



EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Mamba 30 State Com

#742H

OH

Plan: Plan #0.2

Standard Planning Report

17 October, 2018

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #742H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25 @ 3581.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25 @ 3581.0usft
Site:	Mamba 30 State Com	North Reference:	Grid
Well:	#742H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.2		

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:	Northings:	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	#742H		
Well Position	+N/-S	370.0 usft	Northings: 431,177.00 usft
	+E/-W	-4,406.0 usft	Easting: 762,647.00 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	Latitude: 32° 11' 0.097 N
			Longitude: 103° 37' 4.746 W
			Ground Level: 3,556.0 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination
	IGRF2015	9/19/2018	(°)
			6.84
			Dip Angle
			(°)
			60.00
			Field Strength
			(nT)
			47,778.90176000

Design	Plan #0.2		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth: 0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction
			(°)
			0.71

Plan Survey Tool Program	Date 10/17/2018		
Depth From	Depth To	Survey (Wellbore)	Tool Name
(usft)	(usft)		
1	0.0	17,858.6 Plan #0.2 (OH)	MWD
			OWSG MWD - Standard

Plan Sections										
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Dogleg Rate	Build Rate	Turn Rate	TFO	Target
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)	(°)	
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	
3,206.5	4.13	172.76	3,206.3	-7.4	0.9	2.00	2.00	0.00	172.76	
12,251.8	4.13	172.76	12,228.2	-653.6	83.1	0.00	0.00	0.00	0.00	
12,458.3	0.00	0.00	12,434.5	-661.0	84.0	2.00	-2.00	0.00	180.00 KOP (Mamba 30 Stat	
13,208.3	90.00	359.68	12,912.0	-183.5	81.3	12.00	12.00	-0.04	359.68	
17,859.0	90.00	359.68	12,912.0	4,467.0	55.0	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:	#742H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.2		

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	172.76	3,100.0	-1.7	0.2	-1.7	2.00	2.00	0.00
3,206.5	4.13	172.76	3,206.3	-7.4	0.9	-7.4	2.00	2.00	0.00
3,300.0	4.13	172.76	3,299.6	-14.1	1.8	-14.0	0.00	0.00	0.00
3,400.0	4.13	172.76	3,399.3	-21.2	2.7	-21.2	0.00	0.00	0.00
3,500.0	4.13	172.76	3,499.1	-28.3	3.6	-28.3	0.00	0.00	0.00
3,600.0	4.13	172.76	3,598.8	-35.5	4.5	-35.4	0.00	0.00	0.00
3,700.0	4.13	172.76	3,698.5	-42.6	5.4	-42.6	0.00	0.00	0.00
3,800.0	4.13	172.76	3,798.3	-49.8	6.3	-49.7	0.00	0.00	0.00
3,900.0	4.13	172.76	3,898.0	-56.9	7.2	-56.8	0.00	0.00	0.00
4,000.0	4.13	172.76	3,997.8	-64.1	8.1	-64.0	0.00	0.00	0.00
4,100.0	4.13	172.76	4,097.5	-71.2	9.1	-71.1	0.00	0.00	0.00
4,200.0	4.13	172.76	4,197.2	-78.4	10.0	-78.2	0.00	0.00	0.00
4,300.0	4.13	172.76	4,297.0	-85.5	10.9	-85.4	0.00	0.00	0.00
4,400.0	4.13	172.76	4,396.7	-92.6	11.8	-92.5	0.00	0.00	0.00
4,500.0	4.13	172.76	4,496.5	-99.8	12.7	-99.6	0.00	0.00	0.00
4,600.0	4.13	172.76	4,596.2	-106.9	13.6	-106.8	0.00	0.00	0.00
4,700.0	4.13	172.76	4,695.9	-114.1	14.5	-113.9	0.00	0.00	0.00
4,800.0	4.13	172.76	4,795.7	-121.2	15.4	-121.0	0.00	0.00	0.00
4,900.0	4.13	172.76	4,895.4	-128.4	16.3	-128.2	0.00	0.00	0.00
5,000.0	4.13	172.76	4,995.2	-135.5	17.2	-135.3	0.00	0.00	0.00
5,100.0	4.13	172.76	5,094.9	-142.7	18.1	-142.4	0.00	0.00	0.00
5,200.0	4.13	172.76	5,194.6	-149.8	19.0	-149.6	0.00	0.00	0.00
5,300.0	4.13	172.76	5,294.4	-156.9	19.9	-156.7	0.00	0.00	0.00

