



EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Colgrove 35 Fed

#707H

OH

Design: OH

Midland PVA

06 November, 2018

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Midland PVA

Company: EOG Resources - Midland Project: Lea County, NM (NAD 83 NME) Site: Colgrove 35 Fed Well: #707H Wellbore: OH Design: OH		Local Co-ordinate Reference: Well #707H TVD Reference: KB = 25' @ 3360.0usft MD Reference: KB = 25' @ 3360.0usft North Reference: Grid Survey Calculation Method: Minimum Curvature Database: EDM 5000.14	
Project Lea County, NM (NAD 83 NME)			
Map System: US State Plane 1983 Geo Datum: North American Datum 1983 Map Zone: New Mexico Eastern Zone		System Datum: Mean Sea Level	
Site Colgrove 35 Fed			
Site Position: From: Map Position Uncertainty: 0.0 usft		Northing: 365,035.00 usft Easting: 788,945.00 usft Slot Radius: 13-3/16 " Latitude: 32° 0' 3.914 N Longitude: 103° 32' 27.681 W Grid Convergence: 0.42 °	
Well #707H			
Well Position +N-S 0.0 usft From: +E-W 0.0 usft Position Uncertainty 0.0 usft		Northing: 365,045.00 usft Easting: 788,289.00 usft Wellhead Elevation: usft Latitude: 32° 0' 3.915 N Longitude: 103° 32' 12.073 W Ground Level: 3,335.0 usft	
Wellbore OH			
Magnetics			
Model Name	Sample Date	Declination (°)	Dip Angle (°)
IGRF2015	10/2/2018	6.78	59.85
Field Strength (nT) 47,877.21829700			
Design OH			
Audit Notes:			
Version: 1.0	Phase: ACTUAL	Tie On Depth: 0.0	
Vertical Section:		Depth From (TVD) (usft) 0.0	Direction (°) 356.92
Survey Program Date 11/6/2018			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name
148.0	19,984.0	Drilltech MWD (OH)	MWD
			OWSG MWD - Standard



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Site:	Colgrove 35 Fed					MD Reference:			KB = 25' @ 3360.0usft		
Well:	#707H					North Reference:			Grid		
Wellbore:	OH					Survey Calculation Method:			Minimum Curvature		
Design:	OH					Database:			EDM 5000.14		

Survey											
MD (usft)	Inc (°)	Asd (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0
148.0	0.35	31.99	148.0	0.4	0.2	0.24	0.24	0.00	-0.5	0.0	
329.0	0.97	138.08	329.0	-0.3	1.6	0.62	0.34	58.61	-1.3	1.0	
510.0	2.11	135.27	509.9	-3.8	4.9	0.63	0.63	-1.55	-6.2	0.8	
689.0	3.43	136.58	686.7	-10.0	10.9	0.74	0.74	0.73	-14.8	1.0	
874.0	2.55	132.80	873.5	-16.8	17.7	0.49	-0.48	-2.04	-24.5	-0.3	
967.0	2.73	129.20	966.4	-19.6	21.0	0.26	0.19	-3.87	-28.7	-2.0	
1,067.0	2.99	126.56	1,066.2	-22.7	24.9	0.29	0.26	-2.64	-33.5	-3.4	
1,252.0	0.26	126.48	1,251.1	-25.8	29.1	1.48	-1.48	-0.04	-38.8	-3.4	
1,438.0	0.97	277.56	1,437.1	-25.9	27.9	0.65	0.38	81.23	31.1	22.0	
1,623.0	2.37	270.88	1,622.0	-25.6	22.5	0.76	0.76	-3.61	22.9	25.3	
1,809.0	2.73	266.13	1,807.9	-25.8	14.3	0.22	0.19	-2.55	12.5	26.8	
1,995.0	2.81	257.17	1,993.6	-27.2	5.4	0.24	0.04	-4.82	-0.8	27.7	
2,182.0	2.55	254.09	2,180.4	-29.3	-3.1	0.16	-0.14	-1.65	-11.0	27.4	
2,369.0	1.90	245.00	2,367.3	-31.8	-9.9	0.39	-0.35	-4.86	-22.4	24.6	
2,555.0	1.70	226.30	2,553.2	-35.0	-14.7	0.33	-0.11	-10.05	-34.8	15.2	
2,741.0	2.70	238.60	2,739.1	-39.2	-20.4	0.59	0.54	6.61	-37.8	22.8	
2,928.0	2.10	225.10	2,925.9	-43.9	-26.6	0.44	-0.32	-7.22	-49.8	12.3	
3,114.0	2.10	218.00	3,111.8	-49.0	-31.1	0.14	0.00	-3.82	-57.7	5.7	
3,207.0	2.40	226.70	3,204.7	-51.6	-33.6	0.49	0.32	9.35	-59.8	14.6	
3,394.0	2.20	234.10	3,391.6	-56.4	-39.3	0.19	-0.11	3.96	-64.9	22.7	
3,581.0	2.50	235.90	3,578.4	-60.8	-45.6	0.17	0.16	0.96	-71.9	24.8	
3,768.0	1.20	210.10	3,765.3	-64.8	-50.0	0.81	-0.70	-13.80	-81.1	-10.7	
3,955.0	2.20	98.90	3,952.3	-67.1	-47.4	1.53	0.53	-59.47	36.4	-73.6	
4,142.0	2.30	90.70	4,139.1	-67.7	-40.1	0.18	0.05	-4.39	39.2	-68.2	
4,329.0	1.40	82.90	4,326.0	-67.4	-34.1	0.50	-0.48	-4.17	42.1	-62.7	
4,516.0	2.60	93.00	4,512.9	-67.4	-27.6	0.67	0.64	5.40	24.0	-68.7	



