



Lea County, NM (NAD 83 NME)

Mamba 30 State Com #505H

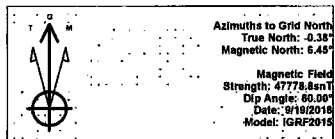
Plan #0.2

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: #505H

KB -25 @ 3578.0usft 3553.0
Northing 430925.00 Easting 763409.00 Latitude 32° 10' 57.553 N Longitude 103° 38' 55.899 W



To convert a Magnetic Direction to a Grid Direction, Add 6.45°
To convert a Magnetic Direction to a True Direction, Add 6.83° East
To convert a True Direction to a Grid Direction, Subtract 0.38°

SECTION DETAILS

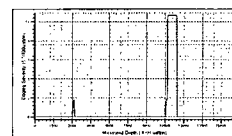
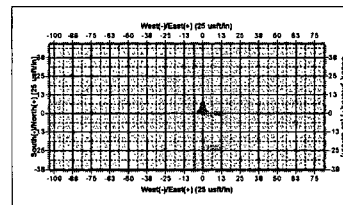
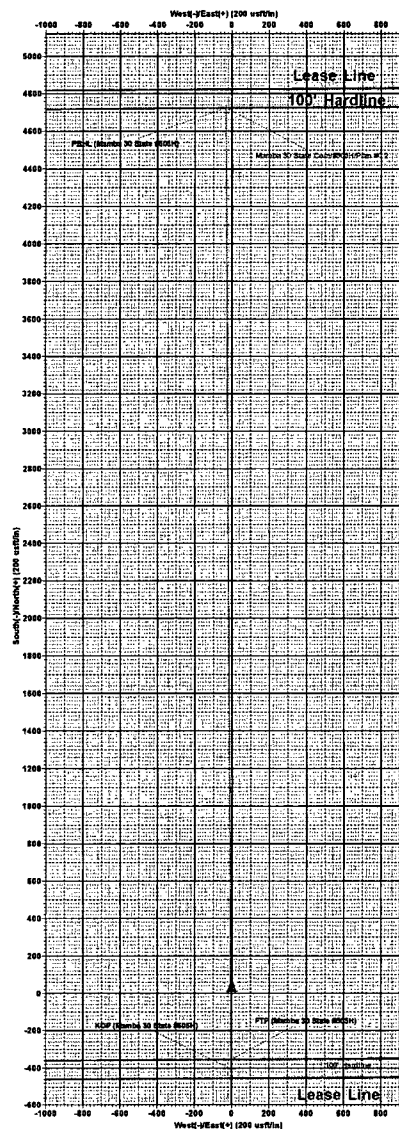
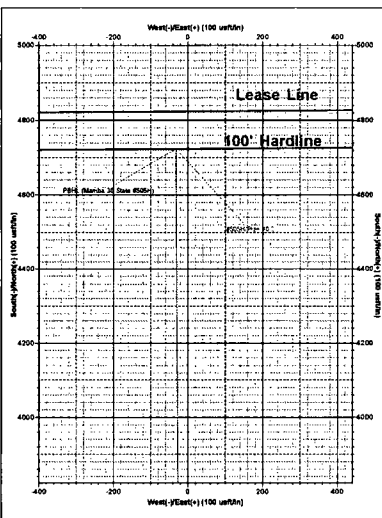
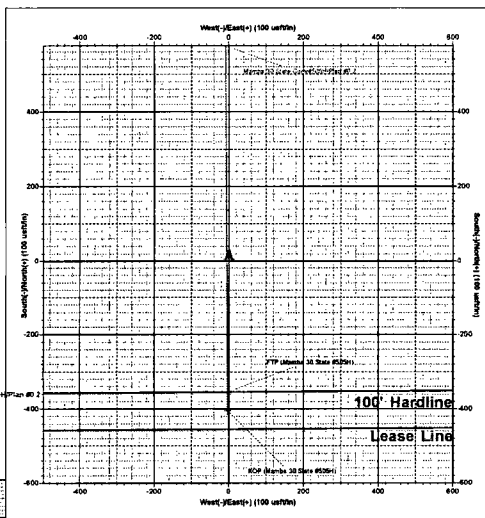
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	3000.0	0.00	0.00	3000.0	0.0	0.0	0.00	0.00	0.0	
3	3154.4	3.09	180.42	3154.3	-4.2	0.0	2.00	180.42	-4.2	
4	10520.0	3.09	180.42	10509.2	-400.8	-3.0	0.00	0.00	-400.8	
5	10674.3	0.00	0.00	10663.5	-405.0	-3.0	2.00	180.00	-405.0	KOP (Mamba 30 State #505H)
6	11424.3	90.00	359.68	11141.0	72.5	-5.7	12.00	359.68	72.5	
7	16076.0	90.00	359.68	11141.0	4724.0	-32.0	0.00	0.00	4724.1	PBHL (Mamba 30 State #505H)