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Site:	Mamba 30 State Com	North Reference:	Grid
Well:	#742H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.2		

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)
5,400.0	4.13	172.76	5,394.1	-164.1	20.9	-163.8	0.00	0.00	0.00
5,500.0	4.13	172.76	5,493.9	-171.2	21.8	-171.0	0.00	0.00	0.00
5,600.0	4.13	172.76	5,593.6	-178.4	22.7	-178.1	0.00	0.00	0.00
5,700.0	4.13	172.76	5,693.3	-185.5	23.6	-185.2	0.00	0.00	0.00
5,800.0	4.13	172.76	5,793.1	-192.7	24.5	-192.4	0.00	0.00	0.00
5,900.0	4.13	172.76	5,892.8	-199.8	25.4	-199.5	0.00	0.00	0.00
6,000.0	4.13	172.76	5,992.6	-207.0	26.3	-206.6	0.00	0.00	0.00
6,100.0	4.13	172.76	6,092.3	-214.1	27.2	-213.8	0.00	0.00	0.00
6,200.0	4.13	172.76	6,192.0	-221.2	28.1	-220.9	0.00	0.00	0.00
6,300.0	4.13	172.76	6,291.8	-228.4	29.0	-228.0	0.00	0.00	0.00
6,400.0	4.13	172.76	6,391.5	-235.5	29.9	-235.2	0.00	0.00	0.00
6,500.0	4.13	172.76	6,491.3	-242.7	30.8	-242.3	0.00	0.00	0.00
6,600.0	4.13	172.76	6,591.0	-249.8	31.7	-249.4	0.00	0.00	0.00
6,700.0	4.13	172.76	6,690.7	-257.0	32.7	-256.5	0.00	0.00	0.00
6,800.0	4.13	172.76	6,790.5	-264.1	33.6	-263.7	0.00	0.00	0.00
6,900.0	4.13	172.76	6,890.2	-271.3	34.5	-270.8	0.00	0.00	0.00
7,000.0	4.13	172.76	6,990.0	-278.4	35.4	-277.9	0.00	0.00	0.00
7,100.0	4.13	172.76	7,089.7	-285.5	36.3	-285.1	0.00	0.00	0.00
7,200.0	4.13	172.76	7,189.5	-292.7	37.2	-292.2	0.00	0.00	0.00
7,300.0	4.13	172.76	7,289.2	-299.8	38.1	-299.3	0.00	0.00	0.00
7,400.0	4.13	172.76	7,388.9	-307.0	39.0	-306.5	0.00	0.00	0.00
7,500.0	4.13	172.76	7,488.7	-314.1	39.9	-313.6	0.00	0.00	0.00
7,600.0	4.13	172.76	7,588.4	-321.3	40.8	-320.7	0.00	0.00	0.00
7,700.0	4.13	172.76	7,688.2	-328.4	41.7	-327.9	0.00	0.00	0.00
7,800.0	4.13	172.76	7,787.9	-335.6	42.6	-335.0	0.00	0.00	0.00
