



EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Colgrove 35 Fed

#706H

OH

Design: OH

Midland PVA

25 November, 2018

HOBBS OCD

JAN 31 2019

RECEIVED



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #706H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25' @ 3352.0usft
Site:	Colgrove 35 Fed	MD Reference:	KB = 25' @ 3352.0usft
Well:	#706H	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	Colgrove 35 Fed		
Site Position:		Northing:	365,035.00 usft
From:	Map	Easting:	786,945.00 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 0' 3.914 N
		Longitude:	103° 32' 27.681 W
		Grid Convergence:	0.42 °

Well	#706H		
Well Position	+N-S 0.0 usft	Northing:	365,036.00 usft
	+E-W 0.0 usft	Easting:	786,975.00 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	32° 0' 3.922 N
		Longitude:	103° 32' 27.332 W
		Ground Level:	3,327.0 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2015	10/2/2018	6.78
			Dip Angle (°)
			59.85
			Field Strength (nT)
			47,676.83657385

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)
	0.0	0.0	0.0
		Direction (°)	1.99

Survey Program	Date 11/25/2018		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name
199.0	19,916.0	Dritech MWD (OH)	MWD
			Description
			OWSG MWD - Standard



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Well:	#706H	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)	
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0
199.0	0.79	41.69	199.0	1.0	0.9	0.40	0.40	0.00	-1.4	0.0	
316.0	0.70	62.52	316.0	2.0	2.1	0.24	-0.08	17.80	-2.8	0.8	
491.0	0.70	68.85	491.0	2.8	4.0	0.04	0.00	3.62	-4.8	1.2	
665.0	0.35	118.16	665.0	3.0	5.5	0.31	-0.20	28.34	-3.4	5.2	
851.0	0.62	120.71	851.0	2.2	6.9	0.15	0.15	1.37	-4.8	5.4	
912.0	0.35	151.03	912.0	1.9	7.2	0.60	-0.44	49.70	-1.9	7.2	
1,040.0	0.62	158.15	1,040.0	0.9	7.7	0.22	0.21	5.56	-2.0	7.4	
1,133.0	0.53	148.83	1,132.9	0.0	8.1	0.14	-0.10	-10.02	-4.2	6.9	
1,225.0	0.53	152.96	1,224.9	-0.7	8.5	0.04	0.00	4.49	-4.5	7.2	
1,316.0	0.53	152.88	1,317.9	-1.5	8.9	0.00	0.00	-0.09	-5.4	7.2	
1,411.0	0.53	142.07	1,410.9	-2.2	9.4	0.11	0.00	-11.62	-7.5	6.0	
1,504.0	0.44	175.38	1,503.9	-2.9	9.6	0.31	-0.10	35.82	-3.7	9.4	
1,598.0	0.35	155.51	1,597.9	-3.5	9.8	0.17	-0.10	-21.14	-7.3	7.5	
1,693.0	0.26	198.75	1,692.9	-4.0	9.8	0.25	-0.09	45.52	-0.6	10.6	
1,786.0	0.18	185.66	1,785.9	-4.3	9.8	0.10	-0.09	-14.08	-3.3	10.1	
1,881.0	0.26	169.57	1,880.9	-4.7	9.8	0.11	0.08	-16.94	-6.4	8.8	
1,975.0	0.18	187.77	1,974.9	-5.0	9.8	0.11	-0.09	19.36	-3.7	10.4	
2,070.0	1.76	130.02	2,069.9	-6.1	10.9	1.76	1.66	-60.79	-12.3	2.3	
2,165.0	3.69	126.07	2,164.8	-8.9	14.5	2.04	2.03	-4.16	-16.2	1.4	
2,259.0	4.66	126.24	2,258.5	-12.9	20.0	1.03	1.03	0.18	-19.4	1.6	
2,354.0	5.10	122.91	2,353.2	-17.5	26.7	0.55	0.46	-3.51	-20.6	0.9	
2,447.0	4.92	122.03	2,445.8	-21.8	33.5	0.21	-0.19	-0.95	-19.4	1.5	
2,542.0	4.84	123.43	2,540.5	-26.2	40.3	0.15	-0.08	1.47	-17.6	2.9	
2,635.0	4.84	122.64	2,633.2	-30.5	46.9	0.07	0.00	-0.85	-15.8	3.6	
2,730.0	4.66	122.64	2,727.8	-34.7	53.5	0.19	-0.19	0.00	-13.7	4.6	
2,823.0	4.48	120.80	2,820.5	-38.6	59.8	0.25	-0.19	-1.98	-11.6	5.3	



