



HOBBS OCD
OCT 18 2019
RECEIVED

EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Bandit 29 State Com

#701Y

OH

Design: OH

Midland PVA

25 May, 2019



Midland PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Bandit 29 State Com
Well: #701Y
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #701Y
TVD Reference: KB = 25' @ 3553.0usft
MD Reference: KB = 25' @ 3553.0usft
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:		Northing:	435,375.00 usft	Latitude:	32° 11' 41.017 N
From:	Map	Easting:	771,884.00 usft	Longitude:	103° 35' 16.930 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.40 "

Well #701Y

Well Position	+N-S	0.0 usft	Northing:	435,359.00 usft	Latitude:	32° 11' 40.833 N
	+E-W	0.0 usft	Easting:	772,252.00 usft	Longitude:	103° 35' 12.648 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,528.0 usft

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	4/22/2019	6.76	60.01	47,728.54286918

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	179.59

Survey Program Date 5/25/2019

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
140.0	19,932.0	Intrepid MWD (OH)	MWD	OWSG MWD - Standard



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0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0
140.0	1.76	229.16	140.0	-1.4	-1.6	1.26	1.26	0.00	-2.2	0.0	
226.0	2.15	213.96	225.9	-3.6	-3.5	0.75	0.45	-17.67	-5.0	-0.9	
312.0	2.11	231.10	311.9	-5.9	-5.7	0.74	-0.05	19.93	-8.1	1.1	
399.0	2.15	207.28	398.8	-8.4	-7.7	1.01	0.05	-27.38	-11.0	-3.0	
487.0	1.98	209.56	486.8	-11.2	-9.2	0.21	-0.19	2.59	-14.2	-2.5	
579.0	1.05	168.96	578.7	-13.4	-9.8	1.48	-1.01	-44.13	-11.3	-12.2	
671.0	0.70	120.97	670.7	-14.5	-9.1	0.85	-0.38	-52.16	0.4	-17.1	
763.0	0.79	125.45	762.7	-15.2	-8.1	0.12	0.10	4.87	-2.2	-17.1	
855.0	0.70	108.75	854.7	-15.7	-7.1	0.25	-0.10	-18.15	1.7	-17.2	
947.0	0.57	103.48	946.7	-16.0	-6.1	0.15	-0.14	-5.73	2.2	-17.0	
1,039.0	0.31	78.43	1,038.7	-16.1	-5.4	0.35	-0.28	-27.23	8.5	-14.6	
1,132.0	0.57	76.15	1,131.7	-15.9	-4.7	0.28	0.28	-2.45	8.4	-14.3	
1,224.0	0.40	127.21	1,223.7	-16.0	-4.0	0.48	-0.18	55.50	-8.5	-15.2	
1,397.0	0.57	119.74	1,396.7	-16.8	-2.8	0.10	0.10	-4.32	-5.9	-16.0	
1,489.0	0.57	100.23	1,488.7	-17.1	-2.0	0.21	0.00	-21.21	-1.1	-17.2	
1,590.0	0.26	63.31	1,589.7	-17.1	-1.3	0.39	-0.31	-36.55	8.8	-14.7	
1,685.0	0.35	142.24	1,684.7	-17.2	-0.9	0.41	0.09	83.08	-13.1	-11.2	
1,780.0	0.26	155.95	1,779.7	-17.6	-0.6	0.12	-0.09	14.43	-15.8	-7.8	
1,874.0	0.22	86.08	1,873.7	-17.8	-0.4	0.29	-0.04	-74.33	1.6	-17.7	
1,969.0	0.22	222.22	1,968.7	-17.9	-0.3	0.43	0.00	143.31	-13.5	11.8	
2,064.0	0.26	125.72	2,063.7	-18.2	-0.2	0.36	0.04	-101.58	-10.4	-14.9	
2,153.0	0.22	192.78	2,152.7	-18.5	-0.1	0.30	-0.04	75.35	-18.0	4.0	
2,248.0	0.09	12.16	2,247.7	-18.6	-0.1	0.33	-0.14	188.82	18.2	-3.8	
2,343.0	0.22	55.84	2,342.7	-18.4	0.0	0.18	0.14	45.98	10.3	-15.2	
2,438.0	0.18	129.14	2,437.7	-18.4	0.3	0.25	-0.04	77.16	-11.8	-14.1	
2,533.0	2.46	5.13	2,532.6	-16.5	0.6	2.70	2.40	-130.54	16.3	-2.1	



