eog resources

Lea County, NM (NAD 83 NME)

Mamba 30 State #704

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: -0.39°
Magnetic North: 6.47°

Magnetic Field
Strength: 47800.9snT
Dip Angle: 60.01°
Date: 7/5/2018
Model: IGRF2015

To convert a Magnetic Direction to a Grid Direction, Add 6.47°
To convert a Magnetic Direction to a True Direction, Add 6.85° East
To convert a True Direction to a Grid Direction, Subtract 0.39°

WELL DETAILS: #704			
	3538.0 KB = 25 @ 3563.0usft		
Northing	Easting	Latitude	Longitude
430848.00	768822.00	32° 10' 56.631 N	103° 36' 27.529 W

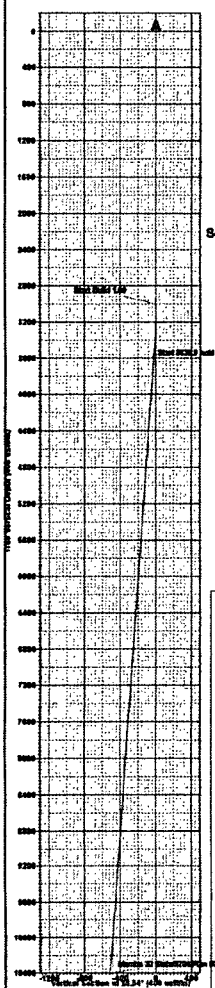
SECTION DETAILS

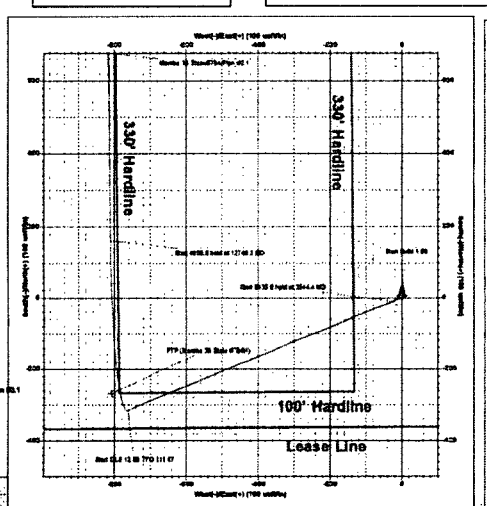
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	3000.0	0.00	0.00	3000.0	0.0	0.0	0.00	0.00	0.0	
3	3544.4	5.44	247.62	3543.6	-9.8	-23.9	1.00	247.62	-5.6	
4	11982.4	5.44	247.62	11943.5	-314.7	-764.1	0.00	0.00	-177.6	
5	12749.3	90.00	359.57	12436.0	162.1	-811.2	12.00	111.87	300.1	
6	17399.3	90.00	359.57	12436.0	4812.0	-846.0	0.00	0.00	4885.8	PBHL (Mamba 30 State #704H)

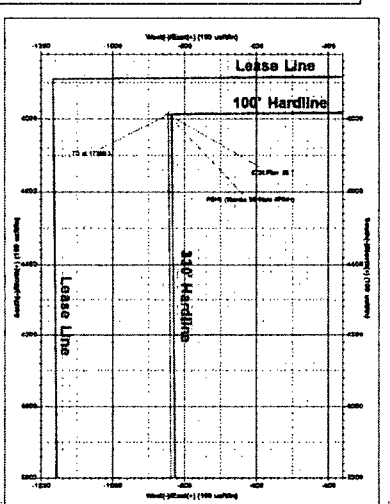
CASING DETAILS
No casing data is available

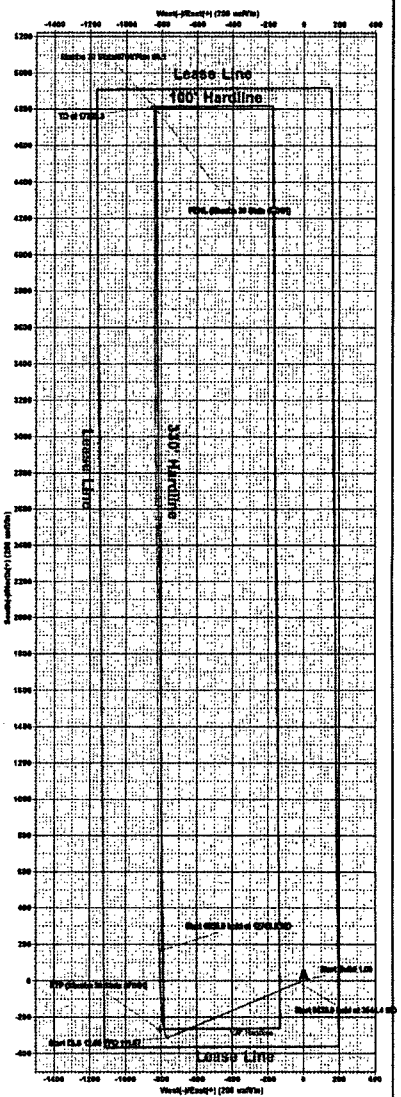
WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

