

30-025-44626

HOBBS OCD

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EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Bandit 29 State Com

#504Y

OH

Design: OH

Midland PVA

14 May, 2018



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #504Y
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3558.0usft (H&P 642)
Site:	Bandit 29 State Com	MD Reference:	KB = 25 @ 3558.0usft (H&P 642)
Well:	#504Y	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	Bandit 29 State Com		
Site Position:		Northing:	435,375.00 usft
From:	Map	Easting:	771,884.00 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 11' 41.017 N
		Longitude:	103° 35' 16.930 W
		Grid Convergence:	0.40 °

Well	#504Y		
Well Position	+N-S	0.0 usft	Northing: 435,381.00 usft
	+E-W	0.0 usft	Easting: 770,373.00 usft
Position Uncertainty	0.0 usft		Wellhead Elevation: usft
			Latitude: 32° 11' 41.180 N
			Longitude: 103° 35' 34.513 W
			Ground Level: 3,533.0 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2015	4/1/2018	6.88
			Dip Angle (°)
			60.02
			Field Strength (nT)
			47,836.60956557

Design	OH		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N-S	+E-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction (°)
			182.34



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Survey Program		Date	5/14/2018		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
100.0	4,863.0	Phoenix Gyro (OH)	MWD	OWSG MWD - Standard	
4,952.0	18,560.0	Learn MWD (OH)	MWD	OWSG MWD - Standard	

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
100.0	0.66	355.20	100.0	0.6	0.0	0.66	0.66	0.00	-0.3	-0.1
200.0	0.87	7.79	200.0	1.9	0.0	0.27	0.21	12.59	-1.0	0.1
300.0	1.02	4.83	300.0	3.5	0.2	0.16	0.15	-2.96	-1.5	0.3
400.0	1.22	5.33	400.0	5.5	0.4	0.20	0.20	0.50	-1.8	0.4
500.0	1.22	353.76	499.9	7.6	0.3	0.25	0.00	-11.57	-2.5	0.1
600.0	1.16	347.28	599.9	9.6	0.0	0.15	-0.06	-6.48	-3.2	-0.1
700.0	1.25	345.93	699.9	11.7	-0.5	0.09	0.09	-1.35	-3.7	-0.3
800.0	1.38	338.10	799.9	13.9	-1.2	0.22	0.13	-7.83	-3.9	-1.1
900.0	1.44	334.43	899.8	16.1	-2.2	0.11	0.06	-3.67	-4.1	-1.4
1,000.0	1.55	330.61	999.8	18.4	-3.4	0.15	0.11	-3.82	-4.6	-1.8
1,100.0	1.54	327.41	1,099.8	20.7	-4.8	0.09	-0.01	-3.20	-5.3	-2.1
1,200.0	1.55	325.79	1,199.7	23.0	-6.3	0.04	0.01	-1.62	-5.9	-2.2
1,300.0	1.59	318.23	1,299.7	25.1	-8.0	0.21	0.04	-7.56	-7.3	-3.1
1,400.0	1.34	312.67	1,399.7	27.0	-9.7	0.29	-0.25	-5.56	-9.5	-4.7
1,500.0	1.37	293.33	1,499.6	28.2	-11.7	0.46	0.03	-19.34	-7.9	-8.5
1,600.0	0.28	197.33	1,599.6	28.5	-12.9	1.43	-1.09	-96.00	9.5	-6.9
1,700.0	0.37	90.68	1,699.6	28.2	-12.6	0.52	0.09	-106.65	3.1	11.3
1,800.0	0.58	93.38	1,799.6	28.2	-11.8	0.21	0.21	2.70	2.9	12.0
1,900.0	0.78	125.37	1,899.6	27.8	-10.7	0.42	0.20	31.99	8.3	9.4
2,000.0	0.54	128.59	1,999.6	27.1	-9.8	0.24	-0.24	3.22	7.8	9.3