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2,629.0	3.21	5.48	2,628.5	-11.7	1.0	0.78	0.78	0.36	11.6	-2.2
2,724.0	4.28	340.52	2,723.3	-5.8	0.1	2.01	1.11	-26.27	5.5	1.8
2,819.0	4.31	342.98	2,818.1	1.0	-2.1	0.20	0.05	2.59	-1.5	1.7
2,914.0	4.13	341.75	2,912.8	7.6	-4.2	0.21	-0.19	-1.29	-8.4	1.7
3,009.0	5.83	356.43	3,007.4	15.8	-5.6	2.31	1.89	15.45	-13.3	4.8
3,105.0	5.76	358.80	3,102.9	25.6	-8.0	0.31	-0.18	2.47	-16.9	5.6
3,200.0	5.54	359.59	3,197.5	34.9	-6.1	0.25	-0.23	0.83	-18.1	6.0
3,390.0	5.32	7.24	3,386.6	52.8	-5.1	0.40	-0.12	4.03	-18.6	7.4
3,485.0	6.07	357.40	3,481.2	62.2	-4.8	1.29	0.79	-10.36	-20.7	3.7
3,580.0	6.51	350.54	3,575.6	72.5	-5.9	0.82	0.46	-7.22	-23.2	2.0
3,675.0	5.63	348.08	3,670.1	82.4	-7.7	0.97	-0.93	-2.59	-25.2	2.4
3,771.0	4.53	347.48	3,765.7	90.7	-9.5	1.15	-1.15	-0.65	-25.6	3.9
3,866.0	4.75	359.68	3,860.4	98.3	-10.4	1.06	0.23	12.88	-23.5	10.0
3,961.0	5.36	8.56	3,955.0	108.6	-9.7	1.04	0.64	9.35	-21.8	12.9
4,056.0	5.76	358.10	4,049.6	115.8	-9.2	1.14	0.42	-11.01	-24.7	8.2
4,152.0	5.49	352.65	4,145.1	125.1	-10.0	0.62	-0.28	-5.68	-26.4	6.4
4,247.0	4.57	340.98	4,239.7	133.2	-11.8	1.45	-0.97	-12.31	-27.6	2.7
4,342.0	4.92	6.10	4,334.4	140.9	-12.6	2.20	0.37	28.46	-23.1	14.8
4,437.0	4.75	21.30	4,429.1	148.6	-10.7	1.36	-0.18	16.00	-18.6	18.4
4,532.0	5.32	13.48	4,523.7	156.5	-8.3	0.94	0.60	-8.23	-21.2	13.2
4,627.0	5.01	21.39	4,618.3	164.7	-5.7	0.82	-0.33	8.33	-20.0	13.6
4,723.0	4.48	36.51	4,714.0	171.6	-2.0	1.41	-0.55	15.75	-18.9	14.4
4,818.0	4.97	28.77	4,808.7	178.2	2.2	0.85	0.52	-8.15	-19.2	7.5
4,913.0	4.92	23.59	4,903.3	185.5	5.8	0.47	-0.05	-5.45	-20.4	2.1
5,008.0	5.76	1.97	4,997.9	194.0	7.6	2.28	0.88	-22.76	-20.0	-7.4
5,103.0	5.93	358.63	5,092.4	203.7	7.7	0.40	0.18	-3.52	-21.0	-8.6
5,198.0	5.41	358.27	5,187.0	213.1	7.4	0.55	-0.55	-0.38	-22.0	-8.8



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5,293.0	5.27	356.87	5,281.5	221.9	7.0	0.20	-0.15	-1.47	-22.4	-8.8
5,389.0	5.14	0.56	5,377.2	230.6	6.8	0.37	-0.14	3.84	-23.3	-7.1
5,484.0	4.92	1.35	5,471.8	238.9	7.0	0.24	-0.23	0.83	-23.4	-7.0
5,579.0	4.66	359.59	5,566.5	246.9	7.0	0.31	-0.27	-1.85	-22.8	-7.8
5,674.0	4.75	1.09	5,661.1	254.7	7.1	0.16	0.09	1.58	-22.6	-7.3
5,769.0	4.75	2.67	5,755.8	262.5	7.3	0.14	0.00	1.66	-22.4	-6.9
5,864.0	4.70	3.37	5,850.5	270.3	7.8	0.08	-0.05	0.74	-22.0	-7.1
5,959.0	4.13	1.97	5,945.2	277.6	8.1	0.61	-0.60	-1.47	-20.9	-8.1
6,054.0	4.09	2.05	6,040.0	284.4	8.3	0.04	-0.04	0.08	-19.4	-8.3
6,150.0	3.96	358.80	6,135.7	291.2	8.4	0.27	-0.14	-3.39	-17.3	-9.5
6,245.0	3.78	357.75	6,230.5	297.6	8.2	0.20	-0.19	-1.11	-15.2	-9.5
6,340.0	3.38	359.77	6,325.3	303.5	8.1	0.44	-0.42	2.13	-13.2	-8.9
6,435.0	3.38	356.78	6,420.2	309.1	7.9	0.19	0.00	-3.15	-10.1	-9.2
6,530.0	3.52	359.77	6,515.0	314.8	7.7	0.24	0.15	3.15	-8.0	-8.6
6,625.0	3.34	358.01	6,609.8	320.5	7.6	0.22	-0.19	-1.85	-5.1	-8.6
6,720.0	3.25	356.60	6,704.7	326.0	7.4	0.13	-0.09	-1.48	-2.1	-8.3
6,814.0	3.47	351.59	6,798.5	331.4	6.8	0.39	0.23	-5.33	1.2	-7.5
6,909.0	3.30	353.26	6,893.3	337.0	6.1	0.21	-0.18	1.76	3.6	-6.5
7,005.0	2.90	348.43	6,989.2	342.1	5.2	0.50	-0.42	-5.03	7.2	-4.8
7,100.0	2.68	350.01	7,084.1	348.7	4.4	0.25	-0.23	1.66	10.6	-3.5
7,195.0	2.46	346.23	7,179.0	350.8	3.5	0.29	-0.23	-3.98	14.6	-1.0
7,290.0	2.55	350.80	7,273.9	354.9	2.7	0.23	0.09	4.81	18.5	-0.7
7,385.0	2.15	345.88	7,368.8	358.7	1.9	0.47	-0.42	-5.18	22.6	2.7
7,479.0	1.85	348.69	7,462.8	361.9	1.2	0.34	-0.32	2.99	25.9	3.0
7,574.0	1.80	341.40	7,557.7	364.8	0.4	0.25	-0.05	-7.67	25.7	7.1
7,669.0	1.41	330.41	7,652.7	367.3	-0.6	0.52	-0.41	-11.57	21.7	11.9
7,764.0	1.01	330.94	7,747.6	369.0	-1.6	0.42	-0.42	0.56	19.8	11.7



