



HOBBS OCD
OCT 22 2019
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EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Bandit 29 State Com

#704H

OH

Design: OH

Final PVA Report

13 June, 2019



Final PVA Report

Company: EOG Resources - Midland Project: Lea County, NM (NAD 83 NME) Site: Bandit 29 State Com Well: #704H Wellbore: OH Design: OH		Local Co-ordinate Reference: Well #704H TVD Reference: KB = 25 @ 3558.0usft MD Reference: KB = 25 @ 3558.0usft 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 Bandit 29 State Com			
Site Position: From: Map Position Uncertainty: 0.0 usft		Northing: 435,375.00 usft Easting: 771,884.00 usft Slot Radius: 13-3/16 " Latitude: 32° 11' 41.017 N Longitude: 103° 35' 16.930 W Grid Convergence: 0.40 °	
Well #704H			
Well Position +N-S 0.0 usft +E-W 0.0 usft Position Uncertainty 0.0 usft		Northing: 435,314.00 usft Easting: 770,199.00 usft Wellhead Elevation: usft Latitude: 32° 11' 40.528 N Longitude: 103° 35' 36.543 W Ground Level: 3,533.0 usft	
Wellbore OH			
Magnetics		Model Name IGRF2015 Sample Date 3/12/2019 Declination (°) 6.77 Dip Angle (°) 60.01 Field Strength (nT) 47,739.30844528	
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 (°) 179.01	
Survey Program Date 6/13/2019			
From (usft) 229.0		To (usft) 19,965.0	
Survey (Wellbore) Learn MWD (OH)		Tool Name MWD Description OWSG MWD - Standard	



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Survey Calculation Method: Minimum Curvature
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Survey

MD (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	EW (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
229.0	1.30	234.50	229.0	-1.5	-2.1	0.57	0.57	0.00	-2.6	0.0
404.0	1.10	252.30	403.9	-3.2	-5.3	0.24	-0.11	10.17	-8.0	1.4
492.0	1.20	234.50	491.9	-4.0	-6.9	0.42	0.11	-20.23	-7.9	-0.8
582.0	0.90	260.20	581.9	-4.8	-8.3	0.61	-0.33	28.56	-9.0	3.1
770.0	0.90	253.00	769.9	-5.3	-11.2	0.08	0.00	-3.83	-12.3	1.8
863.0	0.90	284.30	862.9	-5.3	-12.6	0.52	0.00	33.68	-10.9	8.3
957.0	0.90	278.00	956.9	-5.1	-14.1	0.11	0.00	-6.70	-13.2	7.0
1,050.0	1.00	265.00	1,049.9	-5.0	-15.6	0.25	0.11	-13.98	-16.0	3.7
1,144.0	1.10	264.60	1,143.8	-5.2	-17.3	0.11	0.11	-0.43	-17.7	3.5
1,238.0	1.10	288.90	1,237.8	-5.0	-18.1	0.45	0.00	23.72	-16.8	10.3
1,329.0	0.70	307.50	1,328.8	-4.4	-20.4	0.56	-0.44	22.84	-13.4	16.0
1,423.0	3.50	28.20	1,422.7	-1.5	-19.5	3.68	2.98	85.85	13.0	15.6
1,517.0	6.10	23.30	1,516.4	5.6	-16.1	2.80	2.77	-5.21	9.2	15.0
1,611.0	8.10	22.70	1,609.7	16.3	-11.6	2.13	2.13	-0.84	5.7	13.0
1,705.0	8.20	22.40	1,702.7	28.6	-8.5	0.12	0.11	-0.32	1.8	10.7
1,798.0	8.10	23.40	1,794.6	40.7	-1.4	0.19	-0.11	1.08	-1.8	8.4
1,893.0	8.10	22.90	1,888.8	53.0	3.9	0.07	0.00	-0.53	-5.6	5.9
1,987.0	8.20	9.90	1,981.9	65.7	7.6	1.96	0.11	-13.83	-10.2	2.8
2,081.0	8.30	8.80	2,074.9	79.0	9.8	0.20	0.11	-1.17	-13.9	2.5
2,175.0	8.30	9.00	2,167.9	92.5	11.9	0.03	0.00	0.21	-17.7	2.6
2,269.0	8.30	8.70	2,261.0	105.9	14.0	0.05	0.00	-0.32	-21.5	2.5
2,363.0	8.10	8.70	2,354.0	119.1	16.0	0.21	-0.21	0.00	-25.1	2.6
2,456.0	8.00	9.20	2,446.1	132.0	18.1	0.13	-0.11	0.54	-28.4	2.8
2,550.0	8.00	8.50	2,539.2	144.9	20.1	0.10	0.00	-0.74	-31.7	2.4
2,644.0	8.20	8.00	2,632.2	158.0	22.0	0.23	0.21	-0.53	-35.2	2.3
2,738.0	7.10	17.60	2,725.4	170.2	24.7	1.79	-1.17	10.21	-37.0	7.7