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Site:	Bandit 28 State Com	MD Reference:	KB = 25 @ 3558.0usft (H&P 642)
Well:	#504Y	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)	EW (usft)	DLeg (°/100usft)	Buidd (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
2,100.0	0.49	113.28	2,099.6	26.6	-9.0	0.15	-0.05	-15.31	4.0	11.1	
2,200.0	0.16	196.26	2,199.6	26.3	-8.7	0.50	-0.33	82.98	11.1	-1.9	
2,300.0	0.32	351.66	2,299.6	26.5	-8.8	0.47	0.16	155.40	-10.7	-2.6	
2,400.0	0.43	62.59	2,399.6	26.9	-8.5	0.44	0.11	70.93	-5.8	9.2	
2,500.0	0.29	320.86	2,499.6	27.3	-8.3	0.57	-0.14	-101.73	-8.0	-7.2	
2,600.0	0.50	35.28	2,599.6	27.8	-8.2	0.51	0.21	74.42	-9.1	5.9	
2,700.0	0.23	98.60	2,699.6	28.2	-7.8	0.45	-0.27	63.32	0.4	10.6	
2,800.0	0.54	8.53	2,799.6	28.6	-7.5	0.59	0.31	-90.07	-10.5	-0.2	
2,900.0	0.25	77.45	2,899.6	29.1	-7.2	0.51	-0.29	68.92	-4.4	9.4	
3,000.0	0.53	17.89	2,999.6	29.6	-6.9	0.46	0.28	-59.56	-10.8	0.7	
3,100.0	0.37	320.96	3,099.6	30.3	-6.9	0.45	-0.16	-56.93	-7.2	-9.3	
3,200.0	0.34	324.07	3,199.6	30.8	-7.3	0.04	-0.03	3.11	-8.3	-8.8	
3,300.0	0.29	291.66	3,299.6	31.1	-7.7	0.18	-0.05	-32.41	-3.0	-12.0	
3,400.0	0.57	178.74	3,399.6	30.7	-7.9	0.73	0.28	-112.92	12.3	1.1	
3,500.0	0.60	127.62	3,499.6	29.9	-7.5	0.51	0.03	-51.12	6.5	9.5	
3,600.0	1.40	90.49	3,599.5	29.6	-5.9	0.99	0.80	-37.13	0.3	10.6	
3,700.0	3.08	73.82	3,699.5	30.3	-2.1	1.78	1.68	-16.67	-2.4	10.2	
3,800.0	3.19	76.74	3,799.3	31.7	3.2	0.19	0.11	2.92	-2.2	10.7	
3,900.0	2.59	91.26	3,899.2	32.3	8.2	0.94	-0.60	14.52	0.8	10.7	
4,000.0	1.49	102.91	3,999.1	31.9	11.7	1.17	-1.10	11.65	3.2	9.2	
4,100.0	1.37	94.33	4,099.1	31.6	14.2	0.25	-0.12	-8.58	2.9	8.3	
4,200.0	2.55	85.93	4,199.0	31.6	17.6	1.21	1.18	-8.40	2.2	7.6	
4,300.0	2.32	81.49	4,298.9	32.1	21.8	0.30	-0.23	-4.44	1.7	7.4	
4,400.0	2.71	95.71	4,398.9	32.2	26.2	0.73	0.39	14.22	3.6	7.5	
4,500.0	1.14	136.96	4,498.8	31.2	29.2	2.00	-1.57	41.25	7.9	3.9	
4,600.0	1.28	167.50	4,598.8	29.4	30.1	0.65	0.14	30.54	9.4	-0.6	
4,700.0	1.41	146.31	4,698.7	27.3	31.0	0.51	0.13	-21.19	9.9	2.9	



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Well:	#504Y	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)	
4,800.0	2.25	135.06	4,798.7	24.8	33.1	0.91	0.84	-11.25	9.7	5.6	
4,863.0	3.57	141.91	4,861.6	22.4	35.2	2.16	2.10	10.87	9.9	4.7	
4,952.0	2.60	152.00	4,950.5	18.5	37.9	1.24	-1.09	11.34	10.0	2.7	
4,975.0	1.90	152.00	4,973.5	17.7	38.3	3.04	-3.04	0.00	9.8	2.6	
5,069.0	2.80	297.40	5,067.4	17.3	37.0	4.78	0.96	154.68	-8.8	-7.4	
5,163.0	4.40	309.40	5,161.2	20.7	32.1	1.87	1.70	12.77	-14.2	-4.6	
5,258.0	6.40	317.40	5,255.8	26.9	25.7	2.24	2.11	8.42	-18.6	-1.7	
5,352.0	7.70	322.00	5,349.1	35.7	18.3	1.51	1.38	4.89	-22.1	0.1	
5,447.0	7.70	322.50	5,443.2	45.8	10.5	0.07	0.00	0.53	-23.6	0.1	
5,541.0	8.90	329.60	5,536.3	57.1	3.0	1.68	1.28	7.55	-22.8	1.8	
5,636.0	9.60	328.90	5,630.0	70.2	-4.8	0.75	0.74	-0.74	-20.6	-0.9	
5,730.0	12.10	327.10	5,722.3	85.2	-14.2	2.68	2.66	-1.91	-17.9	-3.8	
5,825.0	14.30	319.90	5,814.8	102.5	-27.2	2.89	2.32	-7.58	-15.4	-6.5	
5,922.0	13.80	319.20	5,908.9	120.4	-42.4	0.54	-0.52	-0.72	-14.2	-5.8	
6,016.0	12.50	318.50	6,000.5	136.5	-56.5	1.39	-1.38	-0.74	-11.6	-4.9	
6,110.0	12.60	318.80	6,092.2	151.9	-70.0	0.13	0.11	0.32	-8.0	-3.6	
6,205.0	13.90	321.10	6,184.7	168.5	-84.0	1.48	1.37	2.42	-5.7	-2.7	
6,299.0	13.40	322.90	6,276.0	186.0	-97.7	0.70	-0.53	1.91	-4.0	-2.8	
6,393.0	15.60	326.60	6,367.0	205.3	-111.2	2.54	2.34	3.94	-3.8	-3.9	
6,488.0	16.00	327.60	6,458.4	227.0	-125.2	0.51	0.42	1.05	-5.8	-6.2	
6,582.0	16.20	327.50	6,548.8	249.0	-139.2	0.21	0.21	-0.11	-8.2	-8.7	
6,677.0	15.00	323.90	6,640.3	270.1	-153.6	1.62	-1.26	-3.79	-9.0	-11.0	
6,771.0	12.70	319.50	6,731.5	287.8	-167.5	2.69	-2.45	-4.68	-6.7	-11.8	
6,866.0	10.20	312.70	6,824.6	301.4	-180.4	2.99	-2.63	-7.16	-0.6	-10.1	
6,960.0	9.50	309.90	6,917.2	312.0	-192.5	0.90	-0.74	-2.98	4.2	-6.3	
7,055.0	7.40	313.60	7,011.2	321.3	-202.9	2.28	-2.21	3.89	7.5	-3.6	
7,148.0	6.60	312.50	7,104.5	329.1	-211.3	0.86	-0.85	-1.17	10.6	-1.3	



