

HOBBS OCD
JAN 09 2018
RECEIVED

Lea County, NM (NAD 83 NME)
Hemlock 32 State #702H
Plan #0.1

PROJECT DETAILS: Lea County, NM (NAD 83 NME)
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Etiageoid: GDS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level

WELL DETAILS: #702H
KB = 25 @ 3665 ft
Northing: 457257.00
Easting: 767892.00
Latitude: 32° 15' 17.422 N
Longitude: 102° 36' 2.696 W

SECTION DETAILS

Seq	MD	INC	Alt	TVD	+M.D	+EL-W	Chg	17' Inc	Vertical	Annulation
1	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	3000.0	0.00	0.00	3000.0	0.0	0.0	0.0	0.0	0.0	
3	3250.0	2.50	182.29	3250.0	0.0	182.29	0.0	182.29	0.0	
4	12013.0	2.28	182.29	12013.0	0.0	182.29	0.0	182.29	0.0	
5	12780.0	90.00	268.87	12780.0	0.0	182.8	0.0	182.8	0.0	
6	17701.0	90.00	268.87	17701.0	0.0	182.8	0.0	182.8	0.0	
7	17701.0	90.00	268.87	17701.0	0.0	182.8	0.0	182.8	0.0	

PBH/Hemlock 32 State #702H

To convert a Magnetic Declination to a Grid Declination, Add 0.52°
 To convert a True Declination to a Grid Declination, Subtract 0.20°
 Magnetic Field
 Strength: 47.823.7 nT
 Dip Angle: 60.08°
 Date: 1/9/2016
 Model: IGRF2015



CASINO DETAILS						
No casino data is available						

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)						
Name	PBH/Hemlock 32 State #702H	TVD	+M.D	+EL-W	Chg	17' Inc
Lease Line	12013.0	4688.0	0.0	182.8	0.0	182.8
330° Hardline	12013.0	4688.0	0.0	182.8	0.0	182.8
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330° Hardline	12013.0	4688.0	0.0	182.8	0.0	182.8
Lease Line	12013.0	4688.0	0.			



EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Hemlock 32 State

#702H

OH

Plan: Plan #0.1

Standard Planning Report

09 January, 2018



Planning Report

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #702H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25 @ 3685.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25 @ 3685.0usft
Site:	Hemlock 32 State	North Reference:	Grid
Well:	#702H	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	Hemlock 32 State		
Site Position:		Northing:	457,257.00 usft
From:	Map	Easting:	767,769.00 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 15' 17.825 N
		Longitude:	103° 36' 3.080 W
		Grid Convergence:	0.39 °

Well	#702H		
Well Position	+N/-S	0.0 usft	Northing:
	+E/-W	33.0 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	Ground Level:
			3,660.0 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination
	IGRF2015	1/9/2018	6.91
			Dip Angle
			60.08
			Field Strength
			47,893.67422686

Design	Plan #0.1		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth:
			0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction
			1.69

Plan Survey Tool Program	Date 1/9/2018		
Depth From	Depth To	Survey (Wellbore)	Tool Name
(usft)	(usft)		
1	0.0	17,301.6 Plan #0.1 (OH)	MWD
			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	
3,225.6	2.26	152.29	3,225.6	-3.9	2.1	1.00	1.00	0.00	152.29	
12,013.8	2.26	152.29	12,006.9	-310.2	162.9	0.00	0.00	0.00	0.00	
12,780.5	90.00	359.61	12,501.0	167.0	168.6	12.00	11.44	-19.91	-152.66	
17,301.6	90.00	359.61	12,501.0	4,688.0	138.0	0.00	0.00	0.00	0.00	PBHL(Hemlock 32 St



Planning Report

Database: EDM 5000.14
 Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Hemlock 32 State
 Well: #702H
 Wellbore: OH
 Design: Plan #0.1

