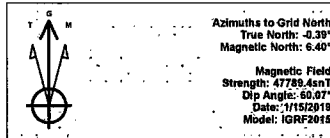




Lea County, NM (NAD 83 NME)

Hemlock 32 State #703H

Plan #0.1



To convert a Magnetic Direction to a Grid Direction, Add 6.40°
To convert a Magnetic Direction to a True Direction, Add 6.40° East
To convert a True Direction to a Grid Direction, Subtract 0.39°

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: #703H

KB = 25 @ 3690.0usft 3665.0
Northing 457231.00 Easting 768942.00 Latitude 32° 15' 17.488 N Longitude 103° 35' 49.423 W

SECTION DETAILS

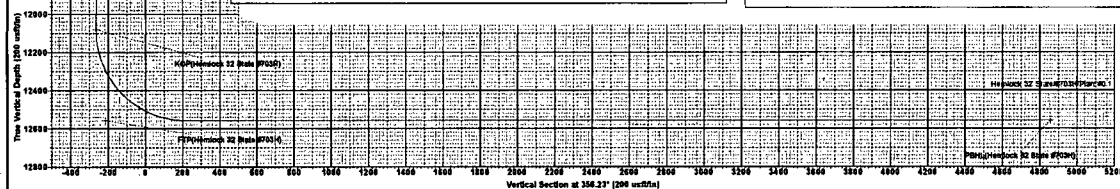
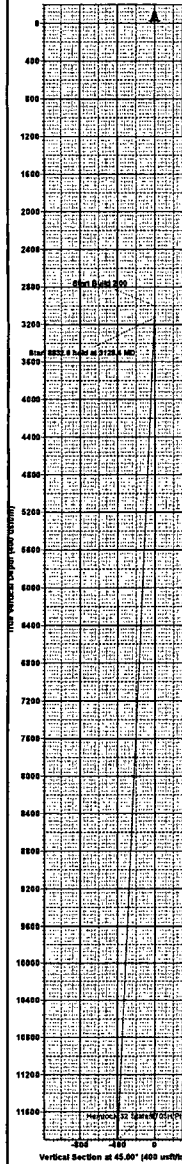
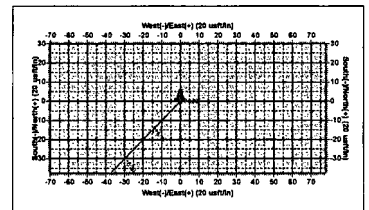
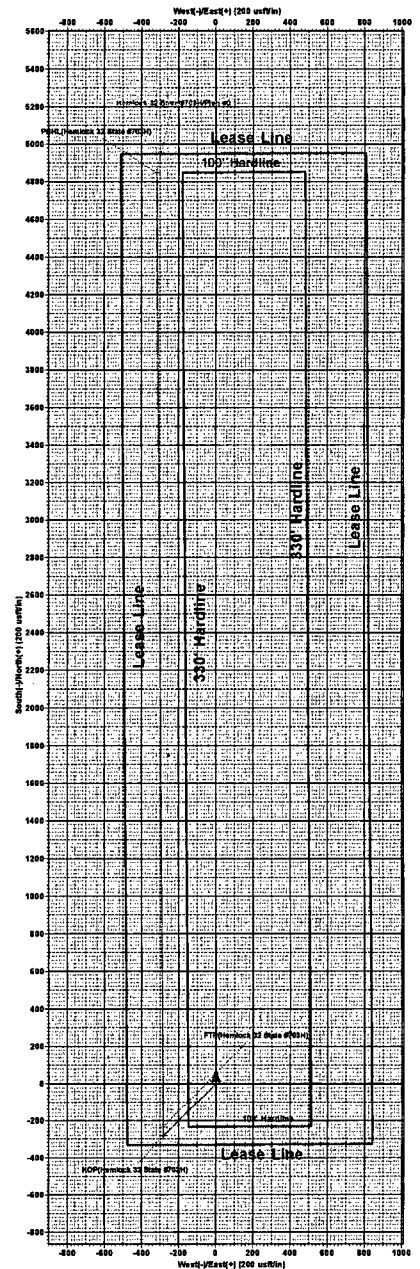
