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EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Adder 31 State

#505H

OH

Design: OH

Midland PVA

17 September, 2019



Midland PVA

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Adder 31 State
 Well: #505H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #505H
 TVD Reference: KB = 25 @ 3526.0usft
 MD Reference: KB = 25 @ 3526.0usft
 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	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Adder 31 State		
Site Position:		Northing:	425,513.00 usft
From:	Map	Easting:	765,412.00 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 10' 3.867 N
		Longitude:	103° 36' 33.017 W
		Grid Convergence:	0.39 °

Well	#505H		
Well Position	+N-S 0.0 usft	Northing:	425,513.00 usft
	+E-W 0.0 usft	Easting:	765,445.00 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	32° 10' 3.865 N
		Longitude:	103° 36' 32.633 W
		Ground Level:	3,501.0 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2015	9/11/2019	6.78
			Dip Angle (°)
			59.98
			Field Strength (nT)
			47,722.30291526

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)
	0.0	0.0	0.0
		Direction (°)	6.92

Survey Program	Date 9/17/2019		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name
172.0	16,014.0	Learn MWD (OH)	MWD
			Description
			OWSG MWD - Standard



Midland PVA

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Site:	Adder 31 State	MD Reference:	KB = 25 @ 3526.0usft
Well:	#505H	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)	
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0
172.0	1.10	348.80	172.0	1.6	-0.3	0.84	0.84	0.00	-1.7	0.0	
228.0	1.30	348.30	228.0	2.8	-0.6	0.36	0.36	-0.89	-2.8	0.0	
316.0	1.40	343.90	316.0	4.8	-1.1	0.16	0.11	-5.00	-4.9	-0.3	
404.0	1.20	341.30	403.9	6.7	-1.6	0.24	-0.23	-2.95	-6.9	-0.6	
492.0	1.10	334.00	491.9	8.3	-2.3	0.20	-0.11	-8.30	-8.5	-1.8	
583.0	1.20	324.30	582.9	9.9	-3.3	0.24	0.11	-10.66	-9.9	-3.1	
676.0	1.30	327.00	675.9	11.6	-4.4	0.12	0.11	2.90	-12.1	-2.6	
770.0	1.10	331.70	769.9	13.2	-5.4	0.24	-0.21	5.00	-14.2	-1.5	
863.0	1.20	332.30	862.8	14.9	-6.3	0.11	0.11	0.65	-16.1	-1.4	
956.0	1.40	314.50	955.8	16.5	-7.5	0.46	0.22	-19.14	-17.0	-8.5	
1,049.0	1.70	290.70	1,048.8	17.8	-8.6	0.76	0.32	-25.59	-15.3	-13.3	
1,118.0	1.60	287.70	1,117.7	18.5	-11.5	0.19	-0.14	-4.35	-16.6	-14.1	
1,237.0	1.70	280.00	1,236.7	19.8	-14.8	0.10	0.08	1.93	-20.6	-13.4	
1,331.0	0.70	236.50	1,330.7	19.8	-16.5	1.49	-1.08	-56.91	-2.9	-25.6	
1,424.0	2.60	159.00	1,423.6	17.5	-16.3	2.73	2.04	-83.33	22.3	-6.1	
1,517.0	4.90	147.10	1,516.4	12.2	-13.4	2.60	2.47	-12.80	19.7	-6.2	
1,610.0	7.60	139.80	1,608.9	4.1	-7.2	3.02	2.90	-7.85	15.2	-6.7	
1,704.0	9.50	138.30	1,701.8	-6.4	1.9	2.03	2.02	-1.60	9.2	-10.2	
1,789.0	9.10	139.20	1,785.6	-17.9	12.1	0.45	-0.42	0.95	3.7	-15.4	
1,892.0	9.10	133.80	1,887.4	-28.6	22.2	0.92	0.00	-5.81	1.0	-19.9	
1,985.0	10.10	126.60	1,979.1	-38.6	34.0	1.68	1.08	-7.74	-1.1	-23.3	
2,078.0	9.80	127.60	2,070.7	-48.3	46.9	0.37	-0.32	1.08	-6.7	-26.2	
2,171.0	9.50	126.80	2,162.4	-57.7	59.3	0.35	-0.32	-0.86	-11.0	-29.2	
2,264.0	10.30	115.40	2,254.0	-65.6	72.9	2.27	0.88	-12.28	-9.6	-33.0	
2,357.0	9.80	114.90	2,345.6	-72.7	87.6	0.55	-0.54	-0.54	-14.3	-33.7	
2,451.0	9.40	115.10	2,438.3	-79.4	101.8	0.43	-0.43	0.21	-18.7	-34.2	



