HOBBS OCD

JAN 09 2018

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eog resources

Lea County, NM (NAD 83 NME)

Hemlock 32 State #701H

Plan #0.1

Azimuths to Grid North
True North: -0.39°
Magnetic North: 6.52°

Magnetic Field
Strength: 47893.7snT
Dip Angle: 60.08°
Date: 1/8/2018
Model: IGRF2015

To convert a Magnetic Direction to a Grid Direction, Add 6.52°
To convert a Magnetic Direction to a True Direction, Add 6.91° 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: #701H

Northing	Easting	Latitude	Longitude
457257.00	767769.00	32° 15' 17.825 N	103° 36' 3.080 W

3660.0
KB = 25 @ 3685.0usft

SECTION DETAILS

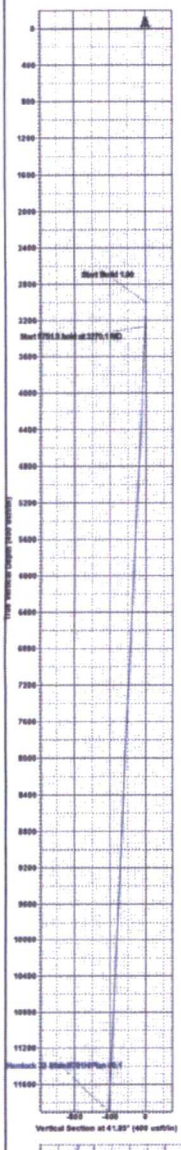
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target	Annotation
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0		
2	3000.0	0.00	0.00	3000.0	0.0	0.0	0.00	0.00	0.0		
3	3270.1	2.70	221.86	3270.0	-4.7	-4.2	1.00	221.86	-4.4		
4	12921.9	2.70	221.86	12012.1	-312.0	-279.5	0.00	0.00	-291.6		
5	12788.6	90.00	359.61	12506.0	165.1	-298.4	12.00	137.73	189.6		
6	17369.6	90.00	359.61	12606.0	4696.0	-329.0	0.00	0.00	4697.5	PBHL(Hemlock 32 State #701H)	