Local Co-ordinate Reference: Well #702H
 TVD Reference: KB = 25 @ 3685.0usft
 MD Reference: KB = 25 @ 3685.0usft
 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	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	152.29	3,100.0	-0.8	0.4	-0.8	1.00	1.00	0.00
3,200.0	2.00	152.29	3,200.0	-3.1	1.6	-3.0	1.00	1.00	0.00
3,225.6	2.26	152.29	3,225.6	-3.9	2.1	-3.9	1.00	1.00	0.00
3,300.0	2.26	152.29	3,299.9	-6.5	3.4	-6.4	0.00	0.00	0.00
3,400.0	2.26	152.29	3,399.8	-10.0	5.3	-9.9	0.00	0.00	0.00
3,500.0	2.26	152.29	3,499.7	-13.5	7.1	-13.3	0.00	0.00	0.00
3,600.0	2.26	152.29	3,599.7	-17.0	8.9	-16.7	0.00	0.00	0.00
3,700.0	2.26	152.29	3,699.6	-20.5	10.7	-20.1	0.00	0.00	0.00
3,800.0	2.26	152.29	3,799.5	-24.0	12.6	-23.6	0.00	0.00	0.00
3,900.0	2.26	152.29	3,899.4	-27.4	14.4	-27.0	0.00	0.00	0.00
4,000.0	2.26	152.29	3,999.3	-30.9	16.2	-30.4	0.00	0.00	0.00
4,100.0	2.26	152.29	4,099.3	-34.4	18.1	-33.9	0.00	0.00	0.00
4,200.0	2.26	152.29	4,199.2	-37.9	19.9	-37.3	0.00	0.00	0.00
4,300.0	2.26	152.29	4,299.1	-41.4	21.7	-40.7	0.00	0.00	0.00
4,400.0	2.26	152.29	4,399.0	-44.9	23.6	-44.1	0.00	0.00	0.00
4,500.0	2.26	152.29	4,499.0	-48.3	25.4	-47.6	0.00	0.00	0.00
4,600.0	2.26	152.29	4,598.9	-51.8	27.2	-51.0	0.00	0.00	0.00
4,700.0	2.26	152.29	4,698.8	-55.3	29.1	-54.4	0.00	0.00	0.00
4,800.0	2.26	152.29	4,798.7	-58.8	30.9	-57.9	0.00	0.00	0.00
4,900.0	2.26	152.29	4,898.6	-62.3	32.7	-61.3	0.00	0.00	0.00
5,000.0	2.26	152.29	4,998.6	-65.8	34.5	-64.7	0.00	0.00	0.00
5,100.0	2.26	152.29	5,098.5	-69.3	36.4	-68.2	0.00	0.00	0.00
5,200.0	2.26	152.29	5,198.4	-72.7	38.2	-71.6	0.00	0.00	0.00



Planning Report

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Wellbore: OH
Design: Plan #0.1