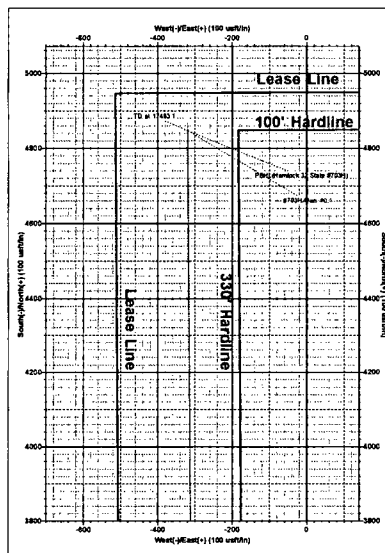
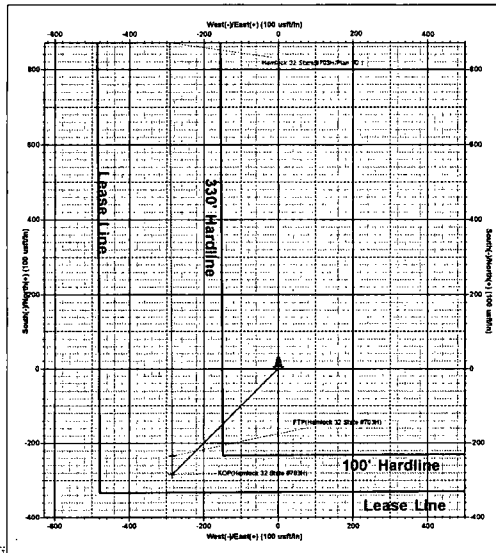
Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Diag	TFace	VSec	Target	Annotation
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0		
2	3000.0	0.00	0.00	3000.0	0.0	0.0	0.00	0.00	0.0		
3	3128.4	2.87	225.00	3128.4	-2.0	-2.0	2.00	225.00	-1.8		
4	11861.0	2.57	225.00	11952.1	-282.0	-282.0	0.00	0.00	-262.8		
5	12089.6	0.00	0.00	12089.6	-284.0	-284.0	2.00	180.00	-264.7		KOP(Hemlock 32 State #703H)
6	12838.5	80.00	359.61	12858.0	192.5	-287.3	12.00	359.61	211.8		
7	17483.1	80.00	359.61	12558.0	4847.0	-319.0	0.00	0.00	4857.5		PBHL(Hemlock 32 State #703H)

