30-025-44343

eog resources

EOG Resources - Midland

Lea County, NM (NAD 83 NME)
Hemlock 32 State
#701H
74567
OH

Design: OH

Standard Survey Report

13 July, 2018

eog resources

Survey Report

Company:	EOG Resources - Midland	**Local Co-ordinate Reference:**	Well #701H
Project:	Lea County, NM (NAD 83 NME)	**TVD Reference:**	KB = 25 @ 3685.0usft
Site:	Hemlock 32 State	**MD Reference:**	KB = 25 @ 3685.0usft
Well:	#701H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	OH	**Database:**	EDM 5000.14

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:**	usft	**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	OH				
Audit Notes:					
Version:	1.0	**Phase:**	ACTUAL	**Tie On Depth:**	0.0
Vertical Section:	**Depth From (TVD) (usft)**	**+N/-S (usft)**	**+E/-W (usft)**	**Direction (°)**	
	0.0	0.0	0.0	356.35	

Survey Program **Date** 7/13/2018

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
191.0	4,975.0	Gordon MWD (OH)	MWD	OWSG MWD - Standard
5,118.0	17,540.0	Newsco MWD (OH)	MWD	OWSG MWD - Standard

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
191.0	0.41	351.58	191.0	0.7	-0.1	0.7	0.21	0.21	0.00
222.0	0.34	346.32	222.0	0.9	-0.1	0.9	0.25	-0.23	-16.97
253.0	0.34	344.41	253.0	1.1	-0.2	1.1	0.04	0.00	-6.16
300.0	0.26	322.84	300.0	1.3	-0.3	1.3	0.29	-0.17	-45.89
344.0	0.19	311.92	344.0	1.4	-0.4	1.4	0.19	-0.16	-24.82
387.0	0.25	268.62	387.0	1.4	-0.5	1.5	0.40	0.14	-100.70
474.0	0.29	267.09	474.0	1.4	-1.0	1.5	0.05	0.05	-1.76
649.0	1.31	259.48	649.0	1.0	-3.4	1.3	0.58	0.58	-4.35
823.0	0.41	262.21	823.0	0.6	-5.9	1.0	0.52	-0.52	1.57

Company:	EOG Resources - Midland	**Local Co-ordinate Reference:**	Well #701H
Project:	Lea County, NM (NAD 83 NME)	**TVD Reference:**	KB = 25 @ 3685.0usft
Site:	Hemlock 32 State	**MD Reference:**	KB = 25 @ 3685.0usft
Well:	#701H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	OH	**Database:**	EDM 5000.14