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MD Reference: KB = 25 @ 3558.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
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)	
2,832.0	7.10	15.50	2,818.7	181.3	28.0	0.28	0.00	-2.23	-39.2	5.0	
2,926.0	7.30	15.70	2,911.9	192.7	31.2	0.21	0.21	0.21	-41.2	4.0	
3,020.0	7.00	15.20	3,005.2	204.0	34.3	0.33	-0.32	-0.53	-43.2	2.5	
3,114.0	5.60	6.60	3,098.6	214.0	36.3	1.79	-1.49	-9.15	-43.5	-4.4	
3,209.0	5.00	0.20	3,193.2	222.8	36.8	0.89	-0.63	-6.74	-41.7	-8.2	
3,302.0	4.70	354.30	3,285.9	230.6	36.5	0.63	-0.32	-6.34	-39.1	-10.4	
3,396.0	5.30	26.90	3,379.6	238.3	38.1	3.04	0.64	34.68	-36.8	11.2	
3,490.0	5.30	40.80	3,473.2	245.5	42.9	1.36	0.00	14.79	-33.2	15.6	
3,584.0	4.90	43.30	3,566.8	251.7	48.5	0.49	-0.43	2.66	-32.7	11.6	
3,678.0	4.80	39.10	3,660.5	257.7	53.7	0.39	-0.11	-4.47	-32.9	4.0	
3,772.0	5.30	19.70	3,754.1	264.8	57.6	1.88	0.53	-20.64	-30.8	-10.2	
3,866.0	4.90	13.10	3,847.7	272.8	60.0	0.75	-0.43	-7.02	-27.9	-14.9	
3,960.0	4.60	12.50	3,941.4	280.4	61.7	0.32	-0.32	-0.64	-25.7	-15.9	
4,053.0	3.50	14.30	4,034.2	286.8	63.2	1.19	-1.18	1.94	-23.1	-15.8	
4,146.0	3.50	4.30	4,128.0	292.5	64.2	0.64	0.00	-10.53	-15.9	-19.3	
4,241.0	5.10	8.30	4,221.7	299.4	65.0	1.75	1.72	4.30	-14.4	-17.8	
4,335.0	4.60	27.60	4,315.4	306.9	67.3	1.81	-0.53	20.53	-17.9	-13.9	
4,429.0	6.00	36.10	4,409.0	314.2	72.0	1.70	1.49	9.04	-19.6	-15.0	
4,523.0	6.20	15.50	4,502.5	323.1	76.2	2.33	0.21	-21.91	-13.0	-23.8	
4,617.0	6.20	20.10	4,595.9	332.7	79.3	0.53	0.00	4.89	-15.4	-24.2	
4,712.0	6.40	14.60	4,690.3	342.7	82.4	0.67	0.21	-5.79	-13.5	-27.0	
4,805.0	6.20	355.00	4,782.8	352.7	83.3	2.31	-0.22	-21.08	-4.2	-29.4	
4,899.0	5.60	343.70	4,876.3	362.1	81.8	1.39	-0.64	-12.02	0.9	-26.4	
4,993.0	4.80	339.10	4,969.9	370.2	78.9	0.96	-0.85	-4.89	3.0	-21.6	
5,087.0	5.50	338.10	5,063.5	378.1	75.8	0.75	0.74	-1.06	3.4	-16.7	
5,181.0	5.30	336.30	5,157.1	386.2	72.4	0.28	-0.21	-1.91	3.4	-11.5	
5,275.0	5.40	336.30	5,250.7	394.2	68.8	0.11	0.11	0.00	2.9	-6.2	