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N-S	+E-W	Northing	Easting
KOP(Hemlock 32 State #703H)	12089.6	-284.0	-284.0	456947.00	768658.00
PBHL(Hemlock 32 State #703H)	12558.0	4847.0	-319.0	462078.00	768623.00
FTP(Hemlock 32 State #703H)	12558.0	-234.0	-284.0	456997.00	768658.00





HOBBS OCD

JAN 23 2019

RECEIVED

EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Hemlock 32 State

#703H

OH

Plan: Plan #0.1

Standard Planning Report

15 January, 2019

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #703H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25 @ 3690.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25 @ 3690.0usft
Site:	Hemlock 32 State	North Reference:	Grid
Well:	#703H	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	Latitude:	32° 15' 17.825 N
From:	Map	Easting:	767,769.00 usft	Longitude:	103° 36' 3.080 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.39

Well	#703H					
Well Position	+N/-S	-26.0 usft	Northing:	457,231.00 usft	Latitude:	32° 15' 17.488 N
	+E/-W	1,173.0 usft	Easting:	768,942.00 usft	Longitude:	103° 35' 49.423 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	3,665.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	1/15/2019	6.80	60.07	47,789.40533125

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	356.23

Plan Survey Tool Program	Date	1/15/2019		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	17,493.1 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	
3,128.4	2.57	225.00	3,128.4	-2.0	-2.0	2.00	2.00	0.00	225.00	
11,961.0	2.57	225.00	11,952.1	-282.0	-282.0	0.00	0.00	0.00	0.00	
12,089.5	0.00	0.01	12,080.5	-284.0	-284.0	2.00	-2.00	0.00	180.00	KOP(Hemlock 32 Sta)
12,839.5	90.00	359.61	12,558.0	193.5	-287.3	12.00	12.00	-0.05	359.61	
17,493.1	90.00	359.61	12,558.0	4,847.0	-319.0	0.00	0.00	0.00	0.00	PBHL(Hemlock 32 Sta)

