



EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Green Drake 16 Fed Com

#701H

OH

Design: OH

Final PVA Report

31 March, 2019

HOBBS OCD

MAY 29 2019

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Final PVA Report

Company: EOG Resources - Midland Project: Lea County, NM (NAD 83 NME) Site: Green Drake 18 Fed Com Well: #701H Wellbore: OH Design: OH		Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: Survey Calculation Method: Database:		Well #701H KB = 25 @ 3444.0usft (HP 444) KB = 25 @ 3444.0usft (HP 444) Grid Minimum Curvature 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 Green Drake 18 Fed Com					
Site Position: From: Map Position Uncertainty: 0.0 usft		Northing: 411,802.00 usft Easting: 773,380.00 usft Slot Radius: 13-3/16 "		Latitude: 32° 7' 47.652 N Longitude: 103° 35' 1.431 W Grid Convergence: 0.40 °	
Well #701H					
Well Position +N-S 0.0 usft +E-W 0.0 usft Position Uncertainty 0.0 usft		Northing: 411,802.00 usft Easting: 773,380.00 usft Wellhead Elevation: usft		Latitude: 32° 7' 47.652 N Longitude: 103° 35' 1.431 W Ground Level: 3,419.0 usft	
Wellbore OH					
Magnetics					
Model Name IGRF2015		Sample Date 7/3/2018		Declination (°) 6.84 Dip Angle (°) 59.96 Field Strength (nT) 47,773.73394025	
Design OH					
Audit Notes:					
Version: 1.0		Phase: ACTUAL		Tie On Depth: 0.0	
Vertical Section:		Depth From (TVD) (usft) 0.0 +N-S (usft) 0.0 +E-W (usft) 0.0		Direction (°) 181.88	
Survey Program					
From (usft) 111.0 To (usft) 19,977.0		Date 3/31/2019 Survey (Wellbore) Intrepid MWD #1 (OH)		Tool Name MWD Description OWSG MWD - Standard	



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Site:	Green Drake 16 Fed Com	MD Reference:	KB = 25 @ 3444.0usft (HP 444)
Well:	#701H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey											
MD (usft)	Inc (°)	Asl (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLag (°/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	0.00	0.0	0.0
111.0	0.70	184.90	111.0	-0.7	-0.1	0.63	0.63	0.00	-0.7	0.0	0.0
293.0	1.10	183.10	293.0	-3.5	-0.2	0.22	0.22	-0.99	-3.5	-0.1	-0.1
472.0	0.40	357.70	472.0	-4.6	-0.4	0.84	-0.39	97.54	4.6	0.6	0.6
627.0	3.10	355.60	626.9	0.1	-0.7	1.74	1.74	-1.35	-0.2	0.7	0.7
784.0	0.30	313.50	783.8	4.6	-1.3	1.84	-1.78	-26.82	-4.1	-2.4	-2.4
972.0	0.30	90.80	971.8	4.9	-1.2	0.30	0.00	73.03	1.3	4.9	4.9
1,133.0	0.80	80.80	1,132.8	5.1	0.3	0.31	0.31	-6.15	-1.1	5.0	5.0
1,246.0	1.20	98.00	1,245.8	5.1	2.3	0.44	0.35	15.13	-1.6	5.4	5.4
1,340.0	1.00	103.90	1,339.8	4.7	4.1	0.24	-0.21	6.28	-2.8	5.6	5.6
1,528.0	1.50	98.30	1,527.7	4.0	8.1	0.27	0.27	-2.98	-7.4	5.1	5.1
1,715.0	1.40	97.80	1,714.6	3.3	12.8	0.05	-0.05	-0.27	-12.2	5.0	5.0
1,903.0	1.70	317.70	1,902.8	5.1	13.2	1.55	0.16	-74.52	5.1	-13.2	-13.2
2,092.0	1.60	330.90	2,091.5	9.5	10.0	0.21	-0.05	6.98	-3.4	-13.3	-13.3
2,280.0	1.90	319.40	2,279.5	14.1	6.7	0.24	0.16	-6.12	-6.4	-14.3	-14.3
2,468.0	2.10	323.80	2,467.3	19.3	2.6	0.13	0.11	2.34	-14.0	-13.5	-13.5
2,656.0	1.50	315.70	2,655.2	23.8	-1.1	0.35	-0.32	-4.31	-17.8	-15.8	-15.8
2,843.0	1.10	254.80	2,842.2	25.1	-4.6	0.73	-0.21	-32.57	2.2	-25.4	-25.4
3,031.0	0.90	276.40	3,030.2	24.8	-7.8	0.23	-0.11	11.49	-10.5	-23.8	-23.8
3,220.0	0.70	19.60	3,219.2	26.0	-8.9	0.67	-0.11	54.60	-21.6	17.1	17.1
3,407.0	1.70	32.00	3,406.1	29.5	-7.0	0.55	0.53	6.63	-21.3	21.6	21.6
3,595.0	1.50	18.40	3,594.1	34.2	-4.8	0.23	-0.11	-7.23	-30.9	15.3	15.3
3,783.0	0.90	6.20	3,782.0	38.0	-3.8	0.35	-0.32	-6.49	-37.3	7.9	7.9
3,970.0	1.30	39.40	3,969.0	41.1	-2.3	0.39	0.21	17.75	-30.4	27.0	27.0
4,158.0	0.70	39.70	4,156.9	43.6	-0.2	0.32	-0.32	0.16	-34.6	18.4	18.4
4,346.0	2.70	303.40	4,344.9	46.9	-3.2	1.52	1.06	-51.22	2.5	-37.2	-37.2
4,534.0	3.90	305.20	4,532.6	53.0	-12.1	0.64	0.64	0.96	10.1	-37.7	-37.7



