



EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Stonewall 28 Fed Com

#314H

OH

Design: OH

Midland PVA

18 July, 2019



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #314H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3517.0usft
Site:	Stonewall 28 Fed Com	MD Reference:	KB = 25 @ 3517.0usft
Well:	#314H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Project	Lea County, NM (NAD 83 NME)	System Datum:	Mean Sea Level
Map System:	US State Plane 1983		
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Stonewall 28 Fed Com		
Site Position:			
From:	Map	Northing:	435,811.00 usft
Position Uncertainty:	0.0 usft	Easting:	804,872.00 usft
		Slot Radius:	13-3/16 "
		Latitude:	32° 11' 42.907 N
		Longitude:	103° 28' 53.013 W
		Grid Convergence:	0.45 °

Well	#314H		
Well Position	+N/-S	Northing:	435,839.00 usft
	+E/-W	Easting:	808,958.00 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Ground Level:	3,492.0 usft
		Latitude:	32° 11' 42.869 N
		Longitude:	103° 28' 53.013 W

Wellbore	OH		
Magnetics	Model Name	Sample Date	Dip Angle
	IGRF2015	6/4/2019	(°)
		6.69	Field Strength
			(nT)
			47,754.79225229

Design	OH		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	Direction
	(usft)	(usft)	(°)
	0.0	0.0	177.61

Survey Program	Date	7/18/2019	
From	To		
(usft)	(usft)		
194.0	20,404.0	Survey (Wellbore)	Tool Name
		Intrepid MWD (OH)	MWD
			Description
			OWSG MWD - Standard



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Well: #314H				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	0.00	0.0	0.0	0.00	0.00	0.00	0.0	0.0
	194.0	1.01	283.88	194.0	0.4	-1.7	0.52	0.52	0.00	-1.7	0.0
	220.0	0.92	311.30	220.0	0.6	-2.0	1.79	-0.35	105.46	-1.9	0.9
	305.0	0.88	297.59	305.0	1.4	-3.1	0.26	-0.05	-16.13	-3.4	0.2
	473.0	0.31	322.55	473.0	2.3	-4.6	0.36	-0.34	14.86	-4.6	2.2
	557.0	0.26	5.79	557.0	2.7	-4.7	0.26	-0.06	51.48	-2.2	4.9
	653.0	0.53	345.58	653.0	3.3	-4.8	0.31	0.28	-21.05	-4.4	3.8
	744.0	0.22	70.57	744.0	3.8	-4.7	0.61	-0.34	93.40	3.2	5.1
	836.0	0.26	224.99	836.0	3.7	-4.7	0.51	0.04	167.85	-0.7	-5.9
	928.0	0.35	184.47	928.0	3.3	-4.8	0.25	0.10	-44.04	2.9	-5.1
	1,021.0	0.48	242.39	1,021.0	2.8	-5.2	0.45	0.14	62.28	-3.3	-4.9
	1,113.0	0.48	189.75	1,113.0	2.3	-5.6	0.46	0.00	-57.22	1.3	-5.9
	1,204.0	0.92	205.13	1,203.9	1.2	-6.0	0.52	0.48	16.90	-1.4	-5.9
	1,221.0	1.01	217.87	1,220.9	1.0	-6.1	1.37	0.53	74.94	-3.0	-5.5
	1,307.0	1.45	254.26	1,306.9	0.1	-7.7	1.02	0.51	42.31	-7.3	-2.2
	1,402.0	1.01	266.21	1,401.9	-0.3	-9.7	0.53	-0.46	12.58	-9.7	-0.3
	1,495.0	0.18	309.80	1,495.9	-0.3	-10.6	0.95	-0.88	46.37	-8.0	7.0
	1,592.0	0.35	39.72	1,591.9	0.1	-10.5	0.41	0.18	93.67	6.7	8.1
	1,687.0	0.35	101.15	1,686.9	0.2	-10.1	0.38	0.00	64.66	9.9	-1.7
	1,783.0	0.57	93.94	1,782.9	0.1	-9.3	0.24	0.23	-7.51	9.3	-0.5
	1,878.0	0.53	84.72	1,877.9	0.2	-8.4	0.10	-0.04	-9.71	8.3	0.9
	1,974.0	0.92	59.67	1,973.9	0.6	-7.3	0.51	0.41	-26.09	6.0	4.2
	2,069.0	0.62	59.32	2,068.9	1.2	-6.2	0.32	-0.32	-0.37	4.7	4.2
	2,164.0	1.23	36.38	2,163.9	2.3	-5.1	0.74	0.64	-24.15	1.2	5.5
	2,259.0	1.23	50.61	2,258.8	3.8	-3.7	0.32	0.00	14.98	0.5	5.3
	2,355.0	1.05	30.14	2,354.8	5.2	-2.5	0.46	-0.19	-21.32	-3.2	4.8
	2,450.0	1.27	27.32	2,449.8	6.9	-1.6	0.24	0.23	-2.97	-5.4	4.6

