

HOBBS CCO
SEP 28 2018
30-025-45241



Lea County, NM (NAD 83 NME)

Mamba 30 State Com #506H

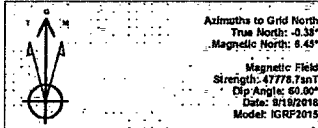
Plan #0.1

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: #506H

KB = 25 @ 3578.0' sur 3553.0'
Northing 430924.00 Easting 763376.00 Latitude 32° 10' 57.546 N Longitude 103° 36' 58.283 W



To convert a Magnetic Direction to a Grid Direction, Add 6.45°
To convert a Magnetic Direction to a True Direction, Add 9.83° East
To convert a True Direction to a Grid Direction, Subtract 0.38°

SECTION DETAILS

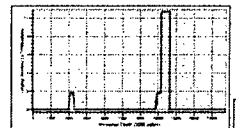
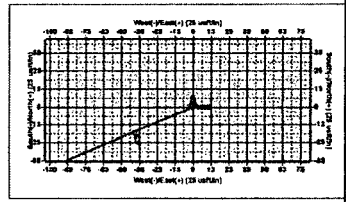
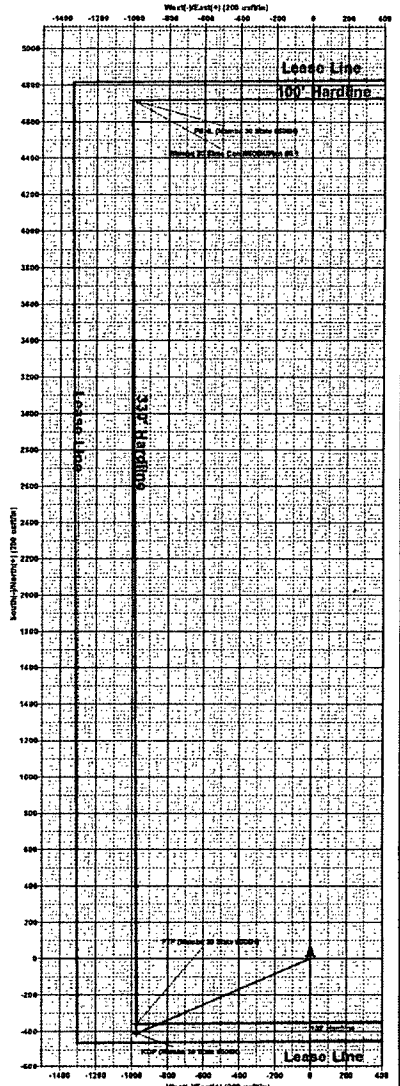
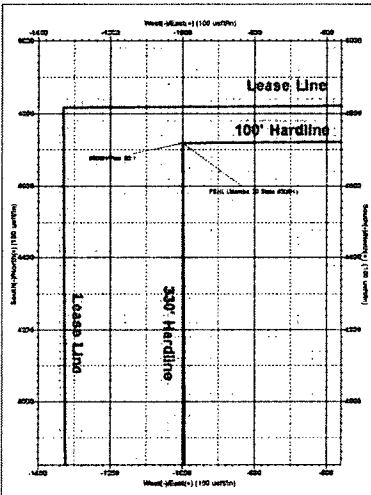
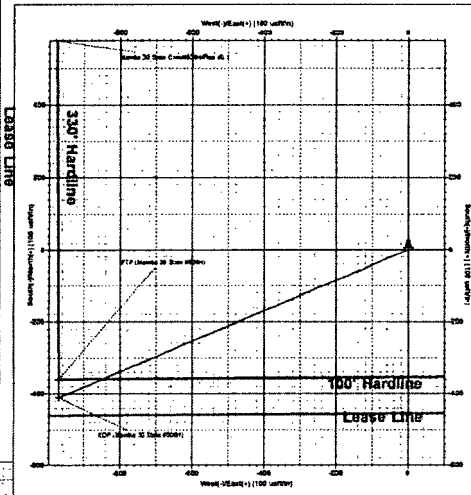
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	3000.0	0.00	0.00	3000.0	0.0	0.0	0.00	0.00	0.0	
3	3413.4	8.27	247.09	3411.9	-11.6	-27.4	2.00	247.09	-5.7	
4	10322.8	8.27	247.09	10249.6	-398.4	-942.6	0.00	0.00	-194.5	
5	10736.2	0.00	0.00	10661.5	-410.0	-970.0	2.00	180.00	-200.2	KOP (Mamba 30 State #506H)
6	11486.2	90.00	359.68	11139.0	67.5	-972.7	12.00	359.68	267.5	
7	16136.8	90.00	359.68	11139.0	4718.0	-999.0	0.00	0.00	4822.6	PBHL (Mamba 30 State #506H)