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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)	
7,243.0	4.60	311.30	7,198.0	335.3	-218.1	2.13	-2.13	-1.28	12.8	0.9	
7,338.0	1.40	295.30	7,292.9	338.3	-222.0	3.45	-3.37	-16.84	14.9	7.1	
7,432.0	0.60	269.40	7,386.9	338.7	-223.6	0.96	-0.85	-27.55	12.0	16.6	
7,527.0	1.00	251.20	7,481.9	338.5	-224.9	0.49	0.42	-19.16	5.7	21.5	
7,621.0	0.90	230.20	7,575.9	337.7	-226.2	0.38	-0.11	-22.34	-3.9	21.8	
7,716.0	0.90	230.20	7,670.9	336.8	-227.3	0.00	0.00	0.00	-5.4	21.8	
7,810.0	1.10	235.90	7,764.8	335.8	-228.7	0.24	0.21	6.06	-4.8	22.3	
7,905.0	1.10	227.40	7,859.8	334.7	-230.1	0.17	0.00	-8.95	-9.9	21.3	
7,999.0	1.10	226.20	7,953.8	333.4	-231.4	0.02	0.00	-1.28	-12.1	21.0	
8,093.0	0.90	297.90	8,047.8	333.2	-232.7	1.26	-0.21	76.28	15.1	19.0	
8,186.0	0.70	305.80	8,140.8	333.8	-233.8	0.25	-0.22	8.49	16.3	16.8	
8,281.0	1.00	295.30	8,235.8	334.5	-235.0	0.35	0.32	-11.05	11.6	19.4	
8,376.0	0.70	294.90	8,330.8	335.1	-236.3	0.32	-0.32	-0.42	10.0	19.5	
8,470.0	0.60	285.10	8,424.8	335.5	-237.3	0.16	-0.11	-10.43	5.5	20.8	
8,564.0	0.70	260.00	8,518.8	335.5	-238.3	0.32	0.11	-26.70	-4.9	20.9	
8,659.0	0.60	227.40	8,613.7	335.1	-239.3	0.40	-0.11	-34.32	-16.4	14.7	
8,753.0	0.50	249.20	8,707.7	334.6	-240.0	0.24	-0.11	23.19	-10.6	19.9	
8,848.0	0.80	242.60	8,802.7	334.2	-241.0	0.32	0.32	-6.95	-13.9	18.5	
8,942.0	0.90	208.30	8,896.7	333.2	-241.9	0.54	0.11	-36.49	-23.2	7.1	
9,036.0	0.90	207.20	8,990.7	331.9	-242.6	0.02	0.00	-1.17	-24.8	6.7	
9,131.0	1.00	222.50	9,085.7	330.6	-243.5	0.29	0.11	16.11	-23.7	13.2	
9,225.0	1.10	212.80	9,179.7	329.3	-244.6	0.22	0.11	-10.32	-27.3	8.8	
9,319.0	1.00	166.40	9,273.7	327.7	-244.9	0.89	-0.11	-49.36	-26.7	-14.3	
9,414.0	0.70	210.00	9,368.7	326.4	-245.0	0.73	-0.32	45.89	-30.4	8.8	
9,508.0	0.60	213.40	9,462.7	325.5	-245.5	0.11	-0.11	3.62	-30.9	10.4	
9,603.0	0.60	213.40	9,557.7	324.7	-246.1	0.00	0.00	0.00	-31.9	10.4	
9,697.0	1.30	180.50	9,651.6	323.2	-246.3	0.92	0.74	-35.00	-33.9	-8.8	



