



EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Mamba 30 State Com

#705H

OH

Plan: Plan #0.1

Standard Planning Report

20 September, 2018

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #705H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25 @ 3579.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25 @ 3579.0usft
Site:	Mamba 30 State Com	North Reference:	Grid
Well:	#705H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1		

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		Mamba 30 State Com			
Site Position:		Northing:	430,807.00 usft	Latitude:	32° 10' 56.143 N
From:	Map	Easting:	767,053.00 usft	Longitude:	103° 36' 13.509 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.39

Well	#705H					
Well Position	+N/-S	734.0 usft	Northing:	431,541.00 usft	Latitude:	32° 11' 3.576 N
	+E/-W	-2,542.0 usft	Easting:	764,511.00 usft	Longitude:	103° 36' 43.029 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	3,554.0 usft

Wellbore	OH				
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	9/19/2018	6.83	60.00	47,780.12104862

Design	Plan #0.1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	359.67

Plan Survey Tool Program	Date 9/20/2018			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	17,440.6 Plan #0.1 (OH)	MWD	
			OWSG MWD - Standard	

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,334.5	6.69	179.72	3,333.7	-19.5	0.1	2.00	2.00	0.00	179.72	
11,704.5	6.69	179.72	11,646.8	-994.5	4.9	0.00	0.00	0.00	0.00	
12,039.0	0.00	0.00	11,980.5	-1,014.0	5.0	2.00	-2.00	0.00	180.00	KOP (Mamba 30 Stat
12,789.0	90.00	359.68	12,458.0	-536.5	2.3	12.00	12.00	-0.04	359.68	
17,440.6	90.00	359.68	12,458.0	4,115.0	-24.0	0.00	0.00	0.00	0.00	PBHL (Mamba 30 Sta

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Site:	Mamba 30 State Com	North Reference:	Grid
Well:	#705H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	2.00	179.72	3,100.0	-1.7	0.0	-1.7	2.00	2.00	0.00
3,200.0	4.00	179.72	3,199.8	-7.0	0.0	-7.0	2.00	2.00	0.00
3,300.0	6.00	179.72	3,299.5	-15.7	0.1	-15.7	2.00	2.00	0.00
3,334.5	6.69	179.72	3,333.7	-19.5	0.1	-19.5	2.00	2.00	0.00
3,400.0	6.69	179.72	3,398.8	-27.1	0.1	-27.1	0.00	0.00	0.00
3,500.0	6.69	179.72	3,498.1	-38.8	0.2	-38.8	0.00	0.00	0.00
3,600.0	6.69	179.72	3,597.4	-50.4	0.2	-50.4	0.00	0.00	0.00
3,700.0	6.69	179.72	3,696.8	-62.1	0.3	-62.1	0.00	0.00	0.00
3,800.0	6.69	179.72	3,796.1	-73.7	0.4	-73.7	0.00	0.00	0.00
3,900.0	6.69	179.72	3,895.4	-85.4	0.4	-85.4	0.00	0.00	0.00
4,000.0	6.69	179.72	3,994.7	-97.0	0.5	-97.0	0.00	0.00	0.00
4,100.0	6.69	179.72	4,094.0	-108.7	0.5	-108.7	0.00	0.00	0.00
4,200.0	6.69	179.72	4,193.3	-120.3	0.6	-120.3	0.00	0.00	0.00
4,300.0	6.69	179.72	4,292.7	-132.0	0.7	-132.0	0.00	0.00	0.00
4,400.0	6.69	179.72	4,392.0	-143.6	0.7	-143.6	0.00	0.00	0.00
4,500.0	6.69	179.72	4,491.3	-155.3	0.8	-155.3	0.00	0.00	0.00
4,600.0	6.69	179.72	4,590.6	-166.9	0.8	-166.9	0.00	0.00	0.00
4,700.0	6.69	179.72	4,689.9	-178.6	0.9	-178.6	0.00	0.00	0.00
4,800.0	6.69	179.72	4,789.3	-190.2	0.9	-190.2	0.00	0.00	0.00
4,900.0	6.69	179.72	4,888.6	-201.9	1.0	-201.9	0.00	0.00	0.00
5,000.0	6.69	179.72	4,987.9	-213.5	1.1	-213.5	0.00	0.00	0.00
5,100.0	6.69	179.72	5,087.2	-225.2	1.1	-225.2	0.00	0.00	0.00
5,200.0	6.69	179.72	5,186.5	-236.8	1.2	-236.8	0.00	0.00	0.00