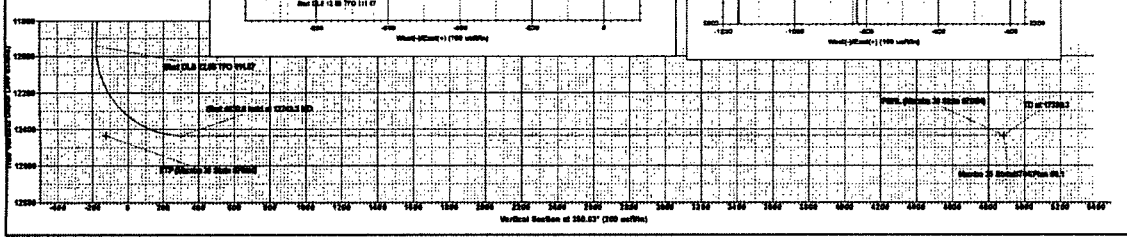
Name	TVD	+N/-S	+E/-W	Northing	Easting
PBHL (Mamba 30 State #704H)	12436.0	4812.0	-846.0	435660.00	764976.00
FTP (Mamba 30 State #704H)	12436.0	-288.0	-808.0	430580.00	768014.00

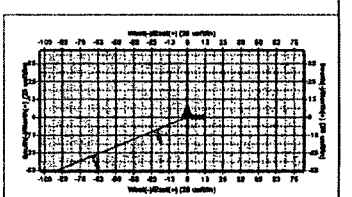


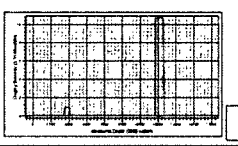












eog resources

EOG Resources - Midland

Lea County, NM (NAD 83 NME)
Mamba 30 State
#704

OH

Plan: Plan #0.1

Standard Planning Report

05 July, 2018

Database:	EDM 5000.14	**Local Co-ordinate Reference:**	Well #704
Company:	EOG Resources - Midland	**TVD Reference:**	KB = 25 @ 3563.0usft
Project:	Lea County, NM (NAD 83 NME)	**MD Reference:**	KB = 25 @ 3563.0usft
Site:	Mamba 30 State	**North Reference:**	Grid
Well:	#704	**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				
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	#704					
Well Position	**+N/-S**	41.0 usft	**Northing:**	430,848.00 usft	**Latitude:**	32° 10' 56.631 N
	+E/-W	-1,231.0 usft	**Easting:**	765,822.00 usft	**Longitude:**	103° 36' 27.829 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**		**Ground Level:**	3,538.0 usft

Wellbore	OH				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2015	7/5/2018	6.85	60.01	47,800.92799721

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	350.03	

Plan Survey Tool Program **Date** 7/5/2018

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	17,399.3	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	
3,544.4	5.44	247.62	3,543.6	-9.8	-23.9	1.00	1.00	0.00	247.62	
11,982.4	5.44	247.62	11,943.5	-314.7	-764.1	0.00	0.00	0.00	0.00	
12,749.3	90.00	359.57	12,436.0	162.1	-811.2	12.00	11.03	14.60	111.87	
17,399.3	90.00	359.57	12,436.0	4,812.0	-846.0	0.00	0.00	0.00	0.00	PBHL (Mamba 30 Sta