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Well:	#504Y	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)	
9,791.0	0.90	195.10	9,745.6	321.4	-246.5	0.52	-0.43	15.53	-36.8	0.3	
9,886.0	1.30	190.70	9,840.6	319.6	-246.9	0.43	0.42	-4.63	-38.5	-2.6	
9,980.0	0.60	235.90	9,934.6	318.3	-247.5	1.04	-0.74	48.09	-30.3	26.2	
10,074.0	0.80	299.50	10,028.6	318.3	-248.5	0.81	0.21	67.66	9.2	39.2	
10,168.0	1.20	307.10	10,122.6	319.3	-249.9	0.45	0.43	8.09	12.6	37.7	
10,262.0	0.60	297.40	10,218.6	320.1	-251.1	0.66	-0.64	-10.32	4.6	39.2	
10,357.0	0.40	243.40	10,311.6	320.2	-251.8	0.51	-0.21	-56.84	-29.6	26.4	
10,451.0	0.60	213.70	10,405.6	319.6	-252.4	0.34	0.21	-31.60	-39.5	8.1	
10,545.0	0.60	210.60	10,499.5	318.8	-252.9	0.03	0.00	-3.30	-40.9	5.9	
10,608.0	0.90	149.40	10,562.5	318.1	-252.8	1.28	0.48	-97.14	-25.5	-33.3	
10,672.0	1.80	163.10	10,626.5	316.7	-252.3	1.48	1.41	21.41	-34.2	-26.2	
10,767.0	11.50	189.80	10,720.8	305.9	-253.5	10.45	10.21	28.11	-45.7	-7.3	
10,861.0	21.60	185.60	10,810.8	279.4	-256.8	10.81	10.74	-4.47	-44.6	-8.9	
10,955.0	30.20	182.40	10,895.3	238.4	-259.5	9.27	9.15	-3.40	-38.9	-5.4	
11,049.0	40.60	185.10	10,971.8	184.2	-263.2	11.19	11.06	2.87	-29.2	3.0	
11,081.0	44.00	187.00	10,995.4	162.8	-265.5	11.35	10.63	5.94	-25.0	5.4	
11,112.0	47.10	186.80	11,017.1	140.8	-268.1	10.01	10.00	-0.65	-20.8	6.8	
11,144.0	50.70	185.80	11,038.2	116.9	-270.7	11.49	11.25	-3.13	-16.1	8.4	
11,176.0	55.90	186.10	11,057.3	91.4	-273.4	16.27	16.25	0.94	-11.6	10.5	
11,193.1	59.21	187.69	11,066.5	77.0	-275.1	20.84	19.31	9.29	-9.4	11.5	
FTP Crossing 11193.1' MD; 11066.5' TVD; 77.0°; -275.1°; 59.21											
11,207.0	61.90	188.90	11,073.3	65.1	-276.9	20.84	19.41	8.72	-8.0	11.9	
11,238.0	67.40	191.80	11,086.6	37.5	-281.9	19.65	17.74	9.35	-5.4	11.9	
11,270.0	73.10	190.00	11,097.4	8.0	-287.6	18.58	17.81	-5.63	-4.2	11.4	
11,301.0	77.40	186.80	11,105.3	-21.7	-292.0	17.09	13.87	-10.32	-3.6	12.3	
11,331.0	81.70	184.00	11,110.7	-51.1	-294.8	17.02	14.33	-9.33	-3.3	14.7	
11,361.0	88.50	182.60	11,113.3	-80.9	-296.5	23.14	22.67	-4.67	-3.8	18.2	