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Site:	Green Drake 16 Fed Com	MD Reference:	KB = 25 @ 3444.0usft (HP 444)
Well:	#701H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey											
MD (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
4,721.0	4.60	281.50	4,719.0	59.5	-24.3	0.66	0.37	-7.33	24.2	-31.6	
4,909.0	3.50	287.20	4,908.6	63.9	-36.8	0.61	-0.59	-2.28	32.1	-24.7	
5,096.0	7.00	280.70	5,092.8	69.6	-52.9	1.88	1.87	1.87	32.5	-21.8	
5,283.0	6.80	289.40	5,278.4	77.3	-74.0	0.14	-0.11	-0.70	29.4	-16.5	
5,471.0	6.70	289.90	5,465.1	84.8	-94.8	0.06	-0.05	0.27	26.2	-12.0	
5,658.0	6.50	286.50	5,650.9	91.5	-115.2	0.23	-0.11	-1.82	24.0	-5.2	
5,845.0	8.20	303.80	5,836.3	101.9	-136.5	1.48	0.91	9.25	17.5	-9.0	
6,033.0	7.50	305.60	6,022.6	116.5	-157.6	0.39	-0.37	0.96	11.1	-9.8	
6,221.0	7.30	302.40	6,209.0	130.1	-177.6	0.24	-0.11	-1.70	7.0	-9.4	
6,408.0	7.50	302.40	6,394.5	143.0	-198.0	0.11	0.11	0.00	2.5	-8.9	
6,596.0	7.30	300.50	6,580.9	155.6	-218.6	0.17	-0.11	-1.01	-1.9	-8.1	
6,783.0	7.10	297.80	6,766.4	167.0	-239.1	0.21	-0.11	-1.44	-5.5	-6.7	
6,971.0	7.10	296.00	6,953.0	177.5	-259.8	0.12	0.00	-0.96	-9.1	-4.6	
7,159.0	6.10	293.20	7,139.7	186.6	-279.4	0.56	-0.53	-1.49	-11.1	-2.0	
7,346.0	3.50	299.60	7,326.1	193.3	-293.5	1.42	-1.39	3.42	-7.4	1.7	
7,534.0	4.00	297.50	7,513.7	199.2	-304.3	0.28	0.27	-1.12	-7.3	2.6	
7,721.0	3.30	259.90	7,700.3	201.2	-315.4	1.31	-0.37	-20.11	-16.7	-5.3	
7,909.0	1.70	268.60	7,888.1	200.2	-323.5	0.87	-0.85	4.63	-25.5	-1.8	
8,096.0	0.70	258.50	8,075.1	199.9	-327.4	0.54	-0.53	-5.40	-28.6	-6.8	
8,283.0	0.60	251.90	8,262.1	199.4	-329.5	0.07	-0.05	-3.53	-29.8	-10.1	
8,471.0	2.10	29.30	8,450.0	202.1	-328.7	1.37	0.80	73.09	12.3	28.3	
8,659.0	2.10	30.50	8,637.9	208.1	-325.3	0.02	0.00	0.64	6.0	28.1	
8,847.0	1.70	31.80	8,825.8	213.4	-322.1	0.21	-0.21	0.69	0.5	28.0	
9,035.0	1.70	71.70	9,013.7	216.6	-317.9	0.62	0.00	21.22	13.4	23.0	
9,223.0	1.00	60.20	9,201.7	218.3	-313.9	0.40	-0.37	-6.12	4.2	24.7	
9,411.0	0.60	94.10	9,389.7	219.1	-311.5	0.32	-0.21	18.03	14.9	19.1	
9,599.0	0.60	158.30	9,577.6	218.1	-310.1	0.34	0.00	34.15	22.2	-4.2	