CASINO DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting
KOP (Mamba 30 State #506H)	10661.5	-410.0	-970.0	430514.00	762406.00
PBHL (Mamba 30 State #506H)	11139.0	4718.0	-999.0	430842.00	762377.00
FTP (Mamba 30 State #506H)	11139.0	-380.0	-970.0	430564.00	762406.00



Vertical Section at 343.04° (200 units)



EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Mamba 30 State Com

#506H

OH

Plan: Plan #0.1

Standard Planning Report

20 September, 2018

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #506H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25 @ 3578.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25 @ 3578.0usft
Site:	Mamba 30 State Com	North Reference:	Grid
Well:	#506H	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	#506H					
Well Position	+N/-S	117.0 usft	Northing:	430,924.00 usft	Latitude:	32° 10' 57.546 N
	+E/-W	-3,677.0 usft	Easting:	763,376.00 usft	Longitude:	103° 36' 56.283 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	3,553.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF2015	9/19/2018	6.83	60.00	47,778.74986268

Design	Plan #0.1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(usft)	(usft)	(usft)	(°)
	0.0	0.0	0.0	348.04

Plan Survey Tool Program	Date	9/20/2018		
Depth From	Depth To	Survey (Wellbore)	Tool Name	Remarks
(usft)	(usft)			
1	0.0	16,136.8 Plan #0.1 (OH)	MWD	
			OWSG MWD - Standard	

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(usft)	(usft)	Rate	Rate	Rate	(°)	
(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	
3,413.4	8.27	247.09	3,411.9	-11.6	-27.4	2.00	2.00	0.00	247.09	
10,322.8	8.27	247.09	10,249.6	-398.4	-942.6	0.00	0.00	0.00	0.00	
10,736.2	0.00	0.00	10,661.5	-410.0	-970.0	2.00	-2.00	0.00	180.00	KOP (Mamba 30 Stat
11,486.2	90.00	359.68	11,139.0	67.5	-972.7	12.00	12.00	-0.04	359.68	
16,136.8	90.00	359.68	11,139.0	4,718.0	-999.0	0.00	0.00	0.00	0.00	PBHL (Mamba 30 Sta