7,900.0	4.13	172.76	7,887.6	-342.7	43.6	-342.1	0.00	0.00	0.00
8,000.0	4.13	172.76	7,987.4	-349.8	44.5	-349.3	0.00	0.00	0.00
8,100.0	4.13	172.76	8,087.1	-357.0	45.4	-356.4	0.00	0.00	0.00
8,200.0	4.13	172.76	8,186.9	-364.1	46.3	-363.5	0.00	0.00	0.00
8,300.0	4.13	172.76	8,286.6	-371.3	47.2	-370.7	0.00	0.00	0.00
8,400.0	4.13	172.76	8,386.3	-378.4	48.1	-377.8	0.00	0.00	0.00
8,500.0	4.13	172.76	8,486.1	-385.6	49.0	-384.9	0.00	0.00	0.00
8,600.0	4.13	172.76	8,585.8	-392.7	49.9	-392.1	0.00	0.00	0.00
8,700.0	4.13	172.76	8,685.6	-399.9	50.8	-399.2	0.00	0.00	0.00
8,800.0	4.13	172.76	8,785.3	-407.0	51.7	-406.3	0.00	0.00	0.00
8,900.0	4.13	172.76	8,885.0	-414.1	52.6	-413.5	0.00	0.00	0.00
9,000.0	4.13	172.76	8,984.8	-421.3	53.5	-420.6	0.00	0.00	0.00
9,100.0	4.13	172.76	9,084.5	-428.4	54.4	-427.7	0.00	0.00	0.00
9,200.0	4.13	172.76	9,184.3	-435.6	55.4	-434.9	0.00	0.00	0.00
9,300.0	4.13	172.76	9,284.0	-442.7	56.3	-442.0	0.00	0.00	0.00
9,400.0	4.13	172.76	9,383.7	-449.9	57.2	-449.1	0.00	0.00	0.00
9,500.0	4.13	172.76	9,483.5	-457.0	58.1	-456.3	0.00	0.00	0.00
9,600.0	4.13	172.76	9,583.2	-464.2	59.0	-463.4	0.00	0.00	0.00
9,700.0	4.13	172.76	9,683.0	-471.3	59.9	-470.5	0.00	0.00	0.00
9,800.0	4.13	172.76	9,782.7	-478.4	60.8	-477.7	0.00	0.00	0.00
9,900.0	4.13	172.76	9,882.4	-485.6	61.7	-484.8	0.00	0.00	0.00
10,000.0	4.13	172.76	9,982.2	-492.7	62.6	-491.9	0.00	0.00	0.00
10,100.0	4.13	172.76	10,081.9	-499.9	63.5	-499.1	0.00	0.00	0.00
10,200.0	4.13	172.76	10,181.7	-507.0	64.4	-506.2	0.00	0.00	0.00
10,300.0	4.13	172.76	10,281.4	-514.2	65.3	-513.3	0.00	0.00	0.00
10,400.0	4.13	172.76	10,381.1	-521.3	66.2	-520.5	0.00	0.00	0.00
10,500.0	4.13	172.76	10,480.9	-528.5	67.2	-527.6	0.00	0.00	0.00
10,600.0	4.13	172.76	10,580.6	-535.6	68.1	-534.7	0.00	0.00	0.00
10,700.0	4.13	172.76	10,680.4	-542.7	69.0	-541.9	0.00	0.00	0.00