Midland PVA

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Well:	#505H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey											
MD (usft)	Inc (°)	Asd (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Buikd (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
2,543.0	8.10	116.20	2,529.1	-85.8	115.2	0.38	-0.33	1.20	-23.0	-34.5	
2,838.0	8.80	117.40	2,820.9	-92.3	128.1	0.38	-0.32	1.29	-28.9	-34.9	
2,730.0	8.80	111.90	2,713.9	-98.2	141.0	0.91	-0.21	-5.85	-26.2	-37.9	
2,824.0	8.50	108.50	2,806.8	-103.0	154.1	0.55	-0.11	-3.62	-28.5	-39.1	
2,818.0	8.00	108.30	2,899.9	-107.3	166.9	0.53	-0.53	-0.21	-28.5	-38.4	
3,011.0	7.70	108.50	2,992.0	-111.3	178.9	0.32	-0.32	0.22	-30.0	-37.8	
3,105.0	7.60	108.30	3,085.1	-115.3	190.8	0.11	-0.11	-0.21	-31.0	-36.9	
3,198.0	7.30	107.80	3,177.4	-119.0	202.3	0.33	-0.32	-0.54	-31.4	-36.4	
3,292.0	7.00	108.60	3,270.6	-122.6	213.4	0.34	-0.32	0.85	-32.2	-35.1	
3,385.0	6.80	107.50	3,362.8	-126.1	224.1	0.18	-0.11	-1.18	-31.5	-34.9	
3,572.0	6.20	103.60	3,548.7	-131.9	244.6	0.44	-0.37	-2.09	-27.8	-34.4	
3,668.0	5.70	103.40	3,642.2	-134.2	254.1	0.53	-0.53	-0.21	-26.1	-32.7	
3,781.0	5.40	101.80	3,736.8	-136.2	263.1	0.38	-0.32	-1.68	-23.0	-31.5	
3,854.0	5.10	101.60	3,829.4	-137.9	271.4	0.32	-0.32	-0.22	-20.2	-28.5	
3,948.0	5.90	100.30	3,922.9	-139.6	280.2	0.86	0.85	-1.38	-17.3	-27.7	
4,041.0	5.90	102.80	4,015.5	-141.5	289.6	0.28	0.00	2.69	-16.9	-24.9	
4,134.0	7.00	89.80	4,107.9	-143.5	289.8	1.24	1.18	-3.23	-14.9	-23.5	
4,228.0	7.70	101.40	4,201.1	-145.8	311.7	0.78	0.74	1.70	-16.4	-20.8	
4,320.0	7.50	101.70	4,282.3	-148.2	323.6	0.22	-0.22	0.33	-17.6	-18.7	
4,413.0	7.20	103.40	4,384.5	-150.8	335.2	0.40	-0.32	1.83	-18.9	-16.2	
4,507.0	6.80	102.10	4,477.8	-153.3	346.4	0.46	-0.43	-1.38	-18.7	-14.8	
4,600.0	6.70	106.60	4,570.2	-156.0	357.0	0.58	-0.11	4.84	-19.4	-11.8	
4,684.0	6.80	109.60	4,663.5	-159.5	367.5	0.43	0.21	3.19	-19.6	-9.9	
4,788.0	6.80	111.30	4,756.8	-163.4	378.1	0.22	0.00	1.81	-19.8	-9.0	
4,847.0	6.80	112.00	4,815.4	-166.0	384.6	0.53	-0.51	1.19	-19.6	-8.7	
4,961.0	6.40	112.50	4,928.7	-170.9	396.5	0.18	-0.18	0.44	-18.7	-8.6	
5,054.0	8.70	114.40	5,020.9	-175.7	407.7	2.49	2.47	2.04	-19.9	-8.2	