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7,859.0	1.14	329.45	7,842.6	370.5	-2.5	0.14	0.14	-1.57	17.7	12.2
7,954.0	0.88	288.23	7,937.6	371.8	-3.7	0.79	-0.27	-43.39	3.8	20.2
8,049.0	0.97	279.00	8,032.6	371.9	-5.2	0.18	0.09	-9.72	-1.0	20.5
8,143.0	0.75	263.00	8,126.6	372.0	-6.8	0.34	-0.23	-17.02	-8.0	19.2
8,239.0	1.19	258.78	8,222.6	371.7	-8.2	0.46	0.46	-4.40	-11.0	18.5
8,334.0	1.14	243.58	8,317.6	371.1	-10.0	0.33	-0.05	-16.00	-17.3	14.7
8,429.0	1.19	239.45	8,412.5	370.2	-11.7	0.10	0.05	-4.35	-20.3	13.4
8,524.0	1.49	242.98	8,507.5	369.1	-13.6	0.33	0.32	3.69	-21.6	14.8
8,619.0	1.49	244.72	8,602.5	368.0	-15.9	0.05	0.00	1.85	-23.7	15.3
8,714.0	1.63	245.18	8,697.4	366.9	-18.2	0.15	0.15	0.46	-26.1	15.5
8,809.0	1.10	321.80	8,792.4	367.1	-20.0	1.83	-0.56	80.67	7.8	30.3
8,904.0	1.85	12.95	8,887.4	369.3	-20.2	1.52	0.79	53.84	26.4	13.6
9,000.0	1.27	347.20	8,983.4	371.8	-20.1	0.93	-0.60	-26.82	15.4	23.1
9,095.0	1.45	335.07	9,078.3	374.0	-20.8	0.36	0.19	-12.77	6.0	25.6
9,184.0	1.27	331.29	9,167.3	375.9	-21.8	0.23	-0.20	-4.25	4.2	26.0
9,279.0	0.92	1.70	9,262.3	377.5	-22.3	0.70	-0.37	32.01	15.1	20.8
9,374.0	1.93	39.23	9,357.3	379.5	-21.2	1.39	1.06	39.51	22.4	7.8
9,469.0	1.27	16.47	9,452.2	381.8	-19.9	0.95	-0.69	-23.96	15.2	15.2
9,564.0	1.05	321.01	9,547.2	383.5	-20.2	1.15	-0.23	-58.38	-5.4	20.3
9,659.0	1.49	273.55	9,642.2	384.2	-21.9	1.16	0.46	-49.98	-20.4	9.1
9,754.0	2.81	254.12	9,737.1	383.7	-25.4	1.57	1.39	-20.45	-25.8	1.3
9,849.0	1.85	237.42	9,832.0	382.2	-29.0	1.23	-1.01	-17.58	-28.8	-6.8
9,944.0	0.84	186.27	9,927.0	380.7	-30.3	1.55	-1.08	-53.84	-14.4	-27.9
10,038.0	0.31	260.19	10,021.0	380.0	-30.6	0.86	-0.56	78.64	-31.3	6.8
10,133.0	1.05	290.33	10,116.0	380.2	-31.7	0.84	0.78	31.73	-24.7	21.7
10,228.0	0.44	28.88	10,211.0	380.8	-32.4	1.26	-0.64	103.72	24.9	22.1
10,323.0	0.84	75.62	10,306.0	381.3	-31.5	0.66	0.42	49.22	32.2	-2.8