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Survey

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5,368.0	5.10	337.70	5,343.3	402.1	65.5	0.35	-0.32	1.51	2.5	-1.1
5,461.0	4.00	348.30	5,438.0	409.1	63.3	1.48	-1.18	11.40	4.0	2.8
5,555.0	2.60	3.40	5,529.9	414.4	62.7	1.74	-1.49	18.06	6.5	3.0
5,649.0	1.90	345.60	5,623.8	418.1	62.5	1.04	-0.74	-18.94	5.5	5.9
5,742.0	1.80	333.90	5,716.8	420.9	61.5	0.42	-0.11	-12.58	2.2	7.2
5,836.0	1.70	336.50	5,810.7	423.5	60.3	0.14	-0.11	2.77	-0.4	7.2
5,929.0	1.60	328.60	5,903.7	425.8	59.0	0.27	-0.11	-8.49	-4.0	6.9
6,023.0	1.30	327.40	5,997.6	427.9	57.8	0.32	-0.32	-1.28	-6.5	6.8
6,117.0	1.20	318.70	6,091.6	429.5	56.5	0.23	-0.11	-9.26	-9.5	5.5
6,211.0	1.10	328.10	6,185.6	431.0	55.4	0.23	-0.11	10.00	-10.4	7.2
6,304.0	1.10	318.20	6,278.6	432.4	54.4	0.20	0.00	-10.65	-13.2	5.1
6,397.0	1.10	314.30	6,371.6	433.7	53.1	0.08	0.00	-4.19	-15.3	4.2
6,490.0	1.10	310.30	6,464.5	434.9	51.8	0.08	0.00	-4.30	-17.4	3.0
6,586.0	1.20	309.80	6,560.5	436.2	50.3	0.10	0.10	-0.52	-19.3	2.9
6,679.0	1.10	295.20	6,653.5	437.2	48.8	0.33	-0.11	-15.70	-21.2	-2.3
6,773.0	1.10	296.20	6,747.5	437.9	47.1	0.02	0.00	1.06	-23.1	-1.9
6,861.0	1.10	300.80	6,835.5	439.7	44.0	0.05	0.00	2.45	-26.8	0.1
7,055.0	0.90	288.50	7,029.4	440.4	42.5	0.31	-0.21	-13.09	-27.8	-5.8
7,148.0	0.40	35.20	7,122.4	440.9	42.0	1.17	-0.54	114.73	2.3	29.0
7,241.0	0.20	78.80	7,215.4	441.2	42.3	0.31	-0.22	46.88	21.2	19.7
7,335.0	0.20	284.30	7,309.4	441.2	42.3	0.42	0.00	-164.36	-27.7	-8.7
7,429.0	0.30	285.20	7,403.4	441.3	41.9	0.11	0.11	0.96	-28.2	-8.2
7,523.0	0.60	276.40	7,497.4	441.4	41.2	0.33	0.32	-9.36	-27.3	-12.5
7,613.0	0.60	249.80	7,587.4	441.3	40.3	0.31	0.00	-29.56	-19.8	-23.6
7,640.3	0.69	253.18	7,614.7	441.2	40.0	0.34	0.32	12.37	-21.4	-22.4
Brushy Top(Bandit 29 St Com #704H)										
7,706.0	0.90	258.60	7,680.4	441.0	39.1	0.34	0.33	8.25	-24.3	-20.2



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7,800.0	1.70	252.30	7,774.4	440.5	37.1	0.86	0.85	-6.70	-24.1	-22.9	
7,893.0	0.80	172.70	7,867.4	439.3	35.9	1.91	-0.86	-85.59	17.2	-29.2	
7,987.0	2.50	118.50	7,981.3	437.6	37.8	2.24	1.70	-57.66	31.2	-3.8	
8,081.0	2.80	116.60	8,055.2	435.6	41.6	0.33	0.32	-2.02	27.0	-2.8	
8,174.0	2.70	119.90	8,148.1	433.5	45.5	0.20	-0.11	3.55	22.3	-4.2	
8,268.0	2.80	118.00	8,242.0	431.3	49.5	0.14	0.11	-2.02	17.9	-3.5	
8,363.0	2.70	119.20	8,336.9	429.1	53.5	0.12	-0.11	1.26	13.3	-3.9	
8,457.0	2.70	122.90	8,430.8	426.8	57.3	0.19	0.00	3.94	8.6	-4.6	
8,550.0	2.60	127.70	8,523.7	424.4	60.8	0.26	-0.11	5.16	3.9	-5.1	
8,643.0	2.70	133.10	8,616.6	421.6	64.1	0.29	0.11	5.81	-0.9	-5.2	
8,738.0	2.30	140.00	8,711.5	418.6	66.8	0.53	-0.42	7.26	-5.6	-4.8	
8,926.0	1.50	189.20	8,899.4	413.3	69.0	0.93	-0.43	26.17	-12.3	4.0	
9,019.0	1.90	190.10	8,992.4	410.5	68.5	0.43	0.43	0.97	-15.0	4.2	
9,112.0	1.80	186.40	9,085.3	407.6	68.1	0.17	-0.11	-3.98	-18.2	3.1	
9,206.0	1.80	198.50	9,179.3	404.7	67.4	0.40	0.00	12.87	-20.1	7.2	
9,299.0	1.90	187.10	9,272.2	401.8	66.8	0.41	0.11	-12.26	-24.0	2.8	
9,393.0	1.30	184.30	9,366.2	399.2	66.3	0.67	-0.64	7.66	-26.1	5.9	
9,486.0	1.60	191.30	9,459.2	396.9	65.8	0.33	0.32	-3.23	-28.8	4.5	
9,580.0	1.80	144.40	9,553.1	394.4	66.4	1.45	0.21	-49.89	-25.3	-18.9	
9,674.0	1.50	143.00	9,647.1	392.2	68.0	0.32	-0.32	-1.49	-27.6	-18.5	
9,767.0	1.60	124.90	9,740.1	390.5	69.8	0.53	0.11	-18.46	-22.6	-27.5	
9,861.0	0.80	52.80	9,834.0	390.2	71.4	1.65	-0.85	-76.70	18.2	-31.2	
10,048.0	1.00	227.20	10,021.0	389.9	71.2	0.86	0.11	93.26	-21.4	29.4	
10,142.0	2.00	308.70	10,115.0	380.3	69.4	2.23	1.06	86.70	24.1	26.4	
10,236.0	1.60	324.20	10,209.0	392.4	67.3	0.67	-0.43	16.49	27.4	18.4	
10,329.0	1.20	316.30	10,301.9	394.2	65.9	0.48	-0.43	-8.49	22.2	22.8	
10,422.0	1.10	294.70	10,394.9	395.3	64.4	0.48	-0.11	-23.23	10.5	29.0	