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MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	NIS (usft)	EW (usft)	DLeg (°/100usft)	Buile (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
5,148.0	9.50	113.70	5,113.7	-181.8	421.3	0.86	0.85	-0.74	-23.2	-8.9
5,242.0	9.50	114.70	5,208.4	-188.2	435.4	0.18	0.00	1.06	-27.5	-8.8
5,338.0	9.20	115.30	5,299.2	-194.6	449.3	0.34	-0.32	0.64	-31.5	-9.1
5,429.0	8.80	114.40	5,391.0	-200.7	462.5	0.46	-0.43	-0.97	-34.6	-10.1
5,523.0	8.40	114.80	5,484.0	-206.6	475.3	0.43	-0.43	0.21	-37.2	-10.5
5,617.0	8.00	115.40	5,577.0	-212.2	487.4	0.44	-0.43	0.85	-39.4	-10.5
5,711.0	7.80	115.20	5,670.1	-217.7	499.1	0.21	-0.21	-0.21	-40.8	-11.3
5,804.0	7.70	113.10	5,762.3	-222.9	510.5	0.32	-0.11	-2.26	-41.6	-13.2
5,897.0	6.80	111.90	5,854.5	-227.4	521.4	0.88	-0.86	-1.29	-41.8	-14.1
5,991.0	6.90	108.90	5,947.8	-231.3	532.0	0.38	0.00	-3.19	-40.9	-15.9
6,085.0	6.70	108.10	6,041.2	-234.9	542.8	0.24	-0.21	-0.85	-40.4	-15.7
6,178.0	6.30	107.50	6,133.6	-238.1	552.6	0.44	-0.43	-0.65	-39.4	-15.3
6,271.0	6.10	106.80	6,226.0	-241.1	562.2	0.23	-0.22	-0.75	-38.0	-14.8
6,364.0	5.70	105.10	6,318.5	-243.7	571.4	0.47	-0.43	-1.83	-35.8	-14.6
6,458.0	5.90	105.70	6,412.0	-246.2	580.5	0.22	0.21	0.64	-34.1	-12.9
6,551.0	5.70	105.80	6,504.6	-248.8	589.6	0.22	-0.22	0.11	-32.2	-11.6
6,645.0	5.50	106.50	6,598.1	-251.3	598.4	0.22	-0.21	0.74	-30.1	-10.0
6,739.0	5.30	103.80	6,691.7	-253.6	606.9	0.34	-0.21	-2.87	-27.1	-10.0
6,833.0	5.00	105.20	6,785.3	-255.7	615.1	0.35	-0.32	1.49	-24.4	-7.8
6,927.0	3.90	90.50	6,879.0	-256.8	622.3	1.68	-1.17	-15.64	-18.1	-10.5
7,021.0	2.90	55.40	6,972.9	-255.5	627.4	2.40	-1.08	-37.34	-7.6	-11.5
7,114.0	2.80	43.50	7,065.8	-252.5	631.0	0.65	0.00	-12.80	-6.5	-5.1
7,208.0	2.70	45.20	7,159.8	-249.2	634.2	0.23	-0.21	1.81	-8.9	0.5
7,302.0	2.20	42.50	7,253.6	-246.3	637.0	0.55	-0.53	-2.87	-12.0	2.6
7,395.0	2.20	50.00	7,346.5	-243.8	639.5	0.31	0.00	8.06	-15.0	4.6
7,489.0	2.10	50.60	7,440.4	-241.6	642.3	0.11	-0.11	0.64	-18.5	4.8
7,582.0	1.50	46.00	7,533.4	-239.7	644.4	0.68	-0.65	-4.95	-21.7	3.1