Midland PVA

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Well:	#706H	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)	
2,917.0	4.48	119.92	2,914.3	-42.3	66.2	0.07	0.00	-0.94	-9.3	6.4	
3,011.0	5.63	117.81	3,007.9	-46.3	73.4	1.24	1.22	-2.24	-8.2	7.7	
3,105.0	5.80	114.99	3,101.4	-50.5	81.8	0.35	0.18	-3.00	-8.3	9.4	
3,197.0	5.89	115.43	3,192.9	-54.5	90.3	0.11	0.10	0.48	-8.2	11.6	
3,291.0	6.07	115.96	3,286.4	-58.7	99.1	0.20	0.19	0.56	-8.3	13.8	
3,384.0	5.63	117.28	3,379.0	-63.0	107.6	0.49	-0.47	1.42	-7.9	16.0	
3,477.0	5.28	115.87	3,471.5	-66.9	115.5	0.40	-0.38	-1.52	-7.6	17.7	
3,571.0	5.72	125.63	3,565.1	-71.5	123.2	1.10	0.47	10.38	-3.7	20.0	
3,666.0	5.89	128.27	3,659.6	-77.3	130.9	0.33	0.18	2.78	-2.4	20.3	
3,760.0	5.98	122.73	3,753.1	-82.9	138.8	0.62	0.10	-5.89	-4.3	20.5	
3,855.0	5.98	116.66	3,847.6	-87.8	147.4	0.67	0.00	-6.39	-6.5	21.4	
3,950.0	5.72	112.36	3,942.1	-91.9	156.2	0.54	-0.27	-4.53	-8.2	23.2	
4,044.0	5.54	109.11	4,035.6	-95.1	164.8	0.39	-0.19	-3.46	-9.5	25.7	
4,138.0	5.45	108.05	4,129.2	-98.0	173.3	0.14	-0.10	-1.13	-9.7	28.8	
4,233.0	5.01	106.73	4,223.8	-100.6	181.6	0.48	-0.46	-1.39	-9.8	32.1	
4,328.0	4.48	107.52	4,318.5	-102.9	189.1	0.56	-0.56	0.83	-7.9	35.8	
4,422.0	4.22	108.23	4,412.2	-105.1	195.9	0.28	-0.28	0.76	-5.3	39.3	
4,516.0	4.31	104.45	4,506.0	-107.1	202.6	0.31	0.10	-4.02	-5.9	42.6	
4,611.0	4.57	103.48	4,600.7	-108.8	209.7	0.28	0.27	-1.02	-4.9	46.6	
4,705.0	4.66	106.73	4,694.4	-110.8	217.0	0.29	0.10	3.46	-0.7	50.6	
4,800.0	5.01	108.84	4,789.0	-113.2	224.6	0.41	0.37	2.22	2.6	54.1	
4,894.0	5.36	107.35	4,882.7	-115.9	232.7	0.40	0.37	-1.59	1.9	57.5	
4,978.0	5.10	106.03	4,966.3	-118.1	240.0	0.34	-0.31	-1.57	1.0	60.8	
5,073.0	4.75	107.00	5,060.9	-120.4	247.9	0.38	-0.37	1.02	3.2	64.4	
5,167.0	5.72	129.94	5,154.6	-124.5	255.2	2.43	1.03	24.40	29.5	59.4	
5,260.0	8.35	145.93	5,246.9	-133.1	262.5	3.50	2.83	17.19	42.6	47.4	
5,353.0	9.15	147.69	5,338.8	-145.0	270.2	0.91	0.86	1.89	39.0	43.1	