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Wellbore:	OH		
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10,800.0	4.13	172.76	10,780.1	-549.9	69.9	-549.0	0.00	0.00	0.00
10,900.0	4.13	172.76	10,879.8	-557.0	70.8	-556.1	0.00	0.00	0.00
11,000.0	4.13	172.76	10,979.6	-564.2	71.7	-563.3	0.00	0.00	0.00
11,100.0	4.13	172.76	11,079.3	-571.3	72.6	-570.4	0.00	0.00	0.00
11,200.0	4.13	172.76	11,179.1	-578.5	73.5	-577.5	0.00	0.00	0.00
11,300.0	4.13	172.76	11,278.8	-585.6	74.4	-584.7	0.00	0.00	0.00
11,400.0	4.13	172.76	11,378.5	-592.8	75.3	-591.8	0.00	0.00	0.00
11,500.0	4.13	172.76	11,478.3	-599.9	76.2	-598.9	0.00	0.00	0.00
11,600.0	4.13	172.76	11,578.0	-607.0	77.1	-606.1	0.00	0.00	0.00
11,700.0	4.13	172.76	11,677.8	-614.2	78.1	-613.2	0.00	0.00	0.00
11,800.0	4.13	172.76	11,777.5	-621.3	79.0	-620.3	0.00	0.00	0.00
11,900.0	4.13	172.76	11,877.2	-628.5	79.9	-627.5	0.00	0.00	0.00
12,000.0	4.13	172.76	11,977.0	-635.6	80.8	-634.6	0.00	0.00	0.00
12,100.0	4.13	172.76	12,076.7	-642.8	81.7	-641.7	0.00	0.00	0.00
12,200.0	4.13	172.76	12,176.5	-649.9	82.6	-648.8	0.00	0.00	0.00
12,251.8	4.13	172.76	12,228.2	-653.6	83.1	-652.5	0.00	0.00	0.00
12,300.0	3.17	172.76	12,276.2	-656.7	83.4	-655.6	2.00	-2.00	0.00
12,400.0	1.17	172.76	12,376.2	-660.4	83.9	-659.3	2.00	-2.00	0.00
12,458.3	0.00	0.00	12,434.5	-661.0	84.0	-659.9	2.00	-2.00	0.00
KOP (Mamba 30 State #742H)									
12,475.0	2.00	359.68	12,451.2	-660.7	84.0	-659.6	12.00	12.00	0.00
12,500.0	5.00	359.68	12,476.1	-659.2	84.0	-658.1	12.00	12.00	0.00
12,525.0	8.00	359.68	12,500.9	-656.4	84.0	-655.3	12.00	12.00	0.00
12,550.0	11.00	359.68	12,525.6	-652.2	84.0	-651.1	12.00	12.00	0.00
12,575.0	14.00	359.68	12,550.0	-646.8	83.9	-645.7	12.00	12.00	0.00
12,600.0	17.00	359.68	12,574.1	-640.1	83.9	-639.1	12.00	12.00	0.00
12,625.0	20.00	359.68	12,597.8	-632.2	83.8	-631.1	12.00	12.00	0.00
12,650.0	23.00	359.68	12,621.0	-623.0	83.8	-622.0	12.00	12.00	0.00
12,675.0	26.00	359.68	12,643.8	-612.7	83.7	-611.6	12.00	12.00	0.00
12,700.0	29.00	359.68	12,666.0	-601.1	83.7	-600.1	12.00	12.00	0.00
12,725.0	32.00	359.68	12,687.5	-588.5	83.6	-587.4	12.00	12.00	0.00
12,750.0	35.00	359.68	12,708.4	-574.7	83.5	-573.6	12.00	12.00	0.00
12,775.0	38.00	359.68	12,728.4	-559.8	83.4	-558.7	12.00	12.00	0.00
12,800.0	41.00	359.68	12,747.7	-543.9	83.3	-542.8	12.00	12.00	0.00
12,825.0	44.00	359.68	12,766.2	-527.0	83.2	-525.9	12.00	12.00	0.00
12,850.0	47.00	359.68	12,783.7	-509.2	83.1	-508.1	12.00	12.00	0.00
12,858.8	48.05	359.68	12,789.6	-502.7	83.1	-501.7	12.00	12.00	0.00
FTP (Mamba 30 State #742H)									
12,875.0	50.00	359.68	12,800.3	-490.5	83.0	-489.4	12.00	12.00	0.00
12,900.0	53.00	359.68	12,815.8	-470.9	82.9	-469.8	12.00	12.00	0.00
12,925.0	56.00	359.68	12,830.3	-450.5	82.8	-449.5	12.00	12.00	0.00
12,950.0	59.00	359.68	12,843.8	-429.5	82.7	-428.4	12.00	12.00	0.00
12,975.0	62.00	359.68	12,856.1	-407.7	82.6	-406.7	12.00	12.00	0.00
13,000.0	65.00	359.68	12,867.2	-385.3	82.4	-384.3	12.00	12.00	0.00
13,025.0	68.00	359.68	12,877.2	-362.4	82.3	-361.4	12.00	12.00	0.00
13,050.0	71.00	359.68	12,885.9	-339.0	82.2	-338.0	12.00	12.00	0.00
13,075.0	74.00	359.68	12,893.5	-315.2	82.0	-314.1	12.00	12.00	0.00
13,100.0	77.00	359.68	12,899.7	-291.0	81.9	-289.9	12.00	12.00	0.00
13,125.0	80.00	359.68	12,904.7	-266.5	81.8	-265.4	12.00	12.00	0.00
13,150.0	83.00	359.68	12,908.4	-241.7	81.6	-240.7	12.00	12.00	0.00
13,175.0	86.00	359.68	12,910.8	-216.9	81.5	-215.8	12.00	12.00	0.00
13,200.0	89.00	359.68	12,911.9	-191.9	81.3	-190.9	12.00	12.00	0.00
13,208.3	90.00	359.68	12,912.0	-183.5	81.3	-182.5	12.00	12.00	0.00
13,300.0	90.00	359.68	12,912.0	-91.9	80.8	-90.9	0.00	0.00	0.00