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Well: #314H			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)
2,544.0	1.54	19.77	2,543.8	9.0	-0.7	0.35	0.29	-8.03	-8.2	3.7
2,639.0	1.71	41.12	2,638.7	11.3	0.7	0.66	0.18	22.47	-8.9	6.9
2,734.0	2.15	56.59	2,733.7	13.3	3.1	0.71	0.46	16.28	-9.9	9.4
2,830.0	2.29	65.91	2,829.6	15.1	6.4	0.40	0.15	9.71	-12.0	11.2
2,924.0	2.81	66.52	2,923.5	16.8	10.2	0.55	0.55	0.65	-16.0	11.3
3,018.0	3.25	60.28	3,017.4	19.0	14.6	0.58	0.47	-6.64	-22.1	9.3
3,113.0	2.73	67.23	3,112.3	21.2	19.1	0.67	-0.55	7.32	-25.8	12.2
3,208.0	2.24	69.77	3,207.2	22.7	22.9	0.53	-0.52	2.67	-29.3	13.4
3,303.0	2.24	78.21	3,302.1	23.8	26.4	0.35	0.00	8.88	-30.7	17.9
3,398.0	2.77	88.06	3,397.0	24.2	30.6	0.72	0.56	10.37	-30.6	22.9
3,495.0	3.12	94.21	3,493.9	24.1	35.5	0.49	0.36	6.34	-29.5	24.3
3,590.0	3.08	95.88	3,588.7	23.7	40.6	0.10	-0.04	1.76	-27.9	21.6
3,685.0	3.16	98.08	3,683.6	23.0	45.8	0.15	0.08	2.32	-25.2	18.3
3,781.0	3.52	98.87	3,779.4	22.2	51.3	0.38	0.37	0.82	-23.6	14.0
3,876.0	3.43	105.28	3,874.3	21.0	56.9	0.42	-0.09	6.75	-21.2	11.6
3,972.0	3.21	124.62	3,970.1	18.7	61.9	1.18	-0.23	20.15	-17.3	11.7
4,067.0	3.08	137.45	4,065.0	15.3	65.8	0.75	-0.14	13.51	-16.9	8.0
4,163.0	2.99	132.27	4,160.8	11.7	69.4	0.30	-0.09	-5.40	-19.3	-1.5
4,258.0	2.46	124.53	4,255.7	8.9	72.9	0.68	-0.56	-8.15	-19.2	-11.5
4,354.0	2.37	118.29	4,351.6	6.8	76.4	0.29	-0.09	-6.50	-16.8	-20.5
4,449.0	2.15	107.13	4,446.6	5.4	79.8	0.52	-0.23	-11.75	-10.1	-29.2
4,544.0	2.99	100.98	4,541.5	4.4	83.9	0.93	0.88	-6.47	-4.4	-35.2
4,640.0	4.22	105.28	4,637.3	2.9	89.8	1.31	1.28	4.48	-6.6	-40.0
4,735.0	4.00	103.44	4,732.0	1.3	96.4	0.27	-0.23	-1.94	-5.6	-45.4
4,830.0	4.00	104.76	4,826.8	-0.4	102.8	0.10	0.00	1.39	-6.9	-50.4
4,926.0	5.05	108.18	4,922.5	-2.5	110.1	1.13	1.09	3.56	-11.2	-55.4
5,022.0	6.07	110.56	5,018.0	-5.6	118.9	1.09	1.06	2.48	-16.9	-60.7