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10,609.0	0.70	88.60	10,581.9	396.0	63.9	0.94	-0.21	82.30	3.8	-29.9	
10,702.0	0.90	169.30	10,674.9	395.3	64.8	1.13	0.22	86.77	-29.7	-8.0	
10,796.0	1.50	136.60	10,768.9	393.7	65.8	0.94	0.84	-34.79	-22.5	-23.2	
10,890.0	0.70	56.30	10,862.9	393.1	66.9	1.64	-0.85	-85.43	18.3	-27.3	
11,078.0	1.40	295.40	11,050.9	394.8	65.8	0.99	0.37	-64.31	12.3	28.7	
11,172.0	2.10	277.80	11,144.8	395.5	63.0	0.93	0.74	-18.72	0.2	30.8	
11,266.0	1.20	256.30	11,238.8	395.5	60.4	1.15	-0.96	-22.87	-13.7	28.1	
11,360.0	1.20	243.00	11,332.7	394.8	58.6	0.30	0.00	-14.15	-21.7	24.0	
11,454.0	1.10	245.10	11,428.7	394.0	56.9	0.12	-0.11	2.23	-22.7	24.8	
11,549.0	2.10	271.50	11,521.7	393.6	54.3	1.28	1.05	27.79	-11.9	32.7	
11,643.0	1.80	265.70	11,615.6	393.6	51.1	0.38	-0.32	-6.17	-18.3	31.1	
11,737.0	2.10	241.40	11,709.6	392.6	48.1	0.93	0.32	-25.85	-32.5	20.3	
11,784.0	1.60	243.70	11,738.6	392.2	47.3	1.87	-1.85	8.52	-32.6	21.6	
11,869.0	1.70	224.30	11,841.5	390.5	44.9	0.54	0.10	-18.48	-40.8	9.0	
11,962.0	1.50	233.80	11,934.5	388.8	43.0	0.36	-0.22	10.22	-41.4	15.9	
12,056.0	13.40	161.80	12,027.6	377.6	45.4	13.84	12.66	-76.60	-35.4	-34.3	
12,065.6	15.28	161.24	12,036.9	375.4	46.2	19.60	19.54	-5.87	-36.2	-34.2	
HL Crossing, MD:12065.6', TVD:12036.9', N/S:375.4', E/W:46.2', INC:15.28											
12,149.0	31.60	159.10	12,113.2	344.4	57.6	19.60	19.57	-2.56	-49.5	-28.1	
12,243.0	40.60	158.80	12,189.0	292.7	77.5	9.58	9.57	-0.32	-68.4	-11.8	
12,337.0	44.90	159.80	12,258.0	233.0	100.0	4.63	4.57	1.06	-77.4	12.7	
12,353.9	46.20	162.04	12,269.9	221.6	103.9	12.18	7.68	13.23	-78.9	19.4	
FTP(Bandit 29 St Com #704H)											
12,431.0	52.60	171.10	12,320.1	164.8	117.3	12.18	8.30	11.76	-68.7	42.7	
12,525.0	57.70	180.20	12,373.9	88.0	122.9	9.61	5.43	9.68	-48.0	54.2	
12,618.0	68.10	181.80	12,416.2	5.4	121.4	11.29	11.18	1.72	-25.0	51.8	
12,680.0	78.20	183.00	12,434.1	-53.8	118.9	16.39	16.29	1.94	-11.1	48.4	



