

30-025-44562

HOBBS OCD

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EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Bandit 29 State Com

#503H

OH

Design: OH

Midland PVA

03 May, 2018





Midland PVA



Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #503H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3557.0usft
Site:	Bandit 29 State Com	MD Reference:	KB = 25 @ 3557.0usft
Well:	#503H	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	#503H		
Well Position	+N-S	0.0 usft	Northing:
	+E-W	0.0 usft	Easting:
Position Uncertainty	0.0 usft		Wellhead Elevation:
			Ground Level:

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination
			(°)
	IGRF2015	4/7/2018	6.87
			Dip Angle
			(°)
			Field Strength
			(nT)
			47,834.91591746

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
			(°)
			176.46



Midland PVA



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Survey Program		Date	5/3/2018		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
100.0	4,828.0	VES Gyro (OH)	NSG-CT_WL	Continuous north-seeking gyro on wireline	
4,979.0	18,508.0	Drilltech MWD (OH)	MWD	OWSG MWD - Standard	

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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.0	0.0
100.0	0.57	102.90	100.0	-0.1	0.5	0.57	0.57	0.00	0.0	0.0
200.0	0.50	93.41	200.0	-0.2	1.4	0.11	-0.07	-9.49	0.0	0.0
300.0	0.52	76.50	300.0	-0.2	2.3	0.15	0.02	-16.91	0.0	0.0
400.0	0.45	71.11	400.0	0.1	3.1	0.08	-0.07	-5.39	0.0	0.0
500.0	0.51	60.75	500.0	0.4	3.9	0.11	0.06	-10.36	0.0	0.0
600.0	0.46	45.17	600.0	0.9	4.5	0.14	-0.05	-15.58	0.0	0.0
700.0	0.48	27.48	700.0	1.6	5.0	0.15	0.02	-17.69	0.0	0.0
800.0	0.59	3.12	800.0	2.5	5.2	0.25	0.11	-24.36	0.0	0.0
900.0	0.69	351.72	900.0	3.6	5.2	0.16	0.10	-11.40	0.0	0.0
1,000.0	0.68	327.29	1,000.0	4.7	4.8	0.29	-0.01	-24.43	0.0	0.0
1,100.0	0.79	328.14	1,099.9	5.7	4.1	0.11	0.11	0.85	0.0	0.0
1,200.0	1.19	329.82	1,199.9	7.2	3.2	0.40	0.40	1.68	0.0	0.0
1,300.0	1.82	332.47	1,299.9	9.5	1.9	0.63	0.63	2.65	0.0	0.0
1,400.0	1.59	331.84	1,399.9	12.2	0.5	0.23	-0.23	-0.63	0.0	0.0
1,500.0	1.32	330.62	1,499.8	14.4	-0.7	0.27	-0.27	-1.22	0.0	0.0
1,600.0	0.99	328.89	1,599.8	16.1	-1.7	0.33	-0.33	-1.73	0.0	0.0
1,700.0	0.66	327.01	1,699.8	17.4	-2.4	0.33	-0.33	-1.88	0.0	0.0
1,800.0	0.83	326.69	1,799.8	18.4	-3.2	0.17	0.17	-0.32	0.0	0.0
1,900.0	0.85	324.88	1,899.8	19.7	-4.0	0.03	0.02	-1.81	0.0	0.0
2,000.0	0.67	322.30	1,999.8	20.7	-4.8	0.18	-0.18	-2.58	0.0	0.0