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Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
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5,115.0	5.76	111.26	5,110.5	-9.0	127.8	0.34	-0.33	0.75	-21.6	-66.3
5,211.0	4.57	111.70	5,206.2	-12.2	135.9	1.24	-1.24	0.46	-25.0	-72.1
5,239.0	4.22	110.12	5,234.1	-13.0	137.9	1.32	-1.25	-5.64	-23.5	-74.5
5,379.0	3.16	100.10	5,373.8	-15.4	146.5	0.88	-0.76	-7.16	-9.2	-85.3
5,475.0	4.31	79.53	5,469.6	-15.2	152.6	1.82	1.20	-21.43	23.4	-86.1
5,570.0	5.14	66.70	5,564.3	-12.9	160.1	1.41	0.87	-13.51	42.4	-79.8
5,664.0	5.89	63.18	5,657.8	-9.1	168.2	0.87	0.80	-3.74	46.4	-77.0
5,759.0	8.00	52.37	5,752.1	-2.8	177.8	2.60	2.22	-11.38	56.5	-66.1
5,855.0	9.98	45.17	5,846.9	7.1	189.0	2.37	2.06	-7.50	57.1	-56.6
5,950.0	10.15	45.61	5,940.5	18.8	200.8	0.20	0.18	0.46	47.8	-54.2
6,046.0	10.64	48.24	6,034.9	30.6	213.5	0.71	0.51	2.74	35.9	-53.5
6,142.0	11.30	50.09	6,129.2	42.5	227.3	0.78	0.69	1.93	23.9	-52.1
6,236.0	10.86	50.26	6,221.4	54.1	241.2	0.47	-0.47	0.18	13.5	-50.0
6,331.0	10.11	51.05	6,314.8	65.1	254.6	0.80	-0.79	0.83	3.6	-48.0
6,428.0	9.98	51.41	6,410.3	75.7	267.7	0.15	-0.13	0.37	-5.4	-45.9
6,523.0	9.58	52.37	6,503.9	85.6	280.4	0.45	-0.42	1.01	-14.3	-43.8
6,618.0	9.45	53.16	6,597.6	95.1	292.9	0.19	-0.14	0.83	-22.5	-41.8
6,712.0	9.93	55.19	6,690.3	104.4	305.8	0.63	0.51	2.16	-31.7	-39.3
6,808.0	10.33	56.06	6,784.8	113.9	319.7	0.45	0.42	0.91	-41.0	-37.4
6,903.0	10.29	58.44	6,878.3	123.1	334.0	0.45	-0.04	2.51	-51.4	-34.3
6,998.0	7.87	52.99	6,972.1	131.5	346.4	2.70	-2.55	-5.74	-54.8	-38.0
7,091.0	6.24	53.34	7,064.4	138.3	355.6	1.75	-1.75	0.38	-58.6	-36.0
7,187.0	4.09	44.11	7,160.0	143.9	362.1	2.39	-2.24	-9.61	-52.9	-42.7
7,281.0	3.16	4.12	7,253.8	148.9	364.7	2.79	-0.99	-42.54	-14.4	-61.6
7,376.0	3.60	353.93	7,348.6	154.5	364.5	0.78	0.46	-10.73	-6.2	-55.8
7,472.0	2.11	348.21	7,444.5	159.2	363.9	1.58	-1.55	-5.96	-3.4	-48.3
7,567.0	1.49	345.93	7,539.5	162.1	363.2	0.66	-0.65	-2.40	-3.0	-40.9



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Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
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	7,662.0	1.32	343.82	7,634.4	164.3	362.6	0.19	-0.18	-2.22	-3.0	-36.4
	7,757.0	1.41	339.16	7,729.4	166.5	361.9	0.15	0.09	-4.91	-2.2	-34.9
	7,852.0	1.23	343.91	7,824.4	168.6	361.2	0.22	-0.19	5.00	-7.3	-34.5
	7,947.0	1.05	344.70	7,919.4	170.4	360.7	0.19	-0.19	0.83	-9.6	-34.4
	8,042.0	1.10	356.74	8,014.3	172.1	360.4	0.24	0.05	12.67	-18.4	-31.5
	8,138.0	0.97	4.30	8,110.3	173.9	360.4	0.20	-0.14	7.87	-24.1	-28.7
	8,232.0	0.66	226.84	8,204.3	174.3	360.1	1.62	-0.33	-146.23	37.2	4.3
	8,326.0	1.19	238.17	8,298.3	173.4	358.8	0.59	0.56	12.05	35.8	-3.0
	8,422.0	1.27	244.77	8,394.3	172.4	357.0	0.17	0.08	6.87	33.1	-7.0
	8,517.0	1.19	249.60	8,489.3	171.6	355.1	0.14	-0.08	5.08	30.4	-9.6
	8,611.0	1.10	252.15	8,583.3	171.0	353.4	0.11	-0.10	2.71	28.1	-10.9
	8,707.0	1.14	271.31	8,679.2	170.8	351.5	0.39	0.04	19.96	21.1	-19.2
	8,802.0	0.57	233.08	8,774.2	170.5	350.2	0.82	-0.60	-40.24	27.3	-2.6
	8,896.0	0.92	211.81	8,868.2	169.6	349.4	0.47	0.37	-22.63	25.2	7.3
	8,991.0	1.10	219.89	8,963.2	168.2	348.5	0.24	0.19	8.51	24.3	3.8
	9,087.0	1.14	230.61	9,059.2	166.9	347.1	0.22	0.04	11.17	22.7	-0.7
	9,181.0	1.14	273.77	9,153.2	166.4	345.5	0.89	0.00	45.91	14.5	-15.4
	9,275.0	1.27	306.64	9,247.1	167.1	343.7	0.74	0.14	34.97	2.0	-20.3
	9,371.0	1.45	324.04	9,343.1	168.7	342.1	0.47	0.19	18.12	-6.4	-19.6
	9,466.0	1.63	317.45	9,438.1	170.6	340.5	0.27	0.19	-6.94	-6.6	-20.4
	9,524.0	2.02	312.09	9,496.1	171.9	339.2	0.73	0.67	-9.24	-6.5	-21.0
	9,629.0	2.37	303.65	9,601.0	174.4	336.0	0.45	0.33	-8.04	-7.4	-22.0
	9,723.0	8.44	187.90	9,694.7	168.6	333.4	10.33	6.46	-123.14	16.9	1.1
	9,771.0	16.48	183.59	9,741.5	168.3	332.5	16.85	16.75	-8.98	8.1	2.1
	9,820.0	22.59	180.61	9,787.6	141.9	332.0	12.63	12.47	-6.08	-2.9	2.0
	9,868.0	28.40	181.04	9,830.9	121.3	331.7	12.11	12.10	0.90	-14.6	1.9
	9,916.0	34.55	181.13	9,871.9	96.3	331.2	12.81	12.81	0.19	-27.3	1.5