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)
998.0	0.55	260.41	997.9	0.4	-7.4	0.8	0.08	0.08	-1.03
1,129.0	0.47	248.94	1,128.9	0.1	-8.5	0.6	0.10	-0.06	-8.76
1,290.0	0.65	240.55	1,289.9	-0.6	-9.9	0.0	0.12	0.11	-5.21
1,383.0	0.52	251.22	1,382.9	-1.0	-10.8	-0.3	0.18	-0.14	11.47
1,558.0	1.05	63.40	1,557.9	-0.5	-10.1	0.1	0.90	0.30	98.39
1,732.0	0.42	67.14	1,731.9	0.4	-8.1	0.9	0.36	-0.36	2.15
1,907.0	0.43	0.86	1,906.9	1.3	-7.5	1.8	0.27	0.01	-37.87
2,082.0	2.26	257.49	2,081.9	1.2	-10.8	1.9	1.37	1.05	-59.07
2,256.0	5.56	224.77	2,255.4	-5.5	-20.1	-4.2	2.22	1.90	-18.80
2,387.0	8.16	218.83	2,385.5	-17.3	-30.4	-15.3	2.05	1.98	-4.53
2,561.0	7.72	216.57	2,557.8	-36.3	-45.1	-33.3	0.31	-0.25	-1.30
2,736.0	5.85	216.17	2,731.6	-52.9	-57.4	-49.1	1.07	-1.07	-0.23
2,910.0	9.66	228.97	2,904.0	-69.6	-73.7	-64.8	2.39	2.19	7.36
3,085.0	9.24	218.79	3,076.6	-90.2	-93.5	-84.1	0.98	-0.24	-5.82
3,260.0	7.90	217.16	3,249.7	-110.8	-109.6	-103.6	0.78	-0.77	-0.93
3,434.0	6.87	215.69	3,422.2	-128.8	-122.9	-120.7	0.60	-0.59	-0.84
3,608.0	6.68	219.08	3,595.0	-145.1	-135.4	-136.2	0.25	-0.11	1.95
3,783.0	5.33	217.39	3,769.0	-159.4	-146.7	-149.8	0.78	-0.77	-0.97
3,957.0	7.69	221.94	3,941.9	-174.5	-159.4	-164.0	1.39	1.36	2.61
4,131.0	8.04	224.35	4,114.3	-191.9	-175.7	-180.3	0.28	0.20	1.39
4,306.0	8.34	219.41	4,287.5	-210.4	-192.3	-197.8	0.44	0.17	-2.82
4,480.0	6.93	209.97	4,459.9	-229.3	-205.5	-215.7	1.08	-0.81	-5.43
4,655.0	7.70	219.42	4,633.5	-247.5	-218.3	-233.1	0.81	0.44	5.40
4,829.0	9.21	214.94	4,805.6	-267.9	-233.6	-252.5	0.95	0.87	-2.57
4,975.0	7.87	211.60	4,950.0	-286.0	-245.6	-269.8	0.98	-0.92	-2.29
5,118.0	6.60	204.10	5,091.9	-301.8	-254.1	-285.0	1.10	-0.89	-5.24
5,274.0	4.20	204.30	5,247.2	-315.2	-260.1	-298.0	1.54	-1.54	0.13
5,462.0	0.70	290.40	5,435.0	-321.1	-264.0	-303.6	2.24	-1.86	45.80
5,649.0	0.80	322.00	5,622.0	-319.7	-265.9	-302.1	0.22	0.05	16.90
5,837.0	1.00	26.50	5,810.0	-317.2	-265.9	-299.6	0.52	0.11	34.31
6,024.0	0.60	313.80	5,996.9	-315.0	-265.9	-297.5	0.54	-0.21	-38.88
6,212.0	0.90	277.60	6,184.9	-314.2	-268.1	-296.4	0.29	0.16	-19.26
6,400.0	1.10	75.60	6,372.9	-313.5	-267.8	-295.8	1.04	0.11	84.04
6,587.0	1.10	76.70	6,559.9	-312.7	-264.3	-295.2	0.01	0.00	0.59
6,775.0	1.10	83.00	6,747.9	-312.0	-260.8	-294.8	0.06	0.00	3.35
6,962.0	1.00	79.80	6,934.8	-311.5	-257.4	-294.5	0.06	-0.05	-1.71
7,149.0	0.80	91.40	7,121.8	-311.3	-254.5	-294.4	0.14	-0.11	6.20
7,337.0	0.80	92.50	7,309.8	-311.3	-251.9	-294.7	0.01	0.00	0.59
7,472.0	0.94	92.42	7,444.8	-311.4	-249.8	-294.9	0.11	0.11	-0.06
Brushy Top(Hemlock 32 State #701H)									
7,525.0	1.00	92.40	7,497.8	-311.5	-248.9	-295.0	0.11	0.11	-0.05
7,713.0	1.00	109.20	7,685.7	-312.1	-245.7	-295.8	0.16	0.00	8.94
7,900.0	1.20	125.70	7,872.7	-313.8	-242.6	-297.7	0.20	0.11	8.82

Company:	EOG Resources - Midland	**Local Co-ordinate Reference:**	Well #701H
Project:	Lea County, NM (NAD 83 NME)	**TVD Reference:**	KB = 25 @ 3685.0usft
Site:	Hemlock 32 State	**MD Reference:**	KB = 25 @ 3685.0usft
Well:	#701H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	OH	**Database:**	EDM 5000.14