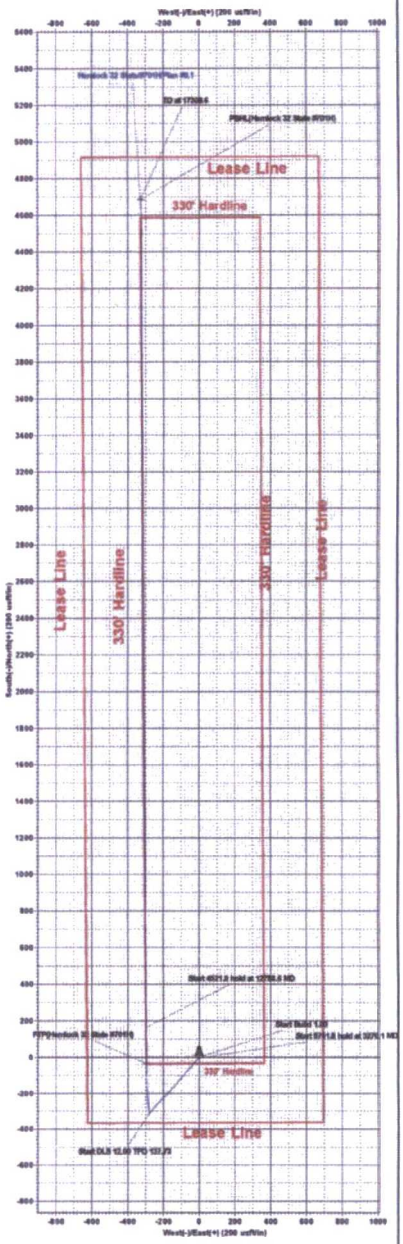
CASING DETAILS

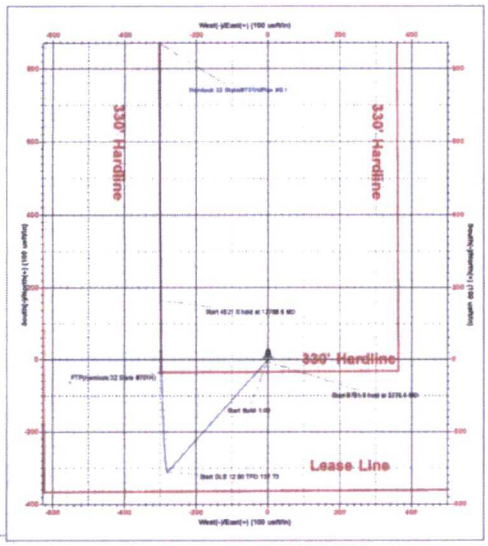
No casing data is available

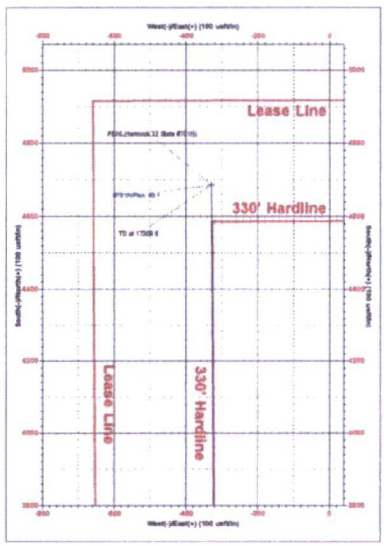
WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

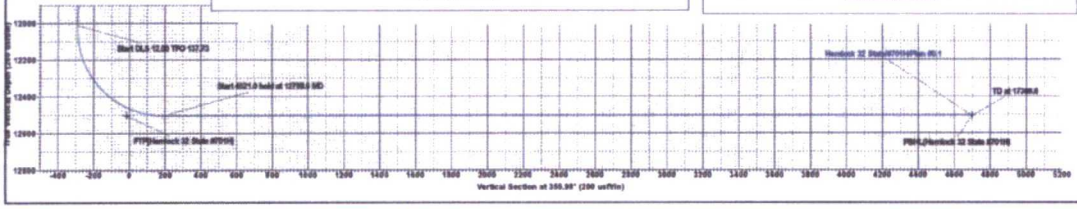
Name	TVD	+N/-S	+E/-W	Northing	Easting
PBHL(Hemlock 32 State #701H)	12506.0	4696.0	-329.0	461943.00	767440.00
FTP(Hemlock 32 State #701H)	12506.0	-35.0	-297.0	457222.00	767472.00

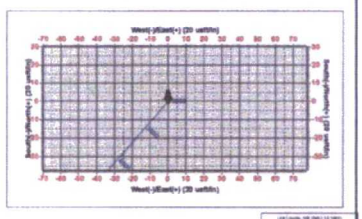












EOG Resources - Midland

Lea County, NM (NAD 83 NME)
Hemlock 32 State
#701H

OH

Plan: Plan #0.1

Standard Planning Report

09 January, 2018

Database:	EDM 5000.14	**Local Co-ordinate Reference:**	Well #701H
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:	#701H	**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	#701H					
Well Position	**+N/-S**	0.0 usft	**Northing:**	457,257.00 usft	**Latitude:**	32° 15' 17.825 N
	+E/-W	0.0 usft	**Easting:**	767,769.00 usft	**Longitude:**	103° 36' 3.080 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**		**Ground Level:**	3,660.0 usft

Wellbore	OH			
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2015	1/9/2018	6.91	60.08	47,893.66335013

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	355.98	

Plan Survey Tool Program **Date** 1/9/2018

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	17,309.6	Plan #0.1 (OH)	MWD	
				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	
3,270.1	2.70	221.85	3,270.0	-4.7	-4.2	1.00	1.00	0.00	221.85	
12,021.9	2.70	221.85	12,012.1	-312.0	-279.5	0.00	0.00	0.00	0.00	
12,788.6	90.00	359.61	12,506.0	165.1	-298.4	12.00	11.39	17.97	137.73	
17,309.6	90.00	359.61	12,506.0	4,686.0	-329.0	0.00	0.00	0.00	0.00	PBHL(Hemlock 32 St

