



EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Caravan 28 State Com

#601H

OH

Design: OH

Midland PVA

04 February, 2019

HOBBS OCD

APR 12 2019

RECEIVED



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #801H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3549.0usft
Site:	Caravan 28 State Com	MD Reference:	KB = 25 @ 3549.0usft
Well:	#801H	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	Caravan 28 State Com		
Site Position:		Northing:	435,288.00 usft
From:	Map	Easting:	774,878.00 usft
Position Uncertainty:	0.0 usft	Grid Radius:	13-3/16 "
		Latitude:	32° 11' 39.983 N
		Longitude:	103° 34' 44.423 W
		Grid Convergence:	0.40 "

Well	#801H		
Well Position	+N-S	0.0 usft	Northing:
	+E-W	0.0 usft	Easting:
Position Uncertainty	0.0 usft		Wellhead Elevation:
			usft
			Latitude:
			Longitude:
			Ground Level:
			3,524.0 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination
			(°)
	IGRF2015	9/27/2018	6.82
			Dip Angle
			(°)
			Field Strength
			(nT)
			47,787.37552358

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
			(°)
			177.90

Survey Program	Date 2/4/2019		
From	To	Survey (Wellbore)	Tool Name
(usft)	(usft)		
199.0	22,447.0	Driltech MWD (OH)	MWD
			Description
			OWSG MWD - Standard



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #801H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3549.0usft
Site:	Caravan 28 State Com	MD Reference:	KB = 25 @ 3549.0usft
Well:	#801H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey											
MD (usft)	Inc (°)	Asd (azimuth) (°)	TVD (usft)	NS (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	0.00	0.00	0.00	0.0	0.0	0.0
199.0	1.14	123.01	199.0	-1.1	1.7	0.57	0.57	0.00	0.0	0.0	0.0
320.0	1.76	133.74	319.9	-3.0	4.0	0.56	0.51	8.87	0.0	0.0	0.0
505.0	0.88	119.32	504.9	-5.7	7.3	0.50	-0.48	-7.79	0.0	0.0	0.0
693.0	0.62	90.32	692.9	-6.4	9.6	0.24	-0.14	-15.43	0.0	0.0	0.0
880.0	0.62	33.54	879.9	-5.6	11.1	0.32	0.00	-30.36	0.0	0.0	0.0
1,066.0	0.53	8.67	1,065.9	-3.9	11.8	0.14	-0.05	-13.37	0.0	0.0	0.0
1,243.0	0.70	322.09	1,242.9	-2.2	11.3	0.29	0.10	-26.32	0.0	0.0	0.0
1,428.0	0.88	306.00	1,427.8	-0.5	9.5	0.15	0.10	-8.70	0.0	0.0	0.0
1,615.0	0.88	318.39	1,614.8	1.4	7.3	0.10	0.00	6.63	0.0	0.0	0.0
1,801.0	0.97	334.21	1,800.8	3.9	5.7	0.15	0.05	6.51	0.0	0.0	0.0
1,988.0	1.23	338.87	1,987.8	7.2	4.3	0.15	0.14	2.49	0.0	0.0	0.0
2,174.0	4.84	27.74	2,173.5	16.0	7.2	2.22	1.94	26.27	0.0	0.0	0.0
2,361.0	5.80	33.63	2,359.7	30.9	16.1	0.59	0.51	3.15	0.0	0.0	0.0
2,546.0	6.33	33.89	2,543.6	47.1	27.0	0.29	0.29	0.14	0.0	0.0	0.0
2,733.0	6.16	31.67	2,729.5	64.2	38.0	0.15	-0.09	-1.08	0.0	0.0	0.0
2,920.0	5.98	32.49	2,915.5	80.9	48.6	0.10	-0.10	0.33	0.0	0.0	0.0
3,106.0	6.16	35.39	3,100.4	97.3	59.6	0.19	0.10	1.56	0.0	0.0	0.0
3,293.0	6.24	39.17	3,286.3	113.3	71.8	0.22	0.04	2.02	0.0	0.0	0.0
3,480.0	5.72	40.40	3,472.3	128.3	84.2	0.29	-0.28	0.66	0.0	0.0	0.0
3,668.0	5.54	36.88	3,659.4	142.7	95.8	0.21	-0.10	-1.87	0.0	0.0	0.0
3,854.0	5.72	38.61	3,844.5	157.1	107.0	0.14	0.10	1.04	0.0	0.0	0.0
4,042.0	5.45	39.43	4,031.6	171.3	118.5	0.15	-0.14	0.33	0.0	0.0	0.0
4,229.0	5.54	35.91	4,217.8	185.5	129.4	0.19	0.05	-1.88	0.0	0.0	0.0
4,415.0	5.98	39.87	4,402.8	200.2	140.9	0.32	0.24	2.13	0.0	0.0	0.0
4,603.0	5.72	53.64	4,589.9	213.2	154.8	0.77	-0.14	7.43	0.0	0.0	0.0
4,790.0	5.98	78.54	4,775.9	220.6	171.8	1.34	0.14	13.21	0.0	0.0	0.0