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7,676.0	1.20	52.90	7,627.4	-238.2	646.1	0.36	-0.32	7.34	-23.4	5.9	
7,769.0	1.00	49.80	7,720.3	-237.1	647.5	0.22	-0.22	-3.33	-25.5	4.5	
7,863.0	1.00	52.20	7,814.3	-236.1	648.8	0.04	0.00	2.55	-26.9	5.6	
7,956.0	0.50	48.10	7,907.3	-235.3	649.7	0.54	-0.54	-4.41	-28.4	3.6	
8,050.0	0.40	64.90	8,001.3	-234.9	650.3	0.18	-0.11	17.87	-26.9	11.8	
8,143.0	0.40	103.00	8,094.3	-234.8	650.9	0.28	0.00	40.97	-14.4	26.1	
8,237.0	0.40	109.50	8,188.3	-235.0	651.6	0.05	0.00	6.91	-12.0	27.6	
8,331.0	0.50	130.50	8,282.3	-235.4	652.2	0.20	0.11	22.34	-2.1	30.2	
8,425.0	0.70	149.60	8,376.3	-236.1	652.8	0.30	0.21	20.32	7.0	29.4	
8,517.0	1.20	151.00	8,468.3	-237.5	653.5	0.54	0.54	1.52	6.2	29.2	
8,611.0	1.50	153.20	8,562.3	-239.4	654.6	0.32	0.32	2.34	5.1	29.0	
8,705.0	1.70	158.10	8,656.2	-241.8	655.7	0.28	0.21	5.21	4.9	28.5	
8,798.0	1.80	161.60	8,749.2	-244.5	656.6	0.16	0.11	3.76	3.8	28.3	
8,892.0	1.80	172.50	8,843.1	-247.3	657.3	0.36	0.00	11.60	6.1	27.3	
8,986.0	1.80	177.60	8,937.1	-250.3	657.5	0.17	0.00	5.43	5.6	26.8	
9,079.0	2.20	183.90	9,030.0	-253.5	657.5	0.49	0.43	6.77	5.3	26.2	
9,172.0	2.40	190.70	9,123.0	-257.2	657.0	0.36	0.22	7.31	4.6	25.6	
9,359.0	1.80	186.50	9,309.8	-264.0	655.9	0.33	-0.32	-2.25	-4.1	25.8	
9,452.0	1.20	185.40	9,402.8	-266.4	655.7	0.65	-0.65	-1.18	-7.0	25.5	
9,546.0	1.10	212.10	9,496.8	-268.2	655.1	0.57	-0.11	28.40	3.4	26.3	
9,638.0	1.70	233.30	9,586.8	-269.7	653.5	0.65	0.65	23.04	10.5	23.7	
9,732.0	2.20	226.50	9,682.7	-271.8	651.1	0.59	0.53	-7.23	4.4	24.6	
9,826.0	2.30	228.90	9,776.6	-274.3	648.4	0.15	0.11	2.55	1.7	24.4	
10,013.0	1.80	281.00	9,863.5	-277.2	642.5	0.65	-0.21	17.17	6.2	21.8	
10,106.0	2.00	254.40	10,056.5	-277.9	639.4	0.26	0.11	-7.10	2.5	22.4	
10,199.0	2.50	239.70	10,148.4	-278.4	636.1	0.82	0.54	-15.81	-6.9	21.9	
10,292.0	2.30	246.10	10,242.3	-281.1	632.6	0.36	-0.22	6.88	-6.3	22.7	



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10,388.0	1.90	245.60	10,336.2	-282.5	629.5	0.43	-0.43	-0.53	-11.9	22.6
10,497.0	1.60	254.80	10,447.2	-283.7	626.3	0.37	-0.27	8.29	-11.5	24.6
10,610.0	3.60	339.40	10,560.1	-280.8	623.6	3.36	1.77	74.87	26.5	17.8
10,703.0	14.20	355.80	10,651.9	-266.7	621.7	11.61	11.40	17.63	37.5	11.6
10,797.0	24.80	354.60	10,740.3	-235.4	619.0	11.28	11.28	-1.28	41.3	15.1
10,891.0	35.30	357.90	10,821.6	-188.5	616.1	11.30	11.17	3.51	43.2	15.3
10,985.0	46.60	359.00	10,892.5	-127.1	614.5	12.05	12.02	1.17	41.1	15.7
11,077.0	54.60	358.00	10,950.8	-56.0	612.6	8.74	8.70	-1.09	37.0	17.4
11,171.0	66.40	359.10	10,997.0	25.6	610.6	12.59	12.55	1.17	31.2	18.3
11,218.0	74.10	359.20	11,012.9	69.8	610.0	16.38	16.38	0.21	25.7	18.6
11,265.0	78.50	0.10	11,024.0	115.4	609.7	9.54	9.36	1.91	19.0	18.4
11,358.0	87.10	1.10	11,035.7	207.6	610.7	9.31	9.25	1.08	5.9	16.6
11,453.0	89.90	1.10	11,038.2	302.6	612.5	2.95	2.85	0.00	-1.6	14.0
11,546.0	90.00	1.10	11,038.2	395.5	614.3	0.11	0.11	0.00	-1.6	11.5
11,639.0	90.00	1.10	11,038.2	488.5	616.0	0.00	0.00	0.00	-1.6	9.0
11,732.0	90.10	0.90	11,038.2	581.5	617.7	0.24	0.11	-0.22	-1.6	6.6
11,826.0	89.80	1.50	11,038.2	675.5	619.6	0.67	-0.21	0.64	-1.5	3.9
11,918.0	90.00	1.00	11,038.2	767.5	621.6	0.55	0.11	-0.54	-1.3	1.2
12,011.0	89.30	1.10	11,038.8	860.4	623.3	0.76	-0.75	0.11	-0.7	-1.3
12,105.0	89.30	1.20	11,040.0	954.4	625.2	0.11	0.00	0.11	0.6	-3.9
12,198.0	89.30	1.20	11,041.1	1,047.4	627.2	0.00	0.00	0.00	1.8	-6.6
12,292.0	89.50	1.30	11,042.1	1,141.4	629.2	0.24	0.21	0.11	2.8	-9.4
12,384.0	89.90	0.90	11,042.6	1,233.3	631.0	0.61	0.43	-0.43	3.4	-11.9
12,478.0	90.10	1.10	11,042.6	1,327.3	632.6	0.30	0.21	0.21	3.5	-14.3
12,571.0	90.10	0.90	11,042.4	1,420.3	634.3	0.22	0.00	-0.22	3.4	-16.7
12,665.0	90.20	1.10	11,042.2	1,514.3	635.9	0.24	0.11	0.21	3.2	-19.1
12,759.0	90.40	0.50	11,041.7	1,608.3	637.2	0.67	0.21	-0.64	2.8	-21.1