Final PVA Report

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #704H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3558.0usft
Site:	Bandit 29 State Com	MD Reference:	KB = 25 @ 3558.0usft
Well:	#704H	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)	EW (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
12,716.0	81.60	182.70	12,440.4	-89.2	117.2	9.48	9.44	-0.83	-4.9	46.2	
12,809.0	88.50	183.40	12,450.1	-181.6	112.2	5.32	5.27	0.75	5.3	40.5	
12,902.0	91.50	179.70	12,451.7	-274.5	109.7	6.69	5.38	-3.98	7.6	37.3	
12,995.0	91.50	181.30	12,449.3	-367.4	108.9	1.72	0.00	1.72	5.9	35.8	
13,090.0	92.00	180.40	12,446.4	-462.4	107.5	1.08	0.53	-0.95	3.8	33.6	
13,183.0	91.80	179.30	12,443.3	-555.3	107.8	1.20	-0.22	-1.18	1.6	33.2	
13,277.0	91.90	181.10	12,440.2	-649.3	107.4	1.92	0.11	1.91	-0.7	32.1	
13,370.0	92.40	180.40	12,438.7	-742.2	106.2	0.92	0.54	-0.75	-3.3	30.2	
13,377.3	92.34	180.60	12,436.4	-749.5	106.1	2.82	-0.86	2.69	-3.6	30.1	
TGT#1(Bandit 29 St Com #704H)											
13,463.0	91.60	182.90	12,433.5	-835.1	103.5	2.82	-0.86	2.69	-5.2	26.8	
13,557.0	91.40	184.10	12,431.0	-928.9	97.8	1.29	-0.21	1.28	-6.2	20.3	
13,651.0	91.50	181.60	12,428.7	-1,022.7	93.1	2.86	0.11	-2.66	-7.1	14.9	
13,745.0	90.90	181.60	12,426.7	-1,116.7	90.5	0.64	-0.64	0.00	-7.5	11.6	
13,840.0	91.80	182.20	12,424.5	-1,211.6	87.4	1.14	0.95	0.63	-8.2	7.7	
13,933.0	91.30	181.10	12,421.9	-1,304.5	84.7	1.30	-0.54	-1.18	-9.3	4.3	
14,027.0	91.80	180.80	12,419.4	-1,398.5	83.1	0.62	0.53	-0.32	-10.3	2.0	
14,121.0	91.50	182.70	12,416.7	-1,492.4	80.3	2.05	-0.32	2.02	-11.5	-1.6	
14,214.0	90.20	180.80	12,415.3	-1,585.3	77.4	2.48	-1.40	-2.04	-11.4	-5.1	
14,308.0	90.10	181.60	12,415.1	-1,679.3	75.4	0.88	-0.11	0.85	-10.2	-7.8	
14,402.0	89.90	178.60	12,415.1	-1,773.3	75.3	3.20	-0.21	-3.19	-8.7	-8.7	
14,496.0	91.80	180.60	12,413.6	-1,867.3	75.9	3.01	2.13	2.13	-8.7	-8.8	
14,590.0	90.80	180.10	12,411.4	-1,961.2	75.4	1.29	-1.17	-0.53	-9.4	-10.1	
14,683.0	90.10	178.50	12,410.6	-2,054.2	76.5	1.88	-0.75	-1.72	-8.6	-9.7	
14,777.0	92.30	179.30	12,408.7	-2,148.2	78.3	2.49	2.34	0.85	-9.1	-8.6	
14,871.0	90.00	178.60	12,406.8	-2,242.1	80.0	2.56	-2.45	-0.74	-9.5	-7.6	
14,965.0	87.70	178.50	12,408.7	-2,336.1	82.4	2.45	-2.45	-0.11	-6.1	-6.0	



Final PVA Report

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Bandit 29 State Com
Well: #704H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #704H
TVD Reference: KB = 25 @ 3558.0usft
MD Reference: KB = 25 @ 3558.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.14