Midland PVA



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Site: Bandit 29 State Com
Well: #503H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #503H
TVD Reference: KB = 25 @ 3557.0usft
MD Reference: KB = 25 @ 3557.0usft
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)
2,100.0	0.67	6.48	2,099.8	21.8	-5.1	0.50	0.00	44.18	0.0	0.0
2,200.0	0.66	24.67	2,199.7	22.9	-4.8	0.21	-0.01	18.19	0.0	0.0
2,300.0	0.15	49.04	2,299.7	23.5	-4.4	0.53	-0.51	24.37	0.0	0.0
2,400.0	0.63	69.36	2,399.7	23.8	-3.8	0.49	0.48	20.32	0.0	0.0
2,500.0	0.10	93.20	2,499.7	23.9	-3.2	0.54	-0.53	23.84	0.0	0.0
2,600.0	0.39	146.47	2,599.7	23.7	-2.9	0.34	0.29	53.27	0.0	0.0
2,700.0	0.36	328.49	2,699.7	23.6	-2.9	0.75	-0.03	-177.98	0.0	0.0
2,800.0	0.34	339.21	2,799.7	24.2	-3.2	0.07	-0.02	10.72	0.0	0.0
2,900.0	0.31	341.82	2,899.7	24.7	-3.4	0.03	-0.03	2.61	0.0	0.0
3,000.0	0.50	346.56	2,999.7	25.4	-3.5	0.19	0.19	4.74	0.0	0.0
3,100.0	0.14	308.11	3,099.7	25.9	-3.7	0.40	-0.36	-38.45	0.0	0.0
3,200.0	0.28	285.41	3,199.7	26.0	-4.1	0.18	0.14	-22.70	0.0	0.0
3,300.0	0.32	196.00	3,299.7	25.8	-4.4	0.42	0.04	-89.41	0.0	0.0
3,400.0	0.37	166.46	3,399.7	25.3	-4.4	0.18	0.05	-29.54	0.0	0.0
3,500.0	0.39	155.07	3,499.7	24.6	-4.2	0.08	0.02	-11.39	0.0	0.0
3,600.0	0.17	88.27	3,599.7	24.3	-3.9	0.36	-0.22	-66.80	0.0	0.0
3,700.0	0.16	79.01	3,699.7	24.4	-3.6	0.03	-0.01	-9.26	0.0	0.0
3,800.0	0.19	69.54	3,799.7	24.4	-3.3	0.04	0.03	-9.47	0.0	0.0
3,900.0	0.43	63.06	3,899.7	24.7	-2.8	0.24	0.24	-6.48	0.0	0.0
4,000.0	1.13	70.79	3,999.7	25.2	-1.5	0.71	0.70	7.73	0.0	0.0
4,100.0	0.53	80.15	4,099.7	25.6	-0.2	0.61	-0.60	9.36	0.0	0.0
4,200.0	0.96	85.52	4,199.7	25.7	1.1	0.44	0.43	5.37	0.0	0.0
4,300.0	1.31	95.27	4,299.7	25.7	3.1	0.40	0.35	9.75	0.0	0.0
4,400.0	1.73	87.54	4,399.6	25.6	5.8	0.47	0.42	-7.73	0.0	0.0
4,500.0	0.77	82.33	4,499.6	25.8	7.9	0.97	-0.96	-5.21	0.0	0.0
4,600.0	0.37	65.44	4,599.6	26.0	8.9	0.43	-0.40	-16.89	0.0	0.0
4,700.0	0.83	32.38	4,699.6	26.8	9.6	0.56	0.46	-33.06	0.0	0.0