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9,963.0	38.20	181.92	9,909.7	68.4	330.5	7.83	7.77	1.68	-39.8	1.3
10,011.0	41.80	180.69	9,946.5	37.6	329.8	7.68	7.50	-2.56	-51.5	-0.3
10,058.0	40.97	179.02	9,981.7	6.5	329.8	2.94	-1.77	-3.55	-59.9	-1.9
10,106.0	43.38	176.56	10,017.3	-25.7	331.1	6.09	5.02	-5.12	-64.8	-3.1
10,153.0	45.58	176.65	10,050.8	-58.6	333.1	4.68	4.68	0.19	-67.2	-1.3
10,201.0	47.30	178.50	10,083.9	-93.3	334.5	4.54	3.58	3.85	-66.8	1.5
10,296.0	55.78	180.96	10,143.0	-167.6	334.8	9.15	8.93	2.59	-60.9	2.6
10,344.0	61.19	181.13	10,168.0	-208.5	334.0	11.27	11.27	0.35	-57.2	1.3
10,391.0	64.40	181.13	10,189.5	-250.3	333.2	6.83	6.83	0.00	-52.7	-0.1
10,438.0	68.48	179.55	10,208.3	-293.4	333.0	9.21	8.68	-3.36	-47.0	-1.2
10,484.0	71.12	179.20	10,224.2	-336.6	333.4	5.78	5.74	-0.76	-40.0	-1.2
10,580.0	76.88	179.90	10,250.6	-428.8	334.1	6.04	6.00	0.73	-20.3	-1.4
10,676.0	88.26	180.96	10,263.0	-523.8	333.4	11.90	11.85	1.10	-8.2	-2.9
10,771.0	94.02	180.34	10,261.1	-618.8	332.3	6.10	6.06	-0.65	-10.3	-4.9
10,866.0	94.37	179.55	10,254.2	-713.5	332.4	0.91	0.37	-0.83	-17.5	-5.7
10,962.0	94.07	179.29	10,247.1	-809.2	333.4	0.41	-0.31	-0.27	-24.8	-5.7
11,056.0	92.18	178.94	10,242.0	-903.1	334.9	2.04	-2.01	-0.37	-30.2	-5.1
11,151.0	90.46	178.58	10,239.8	-998.0	336.9	1.85	-1.81	-0.38	-32.6	-3.9
11,248.0	90.24	178.50	10,239.2	-1,095.0	339.4	0.24	-0.23	-0.08	-33.4	-2.4
11,343.0	89.01	179.73	10,239.8	-1,190.0	340.8	1.83	-1.29	1.29	-33.0	-1.8
11,437.0	89.10	179.90	10,241.4	-1,284.0	341.2	0.20	0.10	0.18	-31.7	-2.4
11,533.0	89.01	179.81	10,243.0	-1,380.0	341.4	0.13	-0.09	-0.09	-30.4	-3.0
11,626.0	88.92	179.64	10,244.7	-1,472.9	341.8	0.21	-0.10	-0.18	-28.9	-3.5
11,721.0	89.67	179.64	10,245.8	-1,567.9	342.4	0.79	0.79	0.00	-28.0	-3.8
11,816.0	90.33	179.73	10,245.8	-1,662.9	343.0	0.70	0.69	0.09	-28.2	-4.1
11,912.0	88.26	179.20	10,247.0	-1,758.9	343.9	2.23	-2.16	-0.55	-27.3	-4.2
12,007.0	90.95	179.90	10,247.7	-1,853.9	344.6	2.93	2.83	0.74	-26.9	-4.3