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10,417.0	0.62	99.44	10,400.0	381.4	-30.3	0.39	-0.23	25.34	27.2	-15.3
10,512.0	0.44	102.78	10,495.0	381.3	-29.5	0.19	-0.19	3.52	25.4	-16.8
10,607.0	0.18	130.89	10,590.0	381.1	-29.0	0.31	-0.27	29.69	14.0	-26.6
10,702.0	0.44	207.54	10,685.0	380.7	-29.1	0.46	0.27	80.58	-23.0	-19.6
10,797.0	0.70	140.92	10,780.0	379.8	-28.9	0.70	0.27	-70.13	8.2	-29.3
10,892.0	0.79	120.44	10,875.0	379.1	-27.9	0.29	0.09	-21.56	16.7	-24.8
10,987.0	0.26	159.73	10,970.0	378.6	-27.3	0.64	-0.58	41.36	-3.5	-29.3
11,082.0	0.84	320.48	11,065.0	378.9	-27.7	1.15	0.61	169.21	-6.9	28.9
11,177.0	0.79	325.05	11,160.0	380.0	-28.5	0.09	-0.05	4.81	-5.9	29.4
11,272.0	0.84	297.54	11,254.9	380.8	-29.5	0.41	0.05	-28.96	-20.1	23.1
11,367.0	1.23	276.01	11,349.9	381.3	-31.1	0.57	0.41	-22.66	-28.8	13.8
11,462.0	2.59	286.03	11,444.9	382.0	-34.2	1.47	1.43	10.55	-29.1	18.8
11,557.0	2.64	284.62	11,539.8	383.1	-38.4	0.09	0.05	-1.48	-33.9	18.1
11,652.0	2.24	276.27	11,634.7	383.9	-42.3	0.56	-0.42	-8.79	-40.2	12.6
11,747.0	1.41	256.15	11,729.6	383.8	-45.3	1.09	-0.87	-21.18	-45.0	-2.6
11,899.0	0.88	247.53	11,881.6	382.9	-48.2	0.37	-0.35	-5.67	-47.1	-9.6
11,994.0	7.87	168.17	11,876.3	376.2	-47.5	8.16	7.36	-83.54	-5.8	-48.8
12,089.0	25.89	171.07	12,068.8	349.2	-43.0	18.98	18.97	3.05	-25.5	-46.6
12,183.0	38.24	168.69	12,148.3	300.2	-34.0	13.20	13.14	-2.53	-47.0	-42.7
12,278.0	42.99	166.15	12,218.4	239.8	-20.5	5.28	5.00	-2.67	-64.0	-32.8
12,373.0	48.04	173.18	12,285.0	173.2	-8.5	7.49	5.32	7.40	-70.1	-14.1
12,467.0	57.19	180.82	12,342.1	98.8	-4.9	11.67	9.73	8.13	-63.6	-5.4
12,562.0	68.59	180.74	12,388.8	15.1	-6.1	9.90	9.89	-0.08	-50.2	-7.6
12,609.0	72.79	180.47	12,403.1	-28.9	-6.5	13.20	13.19	-0.57	-42.1	-8.5
12,657.0	80.97	180.74	12,414.0	-75.6	-7.0	17.05	17.04	0.58	-34.8	-9.3
12,751.0	89.49	179.42	12,421.8	-169.2	-7.2	9.17	9.06	-1.40	-26.3	-10.1
12,847.0	88.73	178.71	12,425.0	-265.1	-5.8	2.97	-2.87	-0.74	-22.1	-9.2



Midland PVA

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Bendit 29 State Cor
 Well: #701Y
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference:
 TVD Reference:
 MD Reference:
 North Reference:
 Survey Calculation Method:
 Database:
 Well #701Y
 KB = 25' @ 3553.0usft
 KB = 25' @ 3553.0usft
 Grid
 Minimum Curvature
 EDM 5000.14