Midland PVA



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Project: Lea County, NM (NAD 83 NME)
Site: Bandit 28 State Corn
Well: #503H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #503H
TVD Reference: KB = 25 @ 3557.0usft
MD Reference: KB = 25 @ 3557.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
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)	
4,800.0	0.46	5.82	4,799.6	27.8	10.0	0.47	-0.37	-26.56	0.0	0.0	
4,828.0	0.29	350.55	4,827.6	28.0	10.0	0.70	-0.61	-54.54	0.0	0.0	
4,979.0	0.50	64.10	4,978.6	28.6	10.5	0.33	0.14	48.71	3.3	-1.3	
5,071.0	1.80	35.00	5,070.6	30.0	11.7	1.51	1.41	-31.63	8.2	1.6	
5,165.0	3.30	58.70	5,164.5	32.6	14.9	1.92	1.60	25.21	13.6	-2.9	
5,260.0	5.70	52.90	5,259.2	36.9	21.0	2.57	2.53	-6.11	19.3	-2.8	
5,354.0	8.40	50.60	5,352.5	44.0	30.0	2.89	2.87	-2.45	23.8	-2.6	
5,449.0	11.30	49.90	5,446.1	54.4	42.5	3.06	3.05	-0.74	26.6	-2.6	
5,543.0	13.30	50.20	5,537.9	67.3	57.8	2.13	2.13	0.32	28.5	-2.9	
5,638.0	15.40	48.50	5,629.9	82.6	75.7	2.25	2.21	-1.79	29.2	-2.0	
5,732.0	15.90	48.50	5,720.4	99.5	94.7	0.53	0.53	0.00	27.8	-1.5	
5,827.0	15.90	49.20	5,811.8	116.6	114.3	0.20	0.00	0.74	26.0	-1.5	
5,921.0	15.10	48.70	5,902.4	133.1	133.2	0.86	-0.85	-0.53	24.9	-1.0	
6,015.0	14.20	48.30	5,993.3	148.8	151.0	0.96	-0.96	-0.43	25.2	-0.4	
6,110.0	15.00	48.50	6,085.3	164.7	168.9	0.84	0.84	0.21	25.5	0.0	
6,204.0	15.10	49.50	6,176.0	180.7	187.4	0.30	0.11	1.06	25.1	-0.2	
6,298.0	14.10	49.50	6,267.0	196.1	205.4	1.06	-1.06	0.00	25.5	-0.1	
6,393.0	18.30	49.90	6,358.7	212.2	224.4	2.32	2.32	0.42	24.9	-0.3	
6,487.0	16.50	49.20	6,448.8	229.4	244.6	0.30	0.21	-0.74	22.3	0.0	
6,582.0	16.90	48.50	6,539.8	247.4	265.1	0.47	0.42	-0.74	19.1	0.5	
6,676.0	17.10	48.30	6,629.7	265.7	285.7	0.22	0.21	-0.21	15.5	1.1	
6,771.0	16.40	48.50	6,720.7	283.8	306.2	0.74	-0.74	0.21	12.3	1.6	
6,865.0	15.70	49.50	6,811.0	300.9	325.8	0.80	-0.74	1.06	10.0	1.6	
6,960.0	13.40	53.10	6,903.0	315.8	344.3	2.60	-2.42	3.79	7.6	0.5	
7,054.0	11.30	52.40	6,994.8	328.0	360.3	2.24	-2.23	-0.74	5.6	-0.4	
7,148.0	8.70	49.70	7,087.4	338.2	373.1	2.81	-2.77	-2.87	4.4	-0.6	
7,243.0	6.60	49.70	7,181.5	346.4	382.7	2.21	-2.21	0.00	3.9	-0.6	



Midland PVA



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Site:	Bandit 29 State Corn	MD Reference:	KB = 25 @ 3557.0usft
Well:	#503H	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)	
7,337.0	3.70	56.80	7,275.1	351.6	389.4	3.15	-3.09	7.55	4.3	-1.6	
7,432.0	1.10	146.10	7,370.1	352.5	392.4	4.05	-2.74	94.00	-3.1	-7.1	
7,526.0	1.10	171.00	7,464.0	350.8	393.1	0.50	0.00	26.49	-9.0	-7.1	
7,621.0	1.30	183.80	7,559.0	348.9	393.2	0.35	0.21	13.47	-12.5	-4.9	
7,715.0	1.40	199.70	7,653.0	346.7	392.7	0.41	0.11	16.91	-15.5	-1.0	
7,810.0	1.50	211.30	7,748.0	344.6	391.7	0.33	0.11	12.21	-17.8	2.4	
7,904.0	1.70	209.90	7,841.9	342.3	390.3	0.22	0.21	-1.49	-20.5	1.9	
7,998.0	1.70	208.60	7,935.9	339.9	389.0	0.04	0.00	-1.38	-23.3	1.4	
8,093.0	0.30	311.80	8,030.9	338.8	388.1	1.89	-1.47	108.63	6.8	23.7	
8,186.0	0.40	332.60	8,123.9	339.3	387.8	0.17	0.11	22.37	14.2	19.9	
8,281.0	0.20	296.00	8,218.9	339.6	387.5	0.28	-0.21	-38.53	-0.9	24.2	
8,375.0	0.10	202.50	8,312.9	339.6	387.3	0.24	-0.11	-99.47	-24.2	-2.5	
8,469.0	0.40	162.90	8,406.9	339.2	387.4	0.35	0.32	-42.13	-17.4	-17.4	
8,564.0	0.50	157.30	8,501.9	338.5	387.6	0.11	0.11	-5.89	-16.4	-19.1	
8,659.0	0.80	158.50	8,596.9	337.5	388.0	0.32	0.32	1.26	-17.9	-18.7	
8,753.0	0.80	158.50	8,690.8	336.3	388.5	0.00	0.00	0.00	-19.2	-18.7	
8,848.0	1.00	170.70	8,785.8	334.9	388.9	0.29	0.21	12.84	-24.2	-14.1	
8,942.0	1.10	176.30	8,879.8	333.2	389.1	0.15	0.11	5.96	-27.1	-11.6	
9,037.0	1.10	172.40	8,974.8	331.3	389.3	0.08	0.00	-4.11	-28.1	-13.5	
9,131.0	1.10	172.40	9,068.8	329.6	389.5	0.00	0.00	0.00	-29.9	-13.5	
9,226.0	1.20	161.70	9,163.8	327.7	389.9	0.25	0.11	-11.26	-28.8	-19.0	
9,320.0	0.50	225.50	9,257.7	326.5	389.9	1.15	-0.74	67.89	-30.6	18.3	
9,414.0	0.90	210.90	9,351.7	325.6	389.3	0.46	0.43	-15.53	-35.3	9.9	
9,508.0	1.00	191.10	9,445.7	324.1	388.7	0.36	0.11	-21.06	-38.1	-2.9	
9,603.0	1.00	294.20	9,540.7	323.7	387.8	1.65	0.00	108.53	5.2	38.6	
9,697.0	1.40	262.80	9,634.7	323.8	385.9	0.80	0.43	-33.40	-17.5	35.2	
9,791.0	1.40	242.20	9,728.7	323.2	383.8	0.53	0.00	-21.91	-31.0	26.4	