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)
8,088.0	1.20	137.30	8,060.7	-316.3	-239.6	-300.4	0.13	0.00	6.17
8,275.0	1.10	128.80	8,247.6	-318.9	-236.9	-303.2	0.11	-0.05	-4.55
8,462.0	1.40	134.40	8,434.6	-321.6	-233.9	-306.1	0.17	0.16	2.99
8,650.0	1.40	150.60	8,622.5	-325.2	-231.1	-309.9	0.21	0.00	8.62
8,837.0	1.10	307.40	8,809.5	-326.1	-231.4	-310.7	1.31	-0.16	83.85
9,024.0	1.20	293.50	8,996.5	-324.3	-234.6	-308.7	0.16	0.05	-7.43
9,211.0	0.60	280.70	9,183.4	-323.3	-237.4	-307.5	0.34	-0.32	-6.84
9,399.0	0.40	282.40	9,371.4	-323.0	-239.0	-307.1	0.11	-0.11	0.90
9,586.0	0.20	327.00	9,558.4	-322.6	-239.8	-306.6	0.16	-0.11	23.85
9,773.0	0.60	220.50	9,745.4	-323.0	-240.6	-307.1	0.37	0.21	-56.95
9,961.0	1.50	207.80	9,933.4	-326.0	-242.4	-309.9	0.49	0.48	-6.76
10,148.0	1.40	222.70	10,120.3	-329.8	-245.1	-313.5	0.21	-0.05	7.97
10,242.0	1.60	220.70	10,214.3	-331.7	-246.8	-315.3	0.22	0.21	-2.13
10,429.0	0.70	261.00	10,401.3	-333.8	-249.6	-317.2	0.62	-0.48	21.55
10,615.0	0.80	209.00	10,587.3	-335.1	-251.3	-318.4	0.36	0.05	-27.96
10,803.0	1.20	264.20	10,775.2	-336.5	-253.9	-319.6	0.53	0.21	29.36
10,991.0	1.20	272.80	10,963.2	-336.6	-257.9	-319.5	0.10	0.00	4.57
11,179.0	0.90	275.50	11,151.2	-336.3	-261.3	-319.0	0.16	-0.16	1.44
11,367.0	0.50	308.80	11,339.1	-335.7	-263.4	-318.2	0.30	-0.21	17.71
11,554.0	1.10	270.00	11,526.1	-335.2	-265.8	-317.6	0.42	0.32	-20.75
11,741.0	0.70	238.10	11,713.1	-335.8	-268.6	-318.0	0.34	-0.21	-17.06
11,821.0	0.20	330.30	11,793.1	-335.9	-269.1	-318.1	0.92	-0.63	115.25
11,944.0	1.00	95.90	11,916.1	-335.8	-268.1	-318.1	0.92	0.65	102.11
12,038.0	1.70	114.50	12,010.1	-336.5	-266.0	-318.9	0.87	0.74	19.79
12,050.0	1.74	110.97	12,022.1	-336.6	-265.7	-319.0	0.96	0.36	-29.39
KOP, MD:12050.0', TVD:12022.1',N/S:-336.6', E/W:-265.7', INC:1.74									
12,084.0	1.90	102.00	12,056.0	-336.9	-264.7	-319.4	0.96	0.46	-26.39
12,131.0	3.80	32.70	12,103.0	-335.8	-263.1	-318.4	7.65	4.04	-147.45
12,178.0	9.20	357.60	12,149.7	-330.7	-262.4	-313.3	13.76	11.49	-74.68
12,225.0	14.30	351.70	12,195.7	-321.2	-263.4	-303.8	11.13	10.85	-12.55
12,272.0	21.70	353.50	12,240.4	-306.8	-265.2	-289.3	15.79	15.74	3.83
12,319.0	27.70	355.20	12,283.0	-287.3	-267.1	-269.7	12.85	12.77	3.62
12,362.3	32.03	355.67	12,320.6	-265.8	-268.8	-248.1	10.01	10.00	1.07
FTP Crossing, MD:12362.3', TVD:12320.6',N/S:-265.8', E/W:-268.8', INC:32.03									
12,366.0	32.40	355.70	12,323.7	-263.8	-269.0	-246.2	10.01	10.00	0.93
12,412.0	38.30	356.90	12,361.2	-237.3	-270.7	-219.6	12.91	12.83	2.61
12,459.0	44.40	3.30	12,396.5	-206.3	-270.5	-188.6	15.78	12.98	13.62
12,506.0	50.40	7.70	12,428.3	-171.9	-267.1	-154.5	14.50	12.77	9.36
12,553.0	51.60	9.40	12,457.9	-135.8	-261.7	-118.8	3.80	2.55	3.62
12,599.0	54.30	8.10	12,485.6	-99.5	-256.1	-83.0	6.29	5.87	-2.83
12,646.0	58.40	5.10	12,511.6	-60.6	-251.6	-44.5	10.21	8.72	-6.38
12,671.5	61.60	3.87	12,524.4	-38.6	-249.9	-22.6	13.21	12.54	-4.80
FTP(Hemlock 32 State #701H)									
12,693.0	64.30	2.90	12,534.2	-19.5	-248.8	-3.6	13.21	12.57	-4.54

Company:	EOG Resources - Midland	**Local Co-ordinate Reference:**	Well #701H
Project:	Lea County, NM (NAD 83 NME)	**TVD Reference:**	KB = 25 @ 3685.0usft
Site:	Hemlock 32 State	**MD Reference:**	KB = 25 @ 3685.0usft
Well:	#701H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	OH	**Database:**	EDM 5000.14