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #742H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25 @ 3581.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25 @ 3581.0usft
Site:	Mamba 30 State Com	North Reference:	Grid
Well:	#742H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.2		

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)
13,400.0	90.00	359.68	12,912.0	8.1	80.2	9.1	0.00	0.00	0.00
13,500.0	90.00	359.68	12,912.0	108.1	79.7	109.1	0.00	0.00	0.00
13,600.0	90.00	359.68	12,912.0	208.1	79.1	209.1	0.00	0.00	0.00
13,700.0	90.00	359.68	12,912.0	308.1	78.5	309.0	0.00	0.00	0.00
13,800.0	90.00	359.68	12,912.0	408.1	78.0	409.0	0.00	0.00	0.00
13,900.0	90.00	359.68	12,912.0	508.1	77.4	509.0	0.00	0.00	0.00
14,000.0	90.00	359.68	12,912.0	608.1	76.8	609.0	0.00	0.00	0.00
14,100.0	90.00	359.68	12,912.0	708.1	76.3	709.0	0.00	0.00	0.00
14,200.0	90.00	359.68	12,912.0	808.1	75.7	809.0	0.00	0.00	0.00
14,300.0	90.00	359.68	12,912.0	908.1	75.1	908.9	0.00	0.00	0.00
14,400.0	90.00	359.68	12,912.0	1,008.1	74.6	1,008.9	0.00	0.00	0.00
14,500.0	90.00	359.68	12,912.0	1,108.1	74.0	1,108.9	0.00	0.00	0.00
14,600.0	90.00	359.68	12,912.0	1,208.1	73.4	1,208.9	0.00	0.00	0.00
14,700.0	90.00	359.68	12,912.0	1,308.1	72.9	1,308.9	0.00	0.00	0.00
14,800.0	90.00	359.68	12,912.0	1,408.1	72.3	1,408.9	0.00	0.00	0.00
14,900.0	90.00	359.68	12,912.0	1,508.1	71.7	1,508.9	0.00	0.00	0.00
15,000.0	90.00	359.68	12,912.0	1,608.1	71.2	1,608.8	0.00	0.00	0.00
15,100.0	90.00	359.68	12,912.0	1,708.1	70.6	1,708.8	0.00	0.00	0.00
15,200.0	90.00	359.68	12,912.0	1,808.1	70.0	1,808.8	0.00	0.00	0.00
15,300.0	90.00	359.68	12,912.0	1,908.1	69.5	1,908.8	0.00	0.00	0.00
15,400.0	90.00	359.68	12,912.0	2,008.1	68.9	2,008.8	0.00	0.00	0.00
15,500.0	90.00	359.68	12,912.0	2,108.1	68.3	2,108.8	0.00	0.00	0.00
15,600.0	90.00	359.68	12,912.0	2,208.1	67.8	2,208.7	0.00	0.00	0.00
15,700.0	90.00	359.68	12,912.0	2,308.1	67.2	2,308.7	0.00	0.00	0.00
15,800.0	90.00	359.68	12,912.0	2,408.1	66.6	2,408.7	0.00	0.00	0.00
15,900.0	90.00	359.68	12,912.0	2,508.1	66.1	2,508.7	0.00	0.00	0.00
16,000.0	90.00	359.68	12,912.0	2,608.1	65.5	2,608.7	0.00	0.00	0.00
16,100.0	90.00	359.68	12,912.0	2,708.1	64.9	2,708.7	0.00	0.00	0.00
16,200.0	90.00	359.68	12,912.0	2,808.1	64.4	2,808.6	0.00	0.00	0.00
16,300.0	90.00	359.68	12,912.0	2,908.1	63.8	2,908.6	0.00	0.00	0.00
16,400.0	90.00	359.68	12,912.0	3,008.1	63.3	3,008.6	0.00	0.00	0.00
16,500.0	90.00	359.68	12,912.0	3,108.1	62.7	3,108.6	0.00	0.00	0.00
16,600.0	90.00	359.68	12,912.0	3,208.1	62.1	3,208.6	0.00	0.00	0.00
16,700.0	90.00	359.68	12,912.0	3,308.1	61.6	3,308.6	0.00	0.00	0.00
16,800.0	90.00	359.68	12,912.0	3,408.1	61.0	3,408.5	0.00	0.00	0.00
16,900.0	90.00	359.68	12,912.0	3,508.1	60.4	3,508.5	0.00	0.00	0.00
17,000.0	90.00	359.68	12,912.0	3,608.1	59.9	3,608.5	0.00	0.00	0.00
17,100.0	90.00	359.68	12,912.0	3,708.0	59.3	3,708.5	0.00	0.00	0.00
17,200.0	90.00	359.68	12,912.0	3,808.0	58.7	3,808.5	0.00	0.00	0.00
17,300.0	90.00	359.68	12,912.0	3,908.0	58.2	3,908.5	0.00	0.00	0.00
17,400.0	90.00	359.68	12,912.0	4,008.0	57.6	4,008.4	0.00	0.00	0.00
17,500.0	90.00	359.68	12,912.0	4,108.0	57.0	4,108.4	0.00	0.00	0.00
17,600.0	90.00	359.68	12,912.0	4,208.0	56.5	4,208.4	0.00	0.00	0.00
17,700.0	90.00	359.68	12,912.0	4,308.0	55.9	4,308.4	0.00	0.00	0.00
17,800.0	90.00	359.68	12,912.0	4,408.0	55.3	4,408.4	0.00	0.00	0.00
17,859.0	90.00	359.68	12,912.0	4,467.0	55.0	4,467.3	0.00	0.00	0.00