Midland PVA



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9,885.0	1.10	228.00	9,822.6	322.0	382.1	0.46	-0.32	-15.11	-38.6	17.7	
9,980.0	1.40	224.80	9,917.6	320.6	380.6	0.32	0.32	-3.37	-41.6	15.5	
10,074.0	1.40	214.40	10,011.6	318.8	379.1	0.27	0.00	-11.06	-46.0	7.5	
10,168.0	1.10	219.90	10,105.6	317.2	377.9	0.34	-0.32	5.85	-47.1	12.0	
10,263.0	0.90	205.10	10,200.6	315.8	377.0	0.34	-0.21	-15.58	-50.2	-0.7	
10,357.0	0.80	206.70	10,294.5	314.6	376.4	0.11	-0.11	1.70	-51.6	0.8	
10,452.0	1.00	217.80	10,389.5	313.3	375.6	0.28	0.21	11.68	-52.0	10.8	
10,546.0	1.20	208.80	10,483.5	311.8	374.6	0.28	0.21	-8.57	-54.8	2.4	
10,644.0	7.70	174.20	10,581.2	304.4	374.8	6.88	6.63	-35.31	-53.8	-29.9	
10,675.0	12.00	170.70	10,611.7	299.1	375.5	14.00	13.87	-11.29	-57.0	-33.6	
10,722.0	17.60	174.40	10,657.1	287.2	377.0	12.08	11.91	7.87	-70.8	-30.0	
10,769.0	23.10	174.40	10,701.2	271.0	378.6	11.70	11.70	0.00	-83.7	-28.5	
10,816.0	28.20	178.90	10,743.5	250.7	379.7	11.61	10.85	9.57	-97.6	-21.7	
10,864.0	32.70	179.80	10,784.9	226.3	380.0	9.42	9.38	1.88	-108.2	-19.9	
10,911.0	38.10	177.50	10,823.2	199.1	380.6	11.83	11.49	-4.89	-115.6	-23.3	
10,958.0	42.70	177.70	10,859.0	168.7	381.9	9.79	9.79	0.43	-122.1	-21.7	
11,005.0	47.20	174.70	10,892.3	135.6	384.2	10.58	9.57	-6.38	-125.2	-24.0	
11,052.0	50.60	170.30	10,923.2	100.5	388.8	10.10	7.23	-9.36	-125.2	-24.4	
11,076.7	53.11	172.03	10,938.4	81.3	391.8	11.57	10.17	7.01	-125.1	-18.3	
FTP Crossing 11076.7 MD; 10938.4 TVD; 81.3°; 391.8°; 53.11											
11,099.0	55.40	173.50	10,951.4	63.3	394.1	11.57	10.26	6.58	-124.2	-13.6	
11,146.0	59.10	173.60	10,976.9	24.1	398.5	7.87	7.87	0.21	-119.6	-7.6	
11,193.0	61.60	175.40	11,000.1	-16.6	402.4	6.27	5.32	3.83	-111.5	-1.3	
11,240.0	64.90	178.00	11,021.3	-58.5	404.8	8.58	7.02	5.53	-99.7	2.8	
11,287.0	67.80	178.20	11,040.1	-101.5	406.2	6.18	6.17	0.43	-85.0	4.4	
11,335.0	71.30	178.60	11,056.9	-146.4	407.5	7.33	7.29	0.83	-68.2	5.5	
11,382.0	75.80	178.60	11,070.2	-191.5	408.6	9.57	9.57	0.00	-54.4	6.2	



