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SEP 28 2018
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30-025-45240

eog resources

Lea County, NM (NAD 83 NME)

Mamba 30 State Com #505H

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

Azimuths to Grid North
True North: -0.38°
Magnetic North: 8.45°

Magnetic Field
Strength: 47778.8nT
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°

WELL DETAILS: #505H

3553.0
KB =25 @ 3578.0usft

Northing	Easting	Latitude	Longitude
430925.00	763409.00	32° 10' 57.553 N	103° 38' 35.899 W

SECTION DETAILS

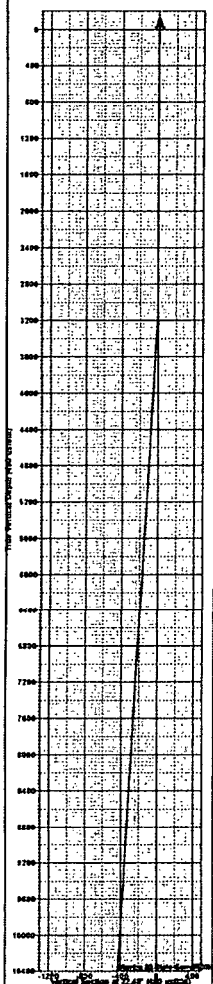
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	3000.0	0.00	0.00	3000.0	0.0	0.0	0.00	0.00	0.0	
3	3167.7	3.35	202.48	3167.6	-4.5	-1.9	2.00	202.48	-4.5	
4	10508.5	3.35	202.48	10495.9	-401.5	-166.1	0.00	0.00	-394.2	
5	10676.3	0.00	0.00	10663.5	-406.0	-168.0	2.00	180.00	-398.6	KOP (Mamba 30 State #505H)
6	11426.3	90.00	359.68	11141.0	71.5	-170.7	12.00	359.68	78.5	
7	16077.9	90.00	359.68	11141.0	4723.0	-197.0	0.00	0.00	4727.1	PBHL (Mamba 30 State #505H)