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #314H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB =25 @ 3517.0usft
Site:	Stonewall 28 Fed Com	MD Reference:	KB =25 @ 3517.0usft
Well:	#314H	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)
	12,102.0	91.74	179.90	10,245.4	-1,948.9	344.8	0.83	0.83	0.00	-29.3	-5.0
	12,197.0	89.23	179.73	10,244.6	-2,043.9	345.1	2.65	-2.64	-0.18	-30.4	-5.6
	12,293.0	89.19	179.73	10,246.0	-2,139.9	345.5	0.04	-0.04	0.00	-30.4	-6.1
	12,390.0	89.41	180.17	10,247.1	-2,236.8	345.6	0.51	0.23	0.45	-30.8	-6.9
	12,485.0	89.54	180.96	10,248.0	-2,331.8	344.7	0.84	0.14	0.83	-31.5	-8.7
	12,579.0	85.67	180.43	10,251.9	-2,425.7	343.5	4.16	-4.12	-0.56	-29.0	-10.8
	12,676.0	83.96	179.20	10,260.7	-2,522.3	343.8	2.17	-1.76	-1.27	-21.8	-11.4
	12,768.0	85.93	179.02	10,268.8	-2,614.0	345.3	2.15	2.14	-0.20	-15.2	-10.8
	12,862.0	85.76	179.11	10,275.6	-2,707.7	346.8	0.20	-0.18	0.10	-10.0	-10.2
	12,956.0	89.10	179.37	10,279.8	-2,801.6	348.0	3.56	3.55	0.28	-8.0	-9.8
	13,051.0	89.41	179.11	10,281.1	-2,896.6	349.3	0.43	0.33	-0.27	-9.1	-9.4
	13,146.0	88.97	179.29	10,282.4	-2,991.5	350.6	0.50	-0.46	0.19	-10.0	-9.0
	13,240.0	89.36	179.02	10,283.8	-3,085.5	352.0	0.50	0.41	-0.29	-10.9	-8.5
	13,336.0	87.52	179.11	10,286.4	-3,181.5	353.6	1.92	-1.92	0.09	-10.6	-7.8
	13,432.0	87.47	179.20	10,290.6	-3,277.4	355.0	0.11	-0.05	0.09	-8.7	-7.3
	13,527.0	88.04	179.20	10,294.3	-3,372.3	356.3	0.60	0.60	0.00	-7.2	-6.9
	13,623.0	88.00	179.02	10,297.6	-3,468.2	357.8	0.19	-0.04	-0.19	-6.2	-6.3
	13,718.0	87.96	178.85	10,301.0	-3,563.1	359.6	0.18	-0.04	-0.18	-4.8	-5.4
	13,814.0	89.36	179.55	10,303.2	-3,659.1	360.9	1.63	1.46	0.73	-3.5	-5.0
	13,909.0	89.10	179.29	10,304.5	-3,754.1	361.9	0.39	-0.27	-0.27	-3.2	-4.9
	14,003.0	88.66	178.76	10,306.3	-3,848.1	363.5	0.73	-0.47	-0.56	-2.3	-4.2
	14,100.0	89.10	179.11	10,308.2	-3,945.0	365.3	0.58	0.45	0.36	-1.4	-3.3
	14,195.0	89.49	179.11	10,309.4	-4,040.0	366.8	0.41	0.41	0.00	-1.2	-2.8
	14,289.0	89.36	178.76	10,310.3	-4,134.0	368.5	0.40	-0.14	-0.37	-1.3	-1.9
	14,384.0	86.07	177.62	10,314.1	-4,228.8	371.5	3.66	-3.46	-1.20	1.5	0.2
	14,479.0	87.43	179.29	10,319.5	-4,323.7	374.1	2.26	1.43	1.76	5.9	1.9
	14,575.0	89.67	180.08	10,321.9	-4,419.6	374.6	2.47	2.33	0.82	7.4	1.5