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Site:	Mamba 30 State Com	North Reference:	Grid
Well:	#705H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,300.0	6.69	179.72	5,285.9	-248.5	1.2	-248.5	0.00	0.00	0.00
5,400.0	6.69	179.72	5,385.2	-260.1	1.3	-260.1	0.00	0.00	0.00
5,500.0	6.69	179.72	5,484.5	-271.8	1.3	-271.8	0.00	0.00	0.00
5,600.0	6.69	179.72	5,583.8	-283.4	1.4	-283.4	0.00	0.00	0.00
5,700.0	6.69	179.72	5,683.1	-295.1	1.5	-295.1	0.00	0.00	0.00
5,800.0	6.69	179.72	5,782.5	-306.7	1.5	-306.7	0.00	0.00	0.00
5,900.0	6.69	179.72	5,881.8	-318.4	1.6	-318.4	0.00	0.00	0.00
6,000.0	6.69	179.72	5,981.1	-330.0	1.6	-330.0	0.00	0.00	0.00
6,100.0	6.69	179.72	6,080.4	-341.6	1.7	-341.7	0.00	0.00	0.00
6,200.0	6.69	179.72	6,179.7	-353.3	1.7	-353.3	0.00	0.00	0.00
6,300.0	6.69	179.72	6,279.1	-364.9	1.8	-364.9	0.00	0.00	0.00
6,400.0	6.69	179.72	6,378.4	-376.6	1.9	-376.6	0.00	0.00	0.00
6,500.0	6.69	179.72	6,477.7	-388.2	1.9	-388.2	0.00	0.00	0.00
6,600.0	6.69	179.72	6,577.0	-399.9	2.0	-399.9	0.00	0.00	0.00
6,700.0	6.69	179.72	6,676.3	-411.5	2.0	-411.5	0.00	0.00	0.00
6,800.0	6.69	179.72	6,775.6	-423.2	2.1	-423.2	0.00	0.00	0.00
6,900.0	6.69	179.72	6,875.0	-434.8	2.1	-434.8	0.00	0.00	0.00
7,000.0	6.69	179.72	6,974.3	-446.5	2.2	-446.5	0.00	0.00	0.00
7,100.0	6.69	179.72	7,073.6	-458.1	2.3	-458.1	0.00	0.00	0.00
7,200.0	6.69	179.72	7,172.9	-469.8	2.3	-469.8	0.00	0.00	0.00
7,300.0	6.69	179.72	7,272.2	-481.4	2.4	-481.4	0.00	0.00	0.00
7,400.0	6.69	179.72	7,371.6	-493.1	2.4	-493.1	0.00	0.00	0.00
7,500.0	6.69	179.72	7,470.9	-504.7	2.5	-504.7	0.00	0.00	0.00
7,600.0	6.69	179.72	7,570.2	-516.4	2.5	-516.4	0.00	0.00	0.00
7,700.0	6.69	179.72	7,669.5	-528.0	2.6	-528.0	0.00	0.00	0.00
7,800.0	6.69	179.72	7,768.8	-539.7	2.7	-539.7	0.00	0.00	0.00