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #707H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25' @ 3360.0usft
Site:	Colgrove 35 Fed	MD Reference:	KB = 25' @ 3360.0usft
Well:	#707H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
4,703.0	1.60	86.80	4,699.8	-67.4	-20.7	0.55	-0.53	-3.28	24.3	-66.2	
4,798.0	3.30	104.40	4,792.7	-68.0	-16.8	1.98	1.83	18.82	-0.6	-70.1	
4,984.0	1.60	116.50	4,980.5	-70.6	-9.3	0.94	-0.90	6.44	-23.2	-67.3	
5,031.0	1.80	118.10	5,027.5	-71.2	-8.0	0.44	0.43	3.40	-26.5	-66.5	
5,156.0	1.80	123.80	5,152.4	-73.2	-4.7	0.14	0.00	4.56	-38.3	-59.5	
5,343.0	2.50	303.20	5,339.4	-72.6	-5.6	2.30	0.37	95.94	42.0	44.6	
5,530.0	6.10	263.30	5,525.9	-71.5	-18.9	2.39	1.93	-21.34	14.9	44.2	
5,717.0	10.40	246.30	5,710.9	-79.5	-44.3	2.62	2.30	-9.09	8.0	36.0	
5,903.0	10.50	241.60	5,893.8	-84.3	-74.5	0.46	0.05	-2.53	4.7	30.1	
6,080.0	9.80	237.00	6,077.8	-111.1	-102.9	0.57	-0.37	-2.46	3.2	26.6	
6,278.0	9.70	235.70	6,263.2	-128.7	-129.4	0.13	-0.05	-0.69	4.9	24.7	
6,465.0	11.00	241.60	6,447.1	-146.1	-158.1	0.80	0.70	3.16	7.4	20.6	
6,652.0	10.60	240.10	6,630.8	-163.1	-188.7	0.26	-0.21	-0.80	5.4	16.2	
6,839.0	10.20	237.00	6,814.8	-180.7	-217.5	0.37	-0.21	-1.66	4.7	13.1	
7,026.0	9.20	233.40	6,999.1	-198.7	-243.4	0.63	-0.53	-1.93	6.3	12.1	
7,213.0	8.40	247.30	7,183.9	-212.8	-268.0	1.21	-0.43	7.43	13.7	5.5	
7,400.0	4.40	244.60	7,369.7	-221.2	-287.1	2.14	-2.14	-1.44	25.1	-1.2	
7,587.0	2.00	266.60	7,556.4	-224.5	-296.8	1.42	-1.28	11.76	32.2	-20.6	
7,774.0	1.00	285.40	7,743.3	-224.0	-301.5	0.65	-0.53	15.40	18.8	-41.6	
7,961.0	1.00	256.60	7,930.3	-223.6	-304.6	0.36	0.00	-20.75	38.6	-22.0	
8,149.0	0.90	229.40	8,118.3	-225.0	-307.3	0.24	-0.05	-14.47	41.4	-2.7	
8,337.0	0.90	205.80	8,306.3	-227.3	-309.1	0.20	0.00	-12.55	36.2	13.5	
8,524.0	1.10	199.40	8,493.2	-230.3	-310.3	0.12	0.11	-3.42	31.2	17.3	
8,712.0	1.10	196.70	8,681.2	-233.7	-311.4	0.03	0.00	-1.44	26.8	18.7	
8,897.0	1.30	202.20	8,866.2	-237.4	-312.7	0.12	0.11	2.97	24.6	16.2	
9,084.0	1.10	209.90	9,053.1	-240.9	-314.4	0.14	-0.11	4.12	22.6	13.0	
9,270.0	1.10	210.20	9,239.1	-244.0	-316.2	0.00	0.00	0.16	19.1	12.9	