Database:	EDM 5000.14	**Local Co-ordinate Reference:**	Well #701H
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:	#701H	**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	221.85	3,100.0	-0.7	-0.6	-0.6	1.00	1.00	0.00
3,200.0	2.00	221.85	3,200.0	-2.6	-2.3	-2.4	1.00	1.00	0.00
3,270.1	2.70	221.85	3,270.0	-4.7	-4.2	-4.4	1.00	1.00	0.00
3,300.0	2.70	221.85	3,299.9	-5.8	-5.2	-5.4	0.00	0.00	0.00
3,400.0	2.70	221.85	3,399.8	-9.3	-8.3	-8.7	0.00	0.00	0.00
3,500.0	2.70	221.85	3,499.6	-12.8	-11.5	-12.0	0.00	0.00	0.00
3,600.0	2.70	221.85	3,599.5	-16.3	-14.6	-15.3	0.00	0.00	0.00
3,700.0	2.70	221.85	3,699.4	-19.8	-17.8	-18.5	0.00	0.00	0.00
3,800.0	2.70	221.85	3,799.3	-23.3	-20.9	-21.8	0.00	0.00	0.00
3,900.0	2.70	221.85	3,899.2	-26.9	-24.1	-25.1	0.00	0.00	0.00
4,000.0	2.70	221.85	3,999.1	-30.4	-27.2	-28.4	0.00	0.00	0.00
4,100.0	2.70	221.85	4,099.0	-33.9	-30.3	-31.7	0.00	0.00	0.00
4,200.0	2.70	221.85	4,198.9	-37.4	-33.5	-34.9	0.00	0.00	0.00
4,300.0	2.70	221.85	4,298.8	-40.9	-36.6	-38.2	0.00	0.00	0.00
4,400.0	2.70	221.85	4,398.6	-44.4	-39.8	-41.5	0.00	0.00	0.00
4,500.0	2.70	221.85	4,498.5	-47.9	-42.9	-44.8	0.00	0.00	0.00
4,600.0	2.70	221.85	4,598.4	-51.4	-46.1	-48.1	0.00	0.00	0.00
4,700.0	2.70	221.85	4,698.3	-54.9	-49.2	-51.4	0.00	0.00	0.00
4,800.0	2.70	221.85	4,798.2	-58.5	-52.4	-54.6	0.00	0.00	0.00
4,900.0	2.70	221.85	4,898.1	-62.0	-55.5	-57.9	0.00	0.00	0.00
5,000.0	2.70	221.85	4,998.0	-65.5	-58.6	-61.2	0.00	0.00	0.00
5,100.0	2.70	221.85	5,097.9	-69.0	-61.8	-64.5	0.00	0.00	0.00
5,200.0	2.70	221.85	5,197.8	-72.5	-64.9	-67.8	0.00	0.00	0.00