Database:	EDM 5000.14	**Local Co-ordinate Reference:**	Well #704
Company:	EOG Resources - Midland	**TVD Reference:**	KB = 25 @ 3563.0usft
Project:	Lea County, NM (NAD 83 NME)	**MD Reference:**	KB = 25 @ 3563.0usft
Site:	Mamba 30 State	**North Reference:**	Grid
Well:	#704	**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	1.00	247.62	3,100.0	-0.3	-0.8	-0.2	1.00	1.00	0.00
3,200.0	2.00	247.62	3,200.0	-1.3	-3.2	-0.8	1.00	1.00	0.00
3,300.0	3.00	247.62	3,299.9	-3.0	-7.3	-1.7	1.00	1.00	0.00
3,400.0	4.00	247.62	3,399.7	-5.3	-12.9	-3.0	1.00	1.00	0.00
3,500.0	5.00	247.62	3,499.4	-8.3	-20.2	-4.7	1.00	1.00	0.00
3,544.4	5.44	247.62	3,543.6	-9.8	-23.9	-5.6	1.00	1.00	0.00
3,600.0	5.44	247.62	3,598.9	-11.9	-28.8	-6.7	0.00	0.00	0.00
3,700.0	5.44	247.62	3,698.5	-15.5	-37.5	-8.7	0.00	0.00	0.00
3,800.0	5.44	247.62	3,798.0	-19.1	-46.3	-10.8	0.00	0.00	0.00
3,900.0	5.44	247.62	3,897.6	-22.7	-55.1	-12.8	0.00	0.00	0.00
4,000.0	5.44	247.62	3,997.1	-26.3	-63.9	-14.8	0.00	0.00	0.00
4,100.0	5.44	247.62	4,096.7	-29.9	-72.6	-16.9	0.00	0.00	0.00
4,200.0	5.44	247.62	4,196.2	-33.5	-81.4	-18.9	0.00	0.00	0.00
4,300.0	5.44	247.62	4,295.8	-37.1	-90.2	-21.0	0.00	0.00	0.00
4,400.0	5.44	247.62	4,395.3	-40.8	-99.0	-23.0	0.00	0.00	0.00
4,500.0	5.44	247.62	4,494.9	-44.4	-107.7	-25.0	0.00	0.00	0.00
4,600.0	5.44	247.62	4,594.4	-48.0	-116.5	-27.1	0.00	0.00	0.00
4,700.0	5.44	247.62	4,694.0	-51.6	-125.3	-29.1	0.00	0.00	0.00
4,800.0	5.44	247.62	4,793.5	-55.2	-134.0	-31.2	0.00	0.00	0.00
4,900.0	5.44	247.62	4,893.1	-58.8	-142.8	-33.2	0.00	0.00	0.00
5,000.0	5.44	247.62	4,992.6	-62.4	-151.6	-35.2	0.00	0.00	0.00
5,100.0	5.44	247.62	5,092.2	-66.0	-160.4	-37.3	0.00	0.00	0.00
5,200.0	5.44	247.62	5,191.7	-69.7	-169.1	-39.3	0.00	0.00	0.00