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5,447.0	6.86	152.88	5,431.9	-158.3	276.8	2.55	-2.44	5.52	38.7	35.9	
5,542.0	6.42	154.11	5,526.2	-166.1	281.7	0.49	-0.46	1.29	37.4	30.8	
5,636.0	6.33	152.79	5,619.6	-175.4	286.4	0.18	-0.10	-1.40	35.2	27.5	
5,729.0	5.98	152.00	5,712.1	-184.3	291.0	0.39	-0.38	-0.85	33.7	24.0	
5,822.0	6.07	154.02	5,804.6	-193.0	295.4	0.25	0.10	2.17	33.6	18.7	
5,916.0	5.98	151.73	5,898.1	-201.8	299.9	0.27	-0.10	-2.44	32.0	15.9	
6,011.0	6.07	151.82	5,992.6	-210.5	304.6	0.10	0.09	0.09	30.7	12.1	
6,104.0	3.69	141.36	6,085.2	-217.2	308.8	2.72	-2.58	-11.25	26.6	15.0	
6,198.0	0.70	171.60	6,179.1	-220.1	310.8	3.30	-3.18	32.17	30.0	-1.3	
6,293.0	0.70	231.10	6,274.1	-221.1	310.4	0.73	0.00	62.63	13.0	-26.6	
6,387.0	0.62	236.55	6,368.1	-221.7	309.6	0.11	-0.09	5.80	9.4	-27.7	
6,481.0	0.53	251.49	6,462.1	-222.1	308.7	0.19	-0.10	15.89	1.0	-29.0	
6,575.0	0.62	257.29	6,556.1	-222.4	307.8	0.11	0.10	6.17	-2.9	-29.0	
6,669.0	0.62	261.24	6,650.1	-222.6	306.8	0.05	0.00	4.20	-5.9	-28.7	
6,763.0	0.53	258.70	6,744.1	-222.7	305.9	0.10	-0.10	-2.70	-5.6	-28.9	
6,857.0	0.53	257.11	6,838.1	-222.9	305.0	0.02	0.00	-1.69	-5.6	-29.1	
6,951.0	0.53	252.10	6,932.1	-223.2	304.2	0.05	0.00	-5.33	-3.9	-29.5	
7,044.0	0.62	254.65	7,025.1	-223.4	303.3	0.10	0.10	2.74	-6.2	-29.3	
7,139.0	0.53	243.49	7,120.1	-223.8	302.4	0.15	-0.09	-11.75	-1.3	-30.0	
7,233.0	1.67	117.19	7,214.1	-224.6	303.2	2.16	1.21	-134.36	23.9	16.3	
7,327.0	2.02	114.91	7,308.0	-225.9	306.0	0.38	0.37	-2.43	20.2	17.2	
7,421.0	2.11	118.25	7,402.0	-227.4	309.0	0.16	0.10	3.55	17.7	16.1	
7,515.0	1.85	128.27	7,495.9	-229.2	311.7	0.46	-0.28	10.66	17.1	13.1	
7,609.0	1.58	129.94	7,589.9	-230.9	313.9	0.29	-0.29	1.78	14.6	12.6	
7,704.0	1.58	136.88	7,684.8	-232.7	315.8	0.20	0.00	7.31	13.4	10.9	
7,798.0	1.67	155.25	7,778.8	-234.9	317.2	0.56	0.10	19.54	13.6	6.5	
7,893.0	1.93	162.90	7,873.7	-237.7	318.3	0.37	0.27	8.05	11.4	4.8	



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8,081.0	2.11	159.12	8,061.6	-244.0	320.5	0.12	0.10	-2.01	4.4	5.4	
8,174.0	2.37	161.66	8,154.6	-247.4	321.7	0.30	0.28	2.73	1.0	5.3	
8,363.0	2.55	161.66	8,343.4	-255.1	324.2	0.10	0.10	0.00	-7.1	5.3	
8,551.0	0.97	155.34	8,531.3	-260.5	326.2	0.85	-0.84	-3.36	-13.4	4.0	
8,645.0	0.53	162.98	8,625.3	-261.7	326.7	0.48	-0.47	8.13	-14.0	5.8	
8,738.0	0.79	172.65	8,718.3	-262.7	326.9	0.30	0.28	10.40	-13.9	8.2	
8,831.0	1.14	175.20	8,811.3	-264.3	327.0	0.38	0.38	2.74	-15.1	8.8	
9,019.0	1.41	195.50	8,999.2	-268.4	326.6	0.28	0.14	10.80	-15.1	14.1	
9,113.0	1.49	203.94	9,093.2	-270.6	325.8	0.24	0.09	8.98	-15.3	16.4	
9,300.0	1.49	211.06	9,280.1	-274.9	323.5	0.10	0.00	3.81	-18.0	18.4	
9,394.0	0.18	33.17	9,374.1	-275.8	323.0	1.78	-1.39	-189.24	18.3	-19.1	
9,488.0	0.44	208.77	9,468.1	-276.0	322.9	0.66	0.28	188.81	-20.0	17.7	
9,582.0	0.88	223.63	9,562.1	-276.8	322.2	0.50	0.47	15.81	-15.8	22.3	
9,771.0	0.53	327.08	9,751.1	-277.2	320.7	0.80	-0.19	54.74	24.8	11.6	
9,864.0	0.44	232.59	9,844.1	-277.0	320.2	0.77	-0.10	-101.60	-13.9	23.4	
10,054.0	1.76	234.35	10,034.1	-279.2	317.3	0.69	0.69	0.93	-16.8	23.9	
10,148.0	0.97	334.46	10,128.0	-279.3	315.7	2.29	-0.84	106.50	25.9	13.8	
10,242.0	1.32	328.74	10,222.0	-277.6	314.8	0.39	0.37	-6.09	22.5	16.2	
10,335.0	1.58	292.97	10,315.0	-276.2	313.1	0.99	0.28	-38.46	6.6	25.7	
10,429.0	1.76	287.00	10,408.9	-275.3	310.5	0.27	0.19	-6.35	1.2	26.1	
10,523.0	2.02	284.18	10,502.9	-274.5	307.5	0.29	0.28	-3.00	-3.2	26.0	
10,618.0	2.64	270.74	10,597.8	-274.0	303.7	0.87	0.65	-14.15	-12.9	24.2	
10,712.0	2.46	262.04	10,691.7	-274.3	299.6	0.45	-0.19	-9.26	-20.6	21.6	
10,900.0	2.81	249.20	10,879.5	-276.5	291.3	0.36	0.19	-6.83	-33.4	15.6	
11,087.0	1.85	213.17	11,066.4	-280.6	285.3	0.91	-0.51	-19.27	-43.0	-9.8	
11,181.0	1.85	203.24	11,160.3	-283.3	283.9	0.34	0.00	-10.56	-43.7	-17.3	
11,276.0	1.67	129.85	11,255.3	-285.6	284.4	2.22	-0.19	-77.25	2.2	-48.2	