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Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25 @ 3578.0usft
Site:	Mamba 30 State Com	North Reference:	Grid
Well:	#506H	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	247.09	3,100.0	-0.7	-1.6	-0.3	2.00	2.00	0.00
3,200.0	4.00	247.09	3,199.8	-2.7	-6.4	-1.3	2.00	2.00	0.00
3,300.0	6.00	247.09	3,299.5	-6.1	-14.5	-3.0	2.00	2.00	0.00
3,400.0	8.00	247.09	3,398.7	-10.9	-25.7	-5.3	2.00	2.00	0.00
3,413.4	8.27	247.09	3,411.9	-11.6	-27.4	-5.7	2.00	2.00	0.00
3,500.0	8.27	247.09	3,497.7	-16.4	-38.9	-8.0	0.00	0.00	0.00
3,600.0	8.27	247.09	3,596.6	-22.0	-52.1	-10.8	0.00	0.00	0.00
3,700.0	8.27	247.09	3,695.6	-27.6	-65.4	-13.5	0.00	0.00	0.00
3,800.0	8.27	247.09	3,794.5	-33.2	-78.6	-16.2	0.00	0.00	0.00
3,900.0	8.27	247.09	3,893.5	-38.8	-91.9	-19.0	0.00	0.00	0.00
4,000.0	8.27	247.09	3,992.5	-44.4	-105.1	-21.7	0.00	0.00	0.00
4,100.0	8.27	247.09	4,091.4	-50.0	-118.4	-24.4	0.00	0.00	0.00
4,200.0	8.27	247.09	4,190.4	-55.6	-131.6	-27.2	0.00	0.00	0.00
4,300.0	8.27	247.09	4,289.4	-61.2	-144.9	-29.9	0.00	0.00	0.00
4,400.0	8.27	247.09	4,388.3	-66.8	-158.1	-32.6	0.00	0.00	0.00
4,500.0	8.27	247.09	4,487.3	-72.4	-171.3	-35.4	0.00	0.00	0.00
4,600.0	8.27	247.09	4,586.2	-78.0	-184.6	-38.1	0.00	0.00	0.00
4,700.0	8.27	247.09	4,685.2	-83.6	-197.8	-40.8	0.00	0.00	0.00
4,800.0	8.27	247.09	4,784.2	-89.2	-211.1	-43.6	0.00	0.00	0.00
4,900.0	8.27	247.09	4,883.1	-94.8	-224.3	-46.3	0.00	0.00	0.00
5,000.0	8.27	247.09	4,982.1	-100.4	-237.6	-49.0	0.00	0.00	0.00
5,100.0	8.27	247.09	5,081.0	-106.0	-250.8	-51.8	0.00	0.00	0.00
5,200.0	8.27	247.09	5,180.0	-111.6	-264.1	-54.5	0.00	0.00	0.00