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 #505H)	10663.5	-405.0	-3.0	430925.00	763409.00
PBHL (Mamba 30 State #505H)	11141.0	4724.0	-32.0	435649.00	763377.00
FTP (Mamba 30 State #505H)	11141.0	-355.0	-3.0	430670.00	763406.00



Lea County, NM (NAD 83 NME)
Mamba 30 State Com #505H
Plan #0.2
9/18/2018



EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Mamba 30 State Com

#505H

OH

Plan: Plan #0.2

Standard Planning Report

17 October, 2018

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #505H
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:	#505H	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:		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	#505H			
Well Position	+N/-S	118.0 usft	Northing:	430,925.00 usft
	+E/-W	-3,644.0 usft	Easting:	763,409.00 usft
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
	IGRF2015	9/19/2018	(°)	(°)	(nT)
			6.83	60.00	47,778.76230844

Design	Plan #0.2				
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	359.61	

Plan Survey Tool Program	Date	10/17/2018			
Depth From	Depth To	Survey (Wellbore)	Tool Name	Remarks	
(usft)	(usft)				
1	0.0	16,076.0 Plan #0.2 (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	
3,154.4	3.09	180.42	3,154.3	-4.2	0.0	2.00	2.00	0.00	180.42	
10,520.0	3.09	180.42	10,509.2	-400.8	-3.0	0.00	0.00	0.00	0.00	
10,674.3	0.00	0.00	10,663.5	-405.0	-3.0	2.00	-2.00	0.00	180.00 KOP (Mamba 30 Sta	
11,424.3	90.00	359.68	11,141.0	72.5	-5.7	12.00	12.00	-0.04	359.68	
16,076.0	90.00	359.68	11,141.0	4,724.0	-32.0	0.00	0.00	0.00	0.00 PBHL (Mamba 30 Sta	



Planning Report

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #505H
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:	#505H	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	180.42	3,100.0	-1.7	0.0	-1.7	2.00	2.00	0.00
3,154.4	3.09	180.42	3,154.3	-4.2	0.0	-4.2	2.00	2.00	0.00
3,200.0	3.09	180.42	3,199.9	-6.6	0.0	-6.6	0.00	0.00	0.00
3,300.0	3.09	180.42	3,299.7	-12.0	-0.1	-12.0	0.00	0.00	0.00
3,400.0	3.09	180.42	3,399.6	-17.4	-0.1	-17.4	0.00	0.00	0.00
3,500.0	3.09	180.42	3,499.4	-22.8	-0.2	-22.8	0.00	0.00	0.00
3,600.0	3.09	180.42	3,599.3	-28.2	-0.2	-28.2	0.00	0.00	0.00
3,700.0	3.09	180.42	3,699.1	-33.5	-0.2	-33.5	0.00	0.00	0.00
3,800.0	3.09	180.42	3,799.0	-38.9	-0.3	-38.9	0.00	0.00	0.00
3,900.0	3.09	180.42	3,898.8	-44.3	-0.3	-44.3	0.00	0.00	0.00
4,000.0	3.09	180.42	3,998.7	-49.7	-0.4	-49.7	0.00	0.00	0.00
4,100.0	3.09	180.42	4,098.6	-55.1	-0.4	-55.1	0.00	0.00	0.00
4,200.0	3.09	180.42	4,198.4	-60.5	-0.4	-60.5	0.00	0.00	0.00
4,300.0	3.09	180.42	4,298.3	-65.9	-0.5	-65.9	0.00	0.00	0.00
4,400.0	3.09	180.42	4,398.1	-71.2	-0.5	-71.2	0.00	0.00	0.00
4,500.0	3.09	180.42	4,498.0	-76.6	-0.6	-76.6	0.00	0.00	0.00
4,600.0	3.09	180.42	4,597.8	-82.0	-0.6	-82.0	0.00	0.00	0.00
4,700.0	3.09	180.42	4,697.7	-87.4	-0.6	-87.4	0.00	0.00	0.00
4,800.0	3.09	180.42	4,797.5	-92.8	-0.7	-92.8	0.00	0.00	0.00
4,900.0	3.09	180.42	4,897.4	-98.2	-0.7	-98.2	0.00	0.00	0.00
5,000.0	3.09	180.42	4,997.2	-103.6	-0.8	-103.5	0.00	0.00	0.00
5,100.0	3.09	180.42	5,097.1	-108.9	-0.8	-108.9	0.00	0.00	0.00
5,200.0	3.09	180.42	5,197.0	-114.3	-0.8	-114.3	0.00	0.00	0.00