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)
12,740.0	73.10	1.50	12,551.2	24.2	-247.1	39.9	18.93	18.72	-2.98
12,787.0	79.80	0.80	12,562.2	69.9	-246.2	85.4	14.33	14.26	-1.49
12,812.0	84.40	358.30	12,565.7	94.6	-246.4	110.1	20.90	18.40	-10.00
12,881.0	92.80	356.00	12,567.3	163.4	-249.8	179.0	12.62	12.17	-3.33
12,975.0	89.40	354.80	12,565.5	257.1	-257.4	273.0	3.84	-3.62	-1.28
13,068.0	89.80	355.30	12,566.2	349.8	-265.4	366.0	0.69	0.43	0.54
13,162.0	93.80	357.20	12,563.2	443.5	-271.5	459.9	4.71	4.26	2.02
13,256.0	95.20	356.50	12,555.9	537.1	-276.7	553.6	1.66	1.49	-0.74
13,349.0	96.70	357.50	12,546.2	629.4	-281.5	646.1	1.94	1.61	1.08
13,443.0	95.00	357.10	12,536.6	722.8	-285.9	739.6	1.86	-1.81	-0.43
13,475.0	93.30	358.30	12,534.3	754.7	-287.2	771.5	6.50	-5.31	3.75
13,506.0	90.50	359.10	12,533.3	785.7	-287.9	802.4	9.39	-9.03	2.58
13,537.0	89.40	359.60	12,533.3	816.7	-288.3	833.4	3.90	-3.55	1.61
13,569.0	89.40	0.10	12,533.7	848.7	-288.4	865.3	1.56	0.00	1.56
13,600.0	89.60	0.60	12,533.9	879.7	-288.2	896.2	1.74	0.65	1.61
13,631.0	89.80	0.90	12,534.1	910.7	-287.8	927.2	1.16	0.65	0.97
13,663.0	89.70	1.20	12,534.2	942.7	-287.2	959.0	0.99	-0.31	0.94
13,694.0	88.00	2.90	12,534.9	973.6	-286.1	989.9	7.75	-5.48	5.48
13,705.1	87.65	3.04	12,535.3	984.7	-285.5	1,000.9	3.37	-3.13	1.25
TGT#1(Hemlock 32 State #701H)									
13,726.0	87.00	3.30	12,536.3	1,005.6	-284.3	1,021.6	3.37	-3.12	1.25
13,773.0	87.10	3.30	12,538.7	1,052.4	-281.6	1,068.2	0.21	0.21	0.00
13,820.0	87.80	3.10	12,540.8	1,099.3	-279.0	1,114.8	1.55	1.49	-0.43
13,914.0	89.60	3.00	12,542.9	1,193.1	-274.0	1,208.2	1.92	1.91	-0.11
14,008.0	87.70	2.70	12,545.1	1,287.0	-269.3	1,301.5	2.05	-2.02	-0.32
14,103.0	88.40	3.40	12,548.3	1,381.8	-264.3	1,395.8	1.04	0.74	0.74
14,166.0	90.50	4.30	12,548.9	1,444.7	-260.1	1,458.3	3.63	3.33	1.43
14,197.0	90.80	4.20	12,548.6	1,475.6	-257.8	1,489.0	1.02	0.97	-0.32
14,259.0	93.40	4.80	12,546.3	1,537.3	-252.9	1,550.3	4.30	4.19	0.97
14,290.0	93.60	1.80	12,544.4	1,568.2	-251.1	1,581.0	9.68	0.65	-9.68
14,383.0	89.80	357.40	12,541.7	1,661.1	-251.8	1,673.8	6.25	-4.09	-4.73
14,477.0	92.20	357.80	12,540.0	1,755.0	-255.7	1,767.8	2.59	2.55	0.43
14,571.0	93.20	358.50	12,535.6	1,848.9	-258.7	1,861.6	1.30	1.06	0.74
14,665.0	90.00	356.90	12,533.0	1,942.8	-262.5	1,955.5	3.81	-3.40	-1.70
14,709.5	91.59	357.37	12,532.4	1,987.1	-264.7	2,000.0	3.73	3.58	1.05
TGT #2(Hemlock 32 State #701H)									
14,760.0	93.40	357.90	12,530.2	2,037.6	-266.8	2,050.5	3.73	3.58	1.05
14,853.0	95.20	356.80	12,523.2	2,130.2	-271.1	2,143.2	2.27	1.94	-1.18
14,916.0	94.90	356.00	12,517.6	2,192.9	-275.0	2,205.9	1.35	-0.48	-1.27
14,947.0	95.00	356.40	12,515.0	2,223.7	-277.1	2,236.8	1.33	0.32	1.29
15,041.0	90.20	354.40	12,510.7	2,317.2	-284.6	2,330.7	5.53	-5.11	-2.13
15,136.0	91.80	354.70	12,509.0	2,411.8	-293.6	2,425.6	1.71	1.68	0.32
15,229.0	91.90	354.60	12,506.0	2,504.3	-302.3	2,518.5	0.15	0.11	-0.11
15,323.0	89.40	356.50	12,505.0	2,598.0	-309.6	2,612.5	3.34	-2.66	2.02