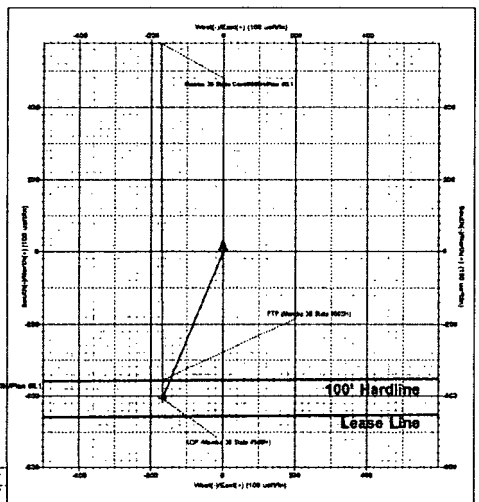
CASING DETAILS

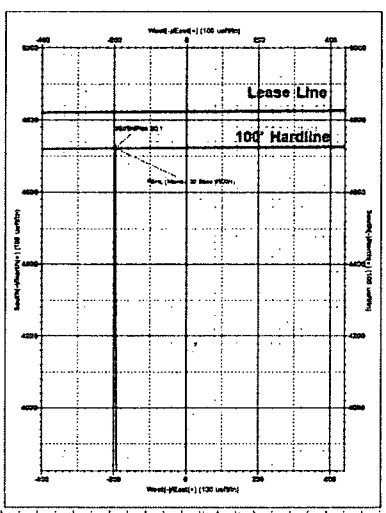
No casing data is available

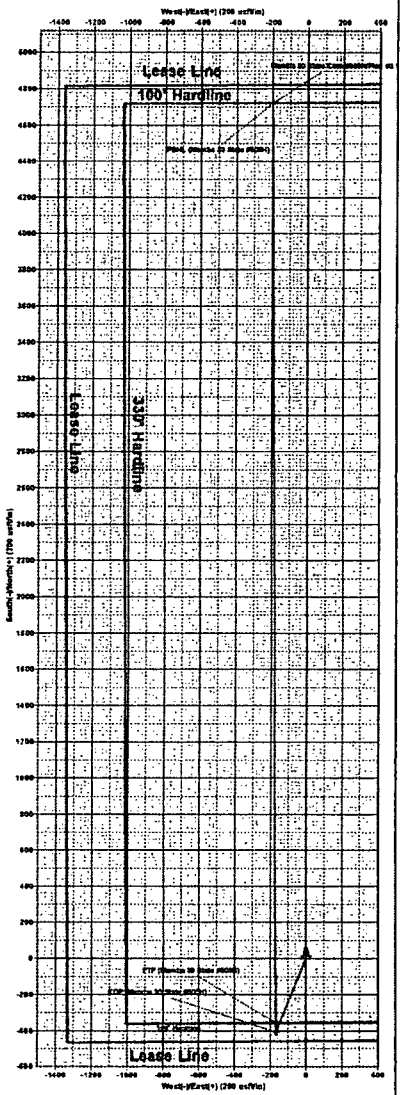
WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

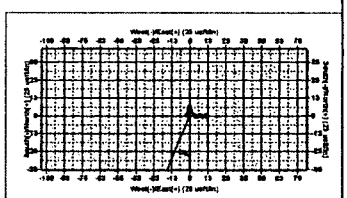
Name	TVD	+N/-S	+E/-W	Northing	Easting
KOP (Mamba 30 State #505H)	10663.5	-406.0	-168.0	430519.00	763241.00
PBHL (Mamba 30 State #505H)	11141.0	4723.0	-197.0	435648.00	763212.00
FTP (Mamba 30 State #505H)	11141.0	-356.0	-168.0	430569.00	763241.00

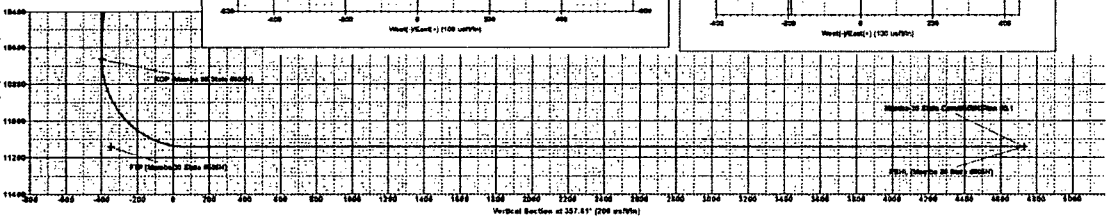


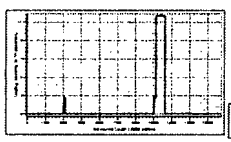












EOG Resources - Midland

Lea County, NM (NAD 83 NME)
Mamba 30 State Com
#505H

OH

Plan: Plan #0.1

Standard Planning Report

20 September, 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 #0.1		

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	#505H					
Well Position	**+N/-S**	118.0 usft	**Northing:**	430,925.00 usft	**Latitude:**	32° 10' 57.553 N
	+E/-W	-3,644.0 usft	**Easting:**	763,409.00 usft	**Longitude:**	103° 36' 55.899 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	47,778.76230844

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	357.61	

Plan Survey Tool Program **Date** 9/20/2018

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	16,077.9	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	
3,167.7	3.35	202.48	3,167.6	-4.5	-1.9	2.00	2.00	0.00	202.48	
10,508.5	3.35	202.48	10,495.9	-401.5	-166.1	0.00	0.00	0.00	0.00	
10,676.3	0.00	0.00	10,663.5	-406.0	-168.0	2.00	-2.00	0.00	180.00	KOP (Mamba 30 Stat
11,426.3	90.00	359.68	11,141.0	71.5	-170.7	12.00	12.00	-0.04	359.68	
16,077.9	90.00	359.68	11,141.0	4,723.0	-197.0	0.00	0.00	0.00	0.00	PBHL (Mamba 30 Sta