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Site:	Hemlock 32 State	**North Reference:**	Grid
Well:	#701H	**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	2.70	221.85	5,297.6	-76.0	-68.1	-71.0	0.00	0.00	0.00
5,400.0	2.70	221.85	5,397.5	-79.5	-71.2	-74.3	0.00	0.00	0.00
5,500.0	2.70	221.85	5,497.4	-83.0	-74.4	-77.6	0.00	0.00	0.00
5,600.0	2.70	221.85	5,597.3	-86.5	-77.5	-80.9	0.00	0.00	0.00
5,700.0	2.70	221.85	5,697.2	-90.0	-80.7	-84.2	0.00	0.00	0.00
5,800.0	2.70	221.85	5,797.1	-93.6	-83.8	-87.5	0.00	0.00	0.00
5,900.0	2.70	221.85	5,897.0	-97.1	-86.9	-90.7	0.00	0.00	0.00
6,000.0	2.70	221.85	5,996.9	-100.6	-90.1	-94.0	0.00	0.00	0.00
6,100.0	2.70	221.85	6,096.8	-104.1	-93.2	-97.3	0.00	0.00	0.00
6,200.0	2.70	221.85	6,196.6	-107.6	-96.4	-100.6	0.00	0.00	0.00
6,300.0	2.70	221.85	6,296.5	-111.1	-99.5	-103.9	0.00	0.00	0.00
6,400.0	2.70	221.85	6,396.4	-114.6	-102.7	-107.1	0.00	0.00	0.00
6,500.0	2.70	221.85	6,496.3	-118.1	-105.8	-110.4	0.00	0.00	0.00
6,600.0	2.70	221.85	6,596.2	-121.6	-109.0	-113.7	0.00	0.00	0.00
6,700.0	2.70	221.85	6,696.1	-125.2	-112.1	-117.0	0.00	0.00	0.00
6,800.0	2.70	221.85	6,796.0	-128.7	-115.2	-120.3	0.00	0.00	0.00
6,900.0	2.70	221.85	6,895.9	-132.2	-118.4	-123.6	0.00	0.00	0.00
7,000.0	2.70	221.85	6,995.8	-135.7	-121.5	-126.8	0.00	0.00	0.00
7,100.0	2.70	221.85	7,095.6	-139.2	-124.7	-130.1	0.00	0.00	0.00
7,200.0	2.70	221.85	7,195.5	-142.7	-127.8	-133.4	0.00	0.00	0.00
7,300.0	2.70	221.85	7,295.4	-146.2	-131.0	-136.7	0.00	0.00	0.00
7,400.0	2.70	221.85	7,395.3	-149.7	-134.1	-140.0	0.00	0.00	0.00
7,500.0	2.70	221.85	7,495.2	-153.2	-137.3	-143.2	0.00	0.00	0.00
7,600.0	2.70	221.85	7,595.1	-156.7	-140.4	-146.5	0.00	0.00	0.00
7,700.0	2.70	221.85	7,695.0	-160.3	-143.5	-149.8	0.00	0.00	0.00
7,800.0	2.70	221.85	7,794.9	-163.8	-146.7	-153.1	0.00	0.00	0.00