7,900.0	6.69	179.72	7,868.2	-551.3	2.7	-551.3	0.00	0.00	0.00
8,000.0	6.69	179.72	7,967.5	-563.0	2.8	-563.0	0.00	0.00	0.00
8,100.0	6.69	179.72	8,066.8	-574.6	2.8	-574.6	0.00	0.00	0.00
8,200.0	6.69	179.72	8,166.1	-586.3	2.9	-586.3	0.00	0.00	0.00
8,300.0	6.69	179.72	8,265.4	-597.9	2.9	-597.9	0.00	0.00	0.00
8,400.0	6.69	179.72	8,364.8	-609.6	3.0	-609.6	0.00	0.00	0.00
8,500.0	6.69	179.72	8,464.1	-621.2	3.1	-621.2	0.00	0.00	0.00
8,600.0	6.69	179.72	8,563.4	-632.9	3.1	-632.9	0.00	0.00	0.00
8,700.0	6.69	179.72	8,662.7	-644.5	3.2	-644.5	0.00	0.00	0.00
8,800.0	6.69	179.72	8,762.0	-656.2	3.2	-656.2	0.00	0.00	0.00
8,900.0	6.69	179.72	8,861.4	-667.8	3.3	-667.8	0.00	0.00	0.00
9,000.0	6.69	179.72	8,960.7	-679.5	3.4	-679.5	0.00	0.00	0.00
9,100.0	6.69	179.72	9,060.0	-691.1	3.4	-691.1	0.00	0.00	0.00
9,200.0	6.69	179.72	9,159.3	-702.8	3.5	-702.8	0.00	0.00	0.00
9,300.0	6.69	179.72	9,258.6	-714.4	3.5	-714.4	0.00	0.00	0.00
9,400.0	6.69	179.72	9,357.9	-726.1	3.6	-726.1	0.00	0.00	0.00
9,500.0	6.69	179.72	9,457.3	-737.7	3.6	-737.7	0.00	0.00	0.00
9,600.0	6.69	179.72	9,556.6	-749.3	3.7	-749.4	0.00	0.00	0.00
9,700.0	6.69	179.72	9,655.9	-761.0	3.8	-761.0	0.00	0.00	0.00
9,800.0	6.69	179.72	9,755.2	-772.6	3.8	-772.7	0.00	0.00	0.00
9,900.0	6.69	179.72	9,854.5	-784.3	3.9	-784.3	0.00	0.00	0.00
10,000.0	6.69	179.72	9,953.9	-795.9	3.9	-796.0	0.00	0.00	0.00
10,100.0	6.69	179.72	10,053.2	-807.6	4.0	-807.6	0.00	0.00	0.00
10,200.0	6.69	179.72	10,152.5	-819.2	4.0	-819.3	0.00	0.00	0.00
10,300.0	6.69	179.72	10,251.8	-830.9	4.1	-830.9	0.00	0.00	0.00
10,400.0	6.69	179.72	10,351.1	-842.5	4.2	-842.5	0.00	0.00	0.00
10,500.0	6.69	179.72	10,450.5	-854.2	4.2	-854.2	0.00	0.00	0.00
10,600.0	6.69	179.72	10,549.8	-865.8	4.3	-865.8	0.00	0.00	0.00