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9,786.0	0.70	175.90	9,764.6	216.0	-309.7	0.12	0.05	9.41	17.8	-10.4	
9,974.0	1.30	224.40	9,952.6	213.4	-311.1	0.52	0.32	25.80	1.1	-19.4	
10,161.0	0.40	88.80	10,139.6	211.9	-311.9	0.86	-0.48	-72.51	13.7	13.2	
10,350.0	0.20	145.80	10,328.6	211.8	-311.1	0.18	-0.11	30.16	17.8	-3.7	
10,537.0	0.70	276.70	10,515.6	211.5	-312.0	0.45	0.27	70.00	-15.4	-10.7	
10,724.0	1.60	267.00	10,702.5	211.5	-315.8	0.49	0.48	-5.19	-17.1	-13.4	
10,910.0	1.20	254.80	10,888.5	210.8	-320.2	0.27	-0.22	-6.56	-18.4	-17.2	
11,098.0	0.80	264.90	11,076.5	210.2	-323.5	0.23	-0.21	5.37	-24.4	-13.4	
11,287.0	1.10	198.80	11,265.4	208.4	-325.4	0.56	0.16	-34.97	0.0	-28.9	
11,474.0	1.60	221.60	11,452.4	204.7	-327.7	0.39	0.27	12.19	-15.4	-26.0	
11,661.0	1.60	174.30	11,639.3	200.2	-329.1	0.69	0.00	-25.29	4.2	-30.9	
11,738.0	2.50	164.30	11,716.3	197.5	-328.6	1.25	1.17	-12.99	6.8	-29.9	
11,859.0	2.60	163.10	11,847.1	191.9	-326.9	0.09	0.08	-0.92	1.6	-29.8	
11,962.0	4.10	164.90	11,940.0	186.6	-325.5	1.62	1.61	1.94	-4.8	-29.7	
11,978.6	7.11	165.03	11,956.5	185.1	-325.0	18.09	18.09	0.75	-6.4	-29.7	
KOP (GD 16 FC #701H)											
12,009.0	12.60	165.10	11,988.4	180.1	-323.7	18.09	18.09	0.25	-10.8	-29.5	
12,056.0	21.50	167.60	12,031.3	166.7	-320.5	18.00	18.94	5.32	-20.7	-27.7	
12,101.0	26.29	166.35	12,072.5	148.9	-316.4	10.70	10.64	-2.79	-29.6	-26.1	
HL Crossing, MD:12101.0', TVD:12072.5', N/S:148.9', EW:-316.4', INC:26.29											
12,103.0	26.50	166.30	12,074.3	148.1	-316.2	10.70	10.65	-2.29	-30.0	-26.0	
12,150.0	29.20	166.50	12,115.8	126.7	-311.0	5.75	5.74	0.43	-38.5	-22.2	
12,197.0	31.40	167.00	12,156.4	103.8	-305.6	4.71	4.68	1.06	-44.2	-17.1	
12,243.0	36.40	172.50	12,194.6	78.4	-301.1	12.74	10.87	11.96	-48.4	-8.9	
12,290.0	39.80	175.40	12,231.5	49.6	-298.1	8.17	7.23	6.17	-49.9	-3.9	
12,337.0	44.90	182.30	12,268.3	18.0	-297.5	14.67	10.85	14.68	-49.4	0.9	