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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	2.26	152.29	5,298.3	-76.2	40.0	-75.0	0.00	0.00	0.00
5,400.0	2.26	152.29	5,398.3	-79.7	41.9	-78.4	0.00	0.00	0.00
5,500.0	2.26	152.29	5,498.2	-83.2	43.7	-81.9	0.00	0.00	0.00
5,600.0	2.26	152.29	5,598.1	-86.7	45.5	-85.3	0.00	0.00	0.00
5,700.0	2.26	152.29	5,698.0	-90.2	47.4	-88.7	0.00	0.00	0.00
5,800.0	2.26	152.29	5,797.9	-93.7	49.2	-92.2	0.00	0.00	0.00
5,900.0	2.26	152.29	5,897.9	-97.1	51.0	-95.6	0.00	0.00	0.00
6,000.0	2.26	152.29	5,997.8	-100.6	52.9	-99.0	0.00	0.00	0.00
6,100.0	2.26	152.29	6,097.7	-104.1	54.7	-102.5	0.00	0.00	0.00
6,200.0	2.26	152.29	6,197.6	-107.6	56.5	-105.9	0.00	0.00	0.00
6,300.0	2.26	152.29	6,297.6	-111.1	58.3	-109.3	0.00	0.00	0.00
6,400.0	2.26	152.29	6,397.5	-114.6	60.2	-112.7	0.00	0.00	0.00
6,500.0	2.26	152.29	6,497.4	-118.1	62.0	-116.2	0.00	0.00	0.00
6,600.0	2.26	152.29	6,597.3	-121.5	63.8	-119.6	0.00	0.00	0.00
6,700.0	2.26	152.29	6,697.2	-125.0	65.7	-123.0	0.00	0.00	0.00
6,800.0	2.26	152.29	6,797.2	-128.5	67.5	-126.5	0.00	0.00	0.00
6,900.0	2.26	152.29	6,897.1	-132.0	69.3	-129.9	0.00	0.00	0.00
7,000.0	2.26	152.29	6,997.0	-135.5	71.2	-133.3	0.00	0.00	0.00
7,100.0	2.26	152.29	7,096.9	-139.0	73.0	-136.8	0.00	0.00	0.00
7,200.0	2.26	152.29	7,196.9	-142.4	74.8	-140.2	0.00	0.00	0.00
7,300.0	2.26	152.29	7,296.8	-145.9	76.7	-143.6	0.00	0.00	0.00
7,400.0	2.26	152.29	7,396.7	-149.4	78.5	-147.0	0.00	0.00	0.00
7,500.0	2.26	152.29	7,496.6	-152.9	80.3	-150.5	0.00	0.00	0.00
7,600.0	2.26	152.29	7,596.6	-156.4	82.1	-153.9	0.00	0.00	0.00
7,700.0	2.26	152.29	7,696.5	-159.9	84.0	-157.3	0.00	0.00	0.00
7,800.0	2.26	152.29	7,796.4	-163.4	85.8	-160.8	0.00	0.00	0.00
7,900.0	2.26	152.29	7,896.3	-166.8	87.6	-164.2	0.00	0.00	0.00