Midland PVA



Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Bandit 28 State Com
Well: #503H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #503H
TVD Reference: KB = 25 @ 3557.0usft
MD Reference: KB = 25 @ 3557.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
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)	
11,429.0	80.00	178.40	11,080.0	-237.4	409.8	8.95	8.94	-0.43	-44.0		7.0
11,476.0	85.30	177.90	11,086.1	-284.0	411.3	11.33	11.28	-1.06	-37.5		8.1
11,524.0	88.20	179.80	11,088.8	-331.9	412.3	7.22	6.04	3.96	-34.3		8.7
11,618.0	89.30	178.90	11,090.8	-425.9	413.3	1.51	1.17	-0.96	-31.1		9.2
11,713.0	90.50	178.70	11,091.0	-520.8	415.3	1.28	1.26	-0.21	-29.9		10.5
11,807.0	90.10	178.20	11,090.5	-614.8	417.9	0.68	-0.43	-0.53	-29.3		12.4
11,902.0	89.60	178.40	11,090.8	-709.8	420.7	0.57	-0.53	0.21	-28.0		14.6
11,996.0	90.20	180.20	11,090.9	-803.8	421.8	2.02	0.84	1.91	-26.8		15.1
12,091.0	89.40	180.20	11,091.2	-898.8	421.5	0.84	-0.84	0.00	-25.3		14.2
12,185.0	90.60	180.00	11,091.2	-992.8	421.3	1.29	1.28	-0.21	-24.3		13.4
12,279.0	90.30	179.40	11,090.5	-1,086.8	421.8	0.71	-0.32	-0.64	-23.9		13.2
12,373.0	89.50	178.60	11,090.7	-1,180.7	423.5	1.20	-0.85	-0.85	-22.7		14.3
12,468.0	89.50	180.70	11,091.5	-1,275.7	424.0	2.21	0.00	2.21	-20.8		14.2
12,563.0	91.30	179.60	11,090.8	-1,370.7	423.8	2.22	1.89	-1.16	-20.4		13.3
12,657.0	90.70	179.80	11,089.2	-1,464.7	424.3	0.67	-0.64	0.21	-20.8		13.2
12,752.0	90.70	179.30	11,088.0	-1,559.7	425.0	0.53	0.00	-0.53	-21.3		12.1
12,846.0	90.10	180.00	11,087.4	-1,653.7	425.6	0.98	-0.64	0.74	-21.5		9.7
12,940.0	90.00	180.20	11,087.3	-1,747.7	425.4	0.24	-0.11	0.21	-21.1		6.6
13,034.0	89.50	180.00	11,087.7	-1,841.7	425.3	0.57	-0.53	-0.21	-20.2		3.4
13,129.0	90.50	177.20	11,087.7	-1,936.6	427.6	3.13	1.05	-2.95	-19.7		2.7
13,223.0	89.50	176.80	11,087.7	-2,030.5	432.5	1.15	-1.06	-0.43	-19.2		4.7
13,317.0	90.70	177.00	11,087.5	-2,124.4	437.6	1.29	1.28	0.21	-18.9		6.7
13,411.0	90.20	175.90	11,086.8	-2,218.2	443.4	1.29	-0.53	-1.17	-19.1		9.6
13,506.0	89.10	175.90	11,087.4	-2,312.9	450.2	1.16	-1.16	0.00	-18.1		13.3
13,600.0	89.20	177.20	11,088.8	-2,406.8	455.9	1.39	0.11	1.38	-16.2		16.0
13,694.0	91.10	177.30	11,088.5	-2,500.6	460.4	2.02	2.02	0.11	-15.9		17.5
13,789.0	91.20	177.30	11,086.6	-2,595.5	464.9	0.11	0.11	0.00	-17.3		19.0