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Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey											
MD (usft)	Inc (")	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLag ("/100usft)	Build ("/100usft)	Turn ("/100usft)	High to Plan (usft)	Right to Plan (usft)	
12,347.5	48.91	182.75	12,273.6	10.4	-297.9	19.37	19.12	4.25	-49.2	0.7	
FTP (GD 16 FC #701H)											
12,384.0	53.90	184.10	12,296.8	-17.6	-289.6	19.37	19.16	3.71	-49.5	-0.6	
12,431.0	55.30	183.90	12,324.1	-55.8	-302.2	3.00	2.88	-0.43	-48.8	-4.0	
12,478.0	57.00	182.30	12,350.2	-94.8	-304.4	4.59	3.62	-3.40	-44.0	-7.4	
12,525.0	57.50	181.20	12,375.7	-134.3	-305.6	2.24	1.06	-2.34	-35.2	-8.6	
12,572.0	64.30	178.20	12,398.5	-175.4	-305.3	15.50	14.47	-6.38	-24.4	-10.1	
12,619.0	68.30	177.10	12,417.4	-218.3	-303.5	8.78	8.51	-2.34	-13.4	-8.5	
12,666.0	77.50	175.70	12,431.2	-263.1	-300.7	19.78	19.57	-2.88	-3.4	-5.7	
12,713.0	85.70	175.20	12,438.1	-309.4	-297.0	17.48	17.45	-1.06	3.1	-2.3	
12,807.0	86.90	174.80	12,444.1	-402.9	-288.8	1.35	1.28	-0.43	9.2	5.3	
12,901.0	88.00	175.70	12,448.3	-496.5	-281.1	1.51	1.17	0.96	13.4	12.5	
12,995.0	91.70	178.20	12,448.6	-590.3	-276.1	4.75	3.94	2.66	13.6	16.8	
13,090.0	89.00	181.50	12,448.0	-685.3	-275.8	4.49	-2.84	3.47	13.0	16.5	
13,184.0	88.30	182.10	12,450.2	-779.2	-278.8	0.98	-0.74	0.64	15.2	12.9	
13,277.0	88.20	181.60	12,453.0	-872.1	-281.8	0.55	-0.11	-0.54	18.1	9.3	
13,370.0	87.80	181.60	12,456.2	-965.0	-284.4	0.32	-0.32	0.00	21.2	6.1	
13,464.0	91.10	181.70	12,457.0	-1,059.0	-287.1	3.41	3.40	0.11	22.0	2.8	
13,557.0	91.30	181.50	12,455.1	-1,151.9	-289.7	0.30	0.22	-0.22	20.1	-0.4	
13,651.0	91.10	181.90	12,453.1	-1,245.9	-292.5	0.48	-0.21	0.43	18.1	-3.7	
13,744.0	89.10	180.50	12,453.0	-1,338.8	-294.4	2.63	-2.15	-1.51	18.0	-6.3	
13,838.0	89.80	181.10	12,453.9	-1,432.8	-295.7	0.98	0.74	0.64	18.9	-8.2	
13,931.0	91.10	180.80	12,453.1	-1,525.8	-297.3	1.43	1.40	-0.32	18.1	-10.4	
14,025.0	89.20	178.90	12,452.9	-1,619.8	-297.0	2.86	-2.02	-2.02	17.9	-10.7	
14,119.0	91.80	178.30	12,452.1	-1,713.7	-294.7	2.84	2.77	-0.64	17.1	-9.0	
14,213.0	90.70	177.90	12,450.0	-1,807.7	-291.6	1.25	-1.17	-0.43	15.0	-6.5	
14,306.0	87.50	177.30	12,451.5	-1,900.6	-287.7	3.50	-3.44	-0.65	16.5	-3.2	