PBHL (Mamba 30 State #742H)



Planning Report

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #742H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25 @ 3581.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25 @ 3581.0usft
Site:	Mamba 30 State Com	North Reference:	Grid
Well:	#742H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.2		

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
KOP (Mamba 30 State # - plan hits target center - Point	0.00	0.00	12,434.5	-661.0	84.0	430,516.00	762,731.00	32° 10' 53.551 N	103° 37' 3.820 W
FTP (Mamba 30 State # - plan misses target center by 163.4usft at 12858.8usft MD (12789.6 TVD, -502.7 N, 83.1 E) - Point	0.00	0.00	12,912.0	-611.0	84.0	430,566.00	762,731.00	32° 10' 54.046 N	103° 37' 3.816 W
PBHL (Mamba 30 State - plan hits target center - Point	0.00	0.01	12,912.0	4,467.0	55.0	435,644.00	762,702.00	32° 11' 44.296 N	103° 37' 3.760 W



Lea County, NM (NAD 83 NME)

Mamba 30 State Com #742H

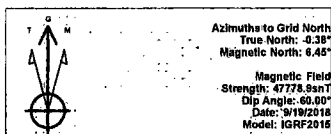
Plan #0.2

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: #742H

KB = 25 @ 3581.0surf 3556.0
Northing 431177.00 Easting 762647.00 Latitude 32° 11' 0.097 N Longitude 103° 37' 4.746 W



Azimuths to Grid North
True North: -0.38°
Magnetic North: 6.45°
Magnetic Field
Strength: 47778.9nT
Dip Angle: 60.00°
Date: 9/19/2016
Model: IGRF2015

To convert a Magnetic Direction to a Grid Direction, Add 6.45°
To convert a Magnetic Direction to a True Direction, Add 6.84° East
To convert a True Direction to a Grid Direction, Subtract 0.38°