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLog (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
12,941.0	89.76	179.15	12,427.9	-359.1	-3.8	3.26	3.22	0.47	-18.2	-8.1
13,036.0	90.90	178.19	12,427.3	-454.0	-1.8	1.57	1.20	-1.01	-17.7	-6.5
13,131.0	91.69	180.30	12,425.2	-549.0	-0.4	2.37	0.83	2.22	-18.9	-5.9
13,226.0	89.98	178.71	12,423.8	-644.0	0.4	2.46	-1.80	-1.67	-19.2	-5.8
13,321.0	88.66	176.52	12,424.9	-738.9	4.4	2.69	-1.39	-2.31	-17.1	-2.5
13,416.0	89.41	179.15	12,426.5	-833.8	8.0	2.88	0.79	2.77	-14.5	0.5
13,532.0	90.33	181.17	12,426.8	-949.8	7.7	1.91	0.79	1.74	-12.9	-0.7
13,627.0	88.70	181.26	12,427.6	-1,044.8	5.6	1.72	-1.72	0.09	-11.1	-3.3
13,721.0	88.62	181.79	12,429.8	-1,138.7	3.1	0.57	-0.09	0.58	-8.0	-6.5
13,816.0	88.79	179.94	12,431.9	-1,233.7	1.7	1.96	0.18	-1.95	-5.1	-8.6
13,911.0	90.20	179.77	12,432.8	-1,328.7	1.9	1.49	1.48	-0.18	-3.6	-9.0
14,006.0	90.64	179.88	12,432.1	-1,423.7	2.3	0.47	0.46	0.09	-3.6	-9.4
14,101.0	90.37	179.42	12,431.2	-1,518.6	2.9	0.54	-0.28	-0.46	-3.7	-9.4
14,196.0	91.21	179.33	12,429.9	-1,613.6	3.9	0.89	0.88	-0.09	-4.3	-9.1
14,291.0	90.46	179.33	12,428.5	-1,708.6	5.0	0.79	-0.79	0.00	-5.0	-8.6
14,386.0	90.68	179.68	12,427.6	-1,803.6	5.8	0.44	0.23	0.37	-5.2	-8.4
14,481.0	90.20	179.77	12,426.9	-1,898.6	6.3	0.51	-0.51	0.09	-5.3	-8.6
14,576.0	89.85	179.86	12,426.8	-1,993.6	6.6	0.38	-0.37	0.09	-4.6	-9.0
14,671.0	90.02	179.77	12,426.9	-2,088.6	6.9	0.20	0.18	-0.09	-3.8	-9.4
14,765.0	89.85	179.59	12,427.0	-2,182.6	7.4	0.26	-0.18	-0.19	-3.0	-9.5
14,860.0	90.29	179.94	12,426.9	-2,277.6	7.8	0.59	0.46	0.37	-2.4	-9.8
14,955.0	90.90	180.03	12,425.9	-2,372.6	7.8	0.65	0.64	0.09	-2.7	-10.4
15,050.0	90.81	180.38	12,424.5	-2,467.6	7.5	0.38	-0.09	0.37	-3.4	-11.4
15,145.0	90.59	180.30	12,423.3	-2,562.6	6.9	0.25	-0.23	-0.08	-4.1	-12.6
15,240.0	90.68	178.45	12,422.3	-2,657.6	8.0	1.95	0.09	-1.95	-4.7	-12.2
15,335.0	88.70	178.19	12,422.8	-2,752.5	10.7	2.10	-2.08	-0.27	-3.7	-10.1
15,430.0	88.35	177.48	12,425.3	-2,847.4	14.3	0.83	-0.37	-0.75	-0.7	-7.2



Midland PVA

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Bandit 29 State Corn
 Well: #701Y
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #701Y
 TVD Reference: KB = 25' @ 3553.0usft
 MD Reference: KB = 25' @ 3553.0usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 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)
15,525.0	88.31	176.78	12,428.0	-2,942.3	19.1	0.74	-0.04	-0.74	2.5	-3.1
15,620.0	89.93	178.63	12,429.5	-3,037.2	22.9	2.59	1.71	1.95	4.4	0.1
15,715.0	90.02	179.07	12,429.5	-3,132.1	24.8	0.47	0.09	0.46	5.0	1.3
15,810.0	89.45	179.15	12,430.0	-3,227.1	26.3	0.61	-0.60	0.08	5.9	2.1
15,904.0	90.20	178.98	12,430.2	-3,321.1	27.8	0.82	0.80	-0.18	6.6	3.0
15,999.0	88.48	178.10	12,431.3	-3,416.1	30.2	2.03	-1.81	-0.93	8.2	4.8
16,094.0	91.03	178.63	12,431.7	-3,511.0	32.9	2.74	2.68	0.56	8.5	6.8
16,189.0	92.79	178.80	12,428.6	-3,605.9	35.1	1.86	1.85	0.18	4.8	8.3
16,284.0	90.90	178.54	12,425.5	-3,700.9	37.3	2.01	-1.99	-0.27	1.2	9.8
16,379.0	90.29	178.71	12,424.5	-3,795.8	39.6	0.67	-0.64	0.18	-0.4	11.4
16,474.0	89.85	178.27	12,424.4	-3,890.8	42.1	0.66	-0.46	-0.46	-1.0	13.3
16,569.0	90.55	178.36	12,424.1	-3,985.8	44.8	0.74	0.74	0.09	-1.9	15.4
16,664.0	91.52	180.30	12,422.4	-4,080.7	46.0	2.28	1.02	2.04	-4.2	15.9
16,758.0	92.18	180.21	12,419.3	-4,174.7	45.5	0.71	0.70	-0.10	-7.7	14.8
16,853.0	90.64	180.65	12,417.0	-4,269.6	44.8	1.69	-1.62	0.46	-10.6	13.4
16,948.0	90.81	181.35	12,415.8	-4,364.6	43.2	0.76	0.18	0.74	-12.5	11.1
17,043.0	89.05	180.91	12,415.9	-4,459.6	41.3	1.91	-1.85	-0.46	-13.4	8.6
17,138.0	87.30	179.33	12,418.9	-4,554.5	41.1	2.48	-1.84	-1.66	-11.5	7.7
17,232.0	87.38	178.98	12,423.3	-4,648.4	42.5	0.38	0.09	-0.37	-8.2	8.4
17,327.0	90.68	179.77	12,424.9	-4,743.4	43.5	3.57	3.47	0.83	-7.6	8.8
17,422.0	91.34	179.68	12,423.2	-4,838.4	44.0	0.70	0.69	-0.09	-10.3	8.6
17,517.0	92.04	179.33	12,420.4	-4,933.3	44.8	0.82	0.74	-0.37	-14.2	8.8
17,612.0	91.60	180.21	12,417.4	-5,028.3	45.2	1.04	-0.48	0.93	-18.3	8.5
17,707.0	89.80	180.38	12,416.3	-5,123.3	44.7	1.90	-1.89	0.18	-20.5	7.4
17,802.0	89.54	180.30	12,416.8	-5,218.3	44.1	0.29	-0.27	-0.08	-21.0	6.1
17,897.0	90.20	181.17	12,417.0	-5,313.3	42.9	1.15	0.69	0.92	-21.6	4.3
17,992.0	89.76	181.26	12,417.1	-5,408.2	40.9	0.47	-0.46	0.09	-22.4	1.6