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Site:	Mamba 30 State Com	North Reference:	Grid
Well:	#506H	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	8.27	247.09	5,279.0	-117.2	-277.3	-57.2	0.00	0.00	0.00
5,400.0	8.27	247.09	5,377.9	-122.8	-290.6	-60.0	0.00	0.00	0.00
5,500.0	8.27	247.09	5,476.9	-128.4	-303.8	-62.7	0.00	0.00	0.00
5,600.0	8.27	247.09	5,575.8	-134.0	-317.0	-65.4	0.00	0.00	0.00
5,700.0	8.27	247.09	5,674.8	-139.6	-330.3	-68.2	0.00	0.00	0.00
5,800.0	8.27	247.09	5,773.8	-145.2	-343.5	-70.9	0.00	0.00	0.00
5,900.0	8.27	247.09	5,872.7	-150.8	-356.8	-73.6	0.00	0.00	0.00
6,000.0	8.27	247.09	5,971.7	-156.4	-370.0	-76.4	0.00	0.00	0.00
6,100.0	8.27	247.09	6,070.6	-162.0	-383.3	-79.1	0.00	0.00	0.00
6,200.0	8.27	247.09	6,169.6	-167.6	-396.5	-81.8	0.00	0.00	0.00
6,300.0	8.27	247.09	6,268.6	-173.2	-409.8	-84.6	0.00	0.00	0.00
6,400.0	8.27	247.09	6,367.5	-178.8	-423.0	-87.3	0.00	0.00	0.00
6,500.0	8.27	247.09	6,466.5	-184.4	-436.2	-90.0	0.00	0.00	0.00
6,600.0	8.27	247.09	6,565.4	-190.0	-449.5	-92.8	0.00	0.00	0.00
6,700.0	8.27	247.09	6,664.4	-195.6	-462.7	-95.5	0.00	0.00	0.00
6,800.0	8.27	247.09	6,763.4	-201.2	-476.0	-98.2	0.00	0.00	0.00
6,900.0	8.27	247.09	6,862.3	-206.8	-489.2	-101.0	0.00	0.00	0.00
7,000.0	8.27	247.09	6,961.3	-212.4	-502.5	-103.7	0.00	0.00	0.00
7,100.0	8.27	247.09	7,060.3	-218.0	-515.7	-106.4	0.00	0.00	0.00
7,200.0	8.27	247.09	7,159.2	-223.6	-529.0	-109.2	0.00	0.00	0.00
7,300.0	8.27	247.09	7,258.2	-229.2	-542.2	-111.9	0.00	0.00	0.00
7,400.0	8.27	247.09	7,357.1	-234.8	-555.5	-114.6	0.00	0.00	0.00
7,500.0	8.27	247.09	7,456.1	-240.4	-568.7	-117.4	0.00	0.00	0.00
7,600.0	8.27	247.09	7,555.1	-246.0	-581.9	-120.1	0.00	0.00	0.00
7,700.0	8.27	247.09	7,654.0	-251.6	-595.2	-122.8	0.00	0.00	0.00
7,800.0	8.27	247.09	7,753.0	-257.2	-608.4	-125.6	0.00	0.00	0.00
