



EOG Resources - Midland

Lea County, NM (NAD 27 NME)

Thor 21 Fed Com

#707H

OH

Plan: Plan #0.2

Standard Planning Report

05 January, 2016

HOBBS OCD

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EOG Resources, Inc.
Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well #707H
Company:	EOG Resources - Midland	TVD Reference:	KB @ 3277.0usft
Project:	Lea County, NM (NAD 27 NME)	MD Reference:	KB @ 3277.0usft
Site:	Thor 21 Fed Com	North Reference:	Grid
Well:	#707H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.2		

Project	Lea County, NM (NAD 27 NME)		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site		Thor 21 Fed Com			
Site Position:		Northing:	372,581.00 usft	Latitude:	32° 1' 19.428 N
From:	Map	Easting:	735,478.00 usft	Longitude:	103° 34' 24.750 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.40 °

Well	#707H					
Well Position	+N/-S	200.0 usft	Northing:	372,781.00 usft	Latitude:	32° 1' 21.407 N
	+E/-W	0.0 usft	Easting:	735,478.00 usft	Longitude:	103° 34' 24.734 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	3,252.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	10/1/2016	7.02	59.89	47,892

Design	Plan #0.2			
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	3.01

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	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,123.7	2.47	141.07	2,123.7	-2.1	1.7	2.00	2.00	0.00	141.07	
11,930.8	2.47	141.07	11,921.6	-331.5	267.8	0.00	0.00	0.00	0.00	
12,696.9	90.00	359.60	12,415.0	145.7	277.7	12.00	11.42	-18.47	-141.45	
17,231.3	90.00	359.60	12,415.0	4,680.0	246.0	0.00	0.00	0.00	0.00	PBHL(THOR 21 FED)

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Project: Lea County, NM (NAD 27 NME)
Site: Thor 21 Fed Com
Well: #707H
Wellbore: OH
Design: Plan #0.2

Local Co-ordinate Reference:
TVD Reference: KB @ 3277.0usft
MD Reference: KB @ 3277.0usft
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)
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	2.00	141.07	2,100.0	-1.4	1.1	-1.3	2.00	2.00	0.00
2,123.7	2.47	141.07	2,123.7	-2.1	1.7	-2.0	2.00	2.00	0.00
2,200.0	2.47	141.07	2,199.9	-4.6	3.7	-4.4	0.00	0.00	0.00
2,300.0	2.47	141.07	2,299.8	-8.0	6.5	-7.6	0.00	0.00	0.00
2,400.0	2.47	141.07	2,399.7	-11.4	9.2	-10.9	0.00	0.00	0.00
2,500.0	2.47	141.07	2,499.6	-14.7	11.9	-14.1	0.00	0.00	0.00
2,600.0	2.47	141.07	2,599.5	-18.1	14.6	-17.3	0.00	0.00	0.00
2,700.0	2.47	141.07	2,699.4	-21.4	17.3	-20.5	0.00	0.00	0.00
2,800.0	2.47	141.07	2,799.3	-24.8	20.0	-23.7	0.00	0.00	0.00
2,900.0	2.47	141.07	2,899.2	-28.2	22.7	-26.9	0.00	0.00	0.00
3,000.0	2.47	141.07	2,999.1	-31.5	25.5	-30.1	0.00	0.00	0.00
3,100.0	2.47	141.07	3,099.1	-34.9	28.2	-33.3	0.00	0.00	0.00
3,200.0	2.47	141.07	3,199.0	-38.2	30.9	-36.6	0.00	0.00	0.00
3,300.0	2.47	141.07	3,298.9	-41.6	33.6	-39.8	0.00	0.00	0.00
3,400.0	2.47	141.07	3,398.8	-45.0	36.3	-43.0	0.00	0.00	0.00
3,500.0	2.47	141.07	3,498.7	-48.3	39.0	-46.2	0.00	0.00	0.00
3,600.0	2.47	141.07	3,598.6	-51.7	41.7	-49.4	0.00	0.00	0.00
3,700.0	2.47	141.07	3,698.5	-55.0	44.4	-52.6	0.00	0.00	0.00
3,800.0	2.47	141.07	3,798.4	-58.4	47.2	-55.8	0.00	0.00	0.00
3,900.0	2.47	141.07	3,898.3	-61.8	49.9	-59.0	0.00	0.00	0.00
4,000.0	2.47	141.07	3,998.2	-65.1	52.6	-62.3	0.00	0.00	0.00
4,100.0	2.47	141.07	4,098.1	-68.5	55.3	-65.5	0.00	0.00	0.00
4,200.0	2.47	141.07	4,198.0	-71.8	58.0	-68.7	0.00	0.00	0.00
4,300.0	2.47	141.07	4,297.9	-75.2	60.7	-71.9	0.00	0.00	0.00
4,400.0	2.47	141.07	4,397.8	-78.5	63.4	-75.1	0.00	0.00	0.00
4,500.0	2.47	141.07	4,497.7	-81.9	66.2	-78.3	0.00	0.00	0.00
4,600.0	2.47	141.07	4,597.7	-85.3	68.9	-81.5	0.00	0.00	0.00
4,700.0	2.47	141.07	4,697.6	-88.6	71.6	-84.7	0.00	0.00	0.00
4,800.0	2.47	141.07	4,797.5	-92.0	74.3	-88.0	0.00	0.00	0.00
4,900.0	2.47	141.07	4,897.4	-95.3	77.0	-91.2	0.00	0.00	0.00
5,000.0	2.47	141.07	4,997.3	-98.7	79.7	-94.4	0.00	0.00	0.00
5,100.0	2.47	141.07	5,097.2	-102.1	82.4	-97.6	0.00	0.00	0.00
5,200.0	2.47	141.07	5,197.1	-105.4	85.1	-100.8	0.00	0.00	0.00