Midland PVA

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Bandit 29 State Com
 Well: #701Y
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #701Y
 TVD Reference: KB = 25' @ 3553.0usft
 MD Reference: KB = 25' @ 3553.0usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.14

Survey											
MD (usft)	Inc (")	Asd (azimuth) (")	TVD (usft)	N/S (usft)	E/W (usft)	DLog (*/100usft)	Build (*/100usft)	Turn (*/100usft)	High to Plan (usft)	Right to Plan (usft)	
18,087.0	89.89	180.82	12,417.3	-5,503.2	39.2	0.48	0.14	-0.46	-23.0	-0.8	
18,182.0	86.73	177.57	12,420.1	-5,598.1	40.5	4.77	-3.33	-3.42	-21.0	-0.1	
18,277.0	87.16	178.27	12,425.2	-5,692.9	43.9	0.86	0.45	0.74	-16.7	2.6	
18,372.0	87.78	178.27	12,429.4	-5,787.8	46.8	0.65	0.65	0.00	-13.4	4.8	
18,467.0	87.69	178.27	12,433.2	-5,882.7	49.7	0.09	-0.09	0.00	-10.4	7.1	
18,562.0	88.88	178.38	12,438.0	-5,977.6	52.5	1.26	1.25	0.09	-8.4	9.2	
18,657.0	88.62	178.27	12,438.1	-6,072.5	55.3	0.20	-0.27	-0.09	-7.1	11.3	
18,752.0	87.43	178.52	12,441.3	-6,167.4	59.6	2.23	-1.25	-1.84	-4.7	15.0	
18,847.0	90.29	178.45	12,443.2	-6,262.3	63.7	3.63	3.01	2.03	-3.6	18.5	
18,942.0	90.33	177.31	12,442.7	-6,357.2	67.2	1.20	0.04	-1.20	-4.9	21.3	
19,037.0	91.78	178.89	12,441.0	-6,452.1	70.4	2.26	1.53	1.66	-7.4	23.8	
19,132.0	91.47	180.12	12,438.3	-6,547.1	71.2	1.33	-0.33	1.29	-10.8	24.0	
19,227.0	89.36	180.65	12,437.6	-6,642.1	70.6	2.29	-2.22	0.56	-12.2	22.7	
19,322.0	89.85	180.82	12,438.2	-6,737.1	69.4	0.55	0.52	0.18	-12.2	20.8	
19,416.0	90.46	181.09	12,438.0	-6,831.0	67.8	0.71	0.65	0.29	-13.2	18.6	
19,511.0	89.58	180.47	12,438.0	-6,926.0	66.5	1.13	-0.93	-0.65	-13.9	16.6	
19,606.0	90.29	180.56	12,438.1	-7,021.0	65.6	0.75	0.75	0.09	-14.4	15.1	
19,701.0	90.90	180.82	12,437.1	-7,116.0	64.5	0.70	0.64	0.27	-16.1	13.3	
19,796.0	90.29	180.56	12,438.1	-7,211.0	63.4	0.70	-0.64	-0.27	-17.8	11.5	
19,832.0	90.29	180.56	12,435.4	-7,347.0	62.0	0.00	0.00	0.00	-19.5	9.2	