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #703H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25 @ 3690.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25 @ 3690.0usft
Site:	Hemlock 32 State	North Reference:	Grid
Well:	#703H	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	225.00	3,100.0	-1.2	-1.2	-1.2	2.00	2.00	0.00
3,128.4	2.57	225.00	3,128.4	-2.0	-2.0	-1.9	2.00	2.00	0.00
3,200.0	2.57	225.00	3,199.9	-4.3	-4.3	-4.0	0.00	0.00	0.00
3,300.0	2.57	225.00	3,299.8	-7.5	-7.5	-7.0	0.00	0.00	0.00
3,400.0	2.57	225.00	3,399.7	-10.6	-10.6	-9.9	0.00	0.00	0.00
3,500.0	2.57	225.00	3,499.6	-13.8	-13.8	-12.9	0.00	0.00	0.00
3,600.0	2.57	225.00	3,599.5	-17.0	-17.0	-15.8	0.00	0.00	0.00
3,700.0	2.57	225.00	3,699.4	-20.1	-20.1	-18.8	0.00	0.00	0.00
3,800.0	2.57	225.00	3,799.3	-23.3	-23.3	-21.7	0.00	0.00	0.00
3,900.0	2.57	225.00	3,899.2	-26.5	-26.5	-24.7	0.00	0.00	0.00
4,000.0	2.57	225.00	3,999.1	-29.7	-29.7	-27.6	0.00	0.00	0.00
4,100.0	2.57	225.00	4,099.0	-32.8	-32.8	-30.6	0.00	0.00	0.00
4,200.0	2.57	225.00	4,198.9	-36.0	-36.0	-33.6	0.00	0.00	0.00
4,300.0	2.57	225.00	4,298.8	-39.2	-39.2	-36.5	0.00	0.00	0.00
4,400.0	2.57	225.00	4,398.7	-42.3	-42.3	-39.5	0.00	0.00	0.00
4,500.0	2.57	225.00	4,498.6	-45.5	-45.5	-42.4	0.00	0.00	0.00
4,600.0	2.57	225.00	4,598.5	-48.7	-48.7	-45.4	0.00	0.00	0.00
4,700.0	2.57	225.00	4,698.4	-51.8	-51.8	-48.3	0.00	0.00	0.00
4,800.0	2.57	225.00	4,798.3	-55.0	-55.0	-51.3	0.00	0.00	0.00
4,900.0	2.57	225.00	4,898.2	-58.2	-58.2	-54.2	0.00	0.00	0.00
5,000.0	2.57	225.00	4,998.1	-61.4	-61.4	-57.2	0.00	0.00	0.00
5,100.0	2.57	225.00	5,098.0	-64.5	-64.5	-60.1	0.00	0.00	0.00
5,200.0	2.57	225.00	5,197.9	-67.7	-67.7	-63.1	0.00	0.00	0.00