7,900.0	8.27	247.09	7,851.9	-262.8	-621.7	-128.3	0.00	0.00	0.00
8,000.0	8.27	247.09	7,950.9	-268.4	-634.9	-131.0	0.00	0.00	0.00
8,100.0	8.27	247.09	8,049.9	-274.0	-648.2	-133.8	0.00	0.00	0.00
8,200.0	8.27	247.09	8,148.8	-279.6	-661.4	-136.5	0.00	0.00	0.00
8,300.0	8.27	247.09	8,247.8	-285.2	-674.7	-139.2	0.00	0.00	0.00
8,400.0	8.27	247.09	8,346.7	-290.8	-687.9	-142.0	0.00	0.00	0.00
8,500.0	8.27	247.09	8,445.7	-296.4	-701.1	-144.7	0.00	0.00	0.00
8,600.0	8.27	247.09	8,544.7	-302.0	-714.4	-147.4	0.00	0.00	0.00
8,700.0	8.27	247.09	8,643.6	-307.6	-727.6	-150.2	0.00	0.00	0.00
8,800.0	8.27	247.09	8,742.6	-313.2	-740.9	-152.9	0.00	0.00	0.00
8,900.0	8.27	247.09	8,841.5	-318.8	-754.1	-155.6	0.00	0.00	0.00
9,000.0	8.27	247.09	8,940.5	-324.4	-767.4	-158.4	0.00	0.00	0.00
9,100.0	8.27	247.09	9,039.5	-330.0	-780.6	-161.1	0.00	0.00	0.00
9,200.0	8.27	247.09	9,138.4	-335.5	-793.9	-163.8	0.00	0.00	0.00
9,300.0	8.27	247.09	9,237.4	-341.1	-807.1	-166.6	0.00	0.00	0.00
9,400.0	8.27	247.09	9,336.4	-346.7	-820.4	-169.3	0.00	0.00	0.00
9,500.0	8.27	247.09	9,435.3	-352.3	-833.6	-172.0	0.00	0.00	0.00
9,600.0	8.27	247.09	9,534.3	-357.9	-846.8	-174.8	0.00	0.00	0.00
9,700.0	8.27	247.09	9,633.2	-363.5	-860.1	-177.5	0.00	0.00	0.00
9,800.0	8.27	247.09	9,732.2	-369.1	-873.3	-180.2	0.00	0.00	0.00
9,900.0	8.27	247.09	9,831.2	-374.7	-886.6	-183.0	0.00	0.00	0.00
10,000.0	8.27	247.09	9,930.1	-380.3	-899.8	-185.7	0.00	0.00	0.00
10,100.0	8.27	247.09	10,029.1	-385.9	-913.1	-188.4	0.00	0.00	0.00
10,200.0	8.27	247.09	10,128.0	-391.5	-926.3	-191.2	0.00	0.00	0.00
10,300.0	8.27	247.09	10,227.0	-397.1	-939.6	-193.9	0.00	0.00	0.00
10,322.8	8.27	247.09	10,249.6	-398.4	-942.6	-194.5	0.00	0.00	0.00
10,400.0	6.72	247.09	10,326.1	-402.3	-951.9	-196.4	2.00	-2.00	0.00
10,500.0	4.72	247.09	10,425.6	-406.2	-961.0	-198.3	2.00	-2.00	0.00