Midland PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Bandit 29 State Com
Well: #701Y
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #701Y
TVD Reference: KB = 25' @ 3553.0usft
MD Reference: KB = 25' @ 3553.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.14

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N-S (usft)	+E-W (usft)	
11,954.0	11,938.5	380.5	-48.3	KOP, MD:11954.0', TVD:11938.5', N/S:380.5', E/W:-48.3', INC:4.84
12,105.0	12,081.1	342.0	-41.8	FTP Crossing, MD:12105.0', TVD:12081.1', N/S:342.0', E/W:-41.8', INC:27.99
19,796.0	12,436.1	-7,211.0	63.4	Last MWD Survey (MD=19796.0')
19,932.0	12,435.4	-7,347.0	62.0	Projection to Bit (MD=19932.0')

Checked By: _____ Approved By: _____ Date: _____



Lea County, NM (NAD 83 NME)
Bandit 29 State Com #701Y
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

To convert a Magnetic Direction to a Grid Direction, Add 6.30°
 To convert a Magnetic Direction to a True Direction, Add 6.70° East
 To convert a True Direction to a Grid Direction, Subtract 0.40°

WELL DETAILS: #701Y

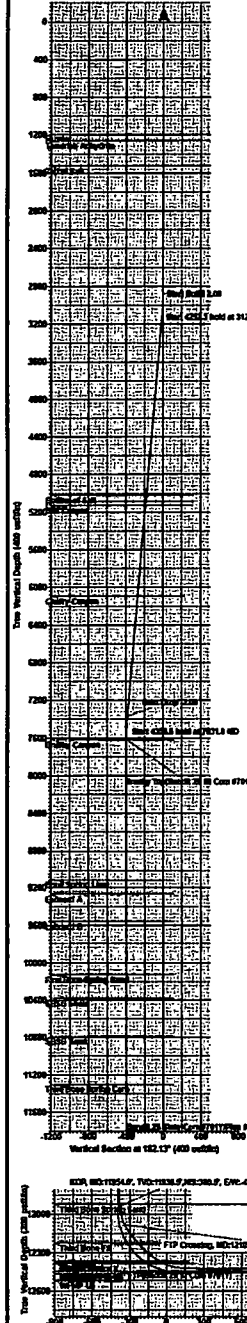
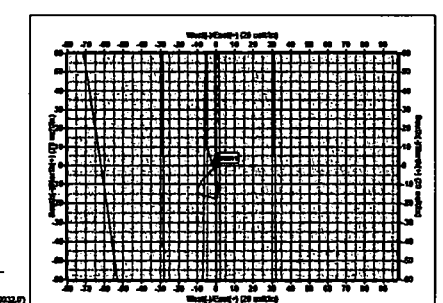
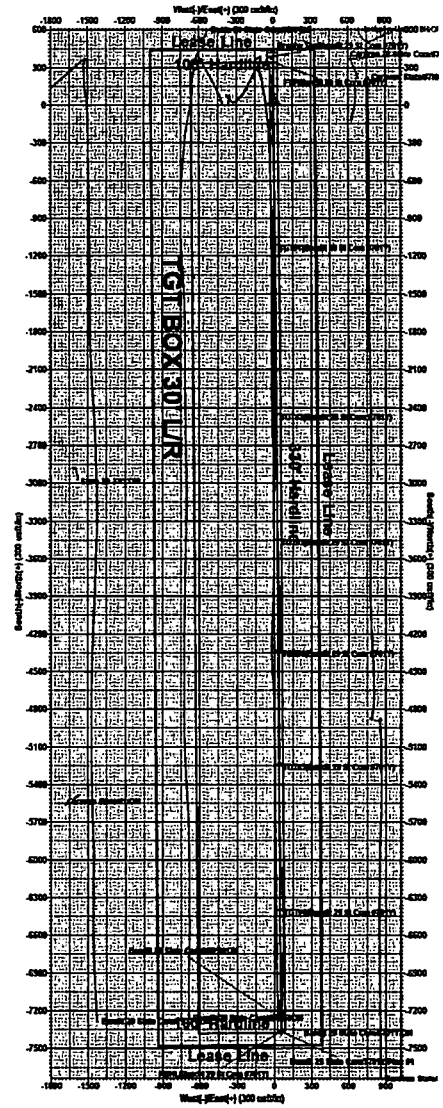
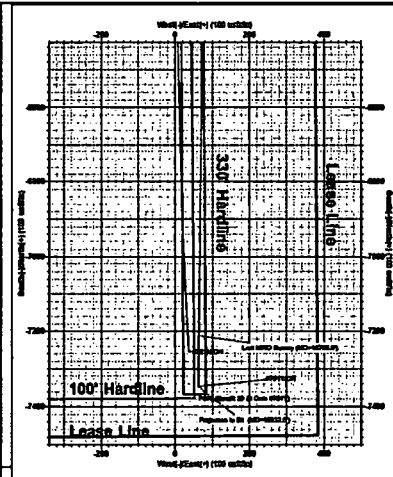
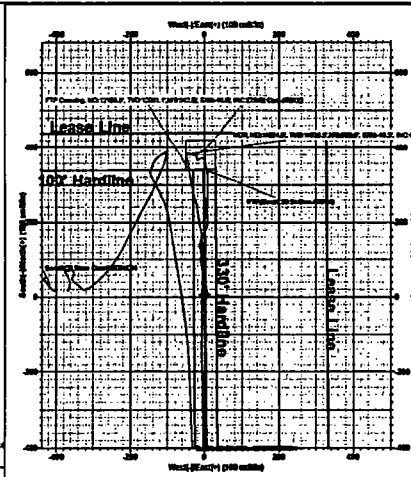
KB = 25' @ 3553.0usft
 +N-S 0.0 +E-W 0.0 Northing 435359.00 Easting 772252.00 32° 11' 40.833 N Longitude 103° 35' 12.848 W Slot