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Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
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Survey											
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14,396.5	87.60	177.69	12,455.3	-1,990.9	-283.8	0.44	0.11	0.43	20.3	0.2	
TGT 1 (GD 16 FC #701H)											
14,400.0	87.60	177.70	12,455.5	-1,994.4	-283.8	0.44	0.11	0.43	20.5	0.3	
14,494.0	87.60	178.00	12,459.4	-2,088.2	-280.1	0.32	0.00	0.32	24.7	3.2	
14,587.0	91.90	177.80	12,459.8	-2,181.2	-276.7	4.63	4.62	-0.22	25.3	6.0	
14,681.0	93.30	177.80	12,455.6	-2,275.0	-273.1	1.49	1.49	0.00	21.3	9.0	
14,774.0	92.20	177.40	12,451.1	-2,367.8	-269.2	1.28	-1.18	-0.43	17.0	12.3	
14,868.0	91.30	178.60	12,448.2	-2,461.7	-265.9	1.60	-0.96	1.28	14.4	15.0	
14,862.0	89.10	178.80	12,447.9	-2,555.7	-263.8	2.35	-2.34	0.21	14.3	16.5	
15,056.0	90.20	179.20	12,448.5	-2,649.6	-262.1	1.25	1.17	0.43	15.1	17.5	
15,150.0	93.60	180.60	12,445.4	-2,743.6	-262.0	3.91	3.62	1.49	12.2	17.1	
15,244.0	92.70	180.10	12,440.2	-2,837.4	-262.5	1.09	-0.96	-0.53	7.3	15.9	
15,338.0	89.10	179.00	12,438.7	-2,931.4	-261.8	4.00	-3.83	-1.17	6.1	16.1	
15,431.0	90.30	182.00	12,439.2	-3,024.4	-262.6	3.47	1.29	3.23	6.8	14.6	
15,524.0	91.10	183.30	12,438.1	-3,117.3	-266.9	1.64	0.86	1.40	5.9	9.8	
15,618.0	91.30	183.90	12,436.1	-3,211.1	-272.8	0.67	0.21	0.64	4.1	3.2	
15,712.0	90.50	185.10	12,434.6	-3,304.8	-280.2	1.53	-0.85	1.28	2.9	-4.7	
15,804.0	93.40	182.20	12,431.5	-3,396.5	-286.0	4.46	3.15	-3.15	0.0	-11.2	
15,899.0	93.50	182.60	12,425.8	-3,491.3	-290.0	0.43	0.11	0.42	-5.4	-15.8	
15,993.0	90.10	183.00	12,422.8	-3,585.1	-294.6	3.64	-3.62	0.43	-8.2	-20.9	
16,087.0	88.80	183.00	12,423.7	-3,678.9	-299.5	1.38	-1.38	0.00	-7.1	-26.5	
16,181.0	85.90	180.10	12,428.1	-3,772.8	-302.1	4.36	-3.09	-3.09	-2.5	-29.6	
16,274.0	84.20	178.10	12,436.1	-3,865.4	-300.6	2.82	-1.83	-2.15	5.8	-28.8	
16,368.0	86.80	177.30	12,443.5	-3,959.0	-296.9	2.89	2.77	-0.85	13.4	-25.6	
16,402.7	88.61	178.30	12,444.9	-3,993.7	-295.5	5.95	5.21	2.87	14.9	-24.5	
TGT 2 (GD 16 FC #701H)											
16,462.0	91.70	180.00	12,444.7	-4,053.0	-294.6	5.95	5.21	2.87	15.2	-24.0	