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11,464.0	1.32	141.71	11,443.2	-289.1	287.8	0.25	-0.19	6.31	-12.6	-47.1
11,556.0	6.77	28.07	11,535.0	-285.1	291.0	8.04	5.92	-123.52	43.2	6.5
11,650.0	4.66	13.74	11,628.6	-276.5	294.5	2.69	-2.24	-15.24	31.0	15.6
11,745.0	3.25	352.83	11,723.3	-270.1	295.1	2.10	-1.48	-22.01	17.2	24.2
11,821.0	2.46	343.16	11,799.2	-266.4	294.4	1.21	-1.04	-12.72	9.1	26.4
11,879.0	2.11	321.10	11,857.2	-264.4	293.3	1.62	-0.60	-38.03	-3.7	27.4
11,973.0	2.11	321.63	11,951.1	-261.6	291.2	0.02	0.00	0.56	-6.9	27.5
12,030.0	3.28	330.16	12,008.1	-259.4	289.7	2.17	2.05	14.96	-4.9	28.6
KOP 12030.0 MD; 12008.1 TVD; -259.4; 289.7; 3.28										
12,066.0	4.04	332.96	12,044.0	-257.4	288.6	2.17	2.11	7.79	-3.2	30.2
12,160.0	17.59	359.07	12,136.1	-240.1	286.9	14.97	14.41	27.78	12.1	30.1
12,254.0	27.87	10.93	12,222.8	-204.3	290.8	11.92	10.94	12.62	15.5	23.4
12,263.1	29.28	11.25	12,230.8	-200.0	291.7	15.60	15.51	3.53	15.3	22.5
FTP Crossing 12263.1 MD; 12230.8 TVD; -200.0; 291.7; 29.28										
12,348.0	42.47	13.31	12,299.4	-151.5	302.4	15.60	15.53	2.42	9.2	12.4
12,441.0	53.55	12.25	12,361.5	-84.2	317.6	11.94	11.91	-1.14	-2.1	-1.6
12,534.0	63.93	5.31	12,409.8	-5.8	329.4	12.85	11.16	-7.46	-12.9	-13.7
12,628.0	73.42	355.73	12,444.0	81.6	330.0	13.85	10.10	-10.19	-22.1	-16.1
12,723.0	75.01	354.32	12,469.8	172.6	322.0	2.20	1.67	-1.48	-24.1	-8.8
12,816.0	76.50	353.09	12,482.7	262.2	312.2	2.05	1.60	-1.32	-11.1	0.8
12,897.0	80.20	351.51	12,509.1	340.8	301.5	4.95	4.57	-1.95	4.9	10.9
12,910.0	80.37	351.16	12,511.3	353.5	299.6	2.96	1.31	-2.69	7.0	12.8
12,941.0	80.81	350.63	12,516.3	383.7	294.8	2.20	1.42	-1.71	12.0	17.5
13,004.0	83.98	349.93	12,524.7	445.2	284.2	5.15	5.03	-1.11	20.3	27.5
13,098.0	94.97	2.14	12,525.5	538.7	277.7	17.46	11.69	12.99	21.1	33.1
13,192.0	90.92	0.21	12,520.7	632.5	279.7	4.77	-4.31	-2.05	16.3	30.4
13,284.0	92.33	0.91	12,518.1	724.5	280.6	1.71	1.53	0.76	13.6	28.8