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #314H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB =25 @ 3517.0usft
Site:	Stonewall 28 Fed Com	MD Reference:	KB =25 @ 3517.0usft
Well:	#314H	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)	Bulid (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
	14,671.0	90.20	180.25	10,322.1	-4,515.6	374.3	0.58	0.55	0.18	6.5	0.3
	14,766.0	88.44	179.84	10,323.2	-4,610.6	374.4	1.96	-1.85	-0.64	6.7	-0.5
	14,862.0	91.74	179.73	10,323.0	-4,706.6	374.9	3.44	3.44	0.09	5.5	-0.9
	14,957.0	92.40	179.81	10,319.6	-4,801.5	375.3	0.70	0.69	0.08	1.1	-1.4
	15,052.0	90.59	179.64	10,317.1	-4,896.5	375.8	1.91	-1.91	-0.18	-2.3	-1.8
	15,146.0	90.07	179.46	10,316.6	-4,990.5	376.5	0.59	-0.55	-0.19	-3.9	-2.0
	15,241.0	89.32	179.11	10,317.1	-5,085.5	377.7	0.87	-0.79	-0.37	-4.3	-1.7
	15,336.0	89.36	178.76	10,318.2	-5,180.4	378.5	0.37	0.04	-0.37	-4.2	-0.8
	15,432.0	89.58	178.76	10,319.1	-5,276.4	381.5	0.23	0.23	0.00	-4.3	0.4
	15,528.0	90.37	178.50	10,319.1	-5,372.4	383.8	0.87	0.82	-0.27	-5.3	1.8
	15,623.0	90.51	178.32	10,318.4	-5,467.4	386.5	0.24	0.15	-0.19	-7.0	3.5
	15,719.0	90.20	177.70	10,317.8	-5,563.3	389.8	0.72	-0.32	-0.65	-8.6	5.9
	15,813.0	90.29	179.55	10,317.4	-5,657.3	392.0	1.97	0.10	1.97	-9.9	7.3
	15,909.0	90.07	179.64	10,317.1	-5,753.3	392.7	0.25	-0.23	0.09	-11.2	7.1
	16,003.0	90.42	179.11	10,316.7	-5,847.3	393.8	0.68	0.37	-0.56	-12.6	7.2
	16,098.0	90.81	178.94	10,315.7	-5,942.2	395.4	0.45	0.41	-0.18	-14.5	7.9
	16,192.0	88.66	179.02	10,316.1	-6,036.2	397.0	2.29	-2.29	0.09	-14.4	8.7
	16,287.0	89.27	179.11	10,317.8	-6,131.2	398.6	0.65	0.64	0.09	-13.0	9.4
	16,382.0	87.38	177.97	10,320.6	-6,226.1	401.0	2.32	-1.99	-1.20	-10.6	10.9
	16,478.0	88.44	179.55	10,324.1	-6,322.0	403.1	1.98	1.10	1.65	-7.5	12.1
	16,573.0	89.71	181.04	10,325.6	-6,417.0	402.6	2.06	1.34	1.57	-6.3	10.7
	16,668.0	89.71	180.96	10,326.1	-6,512.0	400.9	0.08	0.00	-0.08	-6.1	8.1
	16,763.0	89.45	180.61	10,326.8	-6,607.0	399.6	0.46	-0.27	-0.37	-5.8	5.9
	16,859.0	90.24	180.34	10,327.1	-6,703.0	398.8	0.87	0.82	-0.28	-5.9	4.2
	16,955.0	91.47	179.90	10,325.6	-6,799.0	398.6	1.36	1.28	-0.46	-7.7	3.1
	17,051.0	91.52	178.67	10,323.1	-6,894.9	399.8	1.28	0.05	-1.28	-10.5	3.4
	17,146.0	91.16	180.34	10,320.9	-6,989.9	400.7	1.80	-0.38	1.76	-13.1	3.3