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Minimum Curvature

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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	2.47	141.07	5,297.0	-108.8	87.9	-104.0	0.00	0.00	0.00
5,400.0	2.47	141.07	5,396.9	-112.1	90.6	-107.2	0.00	0.00	0.00
5,500.0	2.47	141.07	5,496.8	-115.5	93.3	-110.4	0.00	0.00	0.00
5,600.0	2.47	141.07	5,596.7	-118.9	96.0	-113.7	0.00	0.00	0.00
5,700.0	2.47	141.07	5,696.6	-122.2	98.7	-116.9	0.00	0.00	0.00
5,800.0	2.47	141.07	5,796.5	-125.6	101.4	-120.1	0.00	0.00	0.00
5,900.0	2.47	141.07	5,896.4	-128.9	104.1	-123.3	0.00	0.00	0.00
6,000.0	2.47	141.07	5,996.3	-132.3	106.8	-126.5	0.00	0.00	0.00
6,100.0	2.47	141.07	6,096.3	-135.7	109.6	-129.7	0.00	0.00	0.00
6,200.0	2.47	141.07	6,196.2	-139.0	112.3	-132.9	0.00	0.00	0.00
6,300.0	2.47	141.07	6,296.1	-142.4	115.0	-136.1	0.00	0.00	0.00
6,400.0	2.47	141.07	6,396.0	-145.7	117.7	-139.4	0.00	0.00	0.00
6,500.0	2.47	141.07	6,495.9	-149.1	120.4	-142.6	0.00	0.00	0.00
6,600.0	2.47	141.07	6,595.8	-152.5	123.1	-145.8	0.00	0.00	0.00
6,700.0	2.47	141.07	6,695.7	-155.8	125.8	-149.0	0.00	0.00	0.00
6,800.0	2.47	141.07	6,795.6	-159.2	128.6	-152.2	0.00	0.00	0.00
6,900.0	2.47	141.07	6,895.5	-162.5	131.3	-155.4	0.00	0.00	0.00
7,000.0	2.47	141.07	6,995.4	-165.9	134.0	-158.6	0.00	0.00	0.00
7,100.0	2.47	141.07	7,095.3	-169.3	136.7	-161.8	0.00	0.00	0.00
7,200.0	2.47	141.07	7,195.2	-172.6	139.4	-165.1	0.00	0.00	0.00
7,300.0	2.47	141.07	7,295.1	-176.0	142.1	-168.3	0.00	0.00	0.00
7,400.0	2.47	141.07	7,395.0	-179.3	144.8	-171.5	0.00	0.00	0.00
7,500.0	2.47	141.07	7,494.9	-182.7	147.5	-174.7	0.00	0.00	0.00
7,600.0	2.47	141.07	7,594.9	-186.1	150.3	-177.9	0.00	0.00	0.00
7,700.0	2.47	141.07	7,694.8	-189.4	153.0	-181.1	0.00	0.00	0.00
7,800.0	2.47	141.07	7,794.7	-192.8	155.7	-184.3	0.00	0.00	0.00