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #505H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3526.0usft
Site:	Adder 31 State	MD Reference:	KB = 25 @ 3526.0usft
Well:	#505H	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)	DLog (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
12,853.0	90.40	0.80	11,041.0	1,702.3	638.3	0.32	0.00	0.32	2.3	-23.0	
12,947.0	90.70	1.10	11,040.1	1,798.3	639.8	0.45	0.32	0.32	1.4	-25.3	
13,041.0	90.20	1.20	11,038.4	1,890.2	641.7	0.54	-0.53	0.11	0.8	-27.9	
13,135.0	89.00	359.90	11,040.0	1,984.2	642.6	1.88	-1.28	-1.38	1.5	-29.6	
13,228.0	88.90	359.20	11,041.7	2,077.2	641.9	0.76	-0.11	-0.75	3.3	-29.6	
13,322.0	88.80	359.10	11,043.8	2,171.2	640.5	0.15	-0.11	-0.11	5.3	-28.9	
13,415.0	89.10	359.10	11,045.3	2,264.2	639.0	0.32	0.32	0.00	7.1	-28.2	
13,509.0	89.30	359.70	11,046.8	2,358.1	638.1	0.67	0.21	0.84	8.4	-28.0	
13,602.0	89.20	359.40	11,047.8	2,451.1	637.3	0.34	-0.11	-0.32	9.7	-28.0	
13,696.0	89.40	359.50	11,049.0	2,545.1	638.4	0.24	0.21	0.11	11.0	-27.9	
13,789.0	90.20	359.80	11,049.3	2,638.1	635.9	0.92	0.86	0.32	11.4	-28.0	
13,882.0	89.60	358.80	11,049.5	2,731.1	634.7	1.25	-0.65	-1.08	11.6	-27.6	
13,975.0	89.90	359.00	11,049.9	2,824.1	632.9	0.39	0.32	0.22	12.1	-26.6	
14,068.0	90.50	358.70	11,048.6	2,917.1	631.1	0.72	0.65	-0.32	11.9	-25.5	
14,161.0	90.70	358.30	11,048.6	3,010.0	628.6	0.48	0.22	-0.43	11.0	-23.8	
14,253.0	90.60	357.80	11,047.5	3,102.0	625.5	0.55	-0.11	-0.54	10.0	-21.4	
14,347.0	90.80	357.50	11,046.3	3,195.9	621.7	0.45	0.32	-0.32	8.9	-18.3	
14,441.0	91.10	357.70	11,044.7	3,289.8	617.7	0.30	0.21	0.21	7.3	-15.1	
14,534.0	91.20	356.90	11,042.8	3,382.7	613.3	0.87	0.11	-0.86	5.5	-11.5	
14,628.0	91.20	356.40	11,040.8	3,476.5	607.8	0.53	0.00	-0.53	3.6	-6.7	
14,721.0	89.30	357.00	11,040.4	3,569.3	602.5	2.14	-2.04	0.65	3.3	-2.1	
14,815.0	89.10	356.50	11,041.7	3,663.2	597.2	0.57	-0.21	-0.53	4.7	2.4	
14,908.0	88.10	357.50	11,044.0	3,756.0	592.3	1.52	-1.08	1.08	7.0	6.8	
15,002.0	88.40	357.40	11,046.9	3,849.9	588.1	0.34	0.32	-0.11	10.0	10.0	
15,095.0	88.50	356.80	11,048.4	3,942.7	583.4	0.65	0.11	-0.85	12.6	14.0	
15,189.0	87.70	358.20	11,052.5	4,036.6	579.3	1.71	-0.85	1.49	15.8	17.3	
15,281.0	87.60	358.00	11,056.3	4,128.4	576.3	0.24	-0.11	-0.22	19.6	19.6	