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #505H
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:	#505H	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)
5,300.0	3.09	180.42	5,296.8	-119.7	-0.9	-119.7	0.00	0.00	0.00
5,400.0	3.09	180.42	5,396.7	-125.1	-0.9	-125.1	0.00	0.00	0.00
5,500.0	3.09	180.42	5,496.5	-130.5	-1.0	-130.5	0.00	0.00	0.00
5,600.0	3.09	180.42	5,596.4	-135.9	-1.0	-135.9	0.00	0.00	0.00
5,700.0	3.09	180.42	5,696.2	-141.3	-1.0	-141.2	0.00	0.00	0.00
5,800.0	3.09	180.42	5,796.1	-146.6	-1.1	-146.6	0.00	0.00	0.00
5,900.0	3.09	180.42	5,895.9	-152.0	-1.1	-152.0	0.00	0.00	0.00
6,000.0	3.09	180.42	5,995.8	-157.4	-1.2	-157.4	0.00	0.00	0.00
6,100.0	3.09	180.42	6,095.6	-162.8	-1.2	-162.8	0.00	0.00	0.00
6,200.0	3.09	180.42	6,195.5	-168.2	-1.2	-168.2	0.00	0.00	0.00
6,300.0	3.09	180.42	6,295.4	-173.6	-1.3	-173.6	0.00	0.00	0.00
6,400.0	3.09	180.42	6,395.2	-179.0	-1.3	-178.9	0.00	0.00	0.00
6,500.0	3.09	180.42	6,495.1	-184.3	-1.4	-184.3	0.00	0.00	0.00
6,600.0	3.09	180.42	6,594.9	-189.7	-1.4	-189.7	0.00	0.00	0.00
6,700.0	3.09	180.42	6,694.8	-195.1	-1.4	-195.1	0.00	0.00	0.00
6,800.0	3.09	180.42	6,794.6	-200.5	-1.5	-200.5	0.00	0.00	0.00
6,900.0	3.09	180.42	6,894.5	-205.9	-1.5	-205.9	0.00	0.00	0.00
7,000.0	3.09	180.42	6,994.3	-211.3	-1.6	-211.3	0.00	0.00	0.00
7,100.0	3.09	180.42	7,094.2	-216.7	-1.6	-216.6	0.00	0.00	0.00
7,200.0	3.09	180.42	7,194.1	-222.0	-1.6	-222.0	0.00	0.00	0.00
7,300.0	3.09	180.42	7,293.9	-227.4	-1.7	-227.4	0.00	0.00	0.00
7,400.0	3.09	180.42	7,393.8	-232.8	-1.7	-232.8	0.00	0.00	0.00
7,500.0	3.09	180.42	7,493.6	-238.2	-1.8	-238.2	0.00	0.00	0.00
7,600.0	3.09	180.42	7,593.5	-243.6	-1.8	-243.6	0.00	0.00	0.00
7,700.0	3.09	180.42	7,693.3	-249.0	-1.8	-249.0	0.00	0.00	0.00
7,800.0	3.09	180.42	7,793.2	-254.4	-1.9	-254.3	0.00	0.00	0.00