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Well:	#707H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey											
MD (usft)	Inc (")	Azi (azimuth) (°)	TVD (usft)	NIS (usft)	EAW (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
9,458.0	1.10	197.80	9,427.0	-247.2	-317.7	0.13	0.00	-6.60	12.3	18.3	
9,644.0	1.00	172.20	9,613.0	-250.8	-318.0	0.26	-0.05	-13.78	0.8	19.3	
9,832.0	0.80	186.30	9,801.0	-253.5	-317.9	0.16	-0.11	7.50	2.6	18.9	
10,020.0	0.90	239.40	9,989.0	-255.5	-319.3	0.41	0.05	28.24	14.4	10.3	
10,207.0	2.20	233.70	10,175.9	-258.4	-323.5	0.70	0.70	-3.05	8.3	11.6	
10,394.0	2.60	278.10	10,362.8	-259.9	-330.6	0.99	0.21	23.74	7.2	5.0	
10,581.0	1.20	254.40	10,549.6	-259.9	-336.7	0.84	-0.75	-12.67	-1.3	5.7	
10,767.0	0.60	176.30	10,735.6	-261.4	-338.5	0.66	-0.32	-41.99	-7.3	-2.0	
10,954.0	1.10	261.40	10,922.6	-262.6	-340.2	0.65	0.27	45.51	-4.4	8.0	
11,142.0	1.50	143.60	11,110.6	-264.9	-340.5	1.19	0.21	-62.66	-6.7	-9.3	
11,329.0	2.90	115.50	11,297.4	-268.9	-334.8	0.92	0.75	-15.03	-8.4	-12.5	
11,516.0	1.10	116.70	11,484.3	-271.7	-328.9	0.96	-0.96	0.64	-15.2	-12.2	
11,704.0	0.80	184.90	11,672.3	-273.8	-327.4	0.58	-0.16	36.28	-18.9	11.2	
11,844.0	0.30	264.50	11,812.3	-274.8	-327.9	0.57	-0.36	56.86	7.1	21.6	
12,002.0	0.40	320.90	11,970.3	-274.5	-328.6	0.22	0.06	35.70	21.1	6.4	
12,095.0	1.40	354.70	12,063.3	-273.1	-328.9	1.17	1.08	36.34	20.0	-6.2	
12,142.0	7.40	353.30	12,110.1	-269.5	-329.3	12.77	12.77	-2.98	20.2	-5.4	
12,188.0	13.50	352.60	12,155.3	-261.2	-330.4	13.26	13.26	-1.52	19.8	-4.3	
12,235.0	20.00	351.30	12,200.3	-247.8	-332.3	13.85	13.83	-2.77	18.5	-2.2	
12,281.0	26.20	355.60	12,242.6	-229.9	-334.3	13.96	13.48	9.35	16.3	-1.9	
12,328.0	32.50	3.20	12,283.6	-208.9	-334.4	15.55	13.40	16.17	13.2	-3.7	
12,374.0	37.50	1.20	12,321.2	-180.6	-333.4	11.15	10.87	-4.35	10.5	-4.4	
12,421.0	43.00	358.40	12,357.1	-150.2	-333.5	12.32	11.70	-5.96	7.9	-4.2	
12,468.0	47.30	358.00	12,390.3	-116.9	-334.6	9.17	9.15	-0.85	5.7	-3.4	
12,515.0	51.50	357.40	12,420.8	-81.3	-336.0	8.99	8.94	-1.28	4.5	-2.2	
12,562.0	58.70	357.40	12,447.7	-42.8	-337.8	15.32	15.32	0.00	3.2	-0.8	
12,609.0	65.10	357.20	12,469.8	-1.4	-339.7	13.62	13.62	-0.43	1.0	0.8	