7,900.0	2.70	221.85	7,894.8	-167.3	-149.8	-156.4	0.00	0.00	0.00
8,000.0	2.70	221.85	7,994.6	-170.8	-153.0	-159.7	0.00	0.00	0.00
8,100.0	2.70	221.85	8,094.5	-174.3	-156.1	-162.9	0.00	0.00	0.00
8,200.0	2.70	221.85	8,194.4	-177.8	-159.3	-166.2	0.00	0.00	0.00
8,300.0	2.70	221.85	8,294.3	-181.3	-162.4	-169.5	0.00	0.00	0.00
8,400.0	2.70	221.85	8,394.2	-184.8	-165.6	-172.8	0.00	0.00	0.00
8,500.0	2.70	221.85	8,494.1	-188.3	-168.7	-176.1	0.00	0.00	0.00
8,600.0	2.70	221.85	8,594.0	-191.9	-171.9	-179.3	0.00	0.00	0.00
8,700.0	2.70	221.85	8,693.9	-195.4	-175.0	-182.6	0.00	0.00	0.00
8,800.0	2.70	221.85	8,793.8	-198.9	-178.1	-185.9	0.00	0.00	0.00
8,900.0	2.70	221.85	8,893.6	-202.4	-181.3	-189.2	0.00	0.00	0.00
9,000.0	2.70	221.85	8,993.5	-205.9	-184.4	-192.5	0.00	0.00	0.00
9,100.0	2.70	221.85	9,093.4	-209.4	-187.6	-195.8	0.00	0.00	0.00
9,200.0	2.70	221.85	9,193.3	-212.9	-190.7	-199.0	0.00	0.00	0.00
9,300.0	2.70	221.85	9,293.2	-216.4	-193.9	-202.3	0.00	0.00	0.00
9,400.0	2.70	221.85	9,393.1	-219.9	-197.0	-205.6	0.00	0.00	0.00
9,500.0	2.70	221.85	9,493.0	-223.4	-200.2	-208.9	0.00	0.00	0.00
9,600.0	2.70	221.85	9,592.9	-227.0	-203.3	-212.2	0.00	0.00	0.00
9,700.0	2.70	221.85	9,692.8	-230.5	-206.4	-215.4	0.00	0.00	0.00
9,800.0	2.70	221.85	9,792.6	-234.0	-209.6	-218.7	0.00	0.00	0.00
9,900.0	2.70	221.85	9,892.5	-237.5	-212.7	-222.0	0.00	0.00	0.00
10,000.0	2.70	221.85	9,992.4	-241.0	-215.9	-225.3	0.00	0.00	0.00
10,100.0	2.70	221.85	10,092.3	-244.5	-219.0	-228.6	0.00	0.00	0.00
10,200.0	2.70	221.85	10,192.2	-248.0	-222.2	-231.9	0.00	0.00	0.00
10,300.0	2.70	221.85	10,292.1	-251.5	-225.3	-235.1	0.00	0.00	0.00
10,400.0	2.70	221.85	10,392.0	-255.0	-228.5	-238.4	0.00	0.00	0.00
10,500.0	2.70	221.85	10,491.9	-258.6	-231.6	-241.7	0.00	0.00	0.00
10,600.0	2.70	221.85	10,591.8	-262.1	-234.7	-245.0	0.00	0.00	0.00