Midland PVA



Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #503H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3557.0usft
Site:	Bandit 29 State Corn	MD Reference:	KB = 25 @ 3557.0usft
Well:	#503H	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)	
13,883.0	90.70	177.20	11,085.1	-2,689.4	469.4	0.54	-0.53	-0.11	-18.4	20.5	
13,977.0	90.70	178.40	11,083.9	-2,783.3	473.0	1.28	0.00	1.28	-19.1	21.1	
14,071.0	90.50	178.40	11,082.9	-2,877.3	475.6	0.21	-0.21	0.00	-19.6	20.8	
14,165.0	90.00	177.20	11,082.5	-2,971.2	479.2	1.38	-0.53	-1.28	-19.5	21.4	
14,259.0	90.00	179.30	11,082.5	-3,065.2	482.1	2.23	0.00	2.23	-19.1	22.6	
14,353.0	89.60	178.90	11,082.9	-3,159.1	483.6	0.60	-0.43	-0.43	-18.6	25.3	
14,447.0	89.30	178.60	11,083.8	-3,253.1	485.6	0.45	-0.32	-0.32	-17.6	29.3	
14,541.0	89.30	181.70	11,084.9	-3,347.1	485.4	3.30	0.00	3.30	-16.4	31.0	
14,636.0	90.50	182.80	11,085.1	-3,442.0	481.6	1.71	1.26	1.16	-16.1	29.2	
14,730.0	90.20	182.30	11,084.5	-3,535.9	477.4	0.62	-0.32	-0.53	-16.6	26.9	
14,824.0	90.20	182.10	11,084.2	-3,629.9	473.8	0.21	0.00	-0.21	-16.8	25.2	
14,918.0	90.20	181.70	11,083.8	-3,723.8	470.7	0.43	0.00	-0.43	-17.0	24.0	
15,012.0	90.10	181.60	11,083.6	-3,817.8	468.0	0.15	-0.11	-0.11	-17.2	23.2	
15,106.0	88.80	182.60	11,084.5	-3,911.7	464.6	1.74	-1.38	1.08	-16.1	21.7	
15,201.0	88.50	182.40	11,086.7	-4,006.6	460.4	0.38	-0.32	-0.21	-13.8	19.5	
15,295.0	89.00	182.40	11,088.8	-4,100.5	456.5	0.53	0.53	0.00	-11.6	17.4	
15,390.0	89.30	181.90	11,090.2	-4,195.4	452.9	0.61	0.32	-0.53	-10.1	15.8	
15,484.0	88.90	182.10	11,091.7	-4,289.3	449.6	0.48	-0.43	0.21	-8.5	14.4	
15,578.0	89.30	181.90	11,093.2	-4,383.3	446.4	0.48	0.43	-0.21	-7.0	13.1	
15,673.0	89.10	181.70	11,094.5	-4,478.2	443.4	0.30	-0.21	-0.21	-5.5	12.0	
15,767.0	87.80	181.60	11,097.0	-4,572.1	440.7	1.39	-1.38	-0.11	-3.0	9.8	
15,862.0	90.20	181.00	11,098.7	-4,667.1	438.5	2.60	2.53	-0.63	-1.5	7.0	
15,956.0	90.50	180.30	11,098.1	-4,761.1	437.5	0.81	0.32	-0.74	-2.2	5.2	
16,050.0	90.70	180.30	11,097.1	-4,855.1	437.0	0.21	0.21	0.00	-3.3	4.0	
16,145.0	90.00	180.00	11,096.5	-4,950.0	436.7	0.80	-0.74	-0.32	-4.0	3.0	
16,239.0	89.10	179.10	11,097.3	-5,044.0	437.5	1.35	-0.96	-0.96	-3.4	3.1	
16,334.0	90.50	180.30	11,097.6	-5,139.0	438.0	1.94	1.47	1.26	-3.2	2.9	