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Well:	#707H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	NAS (usft)	E/W (usft)	Dleg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
12,655.0	69.10	357.30	12,487.7	40.9	-341.8	8.70	8.70	0.22	-0.9	2.4	
12,702.0	74.60	356.70	12,502.4	85.5	-344.1	11.76	11.70	-1.28	-2.2	4.4	
12,750.0	80.50	357.80	12,512.7	132.3	-346.3	12.49	12.29	2.29	-3.5	6.3	
12,797.0	84.90	359.30	12,518.7	178.9	-347.5	9.88	9.36	3.19	-4.2	7.1	
12,843.0	88.70	359.80	12,521.2	224.8	-347.9	8.33	8.26	1.09	-3.7	7.1	
12,937.0	89.80	358.70	12,522.5	318.8	-349.1	1.65	1.17	-1.17	-2.6	7.6	
13,031.0	90.60	358.20	12,522.1	412.8	-351.7	1.00	0.85	-0.53	-3.0	9.4	
13,125.0	91.00	359.60	12,520.8	506.7	-353.5	1.55	0.43	1.49	-4.5	10.5	
13,217.0	87.50	1.30	12,522.0	598.7	-352.7	4.23	-3.80	1.85	-3.3	9.0	
13,313.0	88.60	1.40	12,525.3	694.6	-350.5	1.15	1.15	0.10	-0.2	8.0	
13,407.0	92.20	1.50	12,524.6	788.6	-348.1	3.83	3.83	0.11	-1.0	2.9	
13,500.0	90.10	359.70	12,522.8	881.5	-347.1	2.97	-2.26	-1.94	-2.9	1.2	
13,593.0	90.00	358.90	12,522.7	974.5	-348.3	0.87	-0.11	-0.86	-3.1	1.6	
13,687.0	90.70	358.10	12,522.1	1,068.5	-350.7	1.13	0.74	-0.85	-3.8	3.3	
13,780.0	90.90	1.10	12,520.8	1,161.5	-351.4	3.23	0.22	3.23	-5.2	3.2	
13,874.0	90.60	2.20	12,519.6	1,255.4	-348.7	1.21	-0.32	1.17	-6.5	-0.2	
13,966.0	90.80	1.50	12,518.5	1,347.4	-345.7	0.79	0.22	-0.76	-7.8	-3.9	
14,059.0	89.60	1.50	12,518.1	1,440.3	-343.3	1.29	-1.29	0.00	-8.2	-7.0	
14,153.0	91.70	1.80	12,517.1	1,534.3	-340.6	2.26	2.23	0.32	-9.4	-10.5	
14,246.0	89.30	0.60	12,516.3	1,627.3	-338.6	2.89	-2.58	-1.29	-10.3	-13.2	
14,340.0	87.10	0.60	12,519.2	1,721.2	-337.6	2.34	-2.34	0.00	-7.4	-14.9	
14,434.0	89.00	359.80	12,522.4	1,815.1	-337.3	2.19	2.02	-0.85	-4.3	-16.0	
14,528.0	91.20	0.30	12,522.3	1,909.1	-337.2	2.40	2.34	0.53	-4.6	-16.8	
14,622.0	91.30	1.30	12,520.2	2,003.1	-335.9	1.07	0.11	1.06	-6.7	-18.8	
14,715.0	88.80	0.50	12,520.1	2,096.1	-334.4	2.82	-2.69	-0.86	-6.9	-21.0	
14,808.0	90.70	0.90	12,520.5	2,189.1	-333.3	2.09	2.04	0.43	-6.6	-22.9	
14,901.0	91.20	0.70	12,519.0	2,282.0	-332.0	0.58	0.54	-0.22	-8.3	-24.9	