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 #0.1		

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	202.48	3,100.0	-1.6	-0.7	-1.6	2.00	2.00	0.00
3,167.7	3.35	202.48	3,167.6	-4.5	-1.9	-4.5	2.00	2.00	0.00
3,200.0	3.35	202.48	3,199.8	-6.3	-2.6	-6.2	0.00	0.00	0.00
3,300.0	3.35	202.48	3,299.7	-11.7	-4.8	-11.5	0.00	0.00	0.00
3,400.0	3.35	202.48	3,399.5	-17.1	-7.1	-16.8	0.00	0.00	0.00
3,500.0	3.35	202.48	3,499.3	-22.5	-9.3	-22.1	0.00	0.00	0.00
3,600.0	3.35	202.48	3,599.2	-27.9	-11.5	-27.4	0.00	0.00	0.00
3,700.0	3.35	202.48	3,699.0	-33.3	-13.8	-32.7	0.00	0.00	0.00
3,800.0	3.35	202.48	3,798.8	-38.7	-16.0	-38.0	0.00	0.00	0.00
3,900.0	3.35	202.48	3,898.6	-44.1	-18.3	-43.3	0.00	0.00	0.00
4,000.0	3.35	202.48	3,998.5	-49.5	-20.5	-48.6	0.00	0.00	0.00
4,100.0	3.35	202.48	4,098.3	-54.9	-22.7	-53.9	0.00	0.00	0.00
4,200.0	3.35	202.48	4,198.1	-60.4	-25.0	-59.3	0.00	0.00	0.00
4,300.0	3.35	202.48	4,298.0	-65.8	-27.2	-64.6	0.00	0.00	0.00
4,400.0	3.35	202.48	4,397.8	-71.2	-29.4	-69.9	0.00	0.00	0.00
4,500.0	3.35	202.48	4,497.6	-76.6	-31.7	-75.2	0.00	0.00	0.00
4,600.0	3.35	202.48	4,597.4	-82.0	-33.9	-80.5	0.00	0.00	0.00
4,700.0	3.35	202.48	4,697.3	-87.4	-36.2	-85.8	0.00	0.00	0.00
4,800.0	3.35	202.48	4,797.1	-92.8	-38.4	-91.1	0.00	0.00	0.00
4,900.0	3.35	202.48	4,896.9	-98.2	-40.6	-96.4	0.00	0.00	0.00
5,000.0	3.35	202.48	4,996.8	-103.6	-42.9	-101.7	0.00	0.00	0.00
5,100.0	3.35	202.48	5,096.6	-109.0	-45.1	-107.0	0.00	0.00	0.00
5,200.0	3.35	202.48	5,196.4	-114.4	-47.3	-112.4	0.00	0.00	0.00