7,900.0	3.09	180.42	7,893.0	-259.7	-1.9	-259.7	0.00	0.00	0.00
8,000.0	3.09	180.42	7,992.9	-265.1	-2.0	-265.1	0.00	0.00	0.00
8,100.0	3.09	180.42	8,092.7	-270.5	-2.0	-270.5	0.00	0.00	0.00
8,200.0	3.09	180.42	8,192.6	-275.9	-2.0	-275.9	0.00	0.00	0.00
8,300.0	3.09	180.42	8,292.5	-281.3	-2.1	-281.3	0.00	0.00	0.00
8,400.0	3.09	180.42	8,392.3	-286.7	-2.1	-286.6	0.00	0.00	0.00
8,500.0	3.09	180.42	8,492.2	-292.1	-2.2	-292.0	0.00	0.00	0.00
8,600.0	3.09	180.42	8,592.0	-297.4	-2.2	-297.4	0.00	0.00	0.00
8,700.0	3.09	180.42	8,691.9	-302.8	-2.2	-302.8	0.00	0.00	0.00
8,800.0	3.09	180.42	8,791.7	-308.2	-2.3	-308.2	0.00	0.00	0.00
8,900.0	3.09	180.42	8,891.6	-313.6	-2.3	-313.6	0.00	0.00	0.00
9,000.0	3.09	180.42	8,991.4	-319.0	-2.4	-319.0	0.00	0.00	0.00
9,100.0	3.09	180.42	9,091.3	-324.4	-2.4	-324.3	0.00	0.00	0.00
9,200.0	3.09	180.42	9,191.2	-329.8	-2.4	-329.7	0.00	0.00	0.00
9,300.0	3.09	180.42	9,291.0	-335.1	-2.5	-335.1	0.00	0.00	0.00
9,400.0	3.09	180.42	9,390.9	-340.5	-2.5	-340.5	0.00	0.00	0.00
9,500.0	3.09	180.42	9,490.7	-345.9	-2.6	-345.9	0.00	0.00	0.00
9,600.0	3.09	180.42	9,590.6	-351.3	-2.6	-351.3	0.00	0.00	0.00
9,700.0	3.09	180.42	9,690.4	-356.7	-2.6	-356.7	0.00	0.00	0.00
9,800.0	3.09	180.42	9,790.3	-362.1	-2.7	-362.0	0.00	0.00	0.00
9,900.0	3.09	180.42	9,890.1	-367.5	-2.7	-367.4	0.00	0.00	0.00
10,000.0	3.09	180.42	9,990.0	-372.8	-2.8	-372.8	0.00	0.00	0.00
10,100.0	3.09	180.42	10,089.8	-378.2	-2.8	-378.2	0.00	0.00	0.00
10,200.0	3.09	180.42	10,189.7	-383.6	-2.8	-383.6	0.00	0.00	0.00
10,300.0	3.09	180.42	10,289.6	-389.0	-2.9	-389.0	0.00	0.00	0.00
10,400.0	3.09	180.42	10,389.4	-394.4	-2.9	-394.4	0.00	0.00	0.00
10,500.0	3.09	180.42	10,489.3	-399.8	-3.0	-399.7	0.00	0.00	0.00
10,520.0	3.09	180.42	10,509.2	-400.8	-3.0	-400.8	0.00	0.00	0.00