Midland PVA

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Caravan 28 State Com
 Well: #801H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #801H
 TVD Reference: KB = 25 @ 3549.0usft
 MD Reference: KB = 25 @ 3549.0usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.14

Survey

MD (usft)	Inc (")	Asl (azimuth) (")	TVD (usft)	N/S (usft)	EW (usft)	DLeg ("/100usft)	Build ("/100usft)	Turn ("/100usft)	High to Plan (usft)	Right to Plan (usft)
4,978.0	5.89	48.57	4,963.0	229.0	188.7	1.83	-0.05	-15.94	0.0	0.0
5,165.0	5.10	36.88	5,149.1	242.0	200.8	0.73	-0.42	-6.25	0.0	0.0
5,353.0	5.19	36.00	5,336.3	255.5	210.9	0.06	0.05	-0.47	0.0	0.0
5,540.0	5.54	32.57	5,522.5	270.0	220.7	0.25	0.19	-1.83	0.0	0.0
5,727.0	5.83	29.06	5,708.6	285.8	230.0	0.19	0.05	-1.88	0.0	0.0
5,914.0	5.89	26.07	5,894.7	302.2	238.7	0.21	0.14	-1.60	0.0	0.0
6,101.0	5.83	23.52	6,080.8	319.3	246.6	0.20	-0.14	-1.36	0.0	0.0
6,288.0	5.19	22.03	6,266.9	335.5	253.4	0.25	-0.24	-0.80	0.0	0.0
6,476.0	4.92	20.18	6,454.2	351.0	259.4	0.17	-0.14	-0.98	0.0	0.0
6,570.0	5.54	22.03	6,547.8	359.0	262.4	0.68	0.66	1.97	0.0	0.0
6,757.0	7.12	30.73	6,733.7	377.3	271.8	0.99	0.84	4.65	0.0	0.0
6,944.0	6.68	32.22	6,919.3	396.5	283.5	0.25	-0.24	0.80	0.0	0.0
7,131.0	5.98	31.96	7,105.2	413.9	294.4	0.37	-0.37	-0.14	0.0	0.0
7,318.0	5.01	25.89	7,291.3	429.5	303.2	0.60	-0.52	-3.25	0.0	0.0
7,505.0	1.32	317.95	7,478.0	438.5	305.3	2.50	-1.97	-36.33	0.0	0.0
7,692.0	1.23	308.99	7,665.0	441.4	302.3	0.12	-0.05	-4.79	0.0	0.0
7,879.0	1.23	313.74	7,851.9	444.0	299.3	0.05	0.00	2.54	0.0	0.0
8,067.0	0.88	309.87	8,039.9	446.3	296.7	0.19	-0.19	-2.06	0.0	0.0
8,255.0	0.44	302.05	8,227.9	447.6	295.0	0.24	-0.23	-4.16	0.0	0.0
8,442.0	0.53	223.56	8,414.9	447.4	293.8	0.33	0.05	-41.97	0.0	0.0
8,629.0	1.14	204.58	8,601.9	445.1	292.4	0.35	0.33	-10.15	0.0	0.0
8,815.0	1.49	222.77	8,787.8	441.6	290.0	0.29	0.19	9.78	0.0	0.0
9,002.0	1.49	226.99	8,974.7	438.2	286.6	0.06	0.00	2.26	0.0	0.0
9,189.0	1.32	223.91	9,161.7	435.0	283.3	0.10	-0.09	-1.85	0.0	0.0
9,376.0	1.14	246.24	9,348.7	432.7	280.1	0.27	-0.10	11.94	0.0	0.0
9,562.0	1.67	234.83	9,534.6	430.3	276.2	0.32	0.28	-6.24	0.0	0.0
9,749.0	1.67	179.97	9,721.5	428.0	274.0	0.82	0.00	-29.23	0.0	0.0