Midland PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Adder 31 State
Well: #505H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #505H
TVD Reference: KB = 25 @ 3526.0usft
MD Reference: KB = 25 @ 3526.0usft
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)
15,375.0	87.40	357.60	11,060.4	4,222.3	572.7	0.48	-0.21	-0.43	23.8	22.5
15,468.0	87.10	358.50	11,064.9	4,315.1	569.5	1.02	-0.32	0.97	28.4	24.9
15,560.0	87.10	358.30	11,069.5	4,407.0	568.9	0.22	0.00	-0.22	33.1	26.7
15,654.0	88.10	358.10	11,073.4	4,500.8	564.0	1.08	1.06	-0.21	37.1	28.9
15,746.0	87.80	357.30	11,078.7	4,592.7	560.3	0.93	-0.33	-0.87	40.5	31.9
15,840.0	87.70	357.90	11,080.4	4,686.6	556.4	0.65	-0.11	0.64	44.2	35.1
16,014.0	87.70	357.90	11,087.4	4,860.3	550.0	0.00	0.00	0.00	51.4	40.1

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/S (usft)	+E/W (usft)	
10,560.0	10,510.2	-283.0	624.7	KOP, MD:10560.0', TVD:10510.2', N/S:-283.0', E/W:624.7', INC:2.19
10,857.4	10,793.6	-207.0	616.9	FTP Crossing, MD:10857.4', TVD:10793.6', N/S:-207.0', E/W:616.9', INC:31.54
15,840.0	11,080.4	4,686.6	556.4	Last MWD Survey (MD=15840.0')
16,014.0	11,087.4	4,860.3	550.0	Projection to Bit (MD=16014.0')

Checked By: _____ Approved By: _____ Date: _____

I certify this survey to be true and correct to the best of my belief and knowledge.

Kay Maddox
Signed

11/15/2019
Date



Lea County, NM (NAD 83 NME)

Adder 31 State #505H

Plan #1

PROJECT DETAILS: Lea County, NM (NAD 83 NME)

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level

WELL DETAILS: #505H

KB = 25 @ 3528.0usft 3501.0
Northing 428513.00 Easting 765448.00 Latitude 32° 10' 3.865 N Longitude 103° 38' 32.633 W

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Dieg	TFace	VSeet	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1390.0	0.00	0.00	1390.0	0.0	0.0	0.00	0.00	0.0	
3	1739.9	7.00	112.16	1739.0	-8.0	19.8	2.00	112.16	-5.6	
4	6981.9	7.00	112.16	6942.0	-249.0	611.2	0.00	0.00	-173.5	
5	7331.8	0.00	0.00	7291.0	-257.0	631.0	2.00	180.00	-179.1	
6	10507.8	0.00	0.00	10467.0	-257.0	631.0	0.00	0.00	-179.1	
7	11408.3	90.05	359.54	11040.0	316.4	826.4	10.00	359.54	389.6	
8	15955.0	90.05	359.54	11036.0	4863.0	590.0	0.00	0.00	4898.7	PBHL(Adder 31 State #505H)

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N-S	+E-W	Northing	Easting
PBHL(Adder 31 State #505H)	11036.0	4863.0	590.0	430378.00	765038.00
Brushy Top(Adder 31 State #505H)	7391.0	-257.0	631.0	428258.00	766078.00
FTF(Adder 31 State #505H)	11040.0	-257.0	631.0	428308.00	766078.00