8,000.0	2.26	152.29	7,996.2	-170.3	89.5	-167.6	0.00	0.00	0.00
8,100.0	2.26	152.29	8,096.2	-173.8	91.3	-171.1	0.00	0.00	0.00
8,200.0	2.26	152.29	8,196.1	-177.3	93.1	-174.5	0.00	0.00	0.00
8,300.0	2.26	152.29	8,296.0	-180.8	95.0	-177.9	0.00	0.00	0.00
8,400.0	2.26	152.29	8,395.9	-184.3	96.8	-181.3	0.00	0.00	0.00
8,500.0	2.26	152.29	8,495.9	-187.8	98.6	-184.8	0.00	0.00	0.00
8,600.0	2.26	152.29	8,595.8	-191.2	100.5	-188.2	0.00	0.00	0.00
8,700.0	2.26	152.29	8,695.7	-194.7	102.3	-191.6	0.00	0.00	0.00
8,800.0	2.26	152.29	8,795.6	-198.2	104.1	-195.1	0.00	0.00	0.00
8,900.0	2.26	152.29	8,895.5	-201.7	105.9	-198.5	0.00	0.00	0.00
9,000.0	2.26	152.29	8,995.5	-205.2	107.8	-201.9	0.00	0.00	0.00
9,100.0	2.26	152.29	9,095.4	-208.7	109.6	-205.4	0.00	0.00	0.00
9,200.0	2.26	152.29	9,195.3	-212.2	111.4	-208.8	0.00	0.00	0.00
9,300.0	2.26	152.29	9,295.2	-215.6	113.3	-212.2	0.00	0.00	0.00
9,400.0	2.26	152.29	9,395.2	-219.1	115.1	-215.6	0.00	0.00	0.00
9,500.0	2.26	152.29	9,495.1	-222.6	116.9	-219.1	0.00	0.00	0.00
9,600.0	2.26	152.29	9,595.0	-226.1	118.8	-222.5	0.00	0.00	0.00
9,700.0	2.26	152.29	9,694.9	-229.6	120.6	-225.9	0.00	0.00	0.00
9,800.0	2.26	152.29	9,794.8	-233.1	122.4	-229.4	0.00	0.00	0.00
9,900.0	2.26	152.29	9,894.8	-236.5	124.2	-232.8	0.00	0.00	0.00
10,000.0	2.26	152.29	9,994.7	-240.0	126.1	-236.2	0.00	0.00	0.00
10,100.0	2.26	152.29	10,094.6	-243.5	127.9	-239.6	0.00	0.00	0.00
10,200.0	2.26	152.29	10,194.5	-247.0	129.7	-243.1	0.00	0.00	0.00
10,300.0	2.26	152.29	10,294.5	-250.5	131.6	-246.5	0.00	0.00	0.00
10,400.0	2.26	152.29	10,394.4	-254.0	133.4	-249.9	0.00	0.00	0.00
10,500.0	2.26	152.29	10,494.3	-257.5	135.2	-253.4	0.00	0.00	0.00
10,600.0	2.26	152.29	10,594.2	-260.9	137.1	-256.8	0.00	0.00	0.00