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Well:	#707H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

MD (usft)	Incl (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Buile (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
14,995.0	90.20	0.40	12,517.8	2,376.0	-331.1	1.11	-1.06	-0.32	-9.5	-26.6
15,089.0	87.80	357.90	12,519.5	2,470.0	-332.5	3.69	-2.55	-2.66	-8.0	-25.9
15,183.0	88.90	358.20	12,522.2	2,563.9	-335.7	1.21	1.17	0.32	-5.4	-23.4
15,276.0	90.30	357.80	12,522.8	2,656.8	-338.9	1.57	1.51	-0.43	-4.9	-20.9
15,369.0	92.20	357.90	12,520.8	2,749.7	-342.4	2.05	2.04	0.11	-7.0	-18.2
15,463.0	91.50	0.40	12,517.8	2,843.7	-343.8	2.76	-0.74	2.66	-10.1	-17.5
15,557.0	88.50	359.70	12,517.8	2,937.7	-343.7	3.28	-3.19	-0.74	-10.2	-18.3
15,650.0	87.80	359.10	12,520.8	3,030.6	-344.7	0.99	-0.75	-0.65	-7.3	-18.1
15,744.0	87.80	358.90	12,524.4	3,124.5	-346.4	0.21	0.00	-0.21	-3.8	-17.2
15,838.0	90.60	358.10	12,525.7	3,218.5	-348.8	3.10	2.98	-0.85	-2.6	-15.5
15,931.0	91.50	358.90	12,524.0	3,311.4	-351.2	1.29	0.97	0.86	-4.4	-13.8
16,025.0	90.70	358.40	12,522.2	3,405.4	-353.5	1.00	-0.85	-0.53	-6.4	-12.3
16,119.0	91.10	358.20	12,520.7	3,499.3	-356.2	0.48	0.43	-0.21	-7.9	-10.2
16,211.0	90.30	357.50	12,519.6	3,591.3	-359.7	1.16	-0.87	-0.76	-9.2	-7.5
16,304.0	90.40	357.20	12,519.0	3,684.2	-364.0	0.34	0.11	-0.32	-9.8	-3.9
16,398.0	91.50	358.40	12,517.5	3,778.1	-367.6	1.73	1.17	1.28	-11.5	-1.1
16,491.0	91.50	359.40	12,515.0	3,871.0	-369.4	1.07	0.00	1.08	-14.0	0.0
16,588.0	92.80	359.80	12,510.6	3,967.9	-370.2	1.16	1.11	0.34	-18.6	-0.1
16,707.0	93.80	1.30	12,504.9	4,086.8	-369.3	1.82	1.01	1.52	-24.4	-1.8
16,800.0	89.60	2.70	12,502.2	4,179.6	-366.0	4.76	-4.52	1.51	-27.2	-5.8
16,894.0	89.40	359.90	12,503.0	4,273.6	-363.9	2.99	-0.21	-2.98	-26.5	-8.7
16,988.0	89.00	358.30	12,504.3	4,367.6	-365.4	1.75	-0.43	-1.70	-25.3	-8.0
17,081.0	88.80	356.90	12,506.1	4,460.5	-369.3	1.52	-0.22	-1.51	-23.6	-4.8
17,174.0	90.00	357.10	12,507.1	4,553.3	-374.1	1.31	1.29	0.22	-22.8	-0.7
17,268.0	90.70	358.20	12,506.5	4,647.3	-378.0	1.39	0.74	1.17	-23.4	2.5
17,362.0	88.80	359.90	12,506.9	4,741.2	-379.5	2.71	-2.02	1.81	-23.1	3.3
17,455.0	84.90	1.30	12,512.0	4,834.1	-378.6	4.45	-4.19	1.51	-18.1	1.6