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #504Y
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3558.0usft (H&P 642)
Site:	Bandit 28 State Com	MD Reference:	KB = 25 @ 3558.0usft (H&P 642)
Well:	#504Y	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)	EW (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
11,425.0	90.20	182.40	11,114.0	-144.8	-299.3	2.67	2.66	-0.31	-4.1	26.5	
11,520.0	89.70	182.10	11,114.1	-239.7	-303.0	0.61	-0.53	-0.32	-3.3	35.9	
11,614.0	90.20	183.30	11,114.2	-333.6	-307.4	1.38	0.53	1.28	-2.3	39.7	
11,709.0	90.90	183.10	11,113.3	-428.5	-312.7	0.77	0.74	-0.21	-2.3	37.9	
11,803.0	90.70	182.10	11,111.9	-522.4	-317.0	1.08	-0.21	-1.06	-2.6	33.3	
11,898.0	89.80	181.60	11,111.5	-617.3	-320.1	1.08	-0.95	-0.53	-1.9	29.5	
11,992.0	89.80	181.60	11,111.9	-711.3	-322.7	0.00	0.00	0.00	-0.6	26.1	
12,087.0	89.30	181.90	11,112.6	-806.3	-325.6	0.61	-0.53	0.32	1.2	22.4	
12,181.0	89.00	181.70	11,114.0	-900.2	-328.5	0.38	-0.32	-0.21	3.6	18.7	
12,275.0	90.90	181.00	11,114.1	-994.2	-330.8	2.15	2.02	-0.74	4.7	15.8	
12,369.0	90.00	180.30	11,113.3	-1,088.2	-331.8	1.21	-0.96	-0.74	5.0	14.0	
12,464.0	92.90	180.30	11,110.9	-1,183.1	-332.3	3.05	3.05	0.00	3.6	12.7	
12,558.0	90.80	180.30	11,107.9	-1,277.1	-332.8	2.23	-2.23	0.00	1.6	11.5	
12,653.0	90.40	180.30	11,106.9	-1,372.1	-333.3	0.42	-0.42	0.00	1.7	10.3	
12,747.0	90.30	179.60	11,106.3	-1,466.1	-333.2	0.75	-0.11	-0.74	2.1	9.6	
12,842.0	90.90	179.80	11,105.3	-1,561.0	-332.7	0.67	0.63	0.21	1.6	9.4	
12,936.0	90.50	179.80	11,104.2	-1,655.0	-332.4	0.43	-0.43	0.00	0.6	8.9	
13,030.0	89.30	179.30	11,104.4	-1,749.0	-331.7	1.38	-1.28	-0.53	1.0	8.9	
13,125.0	87.80	178.60	11,106.8	-1,844.0	-329.9	1.74	-1.58	-0.74	3.6	9.9	
13,219.0	90.00	178.20	11,108.6	-1,937.9	-327.3	2.38	2.34	-0.43	5.5	11.8	
13,313.0	90.00	178.70	11,108.6	-2,031.9	-324.8	0.53	0.00	0.53	5.7	13.6	
13,407.0	90.20	178.40	11,108.4	-2,125.9	-322.4	0.38	0.21	-0.32	5.7	15.3	
13,501.0	87.80	176.50	11,110.0	-2,219.7	-318.2	3.26	-2.55	-2.02	7.5	18.7	
13,596.0	93.30	179.40	11,109.1	-2,314.6	-314.8	6.54	5.79	3.05	6.8	21.3	
13,690.0	93.00	180.70	11,104.0	-2,408.5	-314.9	1.42	-0.32	1.38	1.8	20.5	
13,783.0	92.30	181.20	11,099.7	-2,501.4	-316.4	0.92	-0.75	0.54	-2.3	18.2	
13,876.0	89.10	180.70	11,098.5	-2,594.3	-318.0	3.48	-3.44	-0.54	-3.2	16.0	



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #504Y
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3558.0usft (H&P 642)
Site:	Bandit 29 State Com	MD Reference:	KB = 25 @ 3558.0usft (H&P 642)
Well:	#504Y	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)	EW (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
13,970.0	88.10	180.70	11,100.8	-2,688.3	-319.1	1.06	-1.06	0.00	-0.7	14.1	
14,065.0	88.80	180.00	11,103.4	-2,783.3	-319.7	1.04	0.74	-0.74	2.0	12.8	
14,159.0	87.90	178.40	11,106.1	-2,877.2	-318.4	1.95	-0.96	-1.70	4.9	13.3	
14,253.0	87.80	177.50	11,109.6	-2,971.1	-315.0	0.96	-0.11	-0.96	8.6	16.0	
14,349.0	89.70	178.60	11,111.7	-3,067.0	-311.8	2.29	1.98	1.15	10.9	18.5	
14,443.0	89.70	178.90	11,112.2	-3,161.0	-309.7	0.32	0.00	0.32	11.5	19.8	
14,537.0	89.50	179.40	11,112.9	-3,255.0	-308.3	0.57	-0.21	0.53	12.4	20.4	
14,631.0	90.30	180.70	11,113.0	-3,349.0	-308.4	1.62	0.85	1.38	12.7	19.6	
14,727.0	89.00	180.30	11,113.6	-3,445.0	-309.2	1.42	-1.35	-0.42	13.5	18.0	
14,822.0	89.90	180.20	11,114.5	-3,539.9	-309.6	0.95	0.95	-0.11	14.6	16.8	
14,916.0	90.10	179.40	11,114.5	-3,633.9	-309.3	0.88	0.21	-0.85	14.8	16.4	
15,011.0	89.60	179.40	11,114.8	-3,728.9	-308.3	0.53	-0.53	0.00	15.2	16.7	
15,105.0	91.10	179.10	11,114.2	-3,822.9	-307.1	1.63	1.60	-0.32	14.8	17.2	
15,199.0	90.40	179.60	11,113.0	-3,916.9	-306.0	0.92	-0.74	0.53	13.8	17.5	
15,294.0	89.70	180.00	11,112.9	-4,011.9	-305.7	0.85	-0.74	0.42	13.9	17.1	
15,388.0	90.30	180.20	11,112.9	-4,105.9	-305.9	0.67	0.64	0.21	14.0	16.2	
15,483.0	89.50	180.20	11,113.1	-4,200.9	-306.2	0.84	-0.84	0.00	14.4	15.1	
15,577.0	88.30	180.30	11,114.9	-4,294.9	-306.6	1.28	-1.28	0.11	16.4	13.9	
15,671.0	90.00	179.40	11,116.3	-4,388.9	-306.4	2.05	1.81	-0.96	18.0	13.4	
15,766.0	90.00	179.60	11,116.3	-4,483.9	-305.5	0.21	0.00	0.21	18.2	13.5	
15,860.0	88.50	177.70	11,117.5	-4,577.8	-303.3	2.58	-1.60	-2.02	19.5	15.0	
15,954.0	90.30	177.70	11,118.5	-4,671.7	-299.5	1.91	1.91	0.00	20.6	18.0	
16,049.0	91.90	177.90	11,116.7	-4,766.7	-295.9	1.70	1.68	0.21	18.8	20.9	
16,144.0	90.90	176.80	11,114.3	-4,861.5	-291.5	1.56	-1.05	-1.16	16.6	24.6	
16,238.0	91.40	178.20	11,112.4	-4,955.4	-287.4	1.58	0.53	1.49	14.8	27.9	
16,332.0	92.60	179.60	11,109.2	-5,049.3	-285.6	1.96	1.28	1.49	11.5	29.0	
16,427.0	91.00	180.00	11,106.2	-5,144.3	-285.3	1.74	-1.68	0.42	8.6	28.6	