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #703H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25 @ 3690.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25 @ 3690.0usft
Site:	Hemlock 32 State	North Reference:	Grid
Well:	#703H	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	2.57	225.00	5,297.8	-70.9	-70.9	-66.1	0.00	0.00	0.00
5,400.0	2.57	225.00	5,397.7	-74.0	-74.0	-69.0	0.00	0.00	0.00
5,500.0	2.57	225.00	5,497.6	-77.2	-77.2	-72.0	0.00	0.00	0.00
5,600.0	2.57	225.00	5,597.5	-80.4	-80.4	-74.9	0.00	0.00	0.00
5,700.0	2.57	225.00	5,697.4	-83.5	-83.5	-77.9	0.00	0.00	0.00
5,800.0	2.57	225.00	5,797.3	-86.7	-86.7	-80.8	0.00	0.00	0.00
5,900.0	2.57	225.00	5,897.2	-89.9	-89.9	-83.8	0.00	0.00	0.00
6,000.0	2.57	225.00	5,997.1	-93.0	-93.0	-86.7	0.00	0.00	0.00
6,100.0	2.57	225.00	6,097.0	-96.2	-96.2	-89.7	0.00	0.00	0.00
6,200.0	2.57	225.00	6,196.9	-99.4	-99.4	-92.6	0.00	0.00	0.00
6,300.0	2.57	225.00	6,296.8	-102.6	-102.6	-95.6	0.00	0.00	0.00
6,400.0	2.57	225.00	6,396.7	-105.7	-105.7	-98.5	0.00	0.00	0.00
6,500.0	2.57	225.00	6,496.6	-108.9	-108.9	-101.5	0.00	0.00	0.00
6,600.0	2.57	225.00	6,596.5	-112.1	-112.1	-104.5	0.00	0.00	0.00
6,700.0	2.57	225.00	6,696.4	-115.2	-115.2	-107.4	0.00	0.00	0.00
6,800.0	2.57	225.00	6,796.3	-118.4	-118.4	-110.4	0.00	0.00	0.00
6,900.0	2.57	225.00	6,896.2	-121.6	-121.6	-113.3	0.00	0.00	0.00
7,000.0	2.57	225.00	6,996.1	-124.7	-124.7	-116.3	0.00	0.00	0.00
7,100.0	2.57	225.00	7,096.0	-127.9	-127.9	-119.2	0.00	0.00	0.00
7,200.0	2.57	225.00	7,195.9	-131.1	-131.1	-122.2	0.00	0.00	0.00
7,300.0	2.57	225.00	7,295.8	-134.2	-134.2	-125.1	0.00	0.00	0.00
7,400.0	2.57	225.00	7,395.7	-137.4	-137.4	-128.1	0.00	0.00	0.00
7,500.0	2.57	225.00	7,495.6	-140.6	-140.6	-131.0	0.00	0.00	0.00
7,600.0	2.57	225.00	7,595.5	-143.8	-143.8	-134.0	0.00	0.00	0.00
7,700.0	2.57	225.00	7,695.4	-146.9	-146.9	-137.0	0.00	0.00	0.00
7,800.0	2.57	225.00	7,795.3	-150.1	-150.1	-139.9	0.00	0.00	0.00
7,900.0	2.57	225.00	7,895.2	-153.3	-153.3	-142.9	0.00	0.00	0.00
8,000.0	2.57	225.00	7,995.1	-156.4	-156.4	-145.8	0.00	0.00	0.00
8,100.0	2.57	225.00	8,095.0	-159.6	-159.6	-148.8	0.00	0.00	0.00
8,200.0	2.57	225.00	8,194.9	-162.8	-162.8	-151.7	0.00	0.00	0.00
8,300.0	2.57	225.00	8,294.8	-165.9	-165.9	-154.7	0.00	0.00	0.00
8,400.0	2.57	225.00	8,394.7	-169.1	-169.1	-157.6	0.00	0.00	0.00
8,500.0	2.57	225.00	8,494.6	-172.3	-172.3	-160.6	0.00	0.00	0.00
8,600.0	2.57	225.00	8,594.5	-175.4	-175.4	-163.5	0.00	0.00	0.00
8,700.0	2.57	225.00	8,694.4	-178.6	-178.6	-166.5	0.00	0.00	0.00
8,800.0	2.57	225.00	8,794.3	-181.8	-181.8	-169.5	0.00	0.00	0.00
8,900.0	2.57	225.00	8,894.2	-185.0	-185.0	-172.4	0.00	0.00	0.00
9,000.0	2.57	225.00	8,994.1	-188.1	-188.1	-175.4	0.00	0.00	0.00
9,100.0	2.57	225.00	9,094.0	-191.3	-191.3	-178.3	0.00	0.00	0.00
9,200.0	2.57	225.00	9,193.9	-194.5	-194.5	-181.3	0.00	0.00	0.00
9,300.0	2.57	225.00	9,293.8	-197.6	-197.6	-184.2	0.00	0.00	0.00
9,400.0	2.57	225.00	9,393.7	-200.8	-200.8	-187.2	0.00	0.00	0.00
9,500.0	2.57	225.00	9,493.6	-204.0	-204.0	-190.1	0.00	0.00	0.00
9,600.0	2.57	225.00	9,593.5	-207.1	-207.1	-193.1	0.00	0.00	0.00
9,700.0	2.57	225.00	9,693.4	-210.3	-210.3	-196.0	0.00	0.00	0.00
9,800.0	2.57	225.00	9,793.3	-213.5	-213.5	-199.0	0.00	0.00	0.00
9,900.0	2.57	225.00	9,893.2	-216.6	-216.6	-201.9	0.00	0.00	0.00
10,000.0	2.57	225.00	9,993.1	-219.8	-219.8	-204.9	0.00	0.00	0.00
10,100.0	2.57	225.00	10,093.0	-223.0	-223.0	-207.9	0.00	0.00	0.00
10,200.0	2.57	225.00	10,192.9	-226.2	-226.2	-210.8	0.00	0.00	0.00
10,300.0	2.57	225.00	10,292.7	-229.3	-229.3	-213.8	0.00	0.00	0.00
10,400.0	2.57	225.00	10,392.6	-232.5	-232.5	-216.7	0.00	0.00	0.00
10,500.0	2.57	225.00	10,492.5	-235.7	-235.7	-219.7	0.00	0.00	0.00
10,600.0	2.57	225.00	10,592.4	-238.8	-238.8	-222.6	0.00	0.00	0.00