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #707H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25' @ 3360.0usft
Site:	Colgrove 35 Fed	MD Reference:	KB = 25' @ 3360.0usft
Well:	#707H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey											
MD (usft)	Inq (")	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
17,549.0	87.90	358.50	12,517.9	4,927.9	-378.7	4.36	3.19	-2.98	-12.3	1.0	
17,643.0	90.50	359.80	12,519.2	5,021.8	-380.1	3.09	2.77	1.38	-11.1	1.7	
17,737.0	89.40	359.40	12,519.3	5,115.8	-380.8	1.25	-1.17	-0.43	-11.1	1.6	
17,829.0	88.60	0.00	12,520.9	5,207.8	-381.3	1.09	-0.87	0.65	-9.6	1.4	
17,923.0	90.30	1.10	12,521.8	5,301.8	-380.4	2.15	1.81	1.17	-8.8	-0.3	
18,017.0	88.30	1.50	12,523.0	5,395.8	-378.2	2.17	-2.13	0.43	-7.8	-3.2	
18,111.0	89.10	2.20	12,525.1	5,489.7	-375.2	1.13	0.85	0.74	-5.8	-6.9	
18,205.0	91.40	3.20	12,524.7	5,583.6	-370.8	2.67	2.45	1.06	-6.3	-12.1	
18,298.0	89.80	3.30	12,523.7	5,676.4	-365.5	1.72	-1.72	0.11	-7.4	-18.1	
18,392.0	88.50	2.70	12,525.1	5,770.3	-360.6	1.52	-1.38	-0.64	-6.1	-23.7	
18,486.0	88.60	1.50	12,527.5	5,864.2	-357.1	1.28	0.11	-1.28	-3.8	-27.9	
18,580.0	90.10	0.80	12,528.6	5,958.2	-355.2	1.76	1.60	-0.74	-2.8	-30.6	
18,673.0	90.70	359.90	12,527.9	6,051.2	-354.7	1.16	0.65	-0.97	-3.6	-31.9	
18,768.0	90.00	359.00	12,527.3	6,144.1	-355.6	1.23	-0.75	-0.97	-4.3	-31.7	
18,859.0	90.70	358.80	12,526.8	6,237.1	-357.4	0.78	0.75	-0.22	-4.9	-30.6	
18,952.0	90.80	358.10	12,525.6	6,330.1	-358.9	0.76	0.11	-0.75	-6.3	-28.9	
19,046.0	91.80	358.40	12,523.4	6,424.0	-362.7	1.11	1.06	0.32	-8.5	-26.7	
19,140.0	92.30	358.40	12,520.1	6,517.9	-365.4	0.53	0.53	0.00	-12.0	-24.8	
19,234.0	92.30	358.50	12,516.3	6,611.8	-367.9	0.11	0.00	0.11	-15.9	-23.0	
19,328.0	89.90	357.40	12,514.5	6,705.7	-371.3	2.81	-2.55	-1.17	-17.8	-20.4	
19,422.0	90.80	357.40	12,513.9	6,799.6	-375.5	0.96	0.96	0.00	-18.4	-16.9	
19,516.0	90.50	359.80	12,512.8	6,893.6	-377.8	2.57	-0.32	2.55	-19.6	-15.3	
19,610.0	88.40	0.60	12,513.7	6,987.6	-377.5	2.39	-2.23	0.85	-18.8	-16.4	
19,703.0	90.20	1.10	12,514.9	7,080.5	-376.1	2.01	1.94	0.54	-17.8	-18.5	
19,796.0	90.70	1.50	12,514.2	7,173.5	-374.0	0.69	0.54	0.43	-18.6	-21.3	
19,890.0	90.20	1.70	12,513.4	7,267.5	-371.4	0.57	-0.53	0.21	-19.5	-24.7	
19,932.0	91.20	2.70	12,512.9	7,309.4	-369.8	3.37	2.38	2.38	-20.0	-26.7	