Survey

MD (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	NS (usft)	EW (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
15,055.0	84.30	179.00	12,415.0	-2,425.8	84.4	3.82	-3.78	0.56	1.6	-4.7
15,149.0	92.70	181.10	12,417.4	-2,519.7	84.3	9.21	8.94	2.23	5.6	-5.5
15,242.0	92.00	180.20	12,413.6	-2,612.6	83.2	1.23	-0.75	-0.97	3.2	-7.3
15,336.0	90.10	178.80	12,411.9	-2,706.6	84.0	2.51	-2.02	-1.49	3.0	-7.2
15,430.0	88.90	179.70	12,412.7	-2,800.6	85.3	1.60	-1.28	0.96	5.3	-6.7
15,524.0	88.40	179.90	12,414.9	-2,894.6	85.6	0.57	-0.53	0.21	9.0	-7.1
15,578.0	88.81	180.07	12,416.2	-2,948.5	85.6	0.82	0.75	0.32	11.2	-7.5
TGT#2(Bandit 29 St Com #704H)										
15,617.0	89.10	180.20	12,416.9	-2,987.5	85.5	0.82	0.75	0.32	12.3	-7.9
15,711.0	90.00	179.50	12,417.7	-3,081.5	85.8	1.21	0.96	-0.74	12.3	-8.4
15,805.0	91.30	179.70	12,416.6	-3,175.5	86.4	1.40	1.38	0.21	10.2	-8.4
15,898.0	91.70	180.40	12,414.2	-3,268.5	86.3	0.87	0.43	0.75	6.8	-9.2
15,992.0	89.90	179.00	12,412.9	-3,362.5	86.8	2.43	-1.91	-1.49	4.5	-9.5
16,086.0	88.40	178.50	12,414.3	-3,456.4	88.9	1.68	-1.60	-0.53	4.9	-8.1
16,179.0	90.50	179.50	12,415.2	-3,549.4	90.5	2.50	2.26	1.08	4.9	-7.2
16,273.0	89.30	179.90	12,415.3	-3,643.4	91.0	1.35	-1.28	0.43	4.0	-7.5
16,367.0	91.50	178.80	12,414.7	-3,737.4	92.2	2.72	2.34	-1.38	2.4	-7.0
16,461.0	91.40	180.80	12,412.3	-3,831.4	92.7	2.34	-0.11	2.34	-1.0	-7.2
16,554.0	88.40	182.30	12,412.4	-3,924.3	90.2	3.61	-3.23	1.61	-1.8	-10.4
16,628.0	89.11	182.61	12,414.1	-3,988.2	87.0	1.05	0.96	0.43	-1.0	-14.2
TGT#3(Bandit 29 St Com #704H)										
16,648.0	89.30	182.70	12,414.3	-4,018.2	88.1	1.05	0.96	0.43	-0.9	-15.3
16,741.0	89.00	180.80	12,415.7	-4,111.1	83.3	2.07	-0.32	-2.04	-1.2	-18.8
16,835.0	88.40	180.80	12,417.8	-4,205.1	82.0	0.64	-0.64	0.00	-0.7	-20.9
16,929.0	88.60	180.90	12,420.3	-4,299.1	80.6	0.24	0.21	0.11	0.1	-23.0
17,023.0	90.70	179.50	12,420.9	-4,393.1	80.2	2.68	2.23	-1.49	-1.0	-24.0
17,116.0	91.10	179.90	12,419.4	-4,486.0	80.7	0.61	0.43	0.43	-4.0	-24.3



Final PVA Report

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TVD Reference: KB = 25 @ 3558.0usft
MD Reference: KB = 25 @ 3558.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.14