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Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference: Well #702H
TVD Reference: KB = 25 @ 3685.0usft
MD Reference: KB = 25 @ 3685.0usft
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)
10,700.0	2.26	152.29	10,694.1	-264.4	138.9	-260.2	0.00	0.00	0.00
10,800.0	2.26	152.29	10,794.1	-267.9	140.7	-263.7	0.00	0.00	0.00
10,900.0	2.26	152.29	10,894.0	-271.4	142.6	-267.1	0.00	0.00	0.00
11,000.0	2.26	152.29	10,993.9	-274.9	144.4	-270.5	0.00	0.00	0.00
11,100.0	2.26	152.29	11,093.8	-278.4	146.2	-273.9	0.00	0.00	0.00
11,200.0	2.26	152.29	11,193.8	-281.9	148.0	-277.4	0.00	0.00	0.00
11,300.0	2.26	152.29	11,293.7	-285.3	149.9	-280.8	0.00	0.00	0.00
11,400.0	2.26	152.29	11,393.6	-288.8	151.7	-284.2	0.00	0.00	0.00
11,500.0	2.26	152.29	11,493.5	-292.3	153.5	-287.7	0.00	0.00	0.00
11,600.0	2.26	152.29	11,593.4	-295.8	155.4	-291.1	0.00	0.00	0.00
11,700.0	2.26	152.29	11,693.4	-299.3	157.2	-294.5	0.00	0.00	0.00
11,800.0	2.26	152.29	11,793.3	-302.8	159.0	-298.0	0.00	0.00	0.00
11,900.0	2.26	152.29	11,893.2	-306.3	160.9	-301.4	0.00	0.00	0.00
12,000.0	2.26	152.29	11,993.1	-309.7	162.7	-304.8	0.00	0.00	0.00
12,013.8	2.26	152.29	12,006.9	-310.2	162.9	-305.3	0.00	0.00	0.00
12,025.0	1.23	122.07	12,018.1	-310.5	163.1	-305.5	12.00	-9.17	-269.53
12,050.0	2.56	23.47	12,043.1	-310.1	163.6	-305.2	12.00	5.33	-394.40
12,075.0	5.44	10.56	12,068.1	-308.4	164.0	-303.5	12.00	11.52	-51.65
12,100.0	8.40	6.64	12,092.9	-305.4	164.5	-300.5	12.00	11.86	-15.66
12,125.0	11.39	4.76	12,117.5	-301.2	164.9	-296.2	12.00	11.93	-7.52
12,150.0	14.38	3.66	12,141.9	-295.6	165.3	-290.6	12.00	11.96	-4.42
12,175.0	17.37	2.93	12,165.9	-288.8	165.7	-283.8	12.00	11.97	-2.93
12,200.0	20.37	2.40	12,189.6	-280.7	166.0	-275.7	12.00	11.98	-2.09
12,225.0	23.36	2.01	12,212.8	-271.4	166.4	-266.4	12.00	11.99	-1.57
12,250.0	26.36	1.70	12,235.4	-260.9	166.7	-255.9	12.00	11.99	-1.23
12,275.0	29.36	1.45	12,257.5	-249.2	167.1	-244.2	12.00	11.99	-1.00
12,300.0	32.36	1.25	12,279.0	-236.4	167.4	-231.4	12.00	11.99	-0.83
12,325.0	35.35	1.07	12,299.8	-222.5	167.6	-217.5	12.00	11.99	-0.70
12,350.0	38.35	0.92	12,319.8	-207.5	167.9	-202.5	12.00	11.99	-0.60
12,375.0	41.35	0.79	12,338.9	-191.5	168.1	-186.5	12.00	12.00	-0.53
12,400.0	44.35	0.67	12,357.3	-174.5	168.4	-169.5	12.00	12.00	-0.47
12,425.0	47.35	0.57	12,374.7	-156.5	168.6	-151.5	12.00	12.00	-0.42
12,450.0	50.35	0.47	12,391.1	-137.7	168.7	-132.7	12.00	12.00	-0.38
12,475.0	53.35	0.38	12,406.6	-118.1	168.9	-113.1	12.00	12.00	-0.35
12,500.0	56.35	0.30	12,421.0	-97.6	169.0	-92.6	12.00	12.00	-0.32
12,525.0	59.35	0.23	12,434.3	-76.5	169.1	-71.5	12.00	12.00	-0.30
12,550.0	62.35	0.15	12,446.4	-54.6	169.2	-49.6	12.00	12.00	-0.28
12,575.0	65.35	0.09	12,457.5	-32.2	169.2	-27.2	12.00	12.00	-0.27
12,591.4	67.31	0.04	12,464.0	-17.2	169.2	-12.2	12.00	12.00	-0.26
FTP(Hemlock 32 State #702H)									
12,600.0	68.34	0.02	12,467.3	-9.2	169.2	-4.2	12.00	12.00	-0.25
12,625.0	71.34	359.96	12,475.9	14.2	169.2	19.2	12.00	12.00	-0.25
12,650.0	74.34	359.90	12,483.3	38.1	169.2	43.1	12.00	12.00	-0.24
12,675.0	77.34	359.84	12,489.4	62.4	169.1	67.3	12.00	12.00	-0.23
12,700.0	80.34	359.79	12,494.2	86.9	169.1	91.8	12.00	12.00	-0.23
12,725.0	83.34	359.73	12,497.8	111.6	169.0	116.6	12.00	12.00	-0.22
12,750.0	86.34	359.68	12,500.0	136.5	168.8	141.4	12.00	12.00	-0.22
12,775.0	89.34	359.62	12,501.0	161.5	168.7	166.4	12.00	12.00	-0.22
12,780.5	90.00	359.61	12,501.0	167.0	168.6	171.9	12.00	12.00	-0.22
12,800.0	90.00	359.61	12,501.0	186.5	168.5	191.4	0.00	0.00	0.00
12,900.0	90.00	359.61	12,501.0	286.5	167.8	291.3	0.00	0.00	0.00
13,000.0	90.00	359.61	12,501.0	386.5	167.2	391.3	0.00	0.00	0.00
13,100.0	90.00	359.61	12,501.0	486.5	166.5	491.2	0.00	0.00	0.00