7,900.0	2.47	141.07	7,894.6	-196.1	158.4	-187.5	0.00	0.00	0.00
8,000.0	2.47	141.07	7,994.5	-199.5	161.1	-190.8	0.00	0.00	0.00
8,100.0	2.47	141.07	8,094.4	-202.9	163.8	-194.0	0.00	0.00	0.00
8,200.0	2.47	141.07	8,194.3	-206.2	166.5	-197.2	0.00	0.00	0.00
8,300.0	2.47	141.07	8,294.2	-209.6	169.3	-200.4	0.00	0.00	0.00
8,400.0	2.47	141.07	8,394.1	-212.9	172.0	-203.6	0.00	0.00	0.00
8,500.0	2.47	141.07	8,494.0	-216.3	174.7	-206.8	0.00	0.00	0.00
8,600.0	2.47	141.07	8,593.9	-219.6	177.4	-210.0	0.00	0.00	0.00
8,700.0	2.47	141.07	8,693.8	-223.0	180.1	-213.2	0.00	0.00	0.00
8,800.0	2.47	141.07	8,793.7	-226.4	182.8	-216.5	0.00	0.00	0.00
8,900.0	2.47	141.07	8,893.6	-229.7	185.5	-219.7	0.00	0.00	0.00
9,000.0	2.47	141.07	8,993.5	-233.1	188.2	-222.9	0.00	0.00	0.00
9,100.0	2.47	141.07	9,093.5	-236.4	191.0	-226.1	0.00	0.00	0.00
9,200.0	2.47	141.07	9,193.4	-239.8	193.7	-229.3	0.00	0.00	0.00
9,300.0	2.47	141.07	9,293.3	-243.2	196.4	-232.5	0.00	0.00	0.00
9,400.0	2.47	141.07	9,393.2	-246.5	199.1	-235.7	0.00	0.00	0.00
9,500.0	2.47	141.07	9,493.1	-249.9	201.8	-238.9	0.00	0.00	0.00
9,600.0	2.47	141.07	9,593.0	-253.2	204.5	-242.2	0.00	0.00	0.00
9,700.0	2.47	141.07	9,692.9	-256.6	207.2	-245.4	0.00	0.00	0.00
9,800.0	2.47	141.07	9,792.8	-260.0	210.0	-248.6	0.00	0.00	0.00
9,900.0	2.47	141.07	9,892.7	-263.3	212.7	-251.8	0.00	0.00	0.00
10,000.0	2.47	141.07	9,992.6	-266.7	215.4	-255.0	0.00	0.00	0.00
10,100.0	2.47	141.07	10,092.5	-270.0	218.1	-258.2	0.00	0.00	0.00
10,200.0	2.47	141.07	10,192.4	-273.4	220.8	-261.4	0.00	0.00	0.00
10,300.0	2.47	141.07	10,292.3	-276.8	223.5	-264.6	0.00	0.00	0.00
10,400.0	2.47	141.07	10,392.2	-280.1	226.2	-267.9	0.00	0.00	0.00
10,500.0	2.47	141.07	10,492.1	-283.5	228.9	-271.1	0.00	0.00	0.00
10,600.0	2.47	141.07	10,592.1	-286.8	231.7	-274.3	0.00	0.00	0.00