Midland PVA

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Caravan 28 State Com
 Well: #801H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #801H
 TVD Reference: KB = 25 @ 3549.0usft
 MD Reference: KB = 25 @ 3549.0usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.14

Survey											
MD (usft)	Inc (°)	Asd (azimuth) (°)	TVD (usft)	NS (usft)	EW (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
9,936.0	1.93	205.37	9,908.4	420.5	272.8	0.44	0.14	13.58	0.0	0.0	
10,123.0	1.32	241.05	10,095.4	418.6	269.4	0.62	-0.33	19.08	0.0	0.0	
10,311.0	0.97	240.96	10,283.3	414.8	266.1	0.19	-0.19	-0.05	0.0	0.0	
10,498.0	1.23	269.53	10,470.3	414.0	262.7	0.32	0.14	15.28	0.0	0.0	
10,685.0	0.44	323.93	10,657.3	414.5	260.3	0.55	-0.42	29.09	0.0	0.0	
10,873.0	0.44	47.50	10,845.3	415.6	260.4	0.31	0.00	44.45	0.0	0.0	
11,059.0	0.53	285.08	11,031.3	416.3	260.1	0.46	0.05	-65.82	0.0	0.0	
11,247.0	1.58	279.11	11,219.2	417.0	258.7	0.56	0.56	-3.18	0.0	0.0	
11,434.0	0.18	78.45	11,406.2	417.4	254.4	0.94	-0.75	85.21	0.0	0.0	
11,528.0	1.06	306.55	11,500.2	418.0	253.9	1.26	0.94	-138.19	0.0	0.0	
11,641.0	1.06	298.88	11,613.2	419.1	252.2	0.16	0.00	-8.56	0.0	0.0	
11,736.0	1.67	214.24	11,708.2	418.4	250.6	1.69	0.64	-89.09	-1.5	0.9	
11,780.0	6.07	198.07	11,752.1	415.7	249.5	10.20	10.00	-36.75	-4.7	1.0	
11,830.0	9.94	194.47	11,801.6	409.0	247.6	7.80	7.74	-7.20	-8.5	0.1	
11,877.0	10.90	193.76	11,847.8	400.7	245.6	2.06	2.04	-1.51	-9.4	-1.9	
11,924.0	13.45	189.63	11,893.7	391.0	243.6	5.73	5.43	-8.79	-8.9	-5.5	
11,971.0	19.43	183.83	11,938.8	377.8	242.2	13.16	12.72	-12.34	-2.7	-8.6	
12,018.0	24.45	181.02	11,982.4	360.3	241.5	10.91	10.68	-5.98	1.5	-10.8	
12,065.0	29.99	183.92	12,024.2	338.8	240.5	12.12	11.79	6.17	5.0	-13.7	
12,112.0	36.05	181.81	12,063.5	313.3	239.2	13.12	12.89	-4.49	9.2	-16.8	
12,159.0	42.38	178.74	12,099.9	283.6	239.1	14.08	13.47	-8.53	13.2	-18.8	
12,205.0	49.68	176.56	12,131.9	250.5	239.9	15.87	15.87	-0.39	15.4	-20.5	
12,252.0	56.89	180.14	12,159.9	212.9	240.3	15.57	15.34	3.36	15.7	-23.2	
12,299.0	64.28	180.85	12,183.0	171.9	240.0	15.78	15.72	1.51	14.8	-26.8	
12,346.0	72.98	179.97	12,200.1	128.2	239.7	18.59	18.51	-1.87	12.1	-30.3	
12,392.0	79.76	175.75	12,211.0	83.6	241.4	17.22	14.74	-9.17	7.9	-32.1	
12,487.0	85.12	174.96	12,223.4	-10.2	249.0	5.70	5.64	-0.83	1.6	-32.5	