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Site:	Mamba 30 State	**North Reference:**	Grid
Well:	#704	**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	5.44	247.62	5,291.3	-73.3	-177.9	-41.4	0.00	0.00	0.00
5,400.0	5.44	247.62	5,390.8	-76.9	-186.7	-43.4	0.00	0.00	0.00
5,500.0	5.44	247.62	5,490.4	-80.5	-195.5	-45.4	0.00	0.00	0.00
5,600.0	5.44	247.62	5,589.9	-84.1	-204.2	-47.5	0.00	0.00	0.00
5,700.0	5.44	247.62	5,689.5	-87.7	-213.0	-49.5	0.00	0.00	0.00
5,800.0	5.44	247.62	5,789.0	-91.3	-221.8	-51.6	0.00	0.00	0.00
5,900.0	5.44	247.62	5,888.6	-94.9	-230.5	-53.6	0.00	0.00	0.00
6,000.0	5.44	247.62	5,988.1	-98.6	-239.3	-55.6	0.00	0.00	0.00
6,100.0	5.44	247.62	6,087.7	-102.2	-248.1	-57.7	0.00	0.00	0.00
6,200.0	5.44	247.62	6,187.2	-105.8	-256.9	-59.7	0.00	0.00	0.00
6,300.0	5.44	247.62	6,286.8	-109.4	-265.6	-61.7	0.00	0.00	0.00
6,400.0	5.44	247.62	6,386.3	-113.0	-274.4	-63.8	0.00	0.00	0.00
6,500.0	5.44	247.62	6,485.8	-116.6	-283.2	-65.8	0.00	0.00	0.00
6,600.0	5.44	247.62	6,585.4	-120.2	-291.9	-67.9	0.00	0.00	0.00
6,700.0	5.44	247.62	6,684.9	-123.8	-300.7	-69.9	0.00	0.00	0.00
6,800.0	5.44	247.62	6,784.5	-127.5	-309.5	-71.9	0.00	0.00	0.00
6,900.0	5.44	247.62	6,884.0	-131.1	-318.3	-74.0	0.00	0.00	0.00
7,000.0	5.44	247.62	6,983.6	-134.7	-327.0	-76.0	0.00	0.00	0.00
7,100.0	5.44	247.62	7,083.1	-138.3	-335.8	-78.1	0.00	0.00	0.00
7,200.0	5.44	247.62	7,182.7	-141.9	-344.6	-80.1	0.00	0.00	0.00
7,300.0	5.44	247.62	7,282.2	-145.5	-353.4	-82.1	0.00	0.00	0.00
7,400.0	5.44	247.62	7,381.8	-149.1	-362.1	-84.2	0.00	0.00	0.00
7,500.0	5.44	247.62	7,481.3	-152.8	-370.9	-86.2	0.00	0.00	0.00
7,600.0	5.44	247.62	7,580.9	-156.4	-379.7	-88.3	0.00	0.00	0.00
7,700.0	5.44	247.62	7,680.4	-160.0	-388.4	-90.3	0.00	0.00	0.00
7,800.0	5.44	247.62	7,780.0	-163.6	-397.2	-92.3	0.00	0.00	0.00
7,900.0	5.44	247.62	7,879.5	-167.2	-406.0	-94.4	0.00	0.00	0.00
8,000.0	5.44	247.62	7,979.1	-170.8	-414.8	-96.4	0.00	0.00	0.00
8,100.0	5.44	247.62	8,078.6	-174.4	-423.5	-98.5	0.00	0.00	0.00
8,200.0	5.44	247.62	8,178.2	-178.0	-432.3	-100.5	0.00	0.00	0.00
8,300.0	5.44	247.62	8,277.7	-181.7	-441.1	-102.5	0.00	0.00	0.00
8,400.0	5.44	247.62	8,377.3	-185.3	-449.9	-104.6	0.00	0.00	0.00
8,500.0	5.44	247.62	8,476.8	-188.9	-458.6	-106.6	0.00	0.00	0.00
8,600.0	5.44	247.62	8,576.4	-192.5	-467.4	-108.7	0.00	0.00	0.00
8,700.0	5.44	247.62	8,675.9	-196.1	-476.2	-110.7	0.00	0.00	0.00
8,800.0	5.44	247.62	8,775.5	-199.7	-484.9	-112.7	0.00	0.00	0.00
8,900.0	5.44	247.62	8,875.0	-203.3	-493.7	-114.8	0.00	0.00	0.00
9,000.0	5.44	247.62	8,974.6	-206.9	-502.5	-116.8	0.00	0.00	0.00
9,100.0	5.44	247.62	9,074.1	-210.6	-511.3	-118.9	0.00	0.00	0.00
9,200.0	5.44	247.62	9,173.7	-214.2	-520.0	-120.9	0.00	0.00	0.00
9,300.0	5.44	247.62	9,273.2	-217.8	-528.8	-122.9	0.00	0.00	0.00
9,400.0	5.44	247.62	9,372.8	-221.4	-537.6	-125.0	0.00	0.00	0.00
9,500.0	5.44	247.62	9,472.3	-225.0	-546.4	-127.0	0.00	0.00	0.00
9,600.0	5.44	247.62	9,571.9	-228.6	-555.1	-129.0	0.00	0.00	0.00
9,700.0	5.44	247.62	9,671.4	-232.2	-563.9	-131.1	0.00	0.00	0.00
9,800.0	5.44	247.62	9,771.0	-235.8	-572.7	-133.1	0.00	0.00	0.00
9,900.0	5.44	247.62	9,870.5	-239.5	-581.4	-135.2	0.00	0.00	0.00
10,000.0	5.44	247.62	9,970.1	-243.1	-590.2	-137.2	0.00	0.00	0.00
10,100.0	5.44	247.62	10,069.6	-246.7	-599.0	-139.2	0.00	0.00	0.00
10,200.0	5.44	247.62	10,169.2	-250.3	-607.8	-141.3	0.00	0.00	0.00
10,300.0	5.44	247.62	10,268.7	-253.9	-616.5	-143.3	0.00	0.00	0.00
10,400.0	5.44	247.62	10,368.3	-257.5	-625.3	-145.4	0.00	0.00	0.00
10,500.0	5.44	247.62	10,467.8	-261.1	-634.1	-147.4	0.00	0.00	0.00
10,600.0	5.44	247.62	10,567.4	-264.8	-642.8	-149.4	0.00	0.00	0.00