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Site:	Mamba 30 State Com	**North Reference:**	Grid
Well:	#505H	**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	3.35	202.48	5,296.3	-119.8	-49.6	-117.7	0.00	0.00	0.00
5,400.0	3.35	202.48	5,396.1	-125.2	-51.8	-123.0	0.00	0.00	0.00
5,500.0	3.35	202.48	5,495.9	-130.6	-54.1	-128.3	0.00	0.00	0.00
5,600.0	3.35	202.48	5,595.7	-136.1	-56.3	-133.6	0.00	0.00	0.00
5,700.0	3.35	202.48	5,695.6	-141.5	-58.5	-138.9	0.00	0.00	0.00
5,800.0	3.35	202.48	5,795.4	-146.9	-60.8	-144.2	0.00	0.00	0.00
5,900.0	3.35	202.48	5,895.2	-152.3	-63.0	-149.5	0.00	0.00	0.00
6,000.0	3.35	202.48	5,995.1	-157.7	-65.2	-154.8	0.00	0.00	0.00
6,100.0	3.35	202.48	6,094.9	-163.1	-67.5	-160.1	0.00	0.00	0.00
6,200.0	3.35	202.48	6,194.7	-168.5	-69.7	-165.4	0.00	0.00	0.00
6,300.0	3.35	202.48	6,294.5	-173.9	-72.0	-170.8	0.00	0.00	0.00
6,400.0	3.35	202.48	6,394.4	-179.3	-74.2	-176.1	0.00	0.00	0.00
6,500.0	3.35	202.48	6,494.2	-184.7	-76.4	-181.4	0.00	0.00	0.00
6,600.0	3.35	202.48	6,594.0	-190.1	-78.7	-186.7	0.00	0.00	0.00
6,700.0	3.35	202.48	6,693.9	-195.5	-80.9	-192.0	0.00	0.00	0.00
6,800.0	3.35	202.48	6,793.7	-200.9	-83.1	-197.3	0.00	0.00	0.00
6,900.0	3.35	202.48	6,893.5	-206.3	-85.4	-202.6	0.00	0.00	0.00
7,000.0	3.35	202.48	6,993.3	-211.8	-87.6	-207.9	0.00	0.00	0.00
7,100.0	3.35	202.48	7,093.2	-217.2	-89.9	-213.2	0.00	0.00	0.00
7,200.0	3.35	202.48	7,193.0	-222.6	-92.1	-218.5	0.00	0.00	0.00
7,300.0	3.35	202.48	7,292.8	-228.0	-94.3	-223.8	0.00	0.00	0.00
7,400.0	3.35	202.48	7,392.7	-233.4	-96.6	-229.2	0.00	0.00	0.00
7,500.0	3.35	202.48	7,492.5	-238.8	-98.8	-234.5	0.00	0.00	0.00
7,600.0	3.35	202.48	7,592.3	-244.2	-101.0	-239.8	0.00	0.00	0.00
7,700.0	3.35	202.48	7,692.1	-249.6	-103.3	-245.1	0.00	0.00	0.00
7,800.0	3.35	202.48	7,792.0	-255.0	-105.5	-250.4	0.00	0.00	0.00