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10,700.0	2.47	141.07	10,692.0	-290.2	234.4	-277.5	0.00	0.00	0.00
10,800.0	2.47	141.07	10,791.9	-293.6	237.1	-280.7	0.00	0.00	0.00
10,900.0	2.47	141.07	10,891.8	-296.9	239.8	-283.9	0.00	0.00	0.00
11,000.0	2.47	141.07	10,991.7	-300.3	242.5	-287.1	0.00	0.00	0.00
11,100.0	2.47	141.07	11,091.6	-303.6	245.2	-290.3	0.00	0.00	0.00
11,200.0	2.47	141.07	11,191.5	-307.0	247.9	-293.6	0.00	0.00	0.00
11,300.0	2.47	141.07	11,291.4	-310.4	250.6	-296.8	0.00	0.00	0.00
11,400.0	2.47	141.07	11,391.3	-313.7	253.4	-300.0	0.00	0.00	0.00
11,500.0	2.47	141.07	11,491.2	-317.1	256.1	-303.2	0.00	0.00	0.00
11,600.0	2.47	141.07	11,591.1	-320.4	258.8	-306.4	0.00	0.00	0.00
11,700.0	2.47	141.07	11,691.0	-323.8	261.5	-309.6	0.00	0.00	0.00
11,800.0	2.47	141.07	11,790.9	-327.2	264.2	-312.8	0.00	0.00	0.00
11,900.0	2.47	141.07	11,890.8	-330.5	266.9	-316.0	0.00	0.00	0.00
11,930.8	2.47	141.07	11,921.6	-331.5	267.8	-317.0	0.00	0.00	0.00
11,950.0	1.59	76.05	11,940.8	-331.8	268.3	-317.3	12.00	-4.62	-338.14
11,975.0	3.71	24.15	11,965.8	-331.0	268.9	-316.4	12.00	8.48	-207.60
12,000.0	6.55	13.15	11,990.7	-328.9	269.6	-314.2	12.00	11.39	-44.00
12,025.0	9.50	8.86	12,015.4	-325.4	270.2	-310.8	12.00	11.77	-17.16
12,050.0	12.47	6.59	12,040.0	-320.7	270.9	-306.0	12.00	11.88	-9.07
12,075.0	15.45	5.19	12,064.2	-314.7	271.5	-300.0	12.00	11.92	-5.62
12,100.0	18.43	4.23	12,088.1	-307.5	272.1	-292.7	12.00	11.95	-3.83
12,125.0	21.42	3.53	12,111.6	-298.9	272.7	-284.2	12.00	11.96	-2.79
12,150.0	24.42	3.00	12,134.7	-289.2	273.2	-274.5	12.00	11.97	-2.14
12,175.0	27.41	2.57	12,157.1	-278.3	273.7	-263.6	12.00	11.98	-1.70
12,200.0	30.41	2.23	12,179.0	-266.2	274.2	-251.5	12.00	11.98	-1.39
12,225.0	33.40	1.94	12,200.3	-253.0	274.7	-238.3	12.00	11.98	-1.16
12,250.0	36.40	1.69	12,220.8	-238.7	275.2	-224.0	12.00	11.99	-0.99
12,275.0	39.40	1.48	12,240.5	-223.4	275.6	-208.6	12.00	11.99	-0.86
12,300.0	42.39	1.29	12,259.4	-207.0	276.0	-192.3	12.00	11.99	-0.75
12,325.0	45.39	1.12	12,277.4	-189.7	276.3	-174.9	12.00	11.99	-0.67
12,350.0	48.39	0.97	12,294.5	-171.5	276.7	-156.7	12.00	11.99	-0.61
12,375.0	51.39	0.83	12,310.6	-152.3	277.0	-137.6	12.00	11.99	-0.55
12,400.0	54.39	0.70	12,325.7	-132.4	277.2	-117.7	12.00	11.99	-0.51
12,425.0	57.38	0.59	12,339.7	-111.7	277.5	-97.0	12.00	11.99	-0.47
12,450.0	60.38	0.48	12,352.6	-90.3	277.7	-75.6	12.00	11.99	-0.44
12,475.0	63.38	0.37	12,364.4	-68.3	277.8	-53.6	12.00	11.99	-0.42
12,500.0	66.38	0.27	12,375.0	-45.6	278.0	-31.0	12.00	11.99	-0.39
12,521.2	68.93	0.19	12,383.1	-26.0	278.0	-11.4	12.00	11.99	-0.38
FTP(THOR 21 FED COM #707H)									
12,525.0	69.38	0.18	12,384.4	-22.5	278.1	-7.9	12.00	12.00	-0.37
12,550.0	72.38	0.09	12,392.6	1.1	278.1	15.7	12.00	12.00	-0.36
12,575.0	75.38	0.00	12,399.5	25.1	278.1	39.7	12.00	12.00	-0.35
12,600.0	78.38	359.92	12,405.2	49.5	278.1	64.0	12.00	12.00	-0.34
12,625.0	81.37	359.83	12,409.6	74.1	278.1	88.6	12.00	12.00	-0.33
12,650.0	84.37	359.75	12,412.7	98.9	278.0	113.4	12.00	12.00	-0.33
12,675.0	87.37	359.67	12,414.5	123.8	277.8	138.2	12.00	12.00	-0.32
12,696.9	90.00	359.60	12,415.0	145.7	277.7	160.1	12.00	12.00	-0.32
12,700.0	90.00	359.60	12,415.0	148.8	277.7	163.2	0.00	0.00	0.00
12,800.0	90.00	359.60	12,415.0	248.8	277.0	263.0	0.00	0.00	0.00
12,900.0	90.00	359.60	12,415.0	348.8	276.3	362.8	0.00	0.00	0.00
13,000.0	90.00	359.60	12,415.0	448.8	275.6	462.7	0.00	0.00	0.00
13,100.0	90.00	359.60	12,415.0	548.8	274.9	562.5	0.00	0.00	0.00
13,200.0	90.00	359.60	12,415.0	648.8	274.2	662.3	0.00	0.00	0.00