Midland PVA

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Caravan 28 State Com
 Well: #801H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #801H
 TVD Reference: KB = 25 @ 3549.0usft
 MD Reference: KB = 25 @ 3549.0usft
 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)	
12,581.0	88.17	173.99	12,230.6	-103.5	258.0	1.52	1.12	-1.03	6.3	-31.4	
12,675.0	87.58	173.73	12,235.7	-196.9	268.1	1.53	1.50	-0.28	11.5	-28.7	
12,769.0	88.72	178.36	12,238.7	-290.4	276.2	3.05	1.21	2.80	14.6	-20.8	
12,863.0	89.34	177.15	12,240.3	-384.3	281.5	1.07	0.86	0.84	16.2	-18.1	
12,957.0	89.69	177.15	12,241.1	-478.2	286.2	0.37	0.37	0.00	17.1	-12.1	
13,050.0	89.25	176.89	12,242.0	-571.0	291.0	0.55	-0.47	-0.28	18.0	-8.0	
13,145.0	89.69	175.31	12,242.9	-665.8	297.5	1.73	0.48	-1.66	19.0	-2.2	
13,238.0	89.25	175.04	12,243.7	-758.5	305.3	0.58	-0.47	-0.29	19.9	4.9	
13,331.0	91.63	176.89	12,243.0	-851.2	311.8	3.24	2.58	1.99	19.3	10.8	
13,425.0	92.33	178.56	12,239.8	-945.1	315.5	1.93	0.74	1.78	16.1	13.8	
13,519.0	91.80	178.65	12,236.4	-1,039.0	317.8	0.57	-0.56	0.10	12.8	15.4	
13,612.0	91.10	178.91	12,234.0	-1,131.9	319.8	0.80	-0.75	0.28	10.6	16.7	
13,706.0	91.10	178.65	12,232.2	-1,225.9	321.8	0.28	0.00	-0.28	8.9	18.0	
13,800.0	91.01	179.88	12,230.5	-1,319.9	323.0	1.31	-0.10	1.31	7.2	18.5	
13,894.0	91.36	180.23	12,228.5	-1,413.9	322.9	0.53	0.37	0.37	5.3	17.8	
13,987.0	91.19	180.85	12,226.5	-1,508.8	322.1	0.69	-0.18	0.67	3.4	16.2	
14,081.0	88.90	182.34	12,226.4	-1,600.8	319.4	2.91	-2.44	1.59	3.4	12.9	
14,175.0	87.76	182.87	12,229.1	-1,694.7	315.2	1.34	-1.21	0.56	6.2	7.9	
14,268.0	87.93	182.69	12,232.6	-1,787.5	310.7	0.27	0.18	-0.19	9.8	2.6	
14,362.0	88.02	183.31	12,236.0	-1,881.3	305.7	0.67	0.10	0.66	13.2	-2.8	
14,455.0	88.81	181.81	12,240.3	-1,974.1	301.6	2.21	-1.52	-1.61	17.6	-7.7	
14,549.0	89.16	180.58	12,243.8	-2,068.0	299.6	3.01	2.71	-1.31	21.2	-10.3	
14,642.0	89.60	179.08	12,244.8	-2,161.0	299.9	1.68	0.47	-1.61	22.3	-10.7	
14,735.0	89.34	177.42	12,245.7	-2,253.9	302.8	1.81	-0.28	-1.78	23.2	-8.6	
14,829.0	91.54	177.94	12,244.9	-2,347.8	306.6	2.40	2.34	0.55	22.6	-5.4	
14,923.0	91.98	177.94	12,242.0	-2,441.7	309.9	0.47	0.47	0.00	19.8	-2.8	
15,017.0	92.86	178.21	12,238.1	-2,535.6	313.1	0.98	0.94	0.29	15.9	-0.3	