Company:	EOG Resources - Midland	**Local Co-ordinate Reference:**	Well #701H
Project:	Lea County, NM (NAD 83 NME)	**TVD Reference:**	KB = 25 @ 3685.0usft
Site:	Hemlock 32 State	**MD Reference:**	KB = 25 @ 3685.0usft
Well:	#701H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	OH	**Database:**	EDM 5000.14

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)
15,417.0	91.70	356.70	12,504.1	2,691.9	-315.2	2,706.5	2.46	2.45	0.21
15,511.0	92.10	359.60	12,501.0	2,785.8	-318.2	2,800.4	3.11	0.43	3.09
15,606.0	92.20	1.40	12,497.4	2,880.7	-317.4	2,895.0	1.90	0.11	1.89
15,699.0	89.30	1.70	12,496.2	2,973.6	-314.9	2,987.6	3.13	-3.12	0.32
15,714.6	89.60	2.18	12,496.3	2,989.2	-314.3	3,003.1	3.63	1.91	3.09
TGT #3(Hemlock 32 State #701H)									
15,793.0	91.10	4.60	12,495.8	3,067.5	-309.7	3,081.0	3.63	1.91	3.09
15,886.0	89.80	3.70	12,495.1	3,160.2	-303.0	3,173.1	1.70	-1.40	-0.97
15,979.0	88.80	2.00	12,496.3	3,253.1	-298.3	3,265.5	2.12	-1.08	-1.83
16,073.0	91.20	2.40	12,496.3	3,347.0	-294.7	3,359.0	2.59	2.55	0.43
16,167.0	90.80	1.70	12,494.6	3,440.9	-291.4	3,452.5	0.86	-0.43	-0.74
16,261.0	92.20	1.70	12,492.2	3,534.9	-288.6	3,546.1	1.49	1.49	0.00
16,355.0	92.80	2.10	12,488.1	3,628.7	-285.5	3,639.5	0.77	0.64	0.43
16,448.0	92.10	0.50	12,484.1	3,721.6	-283.4	3,732.1	1.88	-0.75	-1.72
16,542.0	90.10	1.50	12,482.3	3,815.6	-281.7	3,825.8	2.38	-2.13	1.06
16,636.0	89.30	1.80	12,482.8	3,909.5	-279.0	3,919.4	0.91	-0.85	0.32
16,715.9	89.13	1.55	12,483.9	3,989.4	-276.7	3,998.9	0.38	-0.21	-0.32
TGT #4(Hemlock 32 State #701H)									
16,731.0	89.10	1.50	12,484.1	4,004.5	-276.3	4,014.0	0.38	-0.21	-0.32
16,825.0	88.80	0.80	12,485.8	4,098.5	-274.4	4,107.6	0.81	-0.32	-0.74
16,918.0	90.90	1.50	12,486.1	4,191.4	-272.5	4,200.3	2.38	2.26	0.75
17,012.0	89.10	1.20	12,486.1	4,285.4	-270.3	4,293.9	1.94	-1.91	-0.32
17,107.0	90.40	359.90	12,486.5	4,380.4	-269.4	4,388.7	1.94	1.37	-1.37
17,201.0	87.20	358.00	12,488.4	4,474.3	-271.1	4,482.5	3.96	-3.40	-2.02
17,295.0	89.90	358.10	12,490.8	4,568.2	-274.3	4,576.4	2.87	2.87	0.11
17,390.0	89.80	357.10	12,491.1	4,663.2	-278.3	4,671.4	1.06	-0.11	-1.05
17,414.0	89.83	356.95	12,491.1	4,687.1	-279.6	4,695.4	0.65	0.11	-0.65
PBHL(Hemlock 32 State #701H)									
17,483.0	89.90	356.50	12,491.3	4,756.0	-283.5	4,764.4	0.65	0.11	-0.65
Last MWD Survey									
17,540.0	89.90	356.50	12,491.4	4,812.9	-287.0	4,821.4	0.00	0.00	0.00
Projection To Bit									