Midland PVA

Company: EOG Resources - Midland			Local Co-ordinate Reference:							
Project: Lea County, NM (NAD 83 NME)			Well #314H							
Site: Stonewall 28 Fed Com			TVD Reference: KB =25 @ 3517.0usft							
Well: #314H			MD Reference: KB =25 @ 3517.0usft							
Wellbore: OH			North Reference: Grid							
Design: OH			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)
17,242.0	90.33	180.87	10,319.7	-7,085.9	399.6	1.03	-0.86	0.55	-14.7	1.4
17,336.0	89.54	180.69	10,319.8	-7,179.9	398.4	0.86	-0.84	-0.19	-14.9	-0.7
17,432.0	90.07	180.52	10,320.1	-7,275.8	397.4	0.58	0.55	-0.18	-15.0	-2.7
17,528.0	88.53	180.69	10,321.3	-7,371.8	396.3	1.61	-1.60	0.18	-14.1	-4.6
17,622.0	88.57	180.61	10,323.6	-7,465.8	395.3	0.10	0.04	-0.09	-12.1	-6.5
17,717.0	90.15	180.61	10,324.7	-7,560.8	394.3	1.66	1.66	0.00	-11.4	-8.4
17,813.0	90.24	181.40	10,324.4	-7,656.8	392.6	0.83	0.09	0.82	-12.1	-11.0
17,907.0	88.92	180.08	10,325.1	-7,750.7	391.4	1.99	-1.40	-1.40	-11.7	-13.1
18,002.0	91.16	180.61	10,325.0	-7,845.7	390.8	2.42	2.36	0.56	-12.2	-14.6
18,096.0	89.98	180.69	10,324.1	-7,939.7	389.7	1.26	-1.26	0.09	-13.4	-16.5
18,190.0	90.81	180.25	10,323.4	-8,033.7	389.0	1.00	0.88	-0.47	-14.4	-18.2
18,286.0	89.01	179.20	10,323.6	-8,129.7	389.4	2.17	-1.87	-1.09	-14.6	-18.6
18,381.0	85.93	178.67	10,327.8	-8,224.6	391.2	3.29	-3.24	-0.56	-10.8	-17.8
18,477.0	86.20	178.58	10,334.3	-8,320.3	393.5	0.30	0.28	-0.09	-4.5	-16.4
18,572.0	89.58	179.11	10,337.8	-8,415.2	395.4	3.60	3.56	0.56	-1.4	-15.4
18,666.0	91.16	179.29	10,337.2	-8,509.2	396.7	1.69	1.68	0.19	-2.4	-14.9
18,761.0	90.37	179.20	10,336.0	-8,604.2	398.0	0.84	-0.83	-0.09	-4.0	-14.6
18,856.0	88.44	178.58	10,337.0	-8,699.2	399.8	2.13	-2.03	-0.65	-3.5	-13.6
18,951.0	89.54	179.02	10,338.6	-8,794.1	401.8	1.25	1.16	0.46	-2.4	-12.5
19,047.0	88.00	178.76	10,340.7	-8,890.1	403.6	1.63	-1.60	-0.27	-1.0	-11.6
19,141.0	88.48	178.76	10,343.6	-8,984.0	405.7	0.51	0.51	0.00	1.3	-10.4
19,237.0	90.90	179.73	10,344.1	-9,080.0	406.9	2.72	2.52	1.01	1.3	-10.1
19,332.0	92.13	179.90	10,341.6	-9,175.0	407.2	1.31	1.29	0.18	-1.8	-10.7
19,426.0	91.96	180.17	10,338.2	-9,268.9	407.2	0.34	-0.18	0.29	-5.7	-11.6
19,520.0	90.99	180.52	10,335.8	-9,362.9	406.6	1.10	-1.03	0.37	-8.8	-13.1
19,584.0	88.66	179.55	10,336.0	-9,426.9	406.6	3.94	-3.64	-1.52	-9.0	-13.7
19,615.0	88.04	179.37	10,336.9	-9,457.9	406.9	2.08	-2.00	-0.58	-8.2	-13.7



Midland PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Stonewall 28 Fed Com
Well: #314H
Wellbore: OH
Design: OH

Local Co-ordinate Reference:
TVD Reference: KB = 25 @ 3517.0usft
MD Reference: KB = 25 @ 3517.0usft
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)
19,711.0	87.96	179.20	10,340.2	-9,553.8	408.1	0.20	-0.08	-0.18	-5.5	-13.4
19,806.0	88.62	178.94	10,343.1	-9,648.7	409.6	0.75	0.69	-0.27	-3.2	-12.8
19,901.0	89.89	179.37	10,344.3	-9,743.7	411.0	1.41	1.34	0.45	-2.6	-12.2
19,997.0	88.26	178.85	10,345.9	-9,839.7	412.5	1.78	-1.70	-0.54	-1.6	-11.7
20,092.0	88.22	178.14	10,348.8	-9,934.6	415.0	0.75	-0.04	-0.75	0.7	-10.1
20,186.0	88.31	177.82	10,351.6	-10,028.5	418.5	0.56	0.10	-0.55	3.0	-7.5
20,281.0	89.01	177.27	10,353.9	-10,123.4	422.7	0.82	0.74	-0.37	4.6	-4.1
20,343.0	89.89	177.00	10,354.4	-10,185.3	425.8	1.48	1.42	-0.44	4.8	-1.6
20,404.0	89.89	177.00	10,354.6	-10,246.2	429.0	0.00	0.00	0.00	4.6	1.0