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Site: Mamba 30 State Com
Well: #506H
Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference: Well #506H
TVD Reference: KB = 25 @ 3578.0usft
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North Reference: Grid
Survey Calculation Method: Minimum Curvature

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)
10,600.0	2.72	247.09	10,525.4	-408.7	-967.0	-199.6	2.00	-2.00	0.00
10,700.0	0.72	247.09	10,625.3	-409.9	-969.8	-200.1	2.00	-2.00	0.00
10,736.2	0.00	0.00	10,661.5	-410.0	-970.0	-200.2	2.00	-2.00	0.00
KOP (Mamba 30 State #506H)									
10,750.0	1.66	359.68	10,675.3	-409.8	-970.0	-200.0	12.00	12.00	0.00
10,775.0	4.66	359.68	10,700.3	-408.4	-970.0	-198.6	12.00	12.00	0.00
10,800.0	7.66	359.68	10,725.1	-405.7	-970.0	-196.0	12.00	12.00	0.00
10,825.0	10.66	359.68	10,749.8	-401.8	-970.0	-192.1	12.00	12.00	0.00
10,850.0	13.66	359.68	10,774.3	-396.5	-970.1	-186.9	12.00	12.00	0.00
10,875.0	16.66	359.68	10,798.4	-390.0	-970.1	-180.5	12.00	12.00	0.00
10,900.0	19.66	359.68	10,822.1	-382.2	-970.2	-172.9	12.00	12.00	0.00
10,925.0	22.66	359.68	10,845.4	-373.1	-970.2	-164.1	12.00	12.00	0.00
10,950.0	25.66	359.68	10,868.3	-362.9	-970.3	-154.1	12.00	12.00	0.00
10,975.0	28.66	359.68	10,890.5	-351.5	-970.3	-142.9	12.00	12.00	0.00
11,000.0	31.66	359.68	10,912.1	-338.9	-970.4	-130.6	12.00	12.00	0.00
11,025.0	34.66	359.68	10,933.0	-325.3	-970.5	-117.2	12.00	12.00	0.00
11,050.0	37.66	359.68	10,953.2	-310.5	-970.6	-102.7	12.00	12.00	0.00
11,075.0	40.66	359.68	10,972.6	-294.7	-970.7	-87.3	12.00	12.00	0.00
11,100.0	43.66	359.68	10,991.1	-278.0	-970.7	-70.8	12.00	12.00	0.00
11,125.0	46.66	359.68	11,008.8	-260.2	-970.8	-53.5	12.00	12.00	0.00
11,137.6	48.17	359.68	11,017.3	-251.0	-970.9	-44.4	12.00	12.00	0.00
FTP (Mamba 30 State #506H)									
11,150.0	49.66	359.68	11,025.4	-241.6	-971.0	-35.2	12.00	12.00	0.00
11,175.0	52.66	359.68	11,041.1	-222.1	-971.1	-16.2	12.00	12.00	0.00
11,200.0	55.66	359.68	11,055.7	-201.9	-971.2	3.7	12.00	12.00	0.00
11,225.0	58.66	359.68	11,069.3	-180.9	-971.3	24.2	12.00	12.00	0.00
11,250.0	61.66	359.68	11,081.7	-159.2	-971.4	45.5	12.00	12.00	0.00
11,275.0	64.66	359.68	11,093.0	-136.9	-971.5	67.3	12.00	12.00	0.00
11,300.0	67.66	359.68	11,103.1	-114.0	-971.7	89.7	12.00	12.00	0.00
11,325.0	70.66	359.68	11,112.0	-90.7	-971.8	112.6	12.00	12.00	0.00
11,350.0	73.66	359.68	11,119.7	-66.9	-971.9	135.9	12.00	12.00	0.00
11,375.0	76.66	359.68	11,126.1	-42.7	-972.1	159.6	12.00	12.00	0.00
11,400.0	79.66	359.68	11,131.2	-18.2	-972.2	183.5	12.00	12.00	0.00
11,425.0	82.66	359.68	11,135.1	6.5	-972.4	207.7	12.00	12.00	0.00
11,450.0	85.66	359.68	11,137.6	31.3	-972.5	232.1	12.00	12.00	0.00
11,475.0	88.66	359.68	11,138.8	56.3	-972.6	256.5	12.00	12.00	0.00
11,486.2	90.00	359.68	11,139.0	67.5	-972.7	267.5	12.00	12.00	0.00
11,500.0	90.00	359.68	11,139.0	81.3	-972.8	281.0	0.00	0.00	0.00
11,600.0	90.00	359.68	11,139.0	181.3	-973.3	379.0	0.00	0.00	0.00
11,700.0	90.00	359.68	11,139.0	281.3	-973.9	476.9	0.00	0.00	0.00
11,800.0	90.00	359.68	11,139.0	381.3	-974.5	574.9	0.00	0.00	0.00
11,900.0	90.00	359.68	11,139.0	481.3	-975.0	672.8	0.00	0.00	0.00
12,000.0	90.00	359.68	11,139.0	581.3	-975.6	770.8	0.00	0.00	0.00
12,100.0	90.00	359.68	11,139.0	681.3	-976.2	868.7	0.00	0.00	0.00
12,200.0	90.00	359.68	11,139.0	781.3	-976.7	966.7	0.00	0.00	0.00
12,300.0	90.00	359.68	11,139.0	881.3	-977.3	1,064.6	0.00	0.00	0.00
12,400.0	90.00	359.68	11,139.0	981.3	-977.9	1,162.5	0.00	0.00	0.00
12,500.0	90.00	359.68	11,139.0	1,081.3	-978.4	1,260.5	0.00	0.00	0.00
12,600.0	90.00	359.68	11,139.0	1,181.3	-979.0	1,358.4	0.00	0.00	0.00
12,700.0	90.00	359.68	11,139.0	1,281.3	-979.6	1,456.4	0.00	0.00	0.00
12,800.0	90.00	359.68	11,139.0	1,381.3	-980.1	1,554.3	0.00	0.00	0.00
12,900.0	90.00	359.68	11,139.0	1,481.3	-980.7	1,652.3	0.00	0.00	0.00
13,000.0	90.00	359.68	11,139.0	1,581.3	-981.3	1,750.2	0.00	0.00	0.00
13,100.0	90.00	359.68	11,139.0	1,681.3	-981.8	1,848.2	0.00	0.00	0.00