Survey

MD (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLog (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
17,209.0	90.00	179.90	12,418.5	-4,579.0	80.9	1.18	-1.18	0.00	-6.6	-24.8
17,303.0	93.40	182.20	12,415.7	-4,673.0	79.2	4.37	3.62	2.45	-10.9	-27.3
17,397.0	87.70	178.30	12,414.8	-4,766.9	78.8	7.35	-6.06	-4.15	-13.5	-28.4
17,490.0	88.30	177.60	12,419.7	-4,859.7	82.1	1.68	-1.51	-0.75	-10.3	-25.8
17,583.0	87.10	176.50	12,425.1	-4,952.4	86.9	1.46	0.86	-1.18	-6.5	-21.8
17,676.0	88.50	175.50	12,428.6	-5,045.1	93.3	1.85	1.51	-1.08	-4.8	-16.0
17,770.0	87.70	175.50	12,431.7	-5,138.8	100.7	0.85	-0.85	0.00	-3.2	-9.3
17,863.0	91.60	176.50	12,432.3	-5,231.5	107.2	4.33	4.19	1.08	-4.2	-3.6
17,957.0	91.50	177.10	12,429.8	-5,325.4	112.4	0.85	-0.11	0.84	-8.4	1.0
18,052.0	91.60	177.40	12,427.2	-5,420.2	117.0	0.33	0.11	0.32	-12.7	4.8
18,145.0	89.80	178.60	12,426.0	-5,513.1	120.2	2.24	-1.83	1.29	-15.5	7.3
18,239.0	89.50	179.30	12,426.5	-5,607.1	122.0	0.86	-0.43	0.74	-16.7	8.3
18,333.0	87.90	180.10	12,428.6	-5,701.1	122.5	1.90	-1.70	0.85	-18.2	8.1
18,426.0	89.80	179.20	12,430.5	-5,794.1	123.0	2.26	2.04	-0.97	-15.9	7.9
18,521.0	89.30	179.70	12,431.2	-5,889.1	123.9	0.74	-0.53	0.53	-16.9	8.1
18,615.0	89.60	180.80	12,432.1	-5,983.1	123.5	1.21	0.32	1.17	-17.6	7.0
18,631.2	89.41	180.85	12,432.3	-5,989.3	123.3	1.21	-1.17	0.32	-17.7	6.6
TGT#4(Bandit 29 St Com #704H)										
18,709.0	88.50	181.10	12,433.7	-6,077.0	122.0	1.21	-1.17	0.32	-17.0	4.7
18,803.0	87.90	182.30	12,436.6	-6,170.9	119.2	1.43	-0.64	1.28	-14.8	1.2
18,898.0	90.70	181.50	12,437.8	-6,265.9	116.0	3.07	2.95	-0.84	-14.3	-2.7
18,991.0	91.50	180.90	12,436.0	-6,358.8	114.1	1.08	0.86	-0.65	-16.8	-5.4
19,085.0	90.50	179.90	12,434.4	-6,452.8	113.4	1.50	-1.06	-1.06	-19.1	-6.8
19,180.0	87.60	179.20	12,435.9	-6,547.8	114.2	3.14	-3.05	-0.74	-18.3	-6.8
19,273.0	91.80	181.50	12,436.4	-6,640.8	113.6	5.15	4.52	2.47	-18.5	-8.0
19,367.0	92.40	182.30	12,433.0	-6,734.6	110.5	1.06	0.64	0.85	-22.6	-11.9
19,460.0	90.30	181.50	12,430.8	-6,827.8	107.4	2.42	-2.26	-0.86	-25.5	-15.7



Final PVA Report

Company: EOG Resources - Midland
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Site: Bandit 29 State Com
Well: #704H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #704H
TVD Reference: KB = 25 @ 3558.0usft
MD Reference: KB = 25 @ 3558.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.14

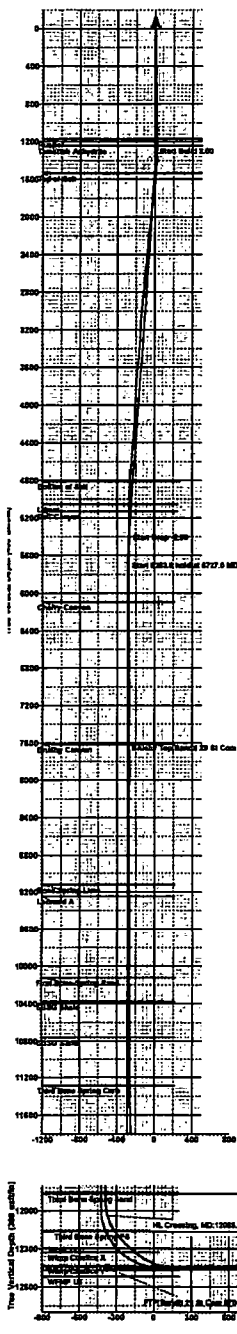
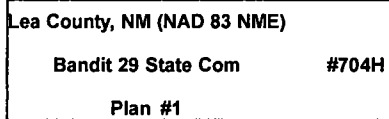
Survey

MD (usft)	Inc (")	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (*/100usft)	Bulld (*/100usft)	Turn (*/100usft)	High to Plan (usft)	Right to Plan (usft)
19,553.0	91.10	181.80	12,429.7	-6,920.5	104.7	0.92	0.88	0.32	-27.3	-19.1
19,647.0	89.80	181.10	12,428.9	-7,014.5	102.4	1.57	-1.38	-0.74	-28.7	-22.2
19,740.0	89.20	180.80	12,429.7	-7,107.5	100.8	0.72	-0.65	-0.32	-28.6	-24.4
19,833.0	89.00	180.80	12,431.2	-7,200.4	99.5	0.22	-0.22	0.00	-27.8	-26.5
19,910.0	89.30	180.90	12,432.3	-7,277.4	98.4	0.41	0.39	0.13	-27.3	-28.2
Final MWD Survey (MD=19910.0')										
19,965.0	89.30	180.90	12,433.0	-7,332.4	97.5	0.00	0.00	0.00	-27.0	-29.5
Final Projection to Bit (MD=19965.0') - PBHL(Bandit 29 St Com #704H)										