7,900.0	3.35	202.48	7,891.8	-260.4	-107.8	-255.7	0.00	0.00	0.00
8,000.0	3.35	202.48	7,991.6	-265.8	-110.0	-261.0	0.00	0.00	0.00
8,100.0	3.35	202.48	8,091.5	-271.2	-112.2	-266.3	0.00	0.00	0.00
8,200.0	3.35	202.48	8,191.3	-276.6	-114.5	-271.6	0.00	0.00	0.00
8,300.0	3.35	202.48	8,291.1	-282.0	-116.7	-276.9	0.00	0.00	0.00
8,400.0	3.35	202.48	8,390.9	-287.5	-118.9	-282.2	0.00	0.00	0.00
8,500.0	3.35	202.48	8,490.8	-292.9	-121.2	-287.6	0.00	0.00	0.00
8,600.0	3.35	202.48	8,590.6	-298.3	-123.4	-292.9	0.00	0.00	0.00
8,700.0	3.35	202.48	8,690.4	-303.7	-125.7	-298.2	0.00	0.00	0.00
8,800.0	3.35	202.48	8,790.3	-309.1	-127.9	-303.5	0.00	0.00	0.00
8,900.0	3.35	202.48	8,890.1	-314.5	-130.1	-308.8	0.00	0.00	0.00
9,000.0	3.35	202.48	8,989.9	-319.9	-132.4	-314.1	0.00	0.00	0.00
9,100.0	3.35	202.48	9,089.7	-325.3	-134.6	-319.4	0.00	0.00	0.00
9,200.0	3.35	202.48	9,189.6	-330.7	-136.8	-324.7	0.00	0.00	0.00
9,300.0	3.35	202.48	9,289.4	-336.1	-139.1	-330.0	0.00	0.00	0.00
9,400.0	3.35	202.48	9,389.2	-341.5	-141.3	-335.3	0.00	0.00	0.00
9,500.0	3.35	202.48	9,489.1	-346.9	-143.6	-340.6	0.00	0.00	0.00
9,600.0	3.35	202.48	9,588.9	-352.3	-145.8	-346.0	0.00	0.00	0.00
9,700.0	3.35	202.48	9,688.7	-357.7	-148.0	-351.3	0.00	0.00	0.00
9,800.0	3.35	202.48	9,788.5	-363.2	-150.3	-356.6	0.00	0.00	0.00
9,900.0	3.35	202.48	9,888.4	-368.6	-152.5	-361.9	0.00	0.00	0.00
10,000.0	3.35	202.48	9,988.2	-374.0	-154.7	-367.2	0.00	0.00	0.00
10,100.0	3.35	202.48	10,088.0	-379.4	-157.0	-372.5	0.00	0.00	0.00
10,200.0	3.35	202.48	10,187.9	-384.8	-159.2	-377.8	0.00	0.00	0.00
10,300.0	3.35	202.48	10,287.7	-390.2	-161.5	-383.1	0.00	0.00	0.00
10,400.0	3.35	202.48	10,387.5	-395.6	-163.7	-388.4	0.00	0.00	0.00
10,508.5	3.35	202.48	10,495.9	-401.5	-166.1	-394.2	0.00	0.00	0.00
10,600.0	1.53	202.48	10,587.2	-405.1	-167.6	-397.7	2.00	-2.00	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 #0.1		