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #506H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25 @ 3578.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25 @ 3578.0usft
Site:	Mamba 30 State Com	North Reference:	Grid
Well:	#506H	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)
13,200.0	90.00	359.68	11,139.0	1,781.3	-982.4	1,946.1	0.00	0.00	0.00
13,300.0	90.00	359.68	11,139.0	1,881.3	-983.0	2,044.1	0.00	0.00	0.00
13,400.0	90.00	359.68	11,139.0	1,981.3	-983.5	2,142.0	0.00	0.00	0.00
13,500.0	90.00	359.68	11,139.0	2,081.3	-984.1	2,240.0	0.00	0.00	0.00
13,600.0	90.00	359.68	11,139.0	2,181.3	-984.7	2,337.9	0.00	0.00	0.00
13,700.0	90.00	359.68	11,139.0	2,281.2	-985.2	2,435.9	0.00	0.00	0.00
13,800.0	90.00	359.68	11,139.0	2,381.2	-985.8	2,533.8	0.00	0.00	0.00
13,900.0	90.00	359.68	11,139.0	2,481.2	-986.4	2,631.7	0.00	0.00	0.00
14,000.0	90.00	359.68	11,139.0	2,581.2	-986.9	2,729.7	0.00	0.00	0.00
14,100.0	90.00	359.68	11,139.0	2,681.2	-987.5	2,827.6	0.00	0.00	0.00
14,200.0	90.00	359.68	11,139.0	2,781.2	-988.0	2,925.6	0.00	0.00	0.00
14,300.0	90.00	359.68	11,139.0	2,881.2	-988.6	3,023.5	0.00	0.00	0.00
14,400.0	90.00	359.68	11,139.0	2,981.2	-989.2	3,121.5	0.00	0.00	0.00
14,500.0	90.00	359.68	11,139.0	3,081.2	-989.7	3,219.4	0.00	0.00	0.00
14,600.0	90.00	359.68	11,139.0	3,181.2	-990.3	3,317.4	0.00	0.00	0.00
14,700.0	90.00	359.68	11,139.0	3,281.2	-990.9	3,415.3	0.00	0.00	0.00
14,800.0	90.00	359.68	11,139.0	3,381.2	-991.4	3,513.3	0.00	0.00	0.00
14,900.0	90.00	359.68	11,139.0	3,481.2	-992.0	3,611.2	0.00	0.00	0.00
15,000.0	90.00	359.68	11,139.0	3,581.2	-992.6	3,709.2	0.00	0.00	0.00
15,100.0	90.00	359.68	11,139.0	3,681.2	-993.1	3,807.1	0.00	0.00	0.00
15,200.0	90.00	359.68	11,139.0	3,781.2	-993.7	3,905.1	0.00	0.00	0.00
15,300.0	90.00	359.68	11,139.0	3,881.2	-994.3	4,003.0	0.00	0.00	0.00
15,400.0	90.00	359.68	11,139.0	3,981.2	-994.8	4,100.9	0.00	0.00	0.00
15,500.0	90.00	359.68	11,139.0	4,081.2	-995.4	4,198.9	0.00	0.00	0.00
15,600.0	90.00	359.68	11,139.0	4,181.2	-996.0	4,296.8	0.00	0.00	0.00
15,700.0	90.00	359.68	11,139.0	4,281.2	-996.5	4,394.8	0.00	0.00	0.00
15,800.0	90.00	359.68	11,139.0	4,381.2	-997.1	4,492.7	0.00	0.00	0.00
15,900.0	90.00	359.68	11,139.0	4,481.2	-997.7	4,590.7	0.00	0.00	0.00
16,000.0	90.00	359.68	11,139.0	4,581.2	-998.2	4,688.6	0.00	0.00	0.00
16,100.0	90.00	359.68	11,139.0	4,681.2	-998.8	4,786.6	0.00	0.00	0.00
16,136.8	90.00	359.68	11,139.0	4,718.0	-999.0	4,822.6	0.00	0.00	0.00

PBHL (Mamba 30 State #506H)

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
KOP (Mamba 30 State #	0.00	0.00	10,661.5	-410.0	-970.0	430,514.00	762,406.00	32° 10' 53.552 N	103° 37' 7.602 W
- plan hits target center									
- Point									
FTP (Mamba 30 State #:	0.00	0.00	11,139.0	-360.0	-970.0	430,564.00	762,406.00	32° 10' 54.047 N	103° 37' 7.598 W
- plan misses target center by 163.4usft at 11137.6usft MD (11017.3 TVD, -251.0 N, -970.9 E)									
- Point									
PBHL (Mamba 30 State	0.00	0.00	11,139.0	4,718.0	-999.0	435,642.00	762,377.00	32° 11' 44.298 N	103° 37' 7.543 W
- plan hits target center									
- Point									