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #706H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25' @ 3352.0usft
Site:	Colgrove 35 Fed	MD Reference:	KB = 25' @ 3352.0usft
Well:	#706H	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)	EW (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
13,378.0	91.71	359.51	12,514.8	818.4	280.9	1.63	-0.68	-1.49	10.1	27.7
13,472.0	88.81	3.64	12,514.3	912.3	283.5	5.37	-3.09	4.39	9.6	24.4
13,565.0	87.23	3.46	12,517.6	1,005.1	289.2	1.71	-1.70	-0.19	12.7	17.9
13,659.0	89.69	3.11	12,520.1	1,098.9	294.6	2.64	2.62	-0.37	15.1	11.8
13,753.0	89.96	1.18	12,520.4	1,192.8	298.1	2.07	0.29	-2.05	15.2	7.5
13,846.0	91.45	0.47	12,519.2	1,285.8	299.5	1.77	1.60	-0.76	14.0	5.4
13,939.0	92.07	359.95	12,516.4	1,378.8	299.8	0.87	0.67	-0.56	11.0	4.4
14,033.0	93.83	1.88	12,511.5	1,472.6	301.3	2.78	1.87	2.05	6.0	2.1
14,126.0	92.07	3.37	12,506.7	1,565.4	305.6	2.48	-1.89	1.60	1.1	-2.8
14,220.0	90.92	1.79	12,504.3	1,659.3	309.8	2.08	-1.22	-1.68	-1.5	-7.8
14,314.0	89.34	3.81	12,504.1	1,753.1	314.4	2.73	-1.68	2.15	-1.8	-13.1
14,407.0	90.31	0.91	12,504.4	1,846.1	318.2	3.29	1.04	-3.12	-1.7	-17.7
14,501.0	89.25	358.89	12,504.7	1,940.0	318.1	2.43	-1.13	-2.15	-1.4	-18.3
14,594.0	90.66	359.86	12,504.8	2,033.0	317.1	1.84	1.52	1.04	-1.5	-18.0
14,688.0	88.37	359.59	12,505.6	2,127.0	316.6	2.45	-2.44	-0.29	-0.8	-18.3
14,782.0	87.14	358.54	12,509.3	2,220.9	315.1	1.72	-1.31	-1.12	2.7	-17.5
14,875.0	88.29	357.92	12,513.0	2,313.8	312.2	1.40	1.24	-0.67	6.3	-15.3
14,969.0	90.22	359.33	12,514.2	2,407.8	309.9	2.54	2.05	1.50	7.4	-13.8
15,062.0	91.28	359.33	12,513.0	2,500.8	308.9	1.14	1.14	0.00	6.0	-13.5
15,157.0	90.66	358.45	12,511.4	2,595.7	307.0	1.13	-0.65	-0.93	4.3	-12.4
15,250.0	91.38	359.95	12,509.7	2,688.7	305.7	1.78	0.75	1.61	2.5	-11.8
15,343.0	88.46	358.54	12,509.9	2,781.7	304.5	3.47	-3.12	-1.52	2.6	-11.3
15,436.0	89.08	359.16	12,511.9	2,874.6	302.6	0.94	0.67	0.67	4.4	-10.2
15,530.0	89.87	359.24	12,512.7	2,968.6	301.3	0.84	0.84	0.09	5.2	-9.6
15,624.0	89.25	359.07	12,513.5	3,062.6	299.9	0.68	-0.66	-0.18	5.8	-9.0
15,717.0	88.99	0.65	12,514.9	3,155.6	299.7	1.72	-0.28	1.70	7.0	-9.5
15,811.0	89.69	0.30	12,516.0	3,249.6	300.5	0.83	0.74	-0.37	8.0	-11.0