Midland PVA

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Caravan 28 State Com
 Well: #601H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #601H
 TVD Reference: KB = 25 @ 3549.0usft
 MD Reference: KB = 25 @ 3549.0usft
 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)	
15,110.0	90.40	178.38	12,235.4	-2,628.5	315.9	2.65	-2.65	0.18	13.3	1.8	
15,204.0	88.72	178.56	12,236.2	-2,722.5	318.4	1.80	-1.79	0.19	14.1	3.6	
15,297.0	88.29	178.47	12,238.6	-2,815.4	320.8	0.47	-0.46	-0.10	16.7	5.4	
15,391.0	90.13	178.47	12,239.9	-2,909.4	323.3	1.98	1.98	0.00	18.1	7.2	
15,485.0	91.80	178.91	12,238.3	-3,003.3	325.4	1.84	1.78	0.47	16.6	8.7	
15,578.0	92.77	180.14	12,234.6	-3,096.2	326.2	1.68	1.04	1.32	13.0	8.9	
15,672.0	93.74	181.72	12,229.2	-3,190.1	324.7	1.97	1.03	1.68	7.7	6.7	
15,769.0	90.84	181.72	12,224.6	-3,306.9	321.2	2.48	-2.48	0.00	3.2	2.4	
15,859.0	88.20	180.58	12,225.2	-3,376.9	319.8	4.11	-3.77	-1.83	3.8	0.5	
15,951.0	88.90	181.81	12,227.5	-3,468.8	317.8	1.54	0.76	1.34	6.3	-2.1	
16,045.0	87.93	181.55	12,230.1	-3,562.8	315.1	1.07	-1.03	-0.28	9.0	-5.5	
16,139.0	90.13	183.48	12,231.7	-3,656.7	311.0	3.11	2.34	2.05	10.7	-10.3	
16,232.0	90.13	183.39	12,231.5	-3,749.5	305.4	0.10	0.00	-0.10	10.8	-16.5	
16,326.0	91.63	184.54	12,230.0	-3,843.2	298.9	2.01	1.60	1.22	9.3	-23.6	
16,419.0	91.01	182.51	12,227.9	-3,936.0	293.2	2.28	-0.67	-2.18	7.2	-30.0	
16,512.0	89.78	179.78	12,227.2	-4,029.0	291.3	3.22	-1.32	-2.94	6.6	-32.5	
16,629.0	89.34	177.94	12,228.1	-4,146.0	293.7	1.62	-0.38	-1.57	7.7	-31.0	
16,700.0	90.84	178.38	12,228.0	-4,216.9	295.9	2.20	2.11	0.62	7.6	-29.2	
16,794.0	90.92	180.23	12,226.6	-4,310.9	297.1	1.97	0.09	1.97	6.3	-28.7	
16,888.0	91.71	180.93	12,224.4	-4,404.9	296.1	1.12	0.84	0.74	4.3	-30.3	
16,981.0	88.81	179.81	12,224.0	-4,497.9	295.7	3.43	-3.12	-1.42	3.9	-31.4	
17,074.0	86.09	178.91	12,228.1	-4,590.8	296.9	3.02	-2.92	-0.75	8.1	-30.8	
17,167.0	85.65	178.82	12,234.8	-4,683.5	298.7	0.48	-0.47	-0.10	14.7	-29.6	
17,261.0	86.79	179.00	12,241.0	-4,777.3	300.5	1.23	1.21	0.19	20.7	-28.5	
17,354.0	87.14	178.82	12,246.0	-4,870.1	302.3	0.42	0.38	-0.19	25.4	-27.4	
17,447.0	88.90	177.94	12,249.2	-4,963.0	304.9	2.12	1.89	-0.95	28.5	-25.4	
17,542.0	89.78	177.68	12,250.3	-5,056.0	308.5	0.97	0.93	-0.27	29.4	-22.4	



Midland PVA

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Caravan 28 State Com
 Well: #601H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #601H
 TVD Reference: KB = 25 @ 3549.0usft
 MD Reference: KB = 25 @ 3549.0usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.14