EOG Resources, Inc.

Planning Report

Database: EDM 5000.1 Single User Db
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Thor 21 Fed Com
Well: #707H
Wellbore: OH
Design: Plan #0.2

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Well #707H
KB @ 3277.0usft
KB @ 3277.0usft
Grid
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)
13,300.0	90.00	359.60	12,415.0	748.8	273.5	762.1	0.00	0.00	0.00
13,400.0	90.00	359.60	12,415.0	848.8	272.8	862.0	0.00	0.00	0.00
13,500.0	90.00	359.60	12,415.0	948.8	272.1	961.8	0.00	0.00	0.00
13,600.0	90.00	359.60	12,415.0	1,048.8	271.4	1,061.6	0.00	0.00	0.00
13,700.0	90.00	359.60	12,415.0	1,148.8	270.7	1,161.4	0.00	0.00	0.00
13,800.0	90.00	359.60	12,415.0	1,248.8	270.0	1,261.2	0.00	0.00	0.00
13,900.0	90.00	359.60	12,415.0	1,348.8	269.3	1,361.1	0.00	0.00	0.00
14,000.0	90.00	359.60	12,415.0	1,448.8	268.6	1,460.9	0.00	0.00	0.00
14,100.0	90.00	359.60	12,415.0	1,548.8	267.9	1,560.7	0.00	0.00	0.00
14,200.0	90.00	359.60	12,415.0	1,648.8	267.2	1,660.5	0.00	0.00	0.00
14,300.0	90.00	359.60	12,415.0	1,748.8	266.5	1,760.4	0.00	0.00	0.00
14,400.0	90.00	359.60	12,415.0	1,848.8	265.8	1,860.2	0.00	0.00	0.00
14,500.0	90.00	359.60	12,415.0	1,948.8	265.1	1,960.0	0.00	0.00	0.00
14,600.0	90.00	359.60	12,415.0	2,048.8	264.4	2,059.8	0.00	0.00	0.00
14,700.0	90.00	359.60	12,415.0	2,148.8	263.7	2,159.7	0.00	0.00	0.00
14,800.0	90.00	359.60	12,415.0	2,248.8	263.0	2,259.5	0.00	0.00	0.00
14,900.0	90.00	359.60	12,415.0	2,348.8	262.3	2,359.3	0.00	0.00	0.00
15,000.0	90.00	359.60	12,415.0	2,448.8	261.6	2,459.1	0.00	0.00	0.00
15,100.0	90.00	359.60	12,415.0	2,548.8	260.9	2,558.9	0.00	0.00	0.00
15,200.0	90.00	359.60	12,415.0	2,648.8	260.2	2,658.8	0.00	0.00	0.00
15,300.0	90.00	359.60	12,415.0	2,748.8	259.5	2,758.6	0.00	0.00	0.00
15,400.0	90.00	359.60	12,415.0	2,848.8	258.8	2,858.4	0.00	0.00	0.00
15,500.0	90.00	359.60	12,415.0	2,948.8	258.1	2,958.2	0.00	0.00	0.00
15,600.0	90.00	359.60	12,415.0	3,048.8	257.4	3,058.1	0.00	0.00	0.00
15,700.0	90.00	359.60	12,415.0	3,148.8	256.7	3,157.9	0.00	0.00	0.00
15,800.0	90.00	359.60	12,415.0	3,248.7	256.0	3,257.7	0.00	0.00	0.00
15,900.0	90.00	359.60	12,415.0	3,348.7	255.3	3,357.5	0.00	0.00	0.00
16,000.0	90.00	359.60	12,415.0	3,448.7	254.6	3,457.4	0.00	0.00	0.00
16,100.0	90.00	359.60	12,415.0	3,548.7	253.9	3,557.2	0.00	0.00	0.00
16,200.0	90.00	359.60	12,415.0	3,648.7	253.2	3,657.0	0.00	0.00	0.00
16,300.0	90.00	359.60	12,415.0	3,748.7	252.5	3,756.8	0.00	0.00	0.00
16,400.0	90.00	359.60	12,415.0	3,848.7	251.8	3,856.6	0.00	0.00	0.00
16,500.0	90.00	359.60	12,415.0	3,948.7	251.1	3,956.5	0.00	0.00	0.00
16,600.0	90.00	359.60	12,415.0	4,048.7	250.4	4,056.3	0.00	0.00	0.00
16,700.0	90.00	359.60	12,415.0	4,148.7	249.7	4,156.1	0.00	0.00	0.00
16,800.0	90.00	359.60	12,415.0	4,248.7	249.0	4,255.9	0.00	0.00	0.00
16,900.0	90.00	359.60	12,415.0	4,348.7	248.3	4,355.8	0.00	0.00	0.00
17,000.0	90.00	359.60	12,415.0	4,448.7	247.6	4,455.6	0.00	0.00	0.00
17,100.0	90.00	359.60	12,415.0	4,548.7	246.9	4,555.4	0.00	0.00	0.00
17,200.0	90.00	359.60	12,415.0	4,648.7	246.2	4,655.2	0.00	0.00	0.00
17,231.3	90.00	359.60	12,415.0	4,680.0	246.0	4,686.5	0.00	0.00	0.00

