7

EOG Resources

PVA Report

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Hearn's 34 State Com
Well: #705H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #705H
TVD Reference: KB = 25 @ 3486.0usft
MD Reference: KB = 25 @ 3486.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.14 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)
19,614.0	90.60	358.60	12,440.3	7,088.9	384.6	0.43	0.00	-0.43	5.3	4.0
19,707.0	91.40	358.70	12,438.7	7,181.9	382.4	0.87	0.86	0.11	3.7	5.5
19,800.0	90.30	359.90	12,437.3	7,274.9	381.2	1.75	-1.18	1.29	2.3	6.0
19,894.0	90.90	359.60	12,436.3	7,368.9	380.8	0.71	0.64	-0.32	1.3	5.7
19,987.0	90.60	359.30	12,435.1	7,461.8	379.9	0.46	-0.32	-0.32	0.1	5.9
20,081.0	90.90	359.50	12,433.8	7,555.8	379.0	0.38	0.32	0.21	-1.3	6.2
20,174.0	91.80	358.80	12,431.7	7,648.8	377.6	1.23	0.97	-0.75	-3.6	6.9
20,268.0	91.30	359.30	12,429.1	7,742.7	376.0	0.75	-0.53	0.53	-6.4	7.8
20,361.0	90.10	1.10	12,428.0	7,835.7	376.3	2.33	-1.29	1.94	-7.7	6.7
20,455.0	90.00	1.40	12,427.9	7,929.7	378.4	0.34	-0.11	0.32	-8.0	4.0
20,548.0	89.20	1.00	12,428.5	8,022.7	380.3	0.96	-0.86	-0.43	-7.5	1.4
20,642.0	88.50	0.40	12,430.4	8,116.7	381.5	0.98	-0.74	-0.64	-5.8	-0.5
20,735.0	89.10	0.50	12,432.4	8,209.6	382.2	0.65	0.65	0.11	-4.0	-1.9
20,829.0	90.30	1.70	12,432.9	8,303.6	384.0	1.81	1.28	1.28	-3.7	-4.4
20,923.0	91.20	359.90	12,431.6	8,397.6	385.3	2.14	0.96	-1.91	-5.1	-6.4
21,017.0	88.50	359.50	12,431.9	8,491.6	384.8	2.90	-2.87	-0.43	-5.1	-6.6
21,110.0	89.00	0.10	12,433.9	8,584.6	384.5	0.84	0.54	0.65	-3.2	-6.9
21,204.0	89.70	359.80	12,435.0	8,678.5	384.4	0.81	0.74	-0.32	-2.4	-7.5
21,298.0	90.50	359.70	12,434.8	8,772.5	384.0	0.86	0.85	-0.11	-2.7	-7.8
21,391.0	90.10	358.10	12,434.3	8,865.5	382.2	1.77	-0.43	-1.72	-3.4	-6.7
21,485.0	88.90	358.90	12,435.1	8,959.5	379.8	1.53	-1.28	0.85	-2.7	-5.0
21,577.0	89.20	357.90	12,436.7	9,051.4	377.2	1.13	0.33	-1.09	-1.4	-3.1
21,671.0	91.40	359.70	12,436.2	9,145.4	375.2	3.02	2.34	1.91	-2.1	-1.8
21,765.0	92.50	359.00	12,433.0	9,239.3	374.2	1.39	1.17	-0.74	-5.5	-1.4
21,859.0	90.70	358.90	12,430.4	9,333.3	372.5	1.92	-1.91	-0.11	-8.3	-0.4
21,953.0	91.90	357.50	12,428.2	9,427.2	369.5	1.96	1.28	-1.49	-10.6	1.9
22,047.0	94.50	357.40	12,423.0	9,521.0	365.3	2.77	2.77	-0.11	-16.0	5.4

EOG Resources

PVA Report

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #705H
Project:	Lea County, NM (NAD 27 NME)	TVD Reference:	KB = 25 @ 3486.0usft
Site:	Hearns 34 State Com	MD Reference:	KB = 25 @ 3486.0usft
Well:	#705H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14 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)	
22,141.0	94.10	356.80	12,415.9	9,614.6	360.6	0.77	-0.43	-0.64	-23.2	9.4	
22,235.0	93.10	354.70	12,410.0	9,708.1	353.6	2.47	-1.06	-2.23	-29.3	15.7	
22,328.0	94.30	353.30	12,404.0	9,800.4	343.9	1.98	1.29	-1.51	-35.5	24.7	
22,380.0	94.60	352.90	12,400.0	9,851.9	337.7	0.96	0.58	-0.77	-39.6	30.6	
Final MWD Survey (MD= 22380.0')											
22,440.0	94.60	352.90	12,395.2	9,911.2	330.3	0.00	0.00	0.00	-44.5	37.6	
Final Projection to Bit (MD=22440.0')											

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
12,545.3	12,410.5	31.0	374.5	HL Crossing, MD:12545.3', TVD:12410.5', N/S:31.0', E/W:374.5', INC:73.85	
22,380.0	12,400.0	9,851.9	337.7	Final MWD Survey (MD= 22380.0')	
22,440.0	12,395.2	9,911.2	330.3	Final Projection to Bit (MD=22440.0')	

Checked By: _____ Approved By: _____ Date: _____