Final PVA Report

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #701H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3444.0usft (HP 444)
Site:	Green Drake 16 Fed Com	MD Reference:	KB = 25 @ 3444.0usft (HP 444)
Well:	#701H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey											
MD (usft)	Inc (°)	Asl (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLag (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
16,555.0	90.90	180.10	12,442.6	-4,148.0	-294.7	0.87	-0.86	0.11	14.0	-24.7	
16,649.0	90.50	180.80	12,441.4	-4,239.9	-295.5	0.86	-0.43	0.74	13.8	-26.0	
16,742.0	91.50	178.70	12,439.8	-4,332.9	-295.1	2.50	1.08	-2.26	13.1	-26.2	
16,835.0	91.80	177.30	12,437.1	-4,425.8	-291.8	1.54	0.32	-1.51	11.4	-23.6	
16,929.0	87.60	174.60	12,437.6	-4,519.6	-285.2	5.31	-4.47	-2.87	12.9	-17.5	
17,022.0	90.30	177.80	12,439.3	-4,612.3	-279.0	4.50	2.90	3.44	15.5	-12.0	
17,116.0	88.60	178.90	12,440.2	-4,706.3	-276.3	2.15	-1.81	1.17	17.3	-9.9	
17,209.0	89.60	180.70	12,441.7	-4,799.3	-276.0	2.21	1.08	1.94	19.7	-10.1	
17,303.0	89.00	177.30	12,442.9	-4,893.2	-274.3	3.67	-0.64	-3.62	21.8	-9.1	
17,397.0	89.70	175.60	12,443.9	-4,987.0	-268.5	1.96	0.74	-1.81	23.8	-3.9	
17,490.0	89.70	175.20	12,444.4	-5,079.7	-261.1	0.43	0.00	-0.43	25.2	2.9	
17,585.0	95.30	176.00	12,440.3	-5,174.3	-253.8	5.95	5.89	0.84	22.0	9.6	
17,679.0	92.60	173.90	12,433.8	-5,267.7	-245.5	3.64	-2.87	-2.23	16.6	17.2	
17,772.0	90.10	173.80	12,431.6	-5,360.1	-235.6	2.69	-2.89	-0.11	15.3	26.6	
17,866.0	88.80	174.40	12,432.5	-5,453.6	-225.9	1.52	-1.38	0.64	17.1	35.7	
17,959.0	89.80	176.10	12,433.6	-5,546.3	-218.2	2.12	1.08	1.83	19.2	42.8	
18,053.0	91.10	182.80	12,432.9	-5,640.2	-217.4	7.36	1.38	7.23	19.3	43.1	
18,147.0	90.80	181.60	12,431.3	-5,734.2	-221.1	1.42	-0.32	-1.38	18.7	38.8	
18,241.0	90.20	182.00	12,430.5	-5,828.1	-224.0	0.77	-0.64	0.43	18.9	35.2	
18,335.0	92.10	181.70	12,428.6	-5,922.0	-227.1	2.05	2.02	-0.32	17.9	31.6	
18,408.7	92.18	179.90	12,425.9	-5,995.7	-228.1	2.45	0.11	-2.45	15.9	30.1	
TOT 3 (GD 16 FC #701H)											
18,429.0	92.20	179.40	12,425.1	-6,016.0	-228.0	2.45	0.10	-2.45	15.4	30.1	
18,523.0	92.00	179.40	12,421.7	-6,109.9	-227.0	0.21	-0.21	0.00	13.1	30.4	
18,617.0	91.40	182.50	12,418.9	-6,203.8	-228.5	3.36	-0.84	3.30	11.5	28.3	
18,710.0	92.80	181.00	12,415.5	-6,296.7	-231.4	2.21	1.51	-1.61	9.3	24.8	
18,804.0	91.20	180.30	12,412.2	-6,390.6	-232.4	1.86	-1.70	-0.74	7.2	23.2	



Final PVA Report

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #701H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3444.0usft (HP 444)
Site:	Green Drake 16 Fed Corn	MD Reference:	KB = 25 @ 3444.0usft (HP 444)
Well:	#701H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey											
MD (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
18,899.0	91.60	180.60	12,409.9	-6,485.6	-233.2	0.53	0.42	0.32	6.1	21.8	
18,892.0	87.90	182.70	12,410.3	-6,578.6	-235.9	4.57	-3.98	2.26	7.7	18.5	
19,086.0	90.70	184.00	12,411.4	-6,672.4	-241.4	3.28	2.98	1.38	10.1	12.4	
19,180.0	88.70	180.50	12,411.9	-6,766.3	-245.0	4.29	-2.13	-3.72	11.7	8.1	
19,274.0	89.40	179.00	12,413.5	-6,860.3	-244.6	1.78	0.74	-1.60	14.5	7.9	
19,368.0	91.60	180.10	12,412.8	-6,954.3	-243.9	2.62	2.34	1.17	14.9	8.1	
19,461.0	90.60	180.90	12,410.9	-7,047.2	-244.7	1.38	-1.08	0.88	14.3	6.7	
19,555.0	92.10	180.80	12,408.6	-7,141.2	-246.1	1.60	1.60	-0.11	13.3	4.7	
19,649.0	91.10	179.30	12,406.0	-7,235.1	-246.2	1.92	-1.06	-1.60	11.8	4.0	
19,743.0	88.80	177.10	12,406.1	-7,329.1	-243.2	3.39	-2.45	-2.34	13.1	6.3	
19,837.0	90.00	175.70	12,407.1	-7,422.9	-237.3	1.86	1.28	-1.49	15.3	11.6	
19,919.0	90.10	176.40	12,407.0	-7,504.7	-231.7	0.88	0.12	0.85	16.3	16.7	
Final MWD Survey (MD=19919.0')											
19,976.2	90.10	176.40	12,408.9	-7,561.8	-228.1	0.00	0.00	0.00	16.9	20.0	
PBHL (GO 16 FC #701H)											
19,977.0	90.10	176.40	12,408.9	-7,562.6	-228.0	0.00	0.00	0.00	16.9	20.0	
Final Projection to Bit (MD=19977.0')											