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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)
10,600.0	1.49	180.42	10,589.2	-404.0	-3.0	-404.0	2.00	-2.00	0.00
10,674.3	0.00	0.00	10,663.5	-405.0	-3.0	-405.0	2.00	-2.00	0.00
KOP (Mamba 30 State #505H)									
10,700.0	3.08	359.68	10,689.1	-404.3	-3.0	-404.3	12.00	12.00	0.00
10,725.0	6.08	359.68	10,714.1	-402.3	-3.0	-402.3	12.00	12.00	0.00
10,750.0	9.08	359.68	10,738.8	-399.0	-3.0	-399.0	12.00	12.00	0.00
10,775.0	12.08	359.68	10,763.4	-394.4	-3.1	-394.4	12.00	12.00	0.00
10,800.0	15.08	359.68	10,787.7	-388.6	-3.1	-388.5	12.00	12.00	0.00
10,825.0	18.08	359.68	10,811.7	-381.4	-3.1	-381.4	12.00	12.00	0.00
10,850.0	21.08	359.68	10,835.2	-373.1	-3.2	-373.0	12.00	12.00	0.00
10,875.0	24.08	359.68	10,858.3	-363.5	-3.2	-363.4	12.00	12.00	0.00
10,900.0	27.08	359.68	10,880.9	-352.7	-3.3	-352.6	12.00	12.00	0.00
10,925.0	30.08	359.68	10,902.8	-340.7	-3.4	-340.7	12.00	12.00	0.00
10,950.0	33.08	359.68	10,924.1	-327.6	-3.4	-327.6	12.00	12.00	0.00
10,975.0	36.08	359.68	10,944.7	-313.4	-3.5	-313.4	12.00	12.00	0.00
11,000.0	39.08	359.68	10,964.5	-298.2	-3.6	-298.1	12.00	12.00	0.00
11,025.0	42.08	359.68	10,983.5	-281.9	-3.7	-281.9	12.00	12.00	0.00
11,050.0	45.08	359.68	11,001.6	-264.7	-3.8	-264.7	12.00	12.00	0.00
11,075.0	48.08	359.68	11,018.8	-246.5	-3.9	-246.5	12.00	12.00	0.00
FTP (Mamba 30 State #505H)									
11,100.0	51.08	359.68	11,035.0	-227.5	-4.0	-227.5	12.00	12.00	0.00
11,125.0	54.08	359.68	11,050.2	-207.7	-4.1	-207.6	12.00	12.00	0.00
11,150.0	57.08	359.68	11,064.3	-187.0	-4.2	-187.0	12.00	12.00	0.00
11,175.0	60.08	359.68	11,077.3	-165.7	-4.4	-165.7	12.00	12.00	0.00
11,200.0	63.08	359.68	11,089.2	-143.7	-4.5	-143.7	12.00	12.00	0.00
11,225.0	66.08	359.68	11,100.0	-121.1	-4.6	-121.1	12.00	12.00	0.00
11,250.0	69.08	359.68	11,109.5	-98.0	-4.7	-98.0	12.00	12.00	0.00
11,275.0	72.08	359.68	11,117.8	-74.5	-4.9	-74.4	12.00	12.00	0.00
11,300.0	75.08	359.68	11,124.9	-50.5	-5.0	-50.4	12.00	12.00	0.00
11,325.0	78.08	359.68	11,130.7	-26.2	-5.1	-26.1	12.00	12.00	0.00
11,350.0	81.08	359.68	11,135.2	-1.6	-5.3	-1.5	12.00	12.00	0.00
11,375.0	84.08	359.68	11,138.4	23.2	-5.4	23.2	12.00	12.00	0.00
11,400.0	87.08	359.68	11,140.3	48.1	-5.6	48.2	12.00	12.00	0.00
11,424.3	90.00	359.68	11,141.0	72.5	-5.7	72.5	12.00	12.00	0.00
11,500.0	90.00	359.68	11,141.0	148.1	-6.1	148.2	0.00	0.00	0.00
11,600.0	90.00	359.68	11,141.0	248.1	-6.7	248.2	0.00	0.00	0.00
11,700.0	90.00	359.68	11,141.0	348.1	-7.3	348.2	0.00	0.00	0.00
11,800.0	90.00	359.68	11,141.0	448.1	-7.8	448.2	0.00	0.00	0.00
11,900.0	90.00	359.68	11,141.0	548.1	-8.4	548.2	0.00	0.00	0.00
12,000.0	90.00	359.68	11,141.0	648.1	-9.0	648.2	0.00	0.00	0.00
12,100.0	90.00	359.68	11,141.0	748.1	-9.5	748.2	0.00	0.00	0.00
12,200.0	90.00	359.68	11,141.0	848.1	-10.1	848.2	0.00	0.00	0.00
12,300.0	90.00	359.68	11,141.0	948.1	-10.7	948.2	0.00	0.00	0.00
12,400.0	90.00	359.68	11,141.0	1,048.1	-11.2	1,048.2	0.00	0.00	0.00
12,500.0	90.00	359.68	11,141.0	1,148.1	-11.8	1,148.2	0.00	0.00	0.00
12,600.0	90.00	359.68	11,141.0	1,248.1	-12.3	1,248.2	0.00	0.00	0.00
12,700.0	90.00	359.68	11,141.0	1,348.1	-12.9	1,348.2	0.00	0.00	0.00
12,800.0	90.00	359.68	11,141.0	1,448.1	-13.5	1,448.2	0.00	0.00	0.00
12,900.0	90.00	359.68	11,141.0	1,548.1	-14.0	1,548.2	0.00	0.00	0.00
13,000.0	90.00	359.68	11,141.0	1,648.1	-14.6	1,648.2	0.00	0.00	0.00
13,100.0	90.00	359.68	11,141.0	1,748.1	-15.2	1,748.2	0.00	0.00	0.00
13,200.0	90.00	359.68	11,141.0	1,848.1	-15.7	1,848.2	0.00	0.00	0.00
13,300.0	90.00	359.68	11,141.0	1,948.1	-16.3	1,948.2	0.00	0.00	0.00
13,400.0	90.00	359.68	11,141.0	2,048.1	-16.9	2,048.2	0.00	0.00	0.00