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #504Y
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3558.0usft (H&P 642)
Site:	Bandit 29 State Corn	MD Reference:	KB = 25 @ 3558.0usft (H&P 642)
Well:	#504Y	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)	EW (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
16,521.0	88.50	181.20	11,106.6	-5,238.3	-286.3	2.95	-2.66	1.28	9.1	26.8	
16,615.0	89.90	181.00	11,107.9	-5,332.2	-288.1	1.50	1.49	-0.21	10.5	24.3	
16,710.0	88.50	180.00	11,109.2	-5,427.2	-288.9	1.81	-1.47	-1.05	11.9	22.7	
16,804.0	89.50	179.80	11,110.9	-5,521.2	-288.7	1.08	1.06	-0.21	13.6	22.2	
16,898.0	89.10	179.30	11,112.0	-5,615.2	-288.0	0.68	-0.43	-0.53	14.8	22.2	
16,993.0	88.00	178.70	11,114.4	-5,710.1	-286.3	1.32	-1.16	-0.63	17.2	23.1	
17,088.0	88.70	179.60	11,117.2	-5,805.1	-284.9	1.20	0.74	0.95	20.0	23.7	
17,182.0	90.20	181.40	11,118.1	-5,899.1	-285.7	2.49	1.60	1.91	21.0	22.2	
17,277.0	90.00	181.20	11,117.9	-5,994.1	-287.9	0.30	-0.21	-0.21	20.9	19.3	
17,371.0	89.80	180.70	11,118.2	-6,088.0	-289.5	0.68	-0.43	-0.53	21.2	17.0	
17,466.0	89.20	181.40	11,119.2	-6,183.0	-291.2	0.85	-0.42	0.74	22.2	14.5	
17,560.0	88.80	181.00	11,120.9	-6,277.0	-293.2	0.60	-0.43	-0.43	23.9	11.8	
17,655.0	90.20	181.40	11,121.7	-6,372.0	-295.1	1.53	1.47	0.42	24.7	9.0	
17,749.0	89.60	181.20	11,121.8	-6,465.9	-297.3	0.67	-0.64	-0.21	24.9	6.1	
17,843.0	90.50	180.00	11,121.8	-6,559.9	-298.3	1.60	0.86	-1.28	24.8	4.4	
17,938.0	90.60	179.10	11,120.9	-6,654.9	-297.5	0.95	0.11	-0.95	23.9	4.4	
18,032.0	90.00	178.20	11,120.4	-6,748.9	-295.3	1.15	-0.64	-0.96	23.4	5.9	
18,127.0	89.30	178.40	11,120.9	-6,843.8	-292.5	0.77	-0.74	0.21	23.9	8.0	
18,222.0	88.90	177.50	11,122.4	-6,938.8	-289.1	1.04	-0.42	-0.95	25.4	10.6	
18,316.0	88.50	177.20	11,124.6	-7,032.6	-284.7	0.53	-0.43	-0.32	27.6	14.2	
18,410.0	87.90	177.20	11,127.5	-7,126.5	-280.2	0.64	-0.64	0.00	30.5	18.1	
18,465.6	87.72	176.79	11,129.6	-7,182.0	-277.2	0.80	-0.32	-0.74	32.6	20.6	
LTP Crossing 18465.6' MD; 11129.6' TVD; -7182.0'; -277.2'; 87.72											
18,505.0	87.60	176.50	11,131.3	-7,221.3	-274.9	0.80	-0.32	-0.74	34.2	22.6	
Last MWD Survey (MD = 18505.0)											
18,560.0	87.60	176.50	11,133.6	-7,276.1	-271.6	0.00	0.00	0.00	36.5	25.5	
Projection to Bit (MD = 18560.0)											