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)
10,676.3	0.00	0.00	10,663.5	-406.0	-168.0	-398.6	2.00	-2.00	0.00
KOP (Mamba 30 State #505H)									
10,700.0	2.85	359.68	10,687.2	-405.4	-168.0	-398.1	12.00	12.00	0.00
10,725.0	5.85	359.68	10,712.1	-403.5	-168.0	-396.2	12.00	12.00	0.00
10,750.0	8.85	359.68	10,736.9	-400.3	-168.0	-393.0	12.00	12.00	0.00
10,775.0	11.85	359.68	10,761.5	-395.8	-168.1	-388.5	12.00	12.00	0.00
10,800.0	14.85	359.68	10,785.8	-390.1	-168.1	-382.7	12.00	12.00	0.00
10,825.0	17.85	359.68	10,809.8	-383.0	-168.1	-375.7	12.00	12.00	0.00
10,850.0	20.85	359.68	10,833.4	-374.7	-168.2	-367.4	12.00	12.00	0.00
10,875.0	23.85	359.68	10,856.5	-365.2	-168.2	-357.9	12.00	12.00	0.00
10,900.0	26.85	359.68	10,879.1	-354.5	-168.3	-347.2	12.00	12.00	0.00
10,925.0	29.85	359.68	10,901.1	-342.7	-168.4	-335.4	12.00	12.00	0.00
10,950.0	32.85	359.68	10,922.5	-329.7	-168.4	-322.4	12.00	12.00	0.00
10,975.0	35.85	359.68	10,943.1	-315.6	-168.5	-308.3	12.00	12.00	0.00
11,000.0	38.85	359.68	10,963.0	-300.4	-168.6	-293.1	12.00	12.00	0.00
11,025.0	41.85	359.68	10,982.0	-284.2	-168.7	-276.9	12.00	12.00	0.00
11,050.0	44.85	359.68	11,000.2	-267.1	-168.8	-259.8	12.00	12.00	0.00
11,075.0	47.85	359.68	11,017.5	-249.0	-168.9	-241.7	12.00	12.00	0.00
FTP (Mamba 30 State #505H)									
11,100.0	50.85	359.68	11,033.8	-230.0	-169.0	-222.8	12.00	12.00	0.00
11,125.0	53.85	359.68	11,049.0	-210.2	-169.1	-203.0	12.00	12.00	0.00
11,150.0	56.85	359.68	11,063.2	-189.6	-169.2	-182.4	12.00	12.00	0.00
11,175.0	59.85	359.68	11,076.4	-168.4	-169.3	-161.2	12.00	12.00	0.00
11,200.0	62.85	359.68	11,088.3	-146.4	-169.5	-139.2	12.00	12.00	0.00
11,225.0	65.85	359.68	11,099.2	-123.9	-169.6	-116.7	12.00	12.00	0.00
11,250.0	68.85	359.68	11,108.8	-100.8	-169.7	-93.7	12.00	12.00	0.00
11,275.0	71.85	359.68	11,117.2	-77.3	-169.9	-70.1	12.00	12.00	0.00
11,300.0	74.85	359.68	11,124.4	-53.3	-170.0	-46.2	12.00	12.00	0.00
11,325.0	77.85	359.68	11,130.3	-29.1	-170.1	-21.9	12.00	12.00	0.00
11,350.0	80.85	359.68	11,134.9	-4.5	-170.3	2.6	12.00	12.00	0.00
11,375.0	83.85	359.68	11,138.2	20.3	-170.4	27.4	12.00	12.00	0.00
11,400.0	86.85	359.68	11,140.2	45.2	-170.6	52.3	12.00	12.00	0.00
11,426.3	90.00	359.68	11,141.0	71.5	-170.7	78.5	12.00	12.00	0.00
11,500.0	90.00	359.68	11,141.0	145.2	-171.1	152.2	0.00	0.00	0.00
11,600.0	90.00	359.68	11,141.0	245.2	-171.7	252.1	0.00	0.00	0.00
11,700.0	90.00	359.68	11,141.0	345.2	-172.2	352.1	0.00	0.00	0.00
11,800.0	90.00	359.68	11,141.0	445.2	-172.8	452.0	0.00	0.00	0.00
11,900.0	90.00	359.68	11,141.0	545.2	-173.4	551.9	0.00	0.00	0.00
12,000.0	90.00	359.68	11,141.0	645.2	-173.9	651.9	0.00	0.00	0.00
12,100.0	90.00	359.68	11,141.0	745.2	-174.5	751.8	0.00	0.00	0.00
12,200.0	90.00	359.68	11,141.0	845.2	-175.1	851.7	0.00	0.00	0.00
12,300.0	90.00	359.68	11,141.0	945.2	-175.6	951.7	0.00	0.00	0.00
12,400.0	90.00	359.68	11,141.0	1,045.2	-176.2	1,051.6	0.00	0.00	0.00
12,500.0	90.00	359.68	11,141.0	1,145.2	-176.8	1,151.5	0.00	0.00	0.00
12,600.0	90.00	359.68	11,141.0	1,245.2	-177.3	1,251.5	0.00	0.00	0.00
12,700.0	90.00	359.68	11,141.0	1,345.2	-177.9	1,351.4	0.00	0.00	0.00
12,800.0	90.00	359.68	11,141.0	1,445.2	-178.5	1,451.3	0.00	0.00	0.00
12,900.0	90.00	359.68	11,141.0	1,545.2	-179.0	1,551.3	0.00	0.00	0.00
13,000.0	90.00	359.68	11,141.0	1,645.2	-179.6	1,651.2	0.00	0.00	0.00
13,100.0	90.00	359.68	11,141.0	1,745.2	-180.2	1,751.2	0.00	0.00	0.00
13,200.0	90.00	359.68	11,141.0	1,845.2	-180.7	1,851.1	0.00	0.00	0.00
13,300.0	90.00	359.68	11,141.0	1,945.2	-181.3	1,951.0	0.00	0.00	0.00
13,400.0	90.00	359.68	11,141.0	2,045.2	-181.9	2,051.0	0.00	0.00	0.00
13,500.0	90.00	359.68	11,141.0	2,145.2	-182.4	2,150.9	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 #0.1		