Database:	EDM 5000.14	**Local Co-ordinate Reference:**	Well #704
Company:	EOG Resources - Midland	**TVD Reference:**	KB = 25 @ 3563.0usft
Project:	Lea County, NM (NAD 83 NME)	**MD Reference:**	KB = 25 @ 3563.0usft
Site:	Mamba 30 State	**North Reference:**	Grid
Well:	#704	**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)
10,700.0	5.44	247.62	10,666.9	-268.4	-651.6	-151.5	0.00	0.00	0.00
10,800.0	5.44	247.62	10,766.5	-272.0	-660.4	-153.5	0.00	0.00	0.00
10,900.0	5.44	247.62	10,866.0	-275.6	-669.2	-155.6	0.00	0.00	0.00
11,000.0	5.44	247.62	10,965.6	-279.2	-677.9	-157.6	0.00	0.00	0.00
11,100.0	5.44	247.62	11,065.1	-282.8	-686.7	-159.6	0.00	0.00	0.00
11,200.0	5.44	247.62	11,164.6	-286.4	-695.5	-161.7	0.00	0.00	0.00
11,300.0	5.44	247.62	11,264.2	-290.0	-704.3	-163.7	0.00	0.00	0.00
11,400.0	5.44	247.62	11,363.7	-293.7	-713.0	-165.8	0.00	0.00	0.00
11,500.0	5.44	247.62	11,463.3	-297.3	-721.8	-167.8	0.00	0.00	0.00
11,600.0	5.44	247.62	11,562.8	-300.9	-730.6	-169.8	0.00	0.00	0.00
11,700.0	5.44	247.62	11,662.4	-304.5	-739.3	-171.9	0.00	0.00	0.00
11,800.0	5.44	247.62	11,761.9	-308.1	-748.1	-173.9	0.00	0.00	0.00
11,900.0	5.44	247.62	11,861.5	-311.7	-756.9	-176.0	0.00	0.00	0.00
11,982.4	5.44	247.62	11,943.5	-314.7	-764.1	-177.6	0.00	0.00	0.00
12,000.0	5.05	270.47	11,961.0	-315.0	-765.7	-177.7	12.00	-2.23	129.86
12,025.0	5.91	301.00	11,985.9	-314.3	-767.9	-176.6	12.00	3.45	122.09
12,050.0	7.90	319.99	12,010.8	-312.4	-770.1	-174.3	12.00	7.94	75.98
12,075.0	10.38	330.72	12,035.4	-309.1	-772.3	-170.7	12.00	9.93	42.91
12,100.0	13.08	337.21	12,059.9	-304.5	-774.5	-165.8	12.00	10.80	25.96
12,125.0	15.88	341.47	12,084.1	-298.6	-776.7	-159.7	12.00	11.22	17.07
12,150.0	18.75	344.48	12,108.0	-291.5	-778.8	-152.3	12.00	11.46	12.01
12,175.0	21.65	346.70	12,131.4	-283.2	-781.0	-143.7	12.00	11.60	8.91
12,200.0	24.57	348.43	12,154.4	-273.6	-783.1	-133.9	12.00	11.69	6.88
12,225.0	27.51	349.80	12,176.9	-262.8	-785.1	-122.9	12.00	11.76	5.50