Midland PVA



Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #503H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3557.0usft
Site:	Bandit 29 State Com	MD Reference:	KB = 25 @ 3557.0usft
Well:	#503H	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)	
16,426.0	90.00	180.00	11,097.2	-5,233.0	437.7	0.62	-0.53	-0.32	-3.8		1.9
16,522.0	89.20	179.40	11,097.9	-5,327.0	438.2	1.06	-0.85	-0.64	-3.2		1.7
16,616.0	88.90	178.70	11,089.4	-5,421.0	439.8	0.81	-0.32	-0.74	-1.8		2.6
16,711.0	90.60	179.10	11,099.8	-5,516.0	441.6	1.84	1.79	0.42	-1.5		3.7
16,805.0	90.50	178.40	11,098.9	-5,609.9	443.6	0.75	-0.11	-0.74	-2.6		5.1
16,899.0	90.20	178.00	11,098.4	-5,703.9	446.6	0.53	-0.32	-0.43	-3.3		7.3
16,993.0	89.70	177.50	11,098.4	-5,797.8	450.3	0.75	-0.53	-0.53	-3.3		10.3
17,087.0	90.00	177.50	11,098.7	-5,891.7	454.4	0.32	0.32	0.00	-3.2		13.7
17,182.0	91.30	179.80	11,097.6	-5,986.7	456.6	2.78	1.37	2.42	-4.4		15.2
17,276.0	90.30	181.00	11,096.3	-6,080.7	456.0	1.66	-1.06	1.28	-5.9		14.0
17,370.0	91.30	180.30	11,095.0	-6,174.6	454.9	1.30	1.06	-0.74	-7.5		12.3
17,464.0	90.00	180.00	11,093.9	-6,268.6	454.6	1.42	-1.38	-0.32	-8.7		11.4
17,558.0	88.10	180.70	11,095.5	-6,362.6	454.1	2.15	-2.02	0.74	-7.4		10.2
17,652.0	87.60	180.50	11,099.0	-6,456.5	453.1	0.57	-0.53	-0.21	-4.1		8.6
17,747.0	89.20	179.80	11,101.6	-6,551.5	452.8	1.84	1.68	-0.74	-1.7		7.7
17,841.0	88.50	179.40	11,103.5	-6,645.5	453.5	0.86	-0.74	-0.43	0.0		7.7
17,936.0	89.30	178.90	11,105.4	-6,740.5	454.9	0.99	0.84	-0.53	1.6		8.5
18,031.0	88.30	177.70	11,107.3	-6,835.4	457.7	1.64	-1.05	-1.26	3.4		10.7
18,125.0	89.50	178.00	11,109.2	-6,929.3	461.2	1.32	1.28	0.32	5.0		13.6
18,220.0	88.60	177.20	11,110.7	-7,024.2	465.2	1.27	-0.95	-0.84	6.3		16.9
18,314.0	88.70	176.80	11,112.9	-7,118.1	470.1	0.44	0.11	-0.43	8.3		21.2
18,376.2	88.50	176.60	11,114.5	-7,180.2	473.7	0.45	-0.32	-0.32	9.7		24.4
LTP Crossing 18376.2' MD; 11114.5' TVD; -7180.2'; 473.7'; 88.50											
18,408.0	88.40	176.50	11,115.3	-7,211.9	475.6	0.45	-0.32	-0.32	10.4		26.1
Last MWD Survey (MD = 18408.0)											
18,508.0	88.40	176.50	11,118.1	-7,311.6	481.7	0.00	0.00	0.00	18.5		45.1
Projection to Bit (MD = 18508.0)											



Midland PVA



Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #503H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3557.0usft
Site:	Bandit 29 State Corn	MD Reference:	KB = 25 @ 3557.0usft
Well:	#503H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