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)
13,600.0	90.00	359.68	11,141.0	2,245.2	-183.0	2,250.8	0.00	0.00	0.00
13,700.0	90.00	359.68	11,141.0	2,345.1	-183.6	2,350.8	0.00	0.00	0.00
13,800.0	90.00	359.68	11,141.0	2,445.1	-184.1	2,450.7	0.00	0.00	0.00
13,900.0	90.00	359.68	11,141.0	2,545.1	-184.7	2,550.6	0.00	0.00	0.00
14,000.0	90.00	359.68	11,141.0	2,645.1	-185.3	2,650.6	0.00	0.00	0.00
14,100.0	90.00	359.68	11,141.0	2,745.1	-185.8	2,750.5	0.00	0.00	0.00
14,200.0	90.00	359.68	11,141.0	2,845.1	-186.4	2,850.4	0.00	0.00	0.00
14,300.0	90.00	359.68	11,141.0	2,945.1	-186.9	2,950.4	0.00	0.00	0.00
14,400.0	90.00	359.68	11,141.0	3,045.1	-187.5	3,050.3	0.00	0.00	0.00
14,500.0	90.00	359.68	11,141.0	3,145.1	-188.1	3,150.2	0.00	0.00	0.00
14,600.0	90.00	359.68	11,141.0	3,245.1	-188.6	3,250.2	0.00	0.00	0.00
14,700.0	90.00	359.68	11,141.0	3,345.1	-189.2	3,350.1	0.00	0.00	0.00
14,800.0	90.00	359.68	11,141.0	3,445.1	-189.8	3,450.0	0.00	0.00	0.00
14,900.0	90.00	359.68	11,141.0	3,545.1	-190.3	3,550.0	0.00	0.00	0.00
15,000.0	90.00	359.68	11,141.0	3,645.1	-190.9	3,649.9	0.00	0.00	0.00
15,100.0	90.00	359.68	11,141.0	3,745.1	-191.5	3,749.9	0.00	0.00	0.00
15,200.0	90.00	359.68	11,141.0	3,845.1	-192.0	3,849.8	0.00	0.00	0.00
15,300.0	90.00	359.68	11,141.0	3,945.1	-192.6	3,949.7	0.00	0.00	0.00
15,400.0	90.00	359.68	11,141.0	4,045.1	-193.2	4,049.7	0.00	0.00	0.00
15,500.0	90.00	359.68	11,141.0	4,145.1	-193.7	4,149.6	0.00	0.00	0.00
15,600.0	90.00	359.68	11,141.0	4,245.1	-194.3	4,249.5	0.00	0.00	0.00
15,700.0	90.00	359.68	11,141.0	4,345.1	-194.9	4,349.5	0.00	0.00	0.00
15,800.0	90.00	359.68	11,141.0	4,445.1	-195.4	4,449.4	0.00	0.00	0.00
15,900.0	90.00	359.68	11,141.0	4,545.1	-196.0	4,549.3	0.00	0.00	0.00
16,000.0	90.00	359.68	11,141.0	4,645.1	-196.6	4,649.3	0.00	0.00	0.00
16,077.9	90.00	359.68	11,141.0	4,723.0	-197.0	4,727.1	0.00	0.00	0.00
PBHL (Mamba 30 State #505H)									

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	10,663.5	-406.0	-168.0	430,519.00	763,241.00	32° 10' 53.547 N	103° 36' 57.886 W
FTP (Mamba 30 State #: - plan misses target center by 163.4usft at 11075.0usft MD (11017.5 TVD, -249.0 N, -168.9 E) - Point	0.00	0.00	11,141.0	-356.0	-168.0	430,569.00	763,241.00	32° 10' 54.042 N	103° 36' 57.882 W
PBHL (Mamba 30 State - plan hits target center - Point	0.00	0.00	11,141.0	4,723.0	-197.0	435,648.00	763,212.00	32° 11' 44.302 N	103° 36' 57.825 W