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #706H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25' @ 3352.0usft
Site:	Colgrove 35 Fed	MD Reference:	KB = 25' @ 3352.0usft
Well:	#706H	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)	
15,904.0	87.32	1.18	12,518.4	3,342.5	301.7	2.72	-2.55	0.95	10.3	-12.9	
15,998.0	89.25	2.58	12,521.2	3,436.4	304.8	2.54	2.05	1.49	13.0	-16.7	
16,091.0	89.69	0.30	12,522.1	3,529.4	307.1	2.50	0.47	-2.45	13.7	-19.8	
16,185.0	91.89	0.47	12,520.8	3,623.4	307.7	2.35	2.34	0.18	12.3	-21.2	
16,278.0	90.92	359.33	12,518.5	3,716.4	307.6	1.61	-1.04	-1.23	9.9	-21.7	
16,371.0	89.52	0.91	12,518.1	3,809.3	307.8	2.27	-1.51	1.70	9.4	-22.7	
16,465.0	91.28	1.79	12,517.5	3,903.3	310.0	2.09	1.87	0.94	8.6	-25.6	
16,558.0	89.16	359.16	12,517.1	3,996.3	310.7	3.63	-2.28	-2.83	8.1	-27.1	
16,652.0	87.49	355.82	12,519.9	4,090.1	306.6	3.97	-1.78	-3.55	10.9	-23.7	
16,745.0	90.48	356.69	12,521.5	4,182.9	300.6	3.35	3.22	0.94	12.4	-18.4	
16,839.0	90.22	356.52	12,521.0	4,276.8	295.0	0.33	-0.28	-0.18	11.8	-13.6	
16,932.0	89.60	355.82	12,521.1	4,369.5	288.8	1.01	-0.67	-0.75	11.9	-8.1	
17,026.0	91.10	354.67	12,520.5	4,463.2	281.0	2.01	1.60	-1.22	11.2	-1.0	
17,120.0	89.34	352.04	12,520.2	4,556.8	270.1	3.37	-1.87	-2.80	10.9	9.1	
17,213.0	90.48	354.32	12,520.3	4,648.9	259.1	2.74	1.23	2.45	11.0	19.4	
17,307.0	91.01	356.61	12,519.1	4,742.6	251.6	2.50	0.56	2.44	9.7	26.1	
17,400.0	89.96	356.61	12,518.3	4,835.4	246.1	1.13	-1.13	0.00	8.8	30.9	
17,493.0	88.99	0.91	12,519.2	4,928.4	244.1	4.74	-1.04	4.62	9.6	32.2	
17,586.0	87.49	1.18	12,522.0	5,021.3	245.8	1.64	-1.61	0.29	12.4	29.8	
17,680.0	87.58	0.91	12,526.1	5,115.2	247.5	0.30	0.10	-0.29	16.4	27.3	
17,774.0	91.28	0.83	12,527.0	5,209.2	249.0	3.94	3.94	-0.09	17.3	25.2	
17,869.0	92.95	1.79	12,523.5	5,304.1	251.1	2.03	1.76	1.01	13.7	22.3	
17,962.0	92.33	2.67	12,519.2	5,396.9	254.8	1.16	-0.67	0.95	9.3	17.9	
18,056.0	88.90	2.23	12,518.2	5,490.8	258.8	3.68	-3.65	-0.47	8.3	13.1	
18,150.0	89.78	2.93	12,519.3	5,584.7	263.0	1.20	0.94	0.74	9.3	8.2	
18,244.0	91.54	2.76	12,518.2	5,678.6	267.7	1.88	1.87	-0.18	8.2	2.8	
18,337.0	87.67	2.14	12,518.8	5,771.5	271.6	4.21	-4.16	-0.67	8.8	-1.9	