PBHL(THOR 21 FED COM #707H)

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OFFICE



EOG Resources, Inc.

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well #707H
Company:	EOG Resources - Midland	TVD Reference:	KB @ 3277.0usft
Project:	Lea County, NM (NAD 27 NME)	MD Reference:	KB @ 3277.0usft
Site:	Thor 21 Fed Com	North Reference:	Grid
Well:	#707H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.2		

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
FTP(THOR 21 FED COI	0.00	0.00	12,415.0	-39.0	279.0	372,742.00	735,757.00	32° 1' 21.002 N	103° 34' 21.496 W
- plan misses target center by 34.5usft at 12521.2usft MD (12383.1 TVD, -26.0 N, 278.0 E)									
- Point									
PBHL(THOR 21 FED CC	0.00	0.00	12,415.0	4,680.0	246.0	377,461.00	735,724.00	32° 2' 7.703 N	103° 34' 21.494 W
- plan hits target center									
- Point									

RECEIVED

APR 12 11 11 AM

EOG
RESOURCES
MIDLAND



Lea County, NM (NAD 27 NME)

Thor 21 Fed Com #707H

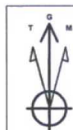
Plan #0.2

PROJECT DETAILS: Lea County, NM (NAD 27 NME)

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

WELL DETAILS: #707H

Ground Level: 3252.0
KB @ 3277.0usft
Northing 370735.00 Easting 735478.00 Latitude 32° 1' 21.407 N Longitude 103° 34' 24.734 W



Azimuths to Grid North
True North: -0.40°
Magnetic North: 6.61°
Magnetic Field
Strength: 47892.1snT
Dip Angle: 59.89°
Date: 10/1/2016
Model: IGRF2015

To convert a Magnetic Direction to a Grid Direction, Add 6.61°
To convert a Magnetic Direction to a True Direction, Add 7.02° East
To convert a True Direction to a Grid Direction, Subtract 9.40°