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
12,050.0	12,022.1	-336.6	-265.7	KOP, MD:12050.0', TVD:12022.1',N/S:-336.6', E/W:-265.7', INC:1.74
12,362.3	12,320.6	-265.8	-268.8	FTP Crossing, MD:12362.3', TVD:12320.6',N/S:-265.8', E/W:-268.8', INC:32.03
17,483.0	12,491.3	4,756.0	-283.5	Last MWD Survey
17,540.0	12,491.4	4,812.9	-287.0	Projection To Bit

Company:	EOG Resources - Midland	**Local Co-ordinate Reference:**	Well #701H
Project:	Lea County, NM (NAD 83 NME)	**TVD Reference:**	KB = 25 @ 3685.0usft
Site:	Hemlock 32 State	**MD Reference:**	KB = 25 @ 3685.0usft
Well:	#701H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	OH	**Database:**	EDM 5000.14

Checked By: _____ Approved By: _____ Date: _____

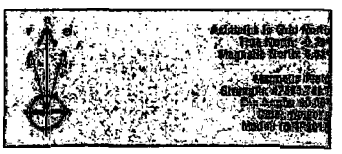
eog resources

Lea County, NM (NAD 83 NME)

Hemlock 32 State #701H

Plan #2

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



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°

WELL DETAILS: #701H

3660.0
KB = 25 @ 3685.0usft

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

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target	Annotation
1	4975.0	7.87	211.60	4950.0	-286.0	-245.6	0.00	0.00	-269.8		
2	5133.0	7.87	211.60	5106.6	-304.4	-256.9	0.00	0.00	-287.4		
3	5546.9	0.41	26.19	5519.1	-327.3	-271.1	2.00	179.73	-309.3		
4	7452.3	0.41	26.19	7424.6	-315.1	-265.1	0.00	0.00	-297.5		
5	7472.8	0.00	0.00	7445.0	-315.0	-265.1	2.00	180.00	-297.6	Brushy Top(Hemlock 32 State #701H)	
6	12070.8	0.00	0.00	12042.8	-315.0	-265.1	0.00	0.00	-297.5		
7	12819.0	89.81	359.61	12520.3	160.9	-268.3	12.00	359.61	177.6		
8	13642.7	89.81	359.61	12523.6		-273.9	0.00	0.00	1000.0	TGT#1(Hemlock 32 State #701H)	
9	13646.5	89.89	359.61	12523.0	988.4	-273.9	2.00	0.00	1003.8		
10	14644.3	89.89	359.61	12525.0	1986.2	-280.7	0.00	0.00	2000.0	TGT #2(Hemlock 32 State #701H)	
11	14650.1	90.00	359.61	12525.0	1991.9	-280.7	2.00	0.00	2005.8		
12	15646.0	90.00	359.61	12525.0	2987.8	-287.5	0.00	0.00	3000.0	TGT #3(Hemlock 32 State #701H)	
13	15669.1	90.46	359.61	12524.9	3010.9	-287.6	2.00	0.00	3023.1		
14	16647.6	90.46	359.61	12517.0	3988.4	-294.3	0.00	0.00	4000.0	TGT #4(Hemlock 32 State #701H)	
15	16670.1	90.91	359.61	12516.7	4011.8	-294.4	2.00	0.00	4022.5		
16	17344.3	90.91	359.61	12506.0	4686.0	-299.0	0.00	0.00	4695.5	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
Brushy Top(Hemlock 32 State #701H)	7445.0	-316.0	-265.1	456942.01	767503.90
TGT#1(Hemlock 32 State #701H)	12823.0	884.6	-273.9	458241.60	767495.09
TGT #2(Hemlock 32 State #701H)	12528.0	1986.2	-280.7	459243.20	767488.30
TGT #3(Hemlock 32 State #701H)	12525.0	2987.8	-287.5	460244.80	767481.51
TGT #4(Hemlock 32 State #701H)	12517.0	3988.4	-294.3	461246.40	767474.72
PBHL(Hemlock 32 State #701H)	12506.0	4686.0	-299.0	461943.00	767470.00
FTP(Hemlock 32 State #701H)	12520.0	-35.0	-267.0	457222.00	767502.00