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #706H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25' @ 3352.0usft
Site:	Colgrove 35 Fed	MD Reference:	KB = 25' @ 3352.0usft
Well:	#706H	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)
18,431.0	88.37	0.74	12,522.1	5,865.4	274.0	1.68	0.74	-1.49	12.0	-5.0
18,524.0	87.67	1.70	12,525.3	5,958.3	276.0	1.28	-0.75	1.03	15.1	-7.8
18,618.0	89.60	1.44	12,527.5	6,052.2	278.6	2.07	2.05	-0.28	17.3	-11.1
18,711.0	91.19	3.02	12,526.9	6,145.2	282.2	2.41	1.71	1.70	16.6	-15.4
18,804.0	91.80	1.44	12,524.5	6,238.1	285.8	1.82	0.66	-1.70	14.2	-19.7
18,898.0	90.31	0.83	12,522.7	6,332.0	287.7	1.71	-1.59	-0.65	12.4	-22.4
18,992.0	87.85	359.68	12,524.2	6,426.0	288.1	2.89	-2.62	-1.22	13.8	-23.5
19,085.0	90.66	358.28	12,525.5	6,519.0	286.4	3.38	3.02	-1.51	15.0	-22.6
19,179.0	91.98	359.86	12,523.3	6,612.9	284.9	2.19	1.40	1.68	12.7	-21.8
19,273.0	88.46	356.87	12,522.9	6,706.9	282.2	4.91	-3.74	-3.18	12.3	-19.8
19,368.0	92.42	356.87	12,522.2	6,801.7	277.0	4.17	4.17	0.00	11.5	-15.4
19,462.0	88.46	354.58	12,521.5	6,895.4	270.0	4.87	-4.21	-2.44	10.8	-9.1
19,556.0	89.60	355.11	12,523.1	6,989.0	261.6	1.34	1.21	0.56	12.3	-1.4
19,651.0	90.66	354.50	12,522.8	7,083.6	253.0	1.29	1.12	-0.64	12.0	6.4
19,745.0	90.04	353.00	12,522.3	7,177.1	242.7	1.73	-0.66	-1.60	11.4	15.9
19,838.0	94.09	353.18	12,518.9	7,269.3	231.6	4.36	4.35	0.19	8.2	26.3
Last MWD Survey (MD = 19838.0)										
19,916.0	94.09	353.18	12,513.4	7,346.6	222.3	0.00	0.00	0.00	2.7	35.0
Projection to Bit (MD = 19916.0)										

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N-S (usft)	+E-W (usft)	
12,030.0	12,008.1	-259.4	289.7	KOP 12030.0' MD; 12008.1' TVD; -259.4'; 289.7'; 3.28
12,263.1	12,230.8	-200.0	291.7	FTP Crossing 12263.1' MD; 12230.8' TVD; -200.0'; 291.7'; 29.28
19,838.0	12,518.9	7,269.3	231.6	Last MWD Survey (MD = 19838.0)
19,916.0	12,513.4	7,346.6	222.3	Projection to Bit (MD = 19916.0)



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #706H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25' @ 3352.0usft
Site:	Colgrove 35 Fed	MD Reference:	KB = 25' @ 3352.0usft
Well:	#706H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Checked By:	_____	Approved By:	_____	Date:	_____
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PROJECT DETAILS: Lea County, NM (NAD 83 NME)

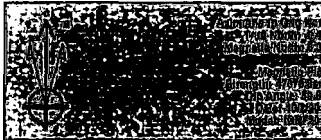
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level

Lea County, NM (NAD 83 NME)

Colgrove 35 Fed

#706H

Plan #2



To convert a Magnetic Direction to a Grid Direction, Add 6.36°
To convert a Magnetic Direction to a True Direction, Add 6.78° East
To convert a True Direction to a Grid Direction, Subtract 0.42°