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #707H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25' @ 3360.0usft
Site:	Colgrove 35 Fed	MD Reference:	KB = 25' @ 3360.0usft
Well:	#707H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
19,994.0	91.20	2.70	12,511.6	7,371.4	-366.9	0.00	0.00	0.00	-21.4	-30.1

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/S (usft)	+E/W (usft)	Comment	
12,030.0	11,998.3	-274.2	-328.7	KOP, MD:12030.0', TVD:11998.3', N/S:-274.2', E/W:-328.7', INC:0.67	
12,333.4	12,288.1	-204.0	-334.2	FTP Crossing, MD:12333.4', TVD:12288.1', N/S:-204.0', E/W:-334.2', INC:33.09	
19,932.0	12,512.9	7,309.4	-369.8	Last MWD Survey (MD=19932.0')	
19,994.0	12,511.6	7,371.4	-366.9	Projection to Bit (MD=19994.0')	

Checked By: _____ Approved By: _____ Date: _____



PROJECT DETAILS: Lea County, NM (NAD 83 NME)

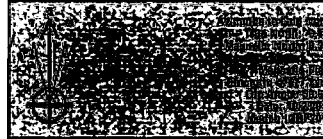
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level

Lea County, NM (NAD 83 NME)

Colgrove 35 Fed

#707H

Plan #1



To convert a Magnetic Direction to a Grid Direction, Add 6.36°
To convert a Magnetic Direction to a True Direction, Add 6.76° East
To convert a True Direction to a Grid Direction, Subtract 0.42°

WELL DETAILS: #707H

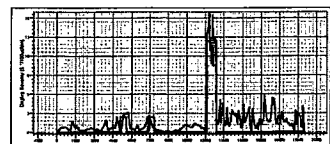
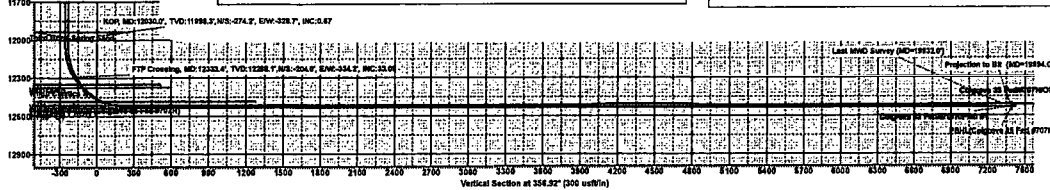
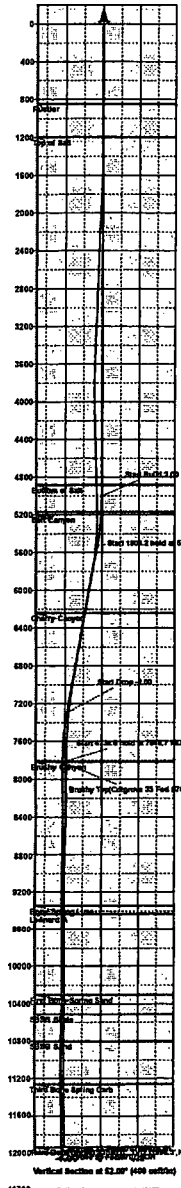
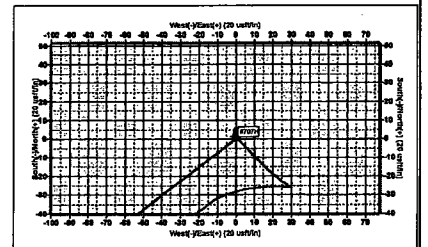
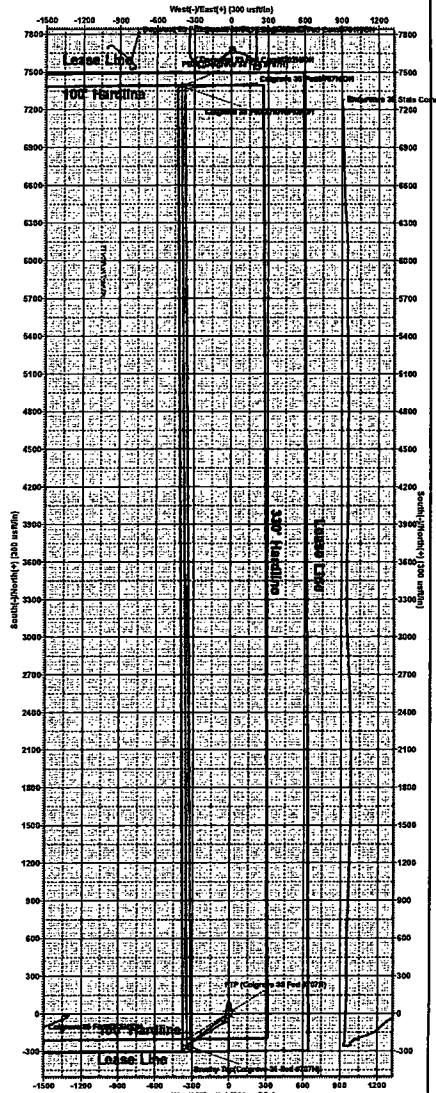
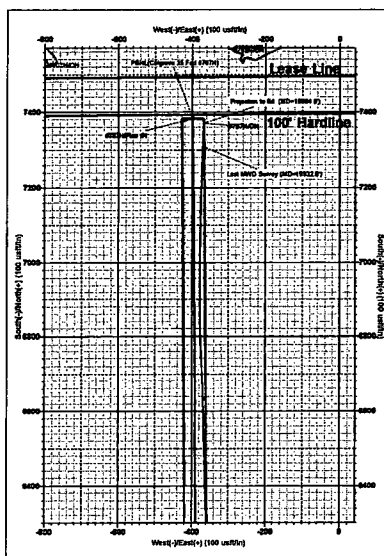
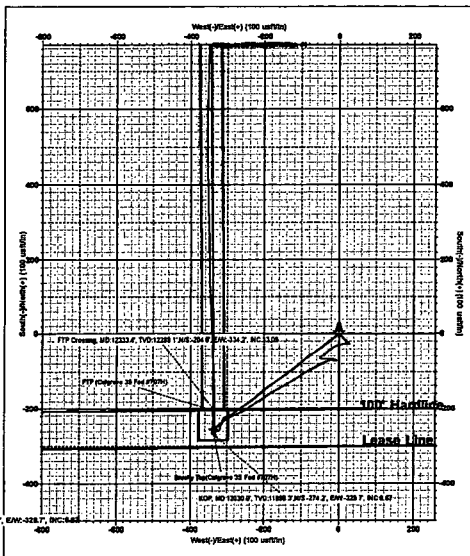
KB = 25' 3335.0
+N/-S 0.0 +E/-W 0.0 Northing 365045.00 Easting 786285.00 32° 0' 3.915 N 103° 32' 12.073 W Slot