12,250.0	30.46	350.93	12,198.8	-250.9	-787.2	-110.8	12.00	11.80	4.51
12,275.0	33.42	351.87	12,220.0	-237.8	-789.1	-97.6	12.00	11.83	3.78
12,300.0	36.38	352.68	12,240.5	-223.6	-791.0	-83.3	12.00	11.86	3.23
12,325.0	39.35	353.38	12,260.2	-208.4	-792.9	-67.9	12.00	11.88	2.81
12,350.0	42.33	354.00	12,279.1	-192.1	-794.7	-51.6	12.00	11.89	2.47
12,375.0	45.30	354.55	12,297.2	-174.9	-796.4	-34.4	12.00	11.90	2.21
12,400.0	48.28	355.05	12,314.3	-156.8	-798.1	-16.2	12.00	11.91	1.99
FTP (Mamba 30 State #704H)									
12,425.0	51.26	355.50	12,330.4	-137.8	-799.6	2.8	12.00	11.92	1.81
12,450.0	54.24	355.92	12,345.6	-117.9	-801.1	22.6	12.00	11.93	1.67
12,475.0	57.22	356.31	12,359.6	-97.3	-802.5	43.1	12.00	11.93	1.55
12,500.0	60.21	356.67	12,372.6	-76.0	-803.8	64.4	12.00	11.94	1.45
12,525.0	63.19	357.01	12,384.5	-54.0	-805.0	86.2	12.00	11.94	1.36
12,550.0	66.18	357.33	12,395.1	-31.4	-806.2	108.6	12.00	11.94	1.29
12,575.0	69.16	357.64	12,404.6	-8.3	-807.2	131.6	12.00	11.95	1.24
12,600.0	72.15	357.94	12,412.9	15.2	-808.1	154.9	12.00	11.95	1.19
12,625.0	75.14	358.23	12,420.0	39.2	-808.9	178.7	12.00	11.95	1.15
12,650.0	78.13	358.51	12,425.7	63.5	-809.6	202.7	12.00	11.95	1.12
12,675.0	81.11	358.78	12,430.2	88.1	-810.2	227.0	12.00	11.95	1.09
12,700.0	84.10	359.05	12,433.5	112.9	-810.6	251.5	12.00	11.95	1.07
12,725.0	87.09	359.31	12,435.4	137.8	-811.0	276.1	12.00	11.95	1.06
12,749.3	90.00	359.57	12,436.0	162.1	-811.2	300.1	12.00	11.95	1.06
12,800.0	90.00	359.57	12,436.0	212.8	-811.6	350.1	0.00	0.00	0.00
12,900.0	90.00	359.57	12,436.0	312.8	-812.3	448.7	0.00	0.00	0.00
13,000.0	90.00	359.57	12,436.0	412.8	-813.1	547.3	0.00	0.00	0.00
13,100.0	90.00	359.57	12,436.0	512.8	-813.8	646.0	0.00	0.00	0.00
13,200.0	90.00	359.57	12,436.0	612.8	-814.6	744.6	0.00	0.00	0.00
13,300.0	90.00	359.57	12,436.0	712.8	-815.3	843.2	0.00	0.00	0.00
13,400.0	90.00	359.57	12,436.0	812.8	-816.1	941.8	0.00	0.00	0.00