WELL DETAILS: #706H

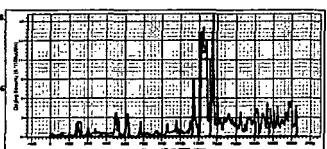
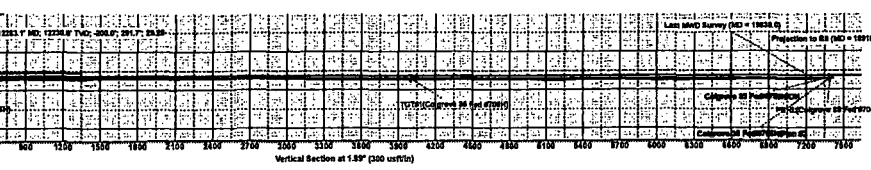
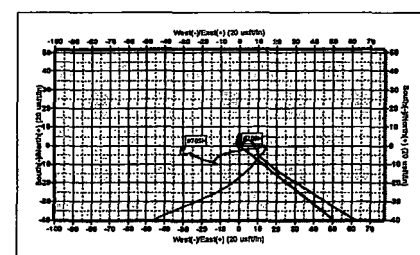
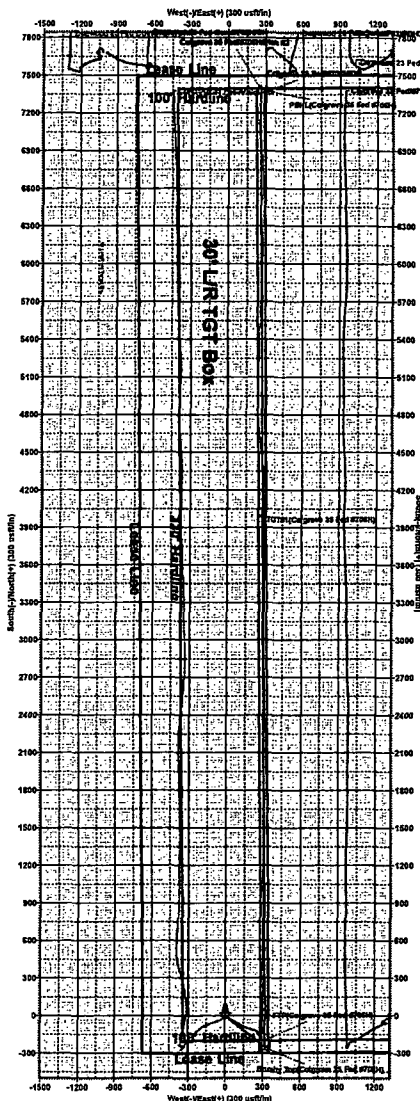
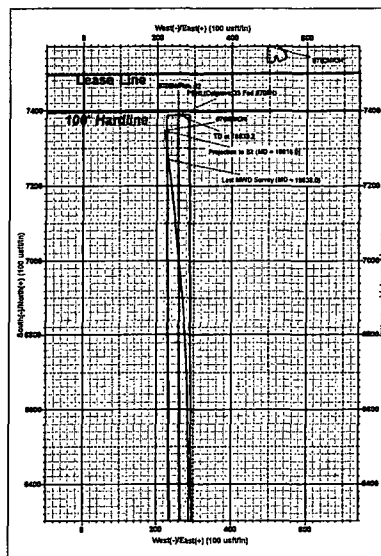
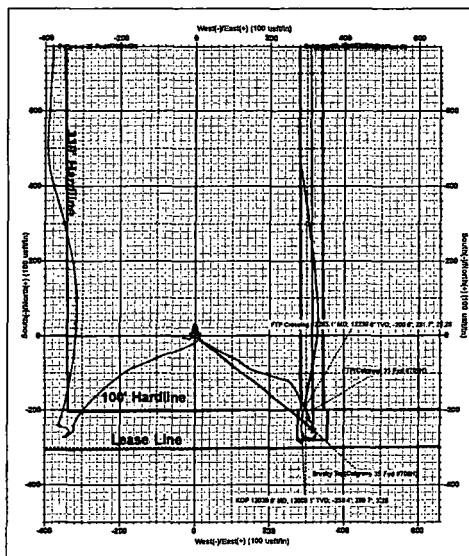
KB = 25' @ 3352.0usft
Northing 355036.00
Easting 786975.00
Latitude 32° 0' 3.922 N
Longitude 103° 32' 27.332 W
Skid

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Dieg	TFace	Vsect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	2100.0	0.00	0.00	2100.0	0.0	0.0	0.00	0.00	0.0	
3	2400.1	6.00	128.26	2399.6	-9.7	12.3	2.00	128.26	-9.3	
4	5960.5	6.00	128.26	5940.4	-240.3	304.7	0.00	0.00	-229.5	
5	6260.6	0.00	0.00	6240.0	-250.0	317.0	2.00	180.00	-238.8	
6	12003.6	0.00	0.00	11983.0	-250.0	317.0	0.00	0.00	-238.8	
7	12821.1	89.92	359.55	12503.9	270.1	312.9	11.00	359.55	280.9	
8	16543.7	89.92	359.55	12509.0	3992.6	283.7	0.00	0.00	4000.0	TGT#1(Colgrove 35 Fed #706H)
9	16545.9	89.97	359.55	12509.0	3994.9	283.7	2.00	0.00	4002.3	
10	19939.2	89.97	359.55	12511.0	7388.0	257.0	0.00	0.00	7392.5	PBHL(Colgrove 35 Fed #706H)

WELLBORE TAPES DETAILS (MAP CO-ORDINATES)

Name	TVD	+N-S	+E-W	Northing	Easting	Shape
Brushy Top(Colgrove 35 Fed #706H)	7789.0	-250.0	317.0	364788.00	787292.00	Polygon
FTP(Colgrove 35 Fed #706H)	12504.0	-200.0	317.0	364836.00	787292.00	Point
TGT#1(Colgrove 35 Fed #706H)	12509.0	3992.6	283.7	369028.60	787258.67	Point
PBHL(Colgrove 35 Fed #706H)	12511.0	7388.0	257.0	372424.00	787232.00	Rectangle (Sides: L0.0 W60.0)



Lea County, NM (NAD 83 NME)
Colgrove 35 Fed #706H
Plan #2