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	5000.0	0.00	0.00	5000.0	0.0	0.0	0.00	0.00	0.0	
3	5522.2	10.44	232.99	5519.3	-28.6	-37.9	2.00	232.99	-26.5	
4	7326.5	10.44	232.99	7293.7	-225.4	-299.1	0.00	0.00	-209.0	
5	7848.7	0.00	0.00	7813.0	-254.0	-337.0	2.00	180.00	-235.5	Brushy Top(Colgrove 35 Fed #707H)
6	12083.2	0.00	0.00	12047.5	-254.0	-337.0	0.00	0.00	-235.5	
7	12832.6	89.94	359.55	12525.0	222.9	-340.7	12.00	359.55	240.9	
8	19992.9	89.94	359.55	12533.0	7383.0	-397.0	0.00	0.00	7393.7	PBHL(Colgrove 35 Fed #707H)

WELLBORE TARGET DETAILS (MAP COORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
Brushy Top(Colgrove 35 Fed #707H)	7813.0	-254.0	-337.0	364781.00	787852.00	Polygon
FTP (Colgrove 35 Fed #707H)	12525.0	-204.0	-337.0	364841.00	787852.00	Point
PBHL(Colgrove 35 Fed #707H)	12533.0	7383.0	-397.0	372428.00	787892.00	Rectangle (Sides: L0.0 W60.0)



Lea County, NM (NAD 83 NME)
Plan #1
12/11/2014
12/11/2014