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #703H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25 @ 3690.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25 @ 3690.0usft
Site:	Hemlock 32 State	North Reference:	Grid
Well:	#703H	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	2.57	225.00	10,692.3	-242.0	-242.0	-225.6	0.00	0.00	0.00
10,800.0	2.57	225.00	10,792.2	-245.2	-245.2	-228.5	0.00	0.00	0.00
10,900.0	2.57	225.00	10,892.1	-248.3	-248.3	-231.5	0.00	0.00	0.00
11,000.0	2.57	225.00	10,992.0	-251.5	-251.5	-234.4	0.00	0.00	0.00
11,100.0	2.57	225.00	11,091.9	-254.7	-254.7	-237.4	0.00	0.00	0.00
11,200.0	2.57	225.00	11,191.8	-257.8	-257.8	-240.4	0.00	0.00	0.00
11,300.0	2.57	225.00	11,291.7	-261.0	-261.0	-243.3	0.00	0.00	0.00
11,400.0	2.57	225.00	11,391.6	-264.2	-264.2	-246.3	0.00	0.00	0.00
11,500.0	2.57	225.00	11,491.5	-267.4	-267.4	-249.2	0.00	0.00	0.00
11,600.0	2.57	225.00	11,591.4	-270.5	-270.5	-252.2	0.00	0.00	0.00
11,700.0	2.57	225.00	11,691.3	-273.7	-273.7	-255.1	0.00	0.00	0.00
11,800.0	2.57	225.00	11,791.2	-276.9	-276.9	-258.1	0.00	0.00	0.00
11,900.0	2.57	225.00	11,891.1	-280.0	-280.0	-261.0	0.00	0.00	0.00
11,961.0	2.57	225.00	11,952.1	-282.0	-282.0	-262.8	0.00	0.00	0.00
12,000.0	1.79	225.00	11,991.1	-283.0	-283.0	-263.8	2.00	-2.00	0.00
12,089.5	0.00	0.01	12,080.5	-284.0	-284.0	-264.7	2.00	-2.00	0.00
KOP(Hemlock 32 State #703H)									
12,100.0	1.26	359.61	12,091.0	-283.9	-284.0	-264.6	12.00	12.00	0.00
12,125.0	4.26	359.61	12,116.0	-282.7	-284.0	-263.4	12.00	12.00	0.00
12,150.0	7.26	359.61	12,140.9	-280.2	-284.0	-260.9	12.00	12.00	0.00
12,175.0	10.26	359.61	12,165.6	-276.4	-284.1	-257.1	12.00	12.00	0.00
12,200.0	13.26	359.61	12,190.1	-271.3	-284.1	-252.0	12.00	12.00	0.00
12,225.0	16.26	359.61	12,214.2	-264.9	-284.1	-245.7	12.00	12.00	0.00
12,250.0	19.26	359.61	12,238.0	-257.3	-284.2	-238.0	12.00	12.00	0.00
12,275.0	22.26	359.61	12,261.4	-248.4	-284.2	-229.2	12.00	12.00	0.00
12,300.0	25.26	359.61	12,284.3	-238.3	-284.3	-219.1	12.00	12.00	0.00
12,325.0	28.26	359.61	12,306.6	-227.1	-284.4	-207.9	12.00	12.00	0.00
12,350.0	31.26	359.61	12,328.3	-214.7	-284.5	-195.5	12.00	12.00	0.00
12,375.0	34.26	359.61	12,349.3	-201.1	-284.6	-182.0	12.00	12.00	0.00
12,400.0	37.26	359.61	12,369.6	-186.5	-284.7	-167.4	12.00	12.00	0.00
12,425.0	40.26	359.61	12,389.1	-170.9	-284.8	-151.8	12.00	12.00	0.00
12,450.0	43.26	359.61	12,407.7	-154.2	-284.9	-135.2	12.00	12.00	0.00
12,475.0	46.26	359.61	12,425.5	-136.6	-285.0	-117.6	12.00	12.00	0.00
12,492.0	48.30	359.61	12,437.0	-124.2	-285.1	-105.2	12.00	12.00	0.00
FTP(Hemlock 32 State #703H)									
12,500.0	49.26	359.61	12,442.3	-118.1	-285.1	-99.1	12.00	12.00	0.00
12,525.0	52.26	359.61	12,458.1	-98.8	-285.3	-79.8	12.00	12.00	0.00
12,550.0	55.26	359.61	12,472.9	-78.6	-285.4	-59.7	12.00	12.00	0.00
12,575.0	58.26	359.61	12,486.6	-57.7	-285.5	-38.8	12.00	12.00	0.00
12,600.0	61.26	359.61	12,499.2	-36.1	-285.7	-17.3	12.00	12.00	0.00
12,625.0	64.26	359.61	12,510.6	-13.9	-285.8	4.9	12.00	12.00	0.00
12,650.0	67.26	359.61	12,520.9	8.9	-286.0	27.7	12.00	12.00	0.00
12,675.0	70.26	359.61	12,529.7	32.2	-286.2	51.0	12.00	12.00	0.00
12,700.0	73.26	359.61	12,537.7	56.0	-286.3	74.7	12.00	12.00	0.00
12,725.0	76.26	359.61	12,544.3	80.1	-286.5	98.7	12.00	12.00	0.00
12,750.0	79.26	359.61	12,549.6	104.5	-286.7	123.1	12.00	12.00	0.00
12,775.0	82.26	359.61	12,553.6	129.2	-286.8	147.7	12.00	12.00	0.00
12,800.0	85.26	359.61	12,556.3	154.0	-287.0	172.6	12.00	12.00	0.00
12,825.0	88.26	359.61	12,557.7	179.0	-287.2	197.5	12.00	12.00	0.00
12,839.5	90.00	359.61	12,558.0	193.5	-287.3	211.9	12.00	12.00	0.00
12,900.0	90.00	359.61	12,558.0	254.0	-287.7	272.3	0.00	0.00	0.00
13,000.0	90.00	359.61	12,558.0	354.0	-288.4	372.2	0.00	0.00	0.00
13,100.0	90.00	359.61	12,558.0	454.0	-289.0	472.0	0.00	0.00	0.00
13,200.0	90.00	359.61	12,558.0	554.0	-289.7	571.8	0.00	0.00	0.00