Survey											
MD (usft)	Inc (°)	Asl (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLag (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
17,635.0	91.19	177.59	12,249.5	-5,150.9	312.4	1.52	1.52	-0.10	28.5	-19.2	
17,729.0	91.54	178.30	12,247.2	-5,244.8	315.7	0.84	0.37	0.76	26.0	-18.5	
17,823.0	91.54	178.47	12,244.7	-5,338.7	318.4	0.16	0.00	0.18	23.3	-14.5	
17,917.0	91.71	179.35	12,242.1	-5,432.7	320.2	0.95	0.18	0.94	20.5	-13.4	
18,010.0	92.68	180.58	12,238.5	-5,525.6	320.2	1.66	1.04	1.32	16.8	-14.0	
18,104.0	89.69	179.35	12,236.5	-5,619.6	320.3	3.44	-3.18	-1.31	14.7	-14.6	
18,198.0	89.78	179.09	12,237.0	-5,713.5	321.6	0.29	0.10	-0.28	14.9	-13.9	
18,292.0	90.04	179.97	12,237.1	-5,807.5	322.3	0.98	0.28	0.94	14.9	-13.8	
18,385.0	90.66	179.26	12,236.6	-5,900.5	323.0	1.01	0.67	-0.76	14.2	-13.9	
18,478.0	91.54	179.79	12,234.8	-5,993.5	323.7	1.10	0.95	0.57	12.2	-13.7	
18,572.0	88.87	179.97	12,233.6	-6,087.5	323.9	1.79	-1.78	0.19	10.9	-14.2	
18,666.0	90.48	179.26	12,233.3	-6,181.5	324.6	1.00	0.65	-0.76	10.4	-14.2	
18,759.0	89.43	180.85	12,233.4	-6,274.5	324.5	2.05	-1.13	1.71	10.3	-14.9	
18,853.0	89.69	180.85	12,234.1	-6,368.5	323.1	0.28	0.28	0.00	10.9	-17.0	
18,946.0	90.04	177.24	12,234.3	-6,461.5	324.6	3.90	0.38	-3.88	10.9	-16.1	
19,040.0	90.31	178.30	12,234.1	-6,555.4	326.3	1.16	0.29	1.13	10.5	-13.1	
19,133.0	90.66	176.01	12,233.3	-6,648.3	332.9	2.49	0.38	-2.46	9.5	-9.1	
19,226.0	90.04	176.45	12,232.7	-6,741.1	339.0	0.82	-0.67	0.47	8.8	-3.6	
19,320.0	88.64	177.68	12,233.8	-6,834.9	343.8	1.98	-1.49	1.31	9.7	0.5	
19,414.0	89.25	177.42	12,235.5	-6,928.8	347.8	0.71	0.65	-0.28	11.2	3.9	
19,508.0	88.20	177.15	12,237.6	-7,022.7	352.3	1.15	-1.12	-0.29	13.2	7.7	
19,601.0	88.90	177.51	12,240.0	-7,115.6	356.6	0.85	0.75	0.39	15.3	11.4	
19,694.0	88.81	180.32	12,241.8	-7,208.5	358.4	3.02	-0.10	3.02	17.0	12.5	
19,788.0	88.90	179.61	12,243.7	-7,302.5	358.4	0.76	0.10	-0.76	18.7	11.9	
19,881.0	90.92	181.99	12,243.8	-7,395.5	357.1	3.36	2.17	2.56	18.6	10.0	
19,975.0	89.52	180.76	12,243.5	-7,489.4	354.9	1.98	-1.49	-1.31	17.9	7.0	
20,069.0	88.72	178.91	12,244.9	-7,583.4	355.2	2.14	-0.85	-1.97	19.0	6.7	