Design Annotations

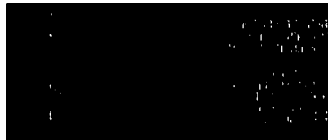
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/S (usft)	+E/W (usft)	
12,065.6	12,038.9	375.4	48.2	HL Crossing, MD:12065.6', TVD:12038.9', N/S:375.4', E/W:48.2', INC:15.28
19,910.0	12,432.3	-7,277.4	98.4	Final MWD Survey (MD=19910.0')
19,965.0	12,433.0	-7,332.4	97.5	Final Projection to Bit (MD=19965.0')

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



To convert a Magnetic Direction to a Grid Direction, Add 0.38°
 To convert a Magnetic Direction to a True Direction, Add 0.77° E.
 To convert a True Direction to a Grid Direction, Subtract 0.39°

WELLBORE TARGET DETAILS: #704H										
3533.0 KB = 25 @ 3558.0uoft +N/S +E/W Northing Easting Latitude Longitude 0.0 0.0 435314.00 770199.00 32° 11' 40.528 N 103° 35' 36.543 W Slot										
SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/S	+E/W	Dleg	TFace	VScet	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1300.0	0.00	0.00	1300.0	0.0	0.0	0.00	0.00	0.0	
3	1599.9	6.00	8.94	1599.3	15.5	2.4	2.00	8.94	-15.4	
4	5427.2	6.00	8.94	5405.7	410.5	64.6	0.00	0.00	-409.3	
5	5727.0	0.00	0.00	5705.0	426.0	67.0	2.00	180.00	-424.8	
6	11990.6	0.00	0.00	11968.6	426.0	67.0	0.00	0.00	-424.8	
7	12744.8	60.50	178.56	12440.0	-55.8	70.7	12.00	178.56	56.8	
8	13438.0	60.50	178.56	12446.0	-74.88	76.1	0.00	0.00	750.0	TGT#1(Bandit 29 St Com #704H)
9	13458.7	60.81	178.56	12437.0	-70.5	76.2	2.00	0.00	770.7	
10	15638.4	90.91	178.56	12405.0	-264.8	93.1	0.00	0.00	2950.0	TGT#2(Bandit 29 St Com #704H)
11	15714.1	89.40	178.56	12404.8	-302.45	93.7	2.00	180.00	302.6	
12	16688.5	89.40	178.56	12415.0	-399.8	101.2	0.00	0.00	4000.0	TGT#3(Bandit 29 St Com #704H)
13	16708.7	89.00	178.56	12415.3	-401.9	101.4	2.00	-180.00	402.0	
14	18688.9	89.00	178.56	12450.0	-598.9	116.7	0.00	0.00	6000.0	TGT#4(Bandit 29 St Com #704H)
15	18718.0	89.58	178.56	12454.0	-602.8	116.9	2.00	0.00	6029.1	
16	20023.1	69.58	178.56	12460.0	-733.0	127.0	0.00	0.00	7334.1	PBH1(Bandit 29 St Com #704H)
WELLBORE TARGET DETAILS (MAP CO-ORDINATES)										
Name	TVD	+N/S	+E/W	Northing	Easting	Shape				
Brushy Top(Bandit 29 St Com #704H)	7816.0	426.0	67.0	435742.00	770268.00	Polygon				
TG1#1(Bandit 29 St Com #704H)	12468.0	-264.8	93.1	432538.20	770232.10	Point				
TG1#2(Bandit 29 St Com #704H)	12416.0	-388.8	101.2	431516.20	770300.22	Point				
TG1#3(Bandit 29 St Com #704H)	12440.0	-74.88	76.1	434885.20	770278.08	Point				
TG1#4(Bandit 29 St Com #704H)	12460.0	-598.9	116.7	433699.00	770268.00	Point				
PBH1(Bandit 29 St Com #704H)	12450.0	-602.8	116.9	432616.10	770314.68	Point				
Rectangle (Sides: LDU W60.0)	12460.0	-733.0	127.0	427891.00	770323.00	Rectangle (Sides: LDU W60.0)				