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VFace	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	2880.0	0.00	0.00	2880.0	0.0	0.0	0.00	0.00	0.0	
3	3129.8	5.00	359.85	3129.4	10.9	0.0	2.00	359.85	-10.9	
4	7382.0	5.00	359.85	7385.6	381.1	-1.0	0.00	0.00	-381.1	Brushy Top(Bandit 29 St Com #701Y)
5	7831.8	0.00	0.00	7815.0	392.0	-1.0	2.00	180.00	-392.0	
6	11958.3	0.00	0.00	11971.5	332.0	-1.0	0.00	0.00	-332.0	
7	12743.4	90.61	179.60	12448.9	-90.6	2.4	12.00	179.60	90.6	
8	13782.9	90.61	179.60	12438.0	-1110.0	9.4	0.00	0.00	1110.0	TGTW1(Bandit 29 St Com #701Y)
9	13772.3	90.43	179.60	12437.9	-1119.4	9.5	2.00	-180.00	1119.4	
10	15103.0	90.43	179.60	12428.0	-2450.0	18.8	0.00	0.00	2450.1	TGTW2(Bandit 29 St Com #701Y)
11	15109.9	90.29	179.60	12428.0	-2458.9	18.8	2.00	-180.00	2457.0	
12	18093.0	90.29	179.60	12423.0	-3440.0	25.6	0.00	0.00	3440.1	TGTW3(Bandit 29 St Com #701Y)
13	18124.0	89.67	179.60	12423.0	-3471.0	25.9	2.00	180.00	3471.1	
14	18168.1	89.57	179.60	12428.0	-4333.0	31.8	0.00	0.00	4333.1	TGTW4(Bandit 29 St Com #701Y)
15	17001.3	89.38	179.60	12428.1	-4348.2	31.9	2.00	-180.00	4348.4	
16	17890.1	89.38	179.60	12438.0	-5237.0	38.1	0.00	0.00	5237.1	TGTW5(Bandit 29 St Com #701Y)
17	17897.3	89.51	179.60	12438.1	-5244.1	38.2	2.00	0.00	5244.3	
18	18049.2	89.51	179.60	12448.0	-6398.0	48.2	0.00	0.00	6398.2	TGTW6(Bandit 29 St Com #701Y)
19	18053.3	89.59	179.60	12448.0	-6400.1	48.2	2.00	-2.90	6400.2	
20	20020.3	89.59	179.60	12455.0	-7387.0	53.0	0.00	0.00	7387.2	PBHL(Bandit 29 St Com #701Y)

WELLBORE TARGET DETAILS (MAP COORDINATES)

Name	TVD	+N-S	+E-W	Northing	Easting	Shape
Brushy Top(Bandit 29 St Com #701Y)	7815.0	382.0	-1.0	435791.08	772251.00	Polygon
TGTW1(Bandit 29 St Com #701Y)	12423.0	-3440.0	25.6	431913.00	772271.84	Point
TGTW2(Bandit 29 St Com #701Y)	12428.0	-2458.9	18.8	432980.00	772275.78	Point
TGTW3(Bandit 29 St Com #701Y)	12428.0	-4333.0	31.8	431028.00	772234.44	Point
TGTW4(Bandit 29 St Com #701Y)	12428.0	-1110.0	9.4	432443.00	772291.44	Point
TGTW5(Bandit 29 St Com #701Y)	12438.0	-5237.0	38.1	430123.00	772306.13	Point
TGTW6(Bandit 29 St Com #701Y)	12448.0	-6398.0	48.2	429913.00	772284.18	Point
PBHL(Bandit 29 St Com #701Y)	12455.0	-7387.0	53.0	429701.00	772251.00	Point
PBHL(Bandit 29 St Com #701Y)	12455.0	-7387.0	53.0	429701.00	772251.00	Rectangle (Width: 1.0, Height: 1.0)



Scale: 1 inch = 100 feet
 North Arrow