SECTION DETAILS

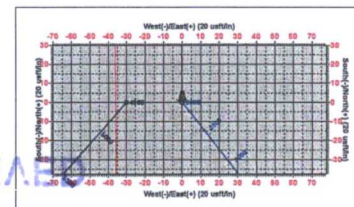
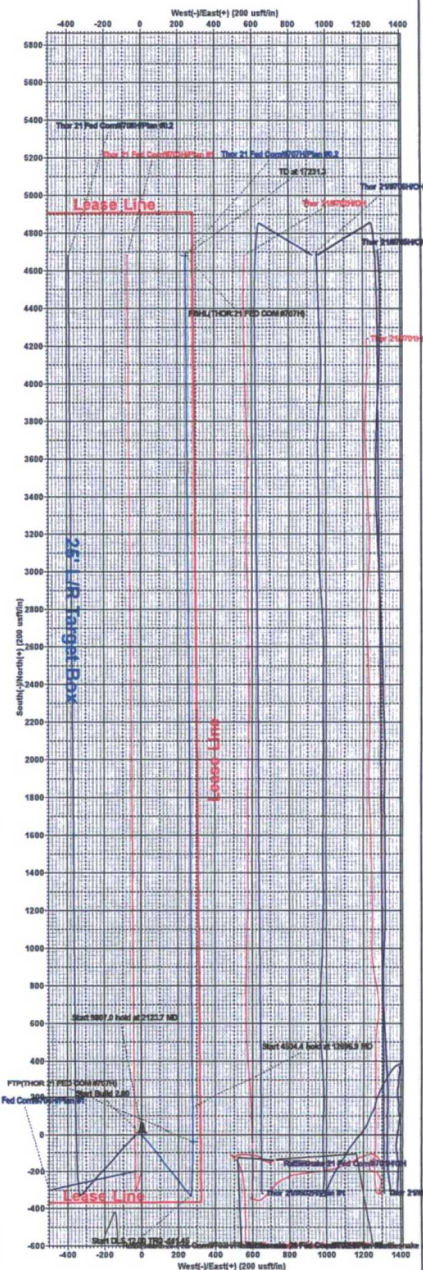
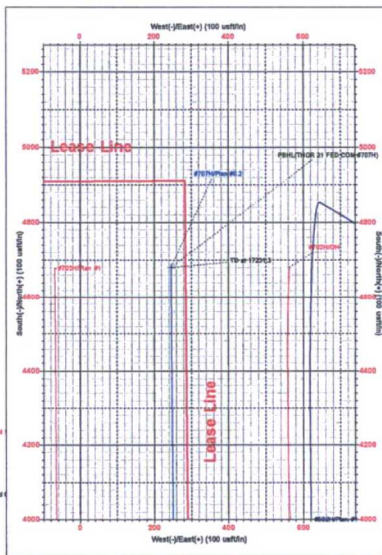
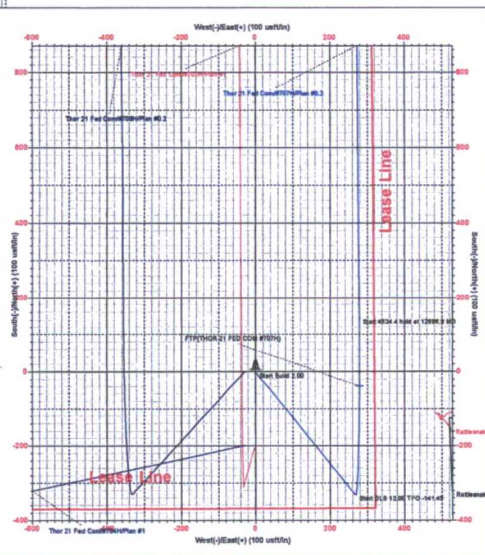
Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VSecl	Target	Annotation
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0		
2	2000.0	0.00	0.00	2000.0	0.0	0.0	0.00	0.00	0.0		
3	2123.7	2.47	141.07	2123.7	-2.1	1.7	2.00	141.07	-2.0		
4	11930.8	2.47	141.07	11921.6	-331.5	267.8	0.00	0.00	-317.0		
5	12896.9	90.00	359.60	12815.0	145.7	277.7	12.00	-141.46	160.1		
6	17221.3	90.00	359.60	12415.0	4680.0	246.0	0.00	0.00	4686.5		PBHL(THOR 21 FED COM #707H)

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N-S	+E-W	Northing	Easting
PBHL(THOR 21 FED COM #707H)	12415.0	4680.0	246.0	377481.00	735724.00
FTPT(THOR 21 FED COM #707H)	12415.0	-39.0	279.0	372742.00	736767.00



Lea County, NM (NAD 27 NME)
Thor 21 Fed Com #707H
Plan #0.2
10/30/2016