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/S (usft)	+E/W (usft)	Comment
9,670.0	9,641.9	173.8	334.7	KOP, MD:9670.0', TVD:9641.9', N/S:173.8', EW:334.7', INC:3.33
9,905.7	9,863.3	102.0	331.3	FTP Crossing, MD:9905.7', TVD:9863.3', N/S:102.0', EW:331.3', INC:3.23
20,343.0	10,354.4	-10,185.3	425.8	Last MWD Survey (MD=20343.0')
20,404.0	10,354.6	-10,246.2	429.0	Projection to Bit (MD=20404.0')

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
7/28/2020
Date



Lea County, NM (NAD 83 NME)

Stonewall 28 Fed Com #314H

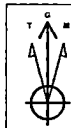
Plan #1

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: #314H

KB = 25 @ 3517.0ust 3492.0
Northing 435839.00 Easting 608853.00 Latitude 32° 11' 42.889 N Longitude 103° 28' 6.527 W



Azinuths to Grid North
True North: -4.48°
Magnetic North: 6.23°

Magnetic Field
Strength: 47754.8nT
Dip Angle: 60.03°
Date: 04/20/18
Model: IGRF2015

To convert a Magnetic Direction to a Grid Direction, Add 0.23°
To convert a Magnetic Direction to a True Direction, Add 0.69° East
To convert a True Direction to a Grid Direction, Subtract 0.46°

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	Vsect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	3330.0	0.00	0.00	3330.0	0.0	0.0	0.00	0.00	0.0	
3	3580.1	5.00	65.27	3579.7	4.6	9.9	2.00	65.27	-4.1	
4	7497.5	5.00	65.27	7482.3	147.4	320.1	0.00	0.00	-133.9	
5	7747.5	0.00	0.00	7732.0	152.0	330.0	2.00	180.00	-138.1	Brushy Top[SW 28 FC #314H]
6	9713.5	0.00	0.00	9698.0	152.0	330.0	0.00	0.00	-138.1	
7	10612.1	89.86	179.46	10271.0	-419.5	335.4	10.00	179.46	433.1	TGT#1[SW 28 FC #314H]
8	12228.8	89.86	179.46	10275.0	-2037.1	350.0	0.00	0.00	2050.0	TGT#2[SW 28 FC #314H]
9	12268.5	89.86	179.46	10275.4	-2075.8	351.0	2.00	180.00	2089.7	TGT#3[SW 28 FC #314H]
10	12870.2	89.08	179.46	10285.0	-2577.4	356.7	0.00	0.00	2630.0	TGT#4[SW 28 FC #314H]
11	12892.8	89.63	179.46	10285.5	-2700.0	359.9	2.00	-180.00	2712.5	TGT#5[SW 28 FC #314H]
12	13710.9	89.63	179.46	10305.0	-3517.8	364.6	0.00	0.00	3530.0	
13	13749.8	89.41	179.46	10305.7	-3556.7	365.0	2.00	0.00	3568.9	
14	16112.3	89.41	179.46	10330.0	-5919.0	387.2	0.00	0.00	5930.0	
15	16131.3	89.79	179.46	10330.1	-5938.0	387.4	2.00	0.00	5949.0	
16	18813.5	89.79	179.46	10340.0	-8520.3	412.7	0.00	0.00	8830.0	
17	18820.9	89.65	179.46	10340.0	-8527.4	412.7	2.00	-180.00	8837.1	
18	20439.6	89.65	179.46	10350.0	-10246.0	428.0	0.00	0.00	10254.0	PBHL[SW 28 FC #314H]

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N-S	+E-W	Northing	Easting
Brushy Top[SW 28 FC #314H]	7732.0	152.0	330.0	435891.00	609182.00
FTPSW 28 FC #314H	10270.0	162.0	330.0	435941.00	609182.00
TGT#1[SW 28 FC #314H]	10278.0	-2037.1	350.0	433901.90	609200.83
TGT#2[SW 28 FC #314H]	10285.0	-2677.4	356.7	433161.60	609214.87
TGT#3[SW 28 FC #314H]	10305.0	-3517.8	364.6	433221.20	609222.59
TGT#4[SW 28 FC #314H]	10330.0	-5919.0	387.2	429920.00	609245.22
TGT#5[SW 28 FC #314H]	10340.0	-8520.3	412.7	427218.70	609270.58
PBHL[SW 28 FC #314H]	10350.0	-10246.0	428.0	425533.00	609286.00