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #504Y
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3558.0usft (H&P 642)
Site:	Bandit 29 State Corn	MD Reference:	KB = 25 @ 3558.0usft (H&P 642)
Well:	#504Y	North Reference:	Grid
Wellbore:	.OH	Survey Calculation Method:	Minimum Curvature
Design:	.OH	Database:	EDM 5000.14

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N-S (usft)	+E-W (usft)	
11,193.1	11,066.5	77.0	-275.1	FTP Crossing 11193.1' MD; 11066.5' TVD; 77.0'; -275.1'; 59.21
18,465.6	11,129.6	-7,182.0	-277.2	LTP Crossing 18465.6' MD; 11129.6' TVD; -7182.0'; -277.2'; 87.72
18,505.0	11,131.3	-7,221.3	-274.9	Last MWD Survey (MD = 18505.0)
18,560.0	11,133.6	-7,276.1	-271.6	Projection to Bit (MD = 18560.0)

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

Bandit 29 State Com

#504Y

H&P 642

Plan #3

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



Adjust to Grid North
Magnetic Declination: 6.48°
Magnetic Declination: 6.48°
Dip Angle: 6.48°
Magnetic Declination: 6.48°

To convert a Magnetic Direction to a Grid Direction, Add 6.48°
To convert a Magnetic Direction to a True Direction, Add 6.48° East
To convert a True Direction to a Grid Direction, Subtract 6.48°

WELL DETAILS: #504Y

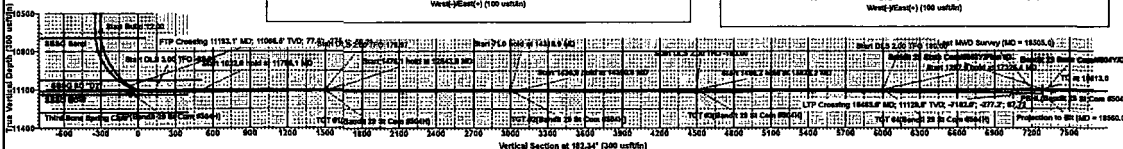
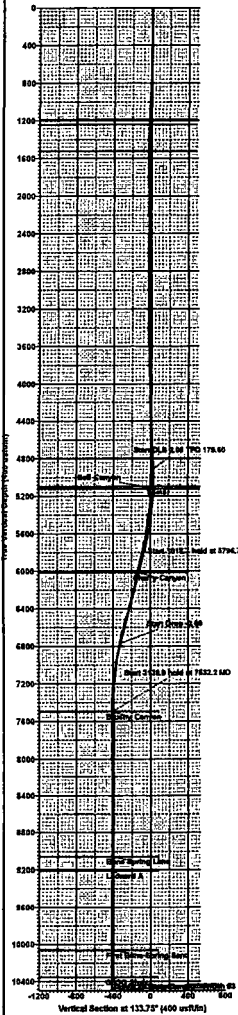
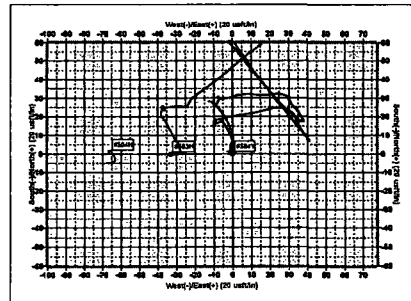
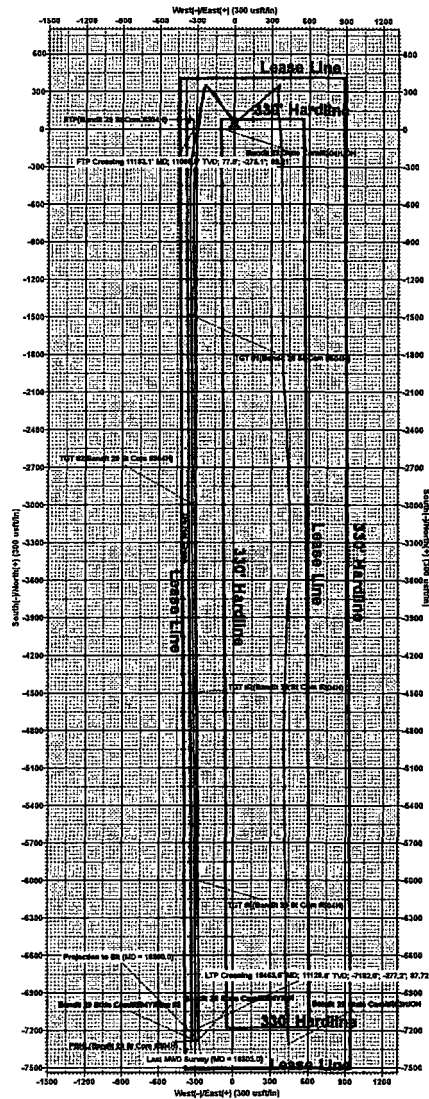
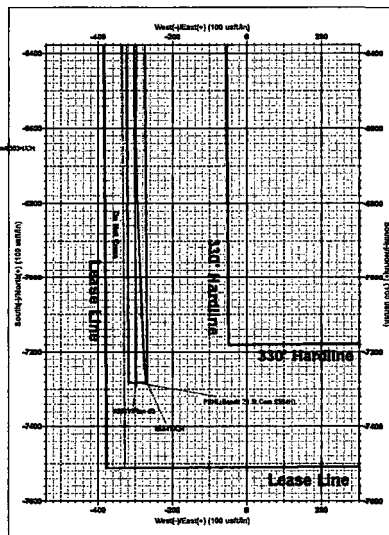
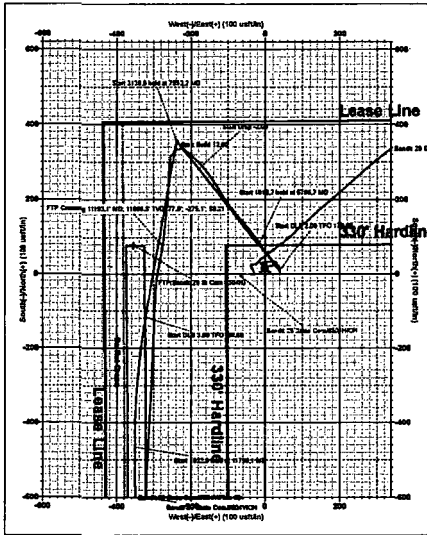
	+N-S	+E-W	North	KB = 25 @ 3558.64 (H&P 642)	Longitude	Slot
	0.0	0.0	435381.00	3533.0	103° 35' 34.513 W	