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Wellbore:	OH		
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Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,700.0	6.69	179.72	10,649.1	-877.5	4.3	-877.5	0.00	0.00	0.00
10,800.0	6.69	179.72	10,748.4	-889.1	4.4	-889.1	0.00	0.00	0.00
10,900.0	6.69	179.72	10,847.7	-900.8	4.4	-900.8	0.00	0.00	0.00
11,000.0	6.69	179.72	10,947.1	-912.4	4.5	-912.4	0.00	0.00	0.00
11,100.0	6.69	179.72	11,046.4	-924.1	4.6	-924.1	0.00	0.00	0.00
11,200.0	6.69	179.72	11,145.7	-935.7	4.6	-935.7	0.00	0.00	0.00
11,300.0	6.69	179.72	11,245.0	-947.4	4.7	-947.4	0.00	0.00	0.00
11,400.0	6.69	179.72	11,344.3	-959.0	4.7	-959.0	0.00	0.00	0.00
11,500.0	6.69	179.72	11,443.7	-970.7	4.8	-970.7	0.00	0.00	0.00
11,600.0	6.69	179.72	11,543.0	-982.3	4.8	-982.3	0.00	0.00	0.00
11,704.5	6.69	179.72	11,646.8	-994.5	4.9	-994.5	0.00	0.00	0.00
11,800.0	4.78	179.72	11,741.8	-1,004.0	5.0	-1,004.0	2.00	-2.00	0.00
11,900.0	2.78	179.72	11,841.6	-1,010.6	5.0	-1,010.6	2.00	-2.00	0.00
12,000.0	0.78	179.72	11,941.5	-1,013.7	5.0	-1,013.7	2.00	-2.00	0.00
12,039.0	0.00	0.00	11,980.5	-1,014.0	5.0	-1,014.0	2.00	-2.00	0.00
KOP (Mamba 30 State #705H)									
12,050.0	1.32	359.68	11,991.5	-1,013.9	5.0	-1,013.9	12.00	12.00	0.00
12,075.0	4.32	359.68	12,016.5	-1,012.6	5.0	-1,012.7	12.00	12.00	0.00
12,100.0	7.32	359.68	12,041.3	-1,010.1	5.0	-1,010.1	12.00	12.00	0.00
12,125.0	10.32	359.68	12,066.0	-1,006.3	5.0	-1,006.3	12.00	12.00	0.00
12,150.0	13.32	359.68	12,090.5	-1,001.2	4.9	-1,001.2	12.00	12.00	0.00
12,175.0	16.32	359.68	12,114.7	-994.8	4.9	-994.8	12.00	12.00	0.00
12,200.0	19.32	359.68	12,138.5	-987.1	4.8	-987.1	12.00	12.00	0.00
12,225.0	22.32	359.68	12,161.8	-978.2	4.8	-978.2	12.00	12.00	0.00
12,250.0	25.32	359.68	12,184.7	-968.1	4.7	-968.1	12.00	12.00	0.00
12,275.0	28.32	359.68	12,207.0	-956.9	4.7	-956.9	12.00	12.00	0.00
12,300.0	31.32	359.68	12,228.7	-944.4	4.6	-944.4	12.00	12.00	0.00
12,325.0	34.32	359.68	12,249.7	-930.9	4.5	-930.9	12.00	12.00	0.00
12,350.0	37.32	359.68	12,270.0	-916.2	4.4	-916.3	12.00	12.00	0.00
12,375.0	40.32	359.68	12,289.4	-900.6	4.4	-900.6	12.00	12.00	0.00
12,400.0	43.32	359.68	12,308.1	-883.9	4.3	-883.9	12.00	12.00	0.00
12,425.0	46.32	359.68	12,325.8	-866.3	4.2	-866.3	12.00	12.00	0.00
12,441.4	48.28	359.68	12,336.9	-854.3	4.1	-854.3	12.00	12.00	0.00
FTP (Mamba 30 State #705H)									
12,450.0	49.32	359.68	12,342.6	-847.8	4.1	-847.8	12.00	12.00	0.00
12,475.0	52.32	359.68	12,358.4	-828.4	4.0	-828.4	12.00	12.00	0.00
12,500.0	55.32	359.68	12,373.1	-808.2	3.8	-808.2	12.00	12.00	0.00
12,525.0	58.32	359.68	12,386.8	-787.3	3.7	-787.3	12.00	12.00	0.00
12,550.0	61.32	359.68	12,399.4	-765.7	3.6	-765.7	12.00	12.00	0.00
12,575.0	64.32	359.68	12,410.8	-743.4	3.5	-743.5	12.00	12.00	0.00
12,600.0	67.32	359.68	12,421.0	-720.6	3.3	-720.7	12.00	12.00	0.00
12,625.0	70.32	359.68	12,430.1	-697.3	3.2	-697.3	12.00	12.00	0.00
12,650.0	73.32	359.68	12,437.9	-673.6	3.1	-673.6	12.00	12.00	0.00
12,675.0	76.32	359.68	12,444.4	-649.5	2.9	-649.5	12.00	12.00	0.00
12,700.0	79.32	359.68	12,449.7	-625.0	2.8	-625.0	12.00	12.00	0.00
12,725.0	82.32	359.68	12,453.7	-600.4	2.7	-600.4	12.00	12.00	0.00
12,750.0	85.32	359.68	12,456.4	-575.5	2.5	-575.5	12.00	12.00	0.00
12,775.0	88.32	359.68	12,457.8	-550.5	2.4	-550.5	12.00	12.00	0.00
12,789.0	90.00	359.68	12,458.0	-536.5	2.3	-536.6	12.00	12.00	0.00
12,800.0	90.00	359.68	12,458.0	-525.5	2.2	-525.5	0.00	0.00	0.00
12,900.0	90.00	359.68	12,458.0	-425.5	1.7	-425.5	0.00	0.00	0.00
13,000.0	90.00	359.68	12,458.0	-325.5	1.1	-325.5	0.00	0.00	0.00
13,100.0	90.00	359.68	12,458.0	-225.5	0.5	-225.5	0.00	0.00	0.00
13,200.0	90.00	359.68	12,458.0	-125.5	0.0	-125.5	0.00	0.00	0.00