Database:	EDM 5000.14	**Local Co-ordinate Reference:**	Well #701H
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:	#701H	**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	2.70	221.85	10,691.6	-265.6	-237.9	-248.3	0.00	0.00	0.00
10,800.0	2.70	221.85	10,791.5	-269.1	-241.0	-251.5	0.00	0.00	0.00
10,900.0	2.70	221.85	10,891.4	-272.6	-244.2	-254.8	0.00	0.00	0.00
11,000.0	2.70	221.85	10,991.3	-276.1	-247.3	-258.1	0.00	0.00	0.00
11,100.0	2.70	221.85	11,091.2	-279.6	-250.5	-261.4	0.00	0.00	0.00
11,200.0	2.70	221.85	11,191.1	-283.1	-253.6	-264.7	0.00	0.00	0.00
11,300.0	2.70	221.85	11,291.0	-286.6	-256.8	-268.0	0.00	0.00	0.00
11,400.0	2.70	221.85	11,390.9	-290.2	-259.9	-271.2	0.00	0.00	0.00
11,500.0	2.70	221.85	11,490.8	-293.7	-263.0	-274.5	0.00	0.00	0.00
11,600.0	2.70	221.85	11,590.6	-297.2	-266.2	-277.8	0.00	0.00	0.00
11,700.0	2.70	221.85	11,690.5	-300.7	-269.3	-281.1	0.00	0.00	0.00
11,800.0	2.70	221.85	11,790.4	-304.2	-272.5	-284.4	0.00	0.00	0.00
11,900.0	2.70	221.85	11,890.3	-307.7	-275.6	-287.6	0.00	0.00	0.00
12,000.0	2.70	221.85	11,990.2	-311.2	-278.8	-290.9	0.00	0.00	0.00
12,021.9	2.70	221.85	12,012.1	-312.0	-279.5	-291.6	0.00	0.00	0.00
12,025.0	2.44	227.64	12,015.2	-312.1	-279.6	-291.7	12.00	-8.47	189.69
12,050.0	2.27	306.57	12,040.2	-312.1	-280.3	-291.7	12.00	-0.68	315.73
12,075.0	4.73	337.06	12,065.1	-310.9	-281.1	-290.4	12.00	9.82	121.97
12,100.0	7.59	345.83	12,090.0	-308.4	-282.0	-287.8	12.00	11.43	35.08
12,125.0	10.52	349.78	12,114.6	-304.5	-282.8	-284.0	12.00	11.75	15.78
12,150.0	13.49	352.01	12,139.1	-299.4	-283.6	-278.8	12.00	11.86	8.93
12,175.0	16.46	353.45	12,163.2	-293.0	-284.4	-272.3	12.00	11.91	5.75
12,200.0	19.45	354.46	12,187.0	-285.3	-285.2	-264.6	12.00	11.94	4.03
12,225.0	22.44	355.21	12,210.4	-276.4	-286.0	-255.7	12.00	11.95	2.99
12,250.0	25.43	355.79	12,233.2	-266.3	-286.8	-245.6	12.00	11.96	2.32
12,275.0	28.42	356.25	12,255.5	-255.0	-287.6	-234.2	12.00	11.97	1.86
12,300.0	31.41	356.63	12,277.2	-242.6	-288.3	-221.8	12.00	11.98	1.53
12,325.0	34.41	356.96	12,298.2	-229.0	-289.1	-208.2	12.00	11.98	1.29
12,350.0	37.40	357.23	12,318.4	-214.4	-289.8	-193.5	12.00	11.98	1.11
12,375.0	40.40	357.48	12,337.9	-198.7	-290.6	-177.8	12.00	11.98	0.97
12,400.0	43.40	357.69	12,356.5	-182.0	-291.3	-161.1	12.00	11.99	0.85
12,425.0	46.39	357.88	12,374.2	-164.4	-291.9	-143.5	12.00	11.99	0.76
12,450.0	49.39	358.05	12,390.9	-145.8	-292.6	-125.0	12.00	11.99	0.69
12,475.0	52.39	358.21	12,406.7	-126.4	-293.2	-105.6	12.00	11.99	0.63
12,500.0	55.39	358.36	12,421.4	-106.3	-293.8	-85.4	12.00	11.99	0.58
12,525.0	58.38	358.49	12,435.1	-85.3	-294.4	-64.5	12.00	11.99	0.54
12,550.0	61.38	358.62	12,447.6	-63.7	-295.0	-42.9	12.00	11.99	0.51
12,575.0	64.38	358.74	12,459.0	-41.5	-295.5	-20.7	12.00	11.99	0.48
12,600.0	67.38	358.85	12,469.2	-18.7	-295.9	2.1	12.00	11.99	0.46
FTP(Hemlock 32 State #701H)									
12,625.0	70.38	358.96	12,478.3	4.7	-296.4	25.4	12.00	11.99	0.44
12,650.0	73.38	359.07	12,486.0	28.4	-296.8	49.1	12.00	11.99	0.42
12,675.0	76.37	359.17	12,492.6	52.5	-297.2	73.2	12.00	11.99	0.41
12,700.0	79.37	359.27	12,497.8	77.0	-297.5	97.6	12.00	11.99	0.40
12,725.0	82.37	359.37	12,501.8	101.6	-297.8	122.3	12.00	11.99	0.39
12,750.0	85.37	359.46	12,504.4	126.5	-298.0	147.1	12.00	11.99	0.38
12,775.0	88.37	359.56	12,505.8	151.5	-298.3	172.0	12.00	11.99	0.38
12,788.6	90.00	359.61	12,506.0	165.1	-298.4	185.6	12.00	11.99	0.38
12,800.0	90.00	359.61	12,506.0	176.5	-298.4	196.9	0.00	0.00	0.00
12,900.0	90.00	359.61	12,506.0	276.5	-299.1	296.7	0.00	0.00	0.00
13,000.0	90.00	359.61	12,506.0	376.5	-299.8	396.5	0.00	0.00	0.00
13,100.0	90.00	359.61	12,506.0	476.5	-300.5	496.3	0.00	0.00	0.00
13,200.0	90.00	359.61	12,506.0	576.4	-301.1	596.1	0.00	0.00	0.00