Planning Report

Database: EDM 5000.14
 Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
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 Design: Plan #0.1

Local Co-ordinate Reference:
 TVD Reference: KB = 25 @ 3685.0usft
 MD Reference: KB = 25 @ 3685.0usft
 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)
13,200.0	90.00	359.61	12,501.0	586.5	165.8	591.1	0.00	0.00	0.00
13,300.0	90.00	359.61	12,501.0	686.5	165.1	691.1	0.00	0.00	0.00
13,400.0	90.00	359.61	12,501.0	786.5	164.4	791.0	0.00	0.00	0.00
13,500.0	90.00	359.61	12,501.0	886.5	163.8	890.9	0.00	0.00	0.00
13,600.0	90.00	359.61	12,501.0	986.5	163.1	990.9	0.00	0.00	0.00
13,700.0	90.00	359.61	12,501.0	1,086.5	162.4	1,090.8	0.00	0.00	0.00
13,800.0	90.00	359.61	12,501.0	1,186.5	161.7	1,190.7	0.00	0.00	0.00
13,900.0	90.00	359.61	12,501.0	1,286.5	161.1	1,290.7	0.00	0.00	0.00
14,000.0	90.00	359.61	12,501.0	1,386.5	160.4	1,390.6	0.00	0.00	0.00
14,100.0	90.00	359.61	12,501.0	1,486.5	159.7	1,490.5	0.00	0.00	0.00
14,200.0	90.00	359.61	12,501.0	1,586.5	159.0	1,590.5	0.00	0.00	0.00
14,300.0	90.00	359.61	12,501.0	1,686.5	158.3	1,690.4	0.00	0.00	0.00
14,400.0	90.00	359.61	12,501.0	1,786.5	157.7	1,790.3	0.00	0.00	0.00
14,500.0	90.00	359.61	12,501.0	1,886.5	157.0	1,890.3	0.00	0.00	0.00
14,600.0	90.00	359.61	12,501.0	1,986.5	156.3	1,990.2	0.00	0.00	0.00
14,700.0	90.00	359.61	12,501.0	2,086.5	155.6	2,090.1	0.00	0.00	0.00
14,800.0	90.00	359.61	12,501.0	2,186.5	155.0	2,190.1	0.00	0.00	0.00
14,900.0	90.00	359.61	12,501.0	2,286.5	154.3	2,290.0	0.00	0.00	0.00
15,000.0	90.00	359.61	12,501.0	2,386.5	153.6	2,389.9	0.00	0.00	0.00
15,100.0	90.00	359.61	12,501.0	2,486.5	152.9	2,489.9	0.00	0.00	0.00
15,200.0	90.00	359.61	12,501.0	2,586.5	152.2	2,589.8	0.00	0.00	0.00
15,300.0	90.00	359.61	12,501.0	2,686.5	151.6	2,689.8	0.00	0.00	0.00
15,400.0	90.00	359.61	12,501.0	2,786.5	150.9	2,789.7	0.00	0.00	0.00
15,500.0	90.00	359.61	12,501.0	2,886.5	150.2	2,889.6	0.00	0.00	0.00
15,600.0	90.00	359.61	12,501.0	2,986.4	149.5	2,989.6	0.00	0.00	0.00
15,700.0	90.00	359.61	12,501.0	3,086.4	148.9	3,089.5	0.00	0.00	0.00
15,800.0	90.00	359.61	12,501.0	3,186.4	148.2	3,189.4	0.00	0.00	0.00
15,900.0	90.00	359.61	12,501.0	3,286.4	147.5	3,289.4	0.00	0.00	0.00
16,000.0	90.00	359.61	12,501.0	3,386.4	146.8	3,389.3	0.00	0.00	0.00
16,100.0	90.00	359.61	12,501.0	3,486.4	146.1	3,489.2	0.00	0.00	0.00
16,200.0	90.00	359.61	12,501.0	3,586.4	145.5	3,589.2	0.00	0.00	0.00
16,300.0	90.00	359.61	12,501.0	3,686.4	144.8	3,689.1	0.00	0.00	0.00
16,400.0	90.00	359.61	12,501.0	3,786.4	144.1	3,789.0	0.00	0.00	0.00
16,500.0	90.00	359.61	12,501.0	3,886.4	143.4	3,889.0	0.00	0.00	0.00
16,600.0	90.00	359.61	12,501.0	3,986.4	142.8	3,988.9	0.00	0.00	0.00
16,700.0	90.00	359.61	12,501.0	4,086.4	142.1	4,088.8	0.00	0.00	0.00
16,800.0	90.00	359.61	12,501.0	4,186.4	141.4	4,188.8	0.00	0.00	0.00
16,900.0	90.00	359.61	12,501.0	4,286.4	140.7	4,288.7	0.00	0.00	0.00
17,000.0	90.00	359.61	12,501.0	4,386.4	140.0	4,388.6	0.00	0.00	0.00
17,100.0	90.00	359.61	12,501.0	4,486.4	139.4	4,488.6	0.00	0.00	0.00
17,200.0	90.00	359.61	12,501.0	4,586.4	138.7	4,588.5	0.00	0.00	0.00
17,301.6	90.00	359.61	12,501.0	4,686.0	138.0	4,690.0	0.00	0.00	0.00

PBHL(Hemlock 32 State #702H)



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Local Co-ordinate Reference: Well #702H
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MD Reference: KB = 25 @ 3685.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

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									
PBHL(Hemlock 32 State - plan hits target center - Point	0.00	0.00	12,501.0	4,688.0	138.0	461,945.00	767,940.00	32° 16' 4.202 N	103° 36' 0.716 W
FTP(Hemlock 32 State # - plan misses target center by 40.2usft at 12591.4usft MD (12464.0 TVD, -17.2 N, 169.2 E) - Point	0.00	0.00	12,501.0	-33.0	170.0	457,224.00	767,972.00	32° 15' 17.484 N	103° 36' 0.719 W