Database:	EDM 5000.14	**Local Co-ordinate Reference:**	Well #704
Company:	EOG Resources - Midland	**TVD Reference:**	KB = 25 @ 3563.0usft
Project:	Lea County, NM (NAD 83 NME)	**MD Reference:**	KB = 25 @ 3563.0usft
Site:	Mamba 30 State	**North Reference:**	Grid
Well:	#704	**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)
13,500.0	90.00	359.57	12,436.0	912.8	-816.8	1,040.4	0.00	0.00	0.00
13,600.0	90.00	359.57	12,436.0	1,012.8	-817.6	1,139.0	0.00	0.00	0.00
13,700.0	90.00	359.57	12,436.0	1,112.8	-818.3	1,237.7	0.00	0.00	0.00
13,800.0	90.00	359.57	12,436.0	1,212.8	-819.1	1,336.3	0.00	0.00	0.00
13,900.0	90.00	359.57	12,436.0	1,312.8	-819.8	1,434.9	0.00	0.00	0.00
14,000.0	90.00	359.57	12,436.0	1,412.8	-820.6	1,533.5	0.00	0.00	0.00
14,100.0	90.00	359.57	12,436.0	1,512.8	-821.3	1,632.1	0.00	0.00	0.00
14,200.0	90.00	359.57	12,436.0	1,612.8	-822.1	1,730.7	0.00	0.00	0.00
14,300.0	90.00	359.57	12,436.0	1,712.7	-822.8	1,829.4	0.00	0.00	0.00
14,400.0	90.00	359.57	12,436.0	1,812.7	-823.6	1,928.0	0.00	0.00	0.00
14,500.0	90.00	359.57	12,436.0	1,912.7	-824.3	2,026.6	0.00	0.00	0.00
14,600.0	90.00	359.57	12,436.0	2,012.7	-825.1	2,125.2	0.00	0.00	0.00
14,700.0	90.00	359.57	12,436.0	2,112.7	-825.8	2,223.8	0.00	0.00	0.00
14,800.0	90.00	359.57	12,436.0	2,212.7	-826.6	2,322.4	0.00	0.00	0.00
14,900.0	90.00	359.57	12,436.0	2,312.7	-827.3	2,421.0	0.00	0.00	0.00
15,000.0	90.00	359.57	12,436.0	2,412.7	-828.1	2,519.7	0.00	0.00	0.00
15,100.0	90.00	359.57	12,436.0	2,512.7	-828.8	2,618.3	0.00	0.00	0.00
15,200.0	90.00	359.57	12,436.0	2,612.7	-829.5	2,716.9	0.00	0.00	0.00
15,300.0	90.00	359.57	12,436.0	2,712.7	-830.3	2,815.5	0.00	0.00	0.00
15,400.0	90.00	359.57	12,436.0	2,812.7	-831.0	2,914.1	0.00	0.00	0.00
15,500.0	90.00	359.57	12,436.0	2,912.7	-831.8	3,012.7	0.00	0.00	0.00
15,600.0	90.00	359.57	12,436.0	3,012.7	-832.5	3,111.4	0.00	0.00	0.00
15,700.0	90.00	359.57	12,436.0	3,112.7	-833.3	3,210.0	0.00	0.00	0.00
15,800.0	90.00	359.57	12,436.0	3,212.7	-834.0	3,308.6	0.00	0.00	0.00
15,900.0	90.00	359.57	12,436.0	3,312.7	-834.8	3,407.2	0.00	0.00	0.00
16,000.0	90.00	359.57	12,436.0	3,412.7	-835.5	3,505.8	0.00	0.00	0.00
16,100.0	90.00	359.57	12,436.0	3,512.7	-836.3	3,604.4	0.00	0.00	0.00
16,200.0	90.00	359.57	12,436.0	3,612.7	-837.0	3,703.1	0.00	0.00	0.00
16,300.0	90.00	359.57	12,436.0	3,712.7	-837.8	3,801.7	0.00	0.00	0.00
16,400.0	90.00	359.57	12,436.0	3,812.7	-838.5	3,900.3	0.00	0.00	0.00
16,500.0	90.00	359.57	12,436.0	3,912.7	-839.3	3,998.9	0.00	0.00	0.00
16,600.0	90.00	359.57	12,436.0	4,012.7	-840.0	4,097.5	0.00	0.00	0.00
16,700.0	90.00	359.57	12,436.0	4,112.7	-840.8	4,196.1	0.00	0.00	0.00
16,800.0	90.00	359.57	12,436.0	4,212.7	-841.5	4,294.8	0.00	0.00	0.00
16,900.0	90.00	359.57	12,436.0	4,312.7	-842.3	4,393.4	0.00	0.00	0.00
17,000.0	90.00	359.57	12,436.0	4,412.7	-843.0	4,492.0	0.00	0.00	0.00
17,100.0	90.00	359.57	12,436.0	4,512.7	-843.8	4,590.6	0.00	0.00	0.00
17,200.0	90.00	359.57	12,436.0	4,612.7	-844.5	4,689.2	0.00	0.00	0.00
17,300.0	90.00	359.57	12,436.0	4,712.7	-845.3	4,787.8	0.00	0.00	0.00
17,399.3	90.00	359.57	12,436.0	4,812.0	-846.0	4,885.8	0.00	0.00	0.00
PBHL (Mamba 30 State #704H)									

Database:	EDM 5000.14	**Local Co-ordinate Reference:**	Well #704
Company:	EOG Resources - Midland	**TVD Reference:**	KB = 25 @ 3563.0usft
Project:	Lea County, NM (NAD 83 NME)	**MD Reference:**	KB = 25 @ 3563.0usft
Site:	Mamba 30 State	**North Reference:**	Grid
Well:	#704	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1		

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
PBHL (Mamba 30 State - plan hits target center - Point	0.00	0.00	12,436.0	4,812.0	-846.0	435,660.00	764,976.00	32° 11' 44.304 N	103° 36' 37.296 W
FTP (Mamba 30 State # - plan misses target center by 165.2usft at 12400.0usft MD (12314.3 TVD, -156.8 N, -798.1 E) - Point	0.00	0.00	12,436.0	-268.0	-808.0	430,580.00	765,014.00	32° 10' 54.033 N	103° 36' 37.251 W