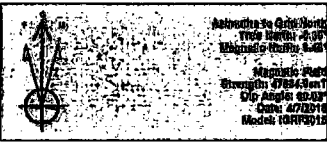
Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
11,076.7	10,938.4	81.3	391.8	FTP Crossing 11076.7' MD; 10938.4' TVD; 81.3'; 391.8'; 53.11
18,376.2	11,114.5	-7,180.2	473.7	LTP Crossing 18376.2' MD; 11114.5' TVD; -7180.2'; 473.7'; 68.50
18,408.0	11,115.3	-7,211.9	475.6	Last MWD Survey (MD = 18408.0)
18,508.0	11,118.1	-7,311.6	481.7	Projection to Bit (MD = 18508.0)

Checked By: _____	Approved By: _____	Date: _____
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Lea County, NM (NAD 83 NME)
Bandit 29 State Com #503H
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



To convert a Magnetic Direction to a Grid Direction, Add 8.48°
To convert a Magnetic Direction to a True Direction, Add 6.87° East
To convert a True Direction to a Grid Direction, Subtract 0.39°

WELL DETAILS: #503H											
3532.0											
KB = 25 @ 3557.0' Depth											
Easting: 770340.00 32° 11' 41.182 N Longitude: 103° 35' 34.897 W											
Site:											
+N-S +E-W Northing											
0.0 0.0 435361.00											
SECTION DETAILS											
Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VSect	Target	
1	4828.0	0.29	350.55	4827.6	28.0	10.0	0.00	0.00	-27.3		
2	5561.4	14.81	49.60	5552.7	90.9	81.5	2.00	60.00	-46.7		
3	6519.9	14.81	49.60	6768.5	299.3	326.4	0.00	0.00	-276.6		
4	7559.7	0.00	0.00	7561.0	361.0	398.9	2.00	180.00	-335.7		
5	10708.7	0.00	0.00	10648.0	361.0	398.9	0.00	0.00	-335.7		
6	11462.1	90.65	179.62	11125.4	-121.9	402.1	12.00	179.62	146.5		
7	12817.7	90.65	179.62	11110.0	-1477.4	411.2	0.00	0.00	1500.0	TGT #1(Bandit 29 St Com #503H)	
8	12891.9	90.30	178.18	11102.0	-1591.5	412.6	2.00	-103.87	1574.0		
9	14318.5	90.30	178.18	11102.0	-2977.4	458.0	0.00	0.00	3000.0	TGT #2(Bandit 29 St Com #503H)	
10	14468.3	90.06	181.17	11101.5	-3127.2	458.9	2.00	94.43	3149.6		
11	15823.3	90.06	181.17	11100.0	-4481.9	431.3	0.00	0.00	4500.0	TGT #3(Bandit 29 St Com #503H)	
12	15903.2	89.92	179.57	11100.0	-4561.9	430.8	2.00	-85.20	4579.7		
13	17325.6	89.92	179.57	11102.0	-5984.2	441.4	0.00	0.00	6000.0	TGT #4(Bandit 29 St Com #503H)	
14	17329.0	89.87	179.62	11102.0	-5987.6	441.4	2.00	141.32	6003.4		
15	18618.5	89.87	179.62	11105.0	-7277.0	450.0	0.00	0.00	7290.9	PBHL(Bandit 29 St Com #503H)	

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)											
Name	TVD	+N-S	+E-W	Northing	Easting	Shape					
TGT #1(Bandit 29 St Com #503H)	0.0	361.0	398.9	435742.00	770736.50	Polygon					
TGT #2(Bandit 29 St Com #503H)	11102.0	-4481.9	431.3	430899.10	770717.30	Point					
TGT #3(Bandit 29 St Com #503H)	11102.0	-2977.4	458.0	432403.60	770798.00	Point					
TGT #4(Bandit 29 St Com #503H)	11102.0	-3884.2	441.4	429396.60	770761.25	Point					
PBHL(Bandit 29 St Com #503H)	11105.0	-7277.0	450.0	429104.00	770790.00	Rectangle (Sides: L:0.0 W:0.0)					
FTP(Bandit 29 St Com #503H)	11110.0	-1477.4	411.2	433903.60	770751.20	Point					
FTP(Bandit 29 St Com #503H)	11127.0	81.0	395.0	435462.00	770735.00	Point					