Database:	EDM 5000.14	**Local Co-ordinate Reference:**	Well #701H
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:	#701H	**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	12,506.0	676.4	-301.8	695.9	0.00	0.00	0.00
13,400.0	90.00	359.61	12,506.0	776.4	-302.5	795.7	0.00	0.00	0.00
13,500.0	90.00	359.61	12,506.0	876.4	-303.2	895.5	0.00	0.00	0.00
13,600.0	90.00	359.61	12,506.0	976.4	-303.9	995.3	0.00	0.00	0.00
13,700.0	90.00	359.61	12,506.0	1,076.4	-304.5	1,095.1	0.00	0.00	0.00
13,800.0	90.00	359.61	12,506.0	1,176.4	-305.2	1,194.9	0.00	0.00	0.00
13,900.0	90.00	359.61	12,506.0	1,276.4	-305.9	1,294.7	0.00	0.00	0.00
14,000.0	90.00	359.61	12,506.0	1,376.4	-306.6	1,394.5	0.00	0.00	0.00
14,100.0	90.00	359.61	12,506.0	1,476.4	-307.2	1,494.3	0.00	0.00	0.00
14,200.0	90.00	359.61	12,506.0	1,576.4	-307.9	1,594.1	0.00	0.00	0.00
14,300.0	90.00	359.61	12,506.0	1,676.4	-308.6	1,693.9	0.00	0.00	0.00
14,400.0	90.00	359.61	12,506.0	1,776.4	-309.3	1,793.7	0.00	0.00	0.00
14,500.0	90.00	359.61	12,506.0	1,876.4	-310.0	1,893.5	0.00	0.00	0.00
14,600.0	90.00	359.61	12,506.0	1,976.4	-310.6	1,993.3	0.00	0.00	0.00
14,700.0	90.00	359.61	12,506.0	2,076.4	-311.3	2,093.1	0.00	0.00	0.00
14,800.0	90.00	359.61	12,506.0	2,176.4	-312.0	2,192.9	0.00	0.00	0.00
14,900.0	90.00	359.61	12,506.0	2,276.4	-312.7	2,292.7	0.00	0.00	0.00
15,000.0	90.00	359.61	12,506.0	2,376.4	-313.3	2,392.5	0.00	0.00	0.00
15,100.0	90.00	359.61	12,506.0	2,476.4	-314.0	2,492.3	0.00	0.00	0.00
15,200.0	90.00	359.61	12,506.0	2,576.4	-314.7	2,592.1	0.00	0.00	0.00
15,300.0	90.00	359.61	12,506.0	2,676.4	-315.4	2,691.9	0.00	0.00	0.00
15,400.0	90.00	359.61	12,506.0	2,776.4	-316.1	2,791.7	0.00	0.00	0.00
15,500.0	90.00	359.61	12,506.0	2,876.4	-316.7	2,891.5	0.00	0.00	0.00
15,600.0	90.00	359.61	12,506.0	2,976.4	-317.4	2,991.3	0.00	0.00	0.00
15,700.0	90.00	359.61	12,506.0	3,076.4	-318.1	3,091.1	0.00	0.00	0.00
15,800.0	90.00	359.61	12,506.0	3,176.4	-318.8	3,190.9	0.00	0.00	0.00
15,900.0	90.00	359.61	12,506.0	3,276.4	-319.4	3,290.7	0.00	0.00	0.00
16,000.0	90.00	359.61	12,506.0	3,376.4	-320.1	3,390.5	0.00	0.00	0.00
16,100.0	90.00	359.61	12,506.0	3,476.4	-320.8	3,490.3	0.00	0.00	0.00
16,200.0	90.00	359.61	12,506.0	3,576.4	-321.5	3,590.1	0.00	0.00	0.00
16,300.0	90.00	359.61	12,506.0	3,676.4	-322.2	3,689.9	0.00	0.00	0.00
16,400.0	90.00	359.61	12,506.0	3,776.4	-322.8	3,789.7	0.00	0.00	0.00
16,500.0	90.00	359.61	12,506.0	3,876.4	-323.5	3,889.5	0.00	0.00	0.00
16,600.0	90.00	359.61	12,506.0	3,976.4	-324.2	3,989.3	0.00	0.00	0.00
16,700.0	90.00	359.61	12,506.0	4,076.4	-324.9	4,089.1	0.00	0.00	0.00
16,800.0	90.00	359.61	12,506.0	4,176.4	-325.5	4,188.9	0.00	0.00	0.00
16,900.0	90.00	359.61	12,506.0	4,276.4	-326.2	4,288.7	0.00	0.00	0.00
17,000.0	90.00	359.61	12,506.0	4,376.4	-326.9	4,388.5	0.00	0.00	0.00
17,100.0	90.00	359.61	12,506.0	4,476.4	-327.6	4,488.3	0.00	0.00	0.00
17,200.0	90.00	359.61	12,506.0	4,576.4	-328.3	4,588.1	0.00	0.00	0.00
17,309.6	90.00	359.61	12,506.0	4,686.0	-329.0	4,697.5	0.00	0.00	0.00
PBHL(Hemlock 32 State #701H)									

Database:	EDM 5000.14	**Local Co-ordinate Reference:**	Well #701H
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:	#701H	**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(Hemlock 32 State - plan hits target center - Point	0.00	0.00	12,506.0	4,686.0	-329.0	461,943.00	767,440.00	32° 16' 4.216 N	103° 36' 6.539 W
FTP(Hemlock 32 State # - plan misses target center by 40.2usft at 12600.0usft MD (12469.2 TVD, -18.7 N, -295.9 E) - Point	0.00	0.00	12,506.0	-35.0	-297.0	457,222.00	767,472.00	32° 15' 17.498 N	103° 36' 6.541 W