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #705H
Company:	Eog Resources - Midland	TVD Reference:	KB = 25 @ 3579.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25 @ 3579.0usft
Site:	Mamba 30 State Com	North Reference:	Grid
Well:	#705H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
13,300.0	90.00	359.68	12,458.0	-25.6	-0.6	-25.5	0.00	0.00	0.00
13,400.0	90.00	359.68	12,458.0	74.4	-1.2	74.5	0.00	0.00	0.00
13,500.0	90.00	359.68	12,458.0	174.4	-1.7	174.5	0.00	0.00	0.00
13,600.0	90.00	359.68	12,458.0	274.4	-2.3	274.5	0.00	0.00	0.00
13,700.0	90.00	359.68	12,458.0	374.4	-2.9	374.5	0.00	0.00	0.00
13,800.0	90.00	359.68	12,458.0	474.4	-3.4	474.5	0.00	0.00	0.00
13,900.0	90.00	359.68	12,458.0	574.4	-4.0	574.5	0.00	0.00	0.00
14,000.0	90.00	359.68	12,458.0	674.4	-4.5	674.5	0.00	0.00	0.00
14,100.0	90.00	359.68	12,458.0	774.4	-5.1	774.5	0.00	0.00	0.00
14,200.0	90.00	359.68	12,458.0	874.4	-5.7	874.5	0.00	0.00	0.00
14,300.0	90.00	359.68	12,458.0	974.4	-6.2	974.5	0.00	0.00	0.00
14,400.0	90.00	359.68	12,458.0	1,074.4	-6.8	1,074.5	0.00	0.00	0.00
14,500.0	90.00	359.68	12,458.0	1,174.4	-7.4	1,174.5	0.00	0.00	0.00
14,600.0	90.00	359.68	12,458.0	1,274.4	-7.9	1,274.5	0.00	0.00	0.00
14,700.0	90.00	359.68	12,458.0	1,374.4	-8.5	1,374.5	0.00	0.00	0.00
14,800.0	90.00	359.68	12,458.0	1,474.4	-9.1	1,474.5	0.00	0.00	0.00
14,900.0	90.00	359.68	12,458.0	1,574.4	-9.6	1,574.5	0.00	0.00	0.00
15,000.0	90.00	359.68	12,458.0	1,674.4	-10.2	1,674.5	0.00	0.00	0.00
15,100.0	90.00	359.68	12,458.0	1,774.4	-10.8	1,774.5	0.00	0.00	0.00
15,200.0	90.00	359.68	12,458.0	1,874.4	-11.3	1,874.5	0.00	0.00	0.00
15,300.0	90.00	359.68	12,458.0	1,974.4	-11.9	1,974.5	0.00	0.00	0.00
15,400.0	90.00	359.68	12,458.0	2,074.4	-12.5	2,074.5	0.00	0.00	0.00
15,500.0	90.00	359.68	12,458.0	2,174.4	-13.0	2,174.5	0.00	0.00	0.00
15,600.0	90.00	359.68	12,458.0	2,274.4	-13.6	2,274.5	0.00	0.00	0.00
15,700.0	90.00	359.68	12,458.0	2,374.4	-14.2	2,374.5	0.00	0.00	0.00
15,800.0	90.00	359.68	12,458.0	2,474.4	-14.7	2,474.5	0.00	0.00	0.00
15,900.0	90.00	359.68	12,458.0	2,574.4	-15.3	2,574.5	0.00	0.00	0.00
16,000.0	90.00	359.68	12,458.0	2,674.4	-15.9	2,674.5	0.00	0.00	0.00
16,100.0	90.00	359.68	12,458.0	2,774.4	-16.4	2,774.5	0.00	0.00	0.00
16,200.0	90.00	359.68	12,458.0	2,874.4	-17.0	2,874.5	0.00	0.00	0.00
16,300.0	90.00	359.68	12,458.0	2,974.4	-17.6	2,974.5	0.00	0.00	0.00
16,400.0	90.00	359.68	12,458.0	3,074.4	-18.1	3,074.5	0.00	0.00	0.00
16,500.0	90.00	359.68	12,458.0	3,174.4	-18.7	3,174.5	0.00	0.00	0.00
16,600.0	90.00	359.68	12,458.0	3,274.4	-19.2	3,274.5	0.00	0.00	0.00
16,700.0	90.00	359.68	12,458.0	3,374.4	-19.8	3,374.5	0.00	0.00	0.00
16,800.0	90.00	359.68	12,458.0	3,474.4	-20.4	3,474.5	0.00	0.00	0.00
16,900.0	90.00	359.68	12,458.0	3,574.4	-20.9	3,574.5	0.00	0.00	0.00
17,000.0	90.00	359.68	12,458.0	3,674.4	-21.5	3,674.5	0.00	0.00	0.00
17,100.0	90.00	359.68	12,458.0	3,774.4	-22.1	3,774.5	0.00	0.00	0.00
17,200.0	90.00	359.68	12,458.0	3,874.4	-22.6	3,874.5	0.00	0.00	0.00
17,300.0	90.00	359.68	12,458.0	3,974.4	-23.2	3,974.5	0.00	0.00	0.00
17,400.0	90.00	359.68	12,458.0	4,074.4	-23.8	4,074.5	0.00	0.00	0.00
17,440.6	90.00	359.68	12,458.0	4,115.0	-24.0	4,115.1	0.00	0.00	0.00
PBHL (Mamba 30 State #705H)									