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/S (usft)	+E/W (usft)	
12,101.0	12,072.5	148.9	-316.4	HL Crossing, MD:12101.0', TVD:12072.5', N/S:148.9', E/W:-316.4', INC:26.29
19,919.0	12,407.0	-7,504.7	-231.7	Final MWD Survey (MD=19919.0')
19,977.0	12,408.9	-7,562.6	-228.0	Final Projection to Bit (MD=19977.0')

Checked By: _____ Approved By: _____ Date: _____



Lea County, NM (NAD 83 NME)
Green Drake 16 Fed Com #701H
HP 444
Plan #1

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

KB = 25 @ 3444.0usft (HP 444) 3419.0
Northing 411802.00 Easting 773380.00 Latitude 32° 7' 47.852 N Longitude 103° 35' 1.431 W

To convert a Magnetic Direction to a Grid Direction, Add 8.44°
To convert a Magnetic Direction to a True Direction, Add 8.84° East
To convert a True Direction to a Grid Direction, Subtract 0.40°

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Dlog	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	3900.0	0.00	0.00	3900.0	0.0	0.0	0.00	0.00	0.0	
3	4199.9	8.00	303.73	4199.3	8.7	-13.0	2.00	303.73	-8.3	
4	7329.4	6.00	303.73	7311.7	190.3	-285.0	0.00	0.00	-180.8	
5	7629.2	0.00	0.00	7611.0	198.0	-288.0	2.00	180.00	-189.1	
6	11975.7	0.00	0.00	11957.5	199.0	-288.0	0.00	0.00	-189.1	KOP (GD 16 FC #701H)
7	12725.7	90.00	179.63	12435.0	-278.4	-284.9	12.00	179.63	268.0	
8	14439.1	90.00	179.63	12435.0	-1991.8	-283.9	0.00	0.00	2000.0	TGT 1 (GD 16 FC #701H)
9	14448.3	90.14	179.63	12435.0	-1999.0	-283.9	2.00	0.00	2007.3	
10	16440.7	90.14	179.63	12430.0	-3993.3	-271.0	0.00	0.00	4000.0	TGT 2 (GD 16 FC #701H)
11	16462.2	90.57	179.63	12429.0	-4014.9	-270.9	2.00	0.00	4021.6	
12	18442.3	90.57	179.63	12410.0	-5994.8	-258.2	0.00	0.00	6000.0	TGT 3 (GD 16 FC #701H)
13	18450.1	90.73	179.63	12409.9	-8002.6	-258.1	2.00	-0.05	6007.8	
14	20010.7	90.73	179.63	12390.0	-7563.0	-248.1	0.00	0.00	7567.1	PBHL (GD 16 FC #701H)

CASING DETAILS

No casing data is available

WELLSBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N-S	+E-W	Northing	Easting
KOP (GD 16 FC #701H)	11957.5	199.0	-288.0	411802.00	773380.00
PBHL (GD 16 FC #701H)	12390.0	-7563.0	-348.1	404228.85	773131.84
TGT 1 (GD 16 FC #701H)	12410.0	-5994.8	-258.2	405807.20	773121.88
TGT 2 (GD 16 FC #701H)	12430.0	-3993.3	-271.0	407008.70	773108.97
TGT 3 (GD 16 FC #701H)	12435.0	-4014.9	-270.9	411981.00	773082.00
TGT 1 (GD 16 FC #701H)	12435.0	-1991.8	-283.9	409810.20	773096.09