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #505H
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:	#505H	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)
13,500.0	90.00	359.68	11,141.0	2,148.1	-17.4	2,148.2	0.00	0.00	0.00
13,600.0	90.00	359.68	11,141.0	2,248.1	-18.0	2,248.2	0.00	0.00	0.00
13,700.0	90.00	359.68	11,141.0	2,348.1	-18.6	2,348.2	0.00	0.00	0.00
13,800.0	90.00	359.68	11,141.0	2,448.1	-19.1	2,448.2	0.00	0.00	0.00
13,900.0	90.00	359.68	11,141.0	2,548.1	-19.7	2,548.2	0.00	0.00	0.00
14,000.0	90.00	359.68	11,141.0	2,648.1	-20.3	2,648.2	0.00	0.00	0.00
14,100.0	90.00	359.68	11,141.0	2,748.1	-20.8	2,748.2	0.00	0.00	0.00
14,200.0	90.00	359.68	11,141.0	2,848.1	-21.4	2,848.2	0.00	0.00	0.00
14,300.0	90.00	359.68	11,141.0	2,948.1	-22.0	2,948.2	0.00	0.00	0.00
14,400.0	90.00	359.68	11,141.0	3,048.1	-22.5	3,048.2	0.00	0.00	0.00
14,500.0	90.00	359.68	11,141.0	3,148.1	-23.1	3,148.2	0.00	0.00	0.00
14,600.0	90.00	359.68	11,141.0	3,248.1	-23.7	3,248.2	0.00	0.00	0.00
14,700.0	90.00	359.68	11,141.0	3,348.1	-24.2	3,348.2	0.00	0.00	0.00
14,800.0	90.00	359.68	11,141.0	3,448.1	-24.8	3,448.2	0.00	0.00	0.00
14,900.0	90.00	359.68	11,141.0	3,548.1	-25.4	3,548.2	0.00	0.00	0.00
15,000.0	90.00	359.68	11,141.0	3,648.1	-25.9	3,648.2	0.00	0.00	0.00
15,100.0	90.00	359.68	11,141.0	3,748.1	-26.5	3,748.2	0.00	0.00	0.00
15,200.0	90.00	359.68	11,141.0	3,848.1	-27.0	3,848.2	0.00	0.00	0.00
15,300.0	90.00	359.68	11,141.0	3,948.1	-27.6	3,948.2	0.00	0.00	0.00
15,400.0	90.00	359.68	11,141.0	4,048.1	-28.2	4,048.2	0.00	0.00	0.00
15,500.0	90.00	359.68	11,141.0	4,148.1	-28.7	4,148.2	0.00	0.00	0.00
15,600.0	90.00	359.68	11,141.0	4,248.1	-29.3	4,248.2	0.00	0.00	0.00
15,700.0	90.00	359.68	11,141.0	4,348.0	-29.9	4,348.2	0.00	0.00	0.00
15,800.0	90.00	359.68	11,141.0	4,448.0	-30.4	4,448.2	0.00	0.00	0.00
15,900.0	90.00	359.68	11,141.0	4,548.0	-31.0	4,548.2	0.00	0.00	0.00
16,000.0	90.00	359.68	11,141.0	4,648.0	-31.6	4,648.2	0.00	0.00	0.00
16,076.0	90.00	359.68	11,141.0	4,724.0	-32.0	4,724.1	0.00	0.00	0.00
PBHL (Mamba 30 State #505H)									

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	10,663.5	-405.0	-3.0	430,520.00	763,406.00	32° 10' 53.546 N	103° 36' 55.966 W
- plan hits target center									
- Point									
FTP (Mamba 30 State #	0.00	0.00	11,141.0	-355.0	-3.0	430,570.00	763,406.00	32° 10' 54.041 N	103° 36' 55.962 W
- plan misses target center by 163.4usft at 11075.0usft MD (11018.8 TVD, -246.5 N, -3.9 E)									
- Point									
PBHL (Mamba 30 State	0.00	0.00	11,141.0	4,724.0	-32.0	435,649.00	763,377.00	32° 11' 44.301 N	103° 36' 55.905 W
- plan hits target center									
- Point									