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #705H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25 @ 3579.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25 @ 3579.0usft
Site:	Mamba 30 State Com	North Reference:	Grid
Well:	#705H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
KOP (Mamba 30 State # - plan hits target center - Point	0.00	0.00	11,980.5	-1,014.0	5.0	430,527.00	764,516.00	32° 10' 53.542 N	103° 36' 43.050 W
FTP (Mamba 30 State # - plan misses target center by 163.4usft at 12441.4usft MD (12336.9 TVD, -854.3 N, 4.1 E) - Point	0.00	0.00	12,458.0	-964.0	5.0	430,577.00	764,516.00	32° 10' 54.036 N	103° 36' 43.046 W
PBHL (Mamba 30 State - plan hits target center - Point	0.00	0.00	12,458.0	4,115.0	-24.0	435,656.00	764,487.00	32° 11' 44.297 N	103° 36' 42.987 W



HOBBS OCD
OCT 30 2018
RECEIVED

Lea County, NM (NAD 83 NME)

Mamba 30 State Com #705H

Plan #0.1

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

WELL DETAILS: #705H

KB = 25 @ 3579.0usft 3554.0
Northing 431541.00 Easting 764511.00 Latitude 32° 11' 3.576 N Longitude 103° 36' 43.029 W

Azimuths to Grid North
True North: -0.38°
Magnetic North: 8.45°
Magnetic Field
Strength: 47780.1snT
Dip Angle: 60.00°
Date: 9/19/2018
Model: IGRF2015

To convert a Magnetic Direction to a Grid Direction, Add 8.45°
To convert a Magnetic Direction to a True Direction, Add 8.83° East
To convert a True Direction to a Grid Direction, Subtract 0.38°