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #703H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25 @ 3690.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25 @ 3690.0usft
Site:	Hemlock 32 State	North Reference:	Grid
Well:	#703H	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)
13,300.0	90.00	359.61	12,558.0	654.0	-290.4	671.6	0.00	0.00	0.00
13,400.0	90.00	359.61	12,558.0	754.0	-291.1	771.5	0.00	0.00	0.00
13,500.0	90.00	359.61	12,558.0	854.0	-291.8	871.3	0.00	0.00	0.00
13,600.0	90.00	359.61	12,558.0	954.0	-292.4	971.1	0.00	0.00	0.00
13,700.0	90.00	359.61	12,558.0	1,054.0	-293.1	1,070.9	0.00	0.00	0.00
13,800.0	90.00	359.61	12,558.0	1,154.0	-293.8	1,170.8	0.00	0.00	0.00
13,900.0	90.00	359.61	12,558.0	1,254.0	-294.5	1,270.6	0.00	0.00	0.00
14,000.0	90.00	359.61	12,558.0	1,354.0	-295.2	1,370.4	0.00	0.00	0.00
14,100.0	90.00	359.61	12,558.0	1,454.0	-295.9	1,470.3	0.00	0.00	0.00
14,200.0	90.00	359.61	12,558.0	1,554.0	-296.5	1,570.1	0.00	0.00	0.00
14,300.0	90.00	359.61	12,558.0	1,654.0	-297.2	1,669.9	0.00	0.00	0.00
14,400.0	90.00	359.61	12,558.0	1,754.0	-297.9	1,769.7	0.00	0.00	0.00
14,500.0	90.00	359.61	12,558.0	1,854.0	-298.6	1,869.6	0.00	0.00	0.00
14,600.0	90.00	359.61	12,558.0	1,954.0	-299.3	1,969.4	0.00	0.00	0.00
14,700.0	90.00	359.61	12,558.0	2,053.9	-299.9	2,069.2	0.00	0.00	0.00
14,800.0	90.00	359.61	12,558.0	2,153.9	-300.6	2,169.0	0.00	0.00	0.00
14,900.0	90.00	359.61	12,558.0	2,253.9	-301.3	2,268.9	0.00	0.00	0.00
15,000.0	90.00	359.61	12,558.0	2,353.9	-302.0	2,368.7	0.00	0.00	0.00
15,100.0	90.00	359.61	12,558.0	2,453.9	-302.7	2,468.5	0.00	0.00	0.00
15,200.0	90.00	359.61	12,558.0	2,553.9	-303.4	2,568.3	0.00	0.00	0.00
15,300.0	90.00	359.61	12,558.0	2,653.9	-304.0	2,668.2	0.00	0.00	0.00
15,400.0	90.00	359.61	12,558.0	2,753.9	-304.7	2,768.0	0.00	0.00	0.00
15,500.0	90.00	359.61	12,558.0	2,853.9	-305.4	2,867.8	0.00	0.00	0.00
15,600.0	90.00	359.61	12,558.0	2,953.9	-306.1	2,967.7	0.00	0.00	0.00
15,700.0	90.00	359.61	12,558.0	3,053.9	-306.8	3,067.5	0.00	0.00	0.00
15,800.0	90.00	359.61	12,558.0	3,153.9	-307.5	3,167.3	0.00	0.00	0.00
15,900.0	90.00	359.61	12,558.0	3,253.9	-308.1	3,267.1	0.00	0.00	0.00
16,000.0	90.00	359.61	12,558.0	3,353.9	-308.8	3,367.0	0.00	0.00	0.00
16,100.0	90.00	359.61	12,558.0	3,453.9	-309.5	3,466.8	0.00	0.00	0.00
16,200.0	90.00	359.61	12,558.0	3,553.9	-310.2	3,566.6	0.00	0.00	0.00
16,300.0	90.00	359.61	12,558.0	3,653.9	-310.9	3,666.4	0.00	0.00	0.00
16,400.0	90.00	359.61	12,558.0	3,753.9	-311.5	3,766.3	0.00	0.00	0.00
16,500.0	90.00	359.61	12,558.0	3,853.9	-312.2	3,866.1	0.00	0.00	0.00
16,600.0	90.00	359.61	12,558.0	3,953.9	-312.9	3,965.9	0.00	0.00	0.00
16,700.0	90.00	359.61	12,558.0	4,053.9	-313.6	4,065.7	0.00	0.00	0.00
16,800.0	90.00	359.61	12,558.0	4,153.9	-314.3	4,165.6	0.00	0.00	0.00
16,900.0	90.00	359.61	12,558.0	4,253.9	-315.0	4,265.4	0.00	0.00	0.00
17,000.0	90.00	359.61	12,558.0	4,353.9	-315.6	4,365.2	0.00	0.00	0.00
17,100.0	90.00	359.61	12,558.0	4,453.9	-316.3	4,465.1	0.00	0.00	0.00
17,200.0	90.00	359.61	12,558.0	4,553.9	-317.0	4,564.9	0.00	0.00	0.00
17,300.0	90.00	359.61	12,558.0	4,653.9	-317.7	4,664.7	0.00	0.00	0.00
17,400.0	90.00	359.61	12,558.0	4,753.9	-318.4	4,764.5	0.00	0.00	0.00
17,493.1	90.00	359.61	12,558.0	4,847.0	-319.0	4,857.5	0.00	0.00	0.00
PBHL(Hemlock 32 State #703H)									

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #703H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25 @ 3690.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25 @ 3690.0usft
Site:	Hemlock 32 State	North Reference:	Grid
Well:	#703H	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
KOP(Hemlock 32 State #1 - plan hits target center - Point	0.00	0.01	12,080.5	-284.0	-284.0	456,947.00	768,658.00	32° 15' 14.697 N	103° 35' 52.753 W
FTP(Hemlock 32 State #1 - plan misses target center by 163.4usft at 12492.0usft MD (12437.0 TVD, -124.2 N, -285.1 E) - Point	0.00	0.00	12,558.0	-234.0	-284.0	456,997.00	768,658.00	32° 15' 15.192 N	103° 35' 52.749 W
PBHL(Hemlock 32 State #1 - plan hits target center - Point	0.00	0.00	12,558.0	4,847.0	-319.0	462,078.00	768,623.00	32° 16' 5.472 N	103° 35' 52.751 W