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VSeet	Target
1	4915.0	2.90	142.00	4913.6	9.6	39.1	0.00	0.00	-11.2	
2	5796.7	14.73	321.52	5787.1	80.4	-17.4	2.00	179.60	-79.6	
3	6815.4	14.73	321.52	6772.4	283.2	-178.6	0.00	0.00	-275.7	
4	7552.2	0.00	0.00	7501.0	357.0	-237.2	2.00	180.00	-347.0	
5	10692.1	0.00	0.00	10640.9	357.0	-237.2	0.00	0.00	-347.0	
6	11445.5	90.42	190.08	11118.3	-116.5	-321.3	12.00	190.08	129.5	
7	11796.1	90.62	179.55	11115.1	-465.4	-350.7	3.00	-88.86	479.3	
8	12818.1	90.62	179.55	11104.0	-1487.3	-342.7	0.00	0.00	1500.0	
9	12843.8	90.11	179.55	11103.8	-1512.9	-342.5	2.00	179.97	1525.6	
10	14319.9	90.11	179.55	11101.0	-2989.0	-330.8	0.00	0.00	3000.0	TGT #1(Bandit 29 St Com #504H)
11	14390.8	90.11	179.55	11100.9	-3060.0	-330.3	0.00	0.00	3070.9	
12	15821.6	90.11	179.55	11098.0	-4490.7	-319.0	0.00	0.00	4500.0	TGT #2(Bandit 29 St Com #504H)
13	15825.2	90.04	179.55	11098.0	-4494.3	-319.0	2.00	-180.00	4503.6	
14	17323.5	90.04	179.55	11097.0	-5992.5	-307.2	0.00	0.00	6000.0	TGT #3(Bandit 29 St Com #504H)
15	17323.5	90.04	179.55	11097.0	-5994.4	-307.1	2.00	180.00	6001.9	
16	18613.0	90.00	179.55	11097.0	-7282.0	-297.0	0.00	0.00	7288.1	TGT #4(Bandit 29 St Com #504H)
										PBHL(Bandit 29 St Com #504H)

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N-S	+E-W	North	East	Shape
PBHL(Bandit 29 St Com #504H)	11097.0	-7282.0	-297.0	428099.00	770076.00	Rectangle (Sides: L0.0 W60.0)
TGT #1(Bandit 29 St Com #504H)	11097.0	-4892.5	-307.2	423389.50	770045.84	Point
TGT #2(Bandit 29 St Com #504H)	11098.0	-4490.7	-319.0	430280.20	770054.00	Point
TGT #3(Bandit 29 St Com #504H)	11101.0	-2989.0	-330.8	432382.00	770042.17	Point
TGT #4(Bandit 29 St Com #504H)	11104.0	-1487.3	-342.7	433893.70	770030.33	Point
FTP(Bandit 29 St Com #504H)	11121.0	77.0	-355.0	435458.00	770018.00	Point



Lea County, NM (NAD 83 NME)
Bandit 29 State Com
#504Y
H&P 642
Plan #3