SECTION DETAILS

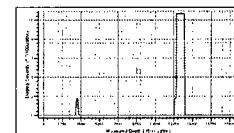
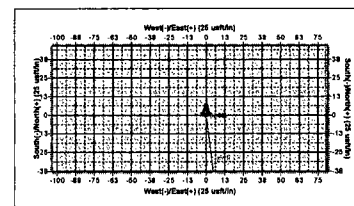
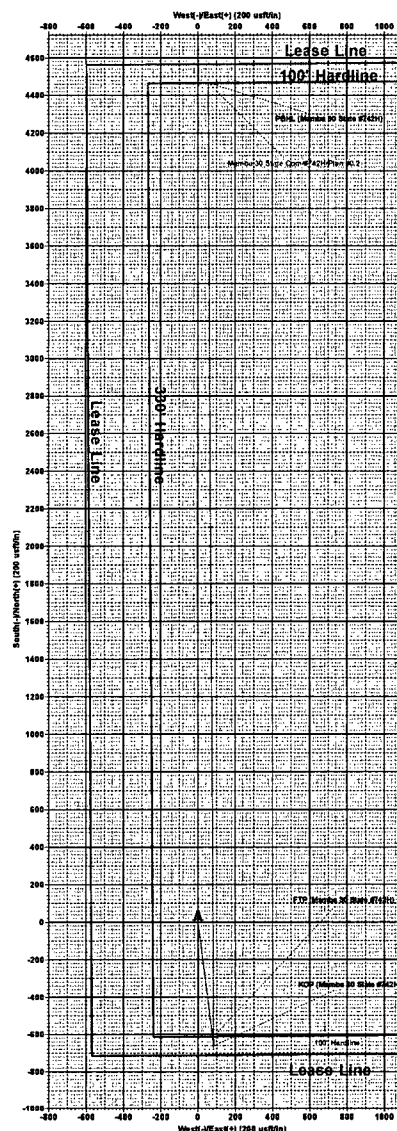
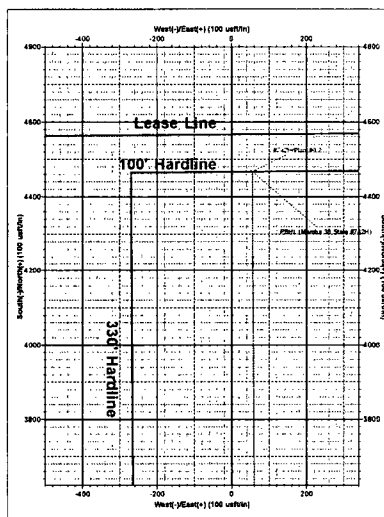
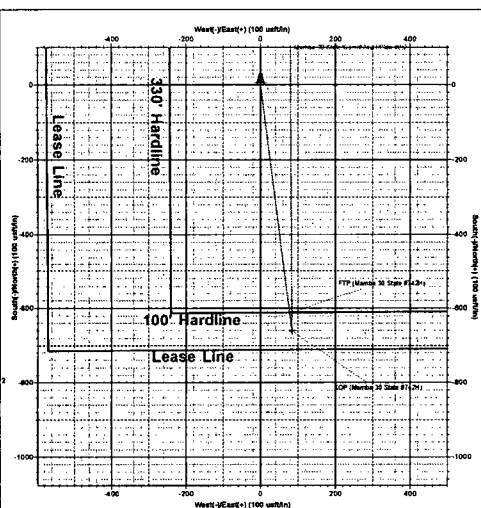
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	3000.0	0.00	0.00	3000.0	0.0	0.0	0.00	0.00	0.0	
3	3206.5	4.13	172.76	3206.3	-7.4	0.9	2.00	172.76	-7.4	
4	12251.8	4.13	172.76	12228.2	-653.6	83.1	0.00	0.00	-652.5	
5	12458.3	0.00	0.00	12434.5	-661.0	84.0	2.00	180.00	-659.9	KOP (Mamba 30 State #742H)
6	13208.3	90.00	359.68	12912.0	-183.5	81.3	12.00	359.68	-182.5	
7	17859.0	90.00	359.68	12912.0	4467.0	55.0	0.00	0.00	4467.3	PBHL (Mamba 30 State #742H)

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 #742H)	12434.5	-661.0	84.0	430516.00	762731.00
PBHL (Mamba 30 State #742H)	12912.0	4467.0	55.0	430544.00	762702.00
FTP (Mamba 30 State #742H)	12912.0	-611.0	84.0	430566.00	762731.00



Lea County, NM (NAD 83 NME)
Mamba 30 State Com #742H
Plan #0.2