SECTION DETAILS

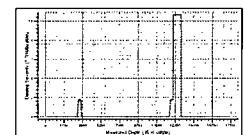
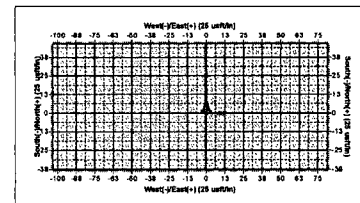
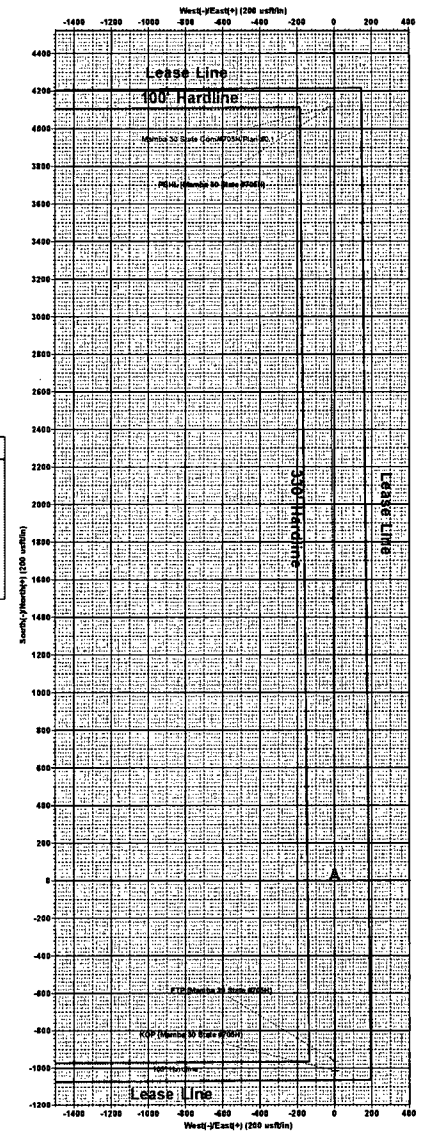
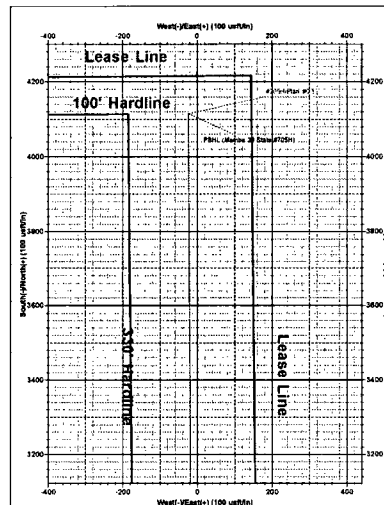
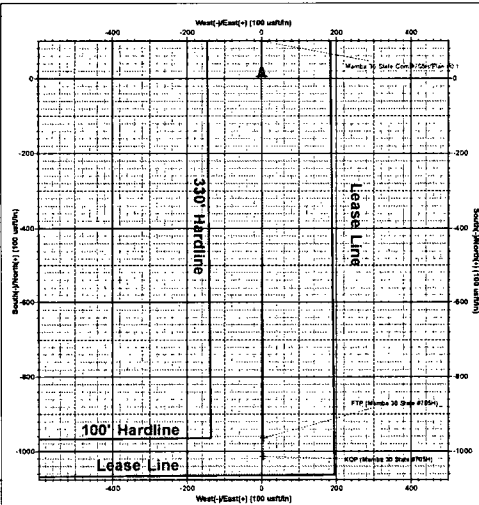
Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	Vsect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	3000.0	0.00	0.00	3000.0	0.0	0.0	0.00	0.00	0.0	
3	3334.5	6.69	179.72	3333.7	-19.5	0.1	2.00	179.72	-19.5	
4	11704.5	6.69	179.72	11646.8	-994.5	4.9	0.00	0.00	-994.5	
5	12039.0	0.00	0.00	11980.5	-1014.0	5.0	2.00	180.00	-1014.0	KOP (Mamba 30 State #705H)
6	12789.0	90.00	359.68	12458.0	-536.5	2.3	12.00	359.68	-536.5	
7	17440.6	90.00	359.68	12458.0	4115.0	-24.0	0.00	0.00	4115.1	PBHL (Mamba 30 State #705H)

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N-S	+E-W	Northing	Easting
KOP (Mamba 30 State #705H)	11980.5	-1014.0	5.0	430527.00	764516.00
PBHL (Mamba 30 State #705H)	12458.0	4115.0	-24.0	430568.00	764487.00
FTP (Mamba 30 State #705H)	12458.0	-864.0	5.0	430577.00	764516.00



U.S. GEOLOGICAL SURVEY
BUREAU OF LAND MANAGEMENT
LEA COUNTY, NEW MEXICO
MAMBA 30 STATE COM #705H
PLAN #0.1
OCT 30 2018