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #601H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3549.0usft
Site:	Caravan 28 State Com	MD Reference:	KB = 25 @ 3549.0usft
Well:	#601H	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)	EW (usft)	DLeg (°/100usft)	Buikd (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
20,162.0	90.22	179.35	12,245.8	-7,876.4	356.6	1.68	1.61	0.47	19.5	7.4	
20,256.0	88.90	180.32	12,246.5	-7,770.4	356.8	1.74	-1.40	1.03	19.9	7.0	
20,349.0	88.81	180.49	12,246.4	-7,863.4	356.2	0.21	-0.10	0.18	21.4	5.7	
20,443.0	89.25	180.67	12,250.0	-7,957.4	355.2	0.51	0.47	0.19	22.7	4.1	
20,537.0	91.19	180.93	12,249.6	-8,051.3	353.9	2.08	2.08	0.28	22.0	2.2	
20,631.0	92.24	180.05	12,246.8	-8,145.3	353.1	1.46	1.12	-0.94	18.9	0.7	
20,725.0	91.19	179.26	12,244.0	-8,239.3	353.7	1.40	-1.12	-0.84	15.7	0.6	
20,819.0	91.01	179.81	12,242.2	-8,333.2	354.6	0.42	-0.19	0.37	13.6	0.9	
20,913.0	87.85	183.39	12,243.1	-8,427.2	352.2	5.24	-3.36	4.02	14.2	-2.2	
21,007.0	88.99	182.16	12,245.7	-8,521.0	347.6	1.78	1.21	-1.31	16.4	-7.4	
21,100.0	87.32	181.90	12,248.7	-8,613.9	344.3	1.82	-1.80	-0.28	19.1	-11.3	
21,194.0	88.81	182.43	12,251.9	-8,707.8	340.8	1.68	1.59	0.56	21.9	-15.5	
21,288.0	88.55	180.93	12,254.0	-8,801.7	338.0	1.62	-0.28	-1.60	23.7	-19.0	
21,381.0	89.25	177.33	12,255.8	-8,894.7	339.4	3.94	0.75	-3.87	25.1	-18.2	
21,475.0	89.43	175.57	12,256.9	-8,988.5	345.2	1.88	0.19	-1.87	25.8	-13.0	
21,569.0	91.10	177.94	12,256.5	-9,082.3	350.6	3.08	1.78	2.52	25.0	-8.3	
21,662.0	91.10	177.86	12,254.7	-9,175.2	354.0	0.09	0.00	-0.09	22.9	-5.6	
21,756.0	88.55	178.82	12,255.0	-9,269.2	356.7	2.90	-2.71	1.02	22.8	-3.5	
21,849.0	88.55	179.18	12,257.3	-9,362.1	358.3	0.39	0.00	0.39	24.7	-2.5	
21,944.0	88.55	178.82	12,259.7	-9,457.1	360.0	0.38	0.00	-0.38	26.8	-1.5	
22,037.0	89.34	178.91	12,261.4	-9,550.1	361.8	0.85	0.85	0.10	28.1	-0.3	
22,131.0	89.69	178.47	12,262.2	-9,644.0	364.0	0.60	0.37	-0.47	28.5	1.2	
22,225.0	90.48	177.86	12,262.1	-9,738.0	367.0	1.06	0.84	-0.65	28.0	3.5	
22,318.0	90.66	177.42	12,261.2	-9,830.9	370.8	0.51	0.19	-0.47	26.7	6.7	
22,387.0	90.31	177.42	12,260.6	-9,899.8	373.9	0.51	-0.51	0.00	25.8	9.3	
22,447.0	90.31	177.42	12,260.3	-9,959.8	376.6	0.00	0.00	0.00	25.3	11.6	



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #801H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3549.0usft
Site:	Caravan 28 State Com	MD Reference:	KB = 25 @ 3549.0usft
Well:	#801H	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)	
11,719.0	11,691.2	418.8	250.8	KOP, MD:11719.0', TVD:11691.2', N/S:418.8', E/W:250.9', INC:1.40
11,947.7	11,916.6	385.0	242.8	FTP Crossing, MD:11947.7', TVD:11916.6', N/S:385.0', E/W:242.8', INC:16.45
22,387.0	12,260.6	-9,899.8	373.9	Last MWD Survey (MD=22387.0')
22,447.0	12,260.3	-9,959.8	376.6	Projection to Bit (MD=22447.0')

Checked By: _____ Approved By: _____ Date: _____



Lea County, NM (NAD 83 NME)
Caravan 28 State Com #601H
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: #601H

KB = 25 @ 3549.0usft 3524.0
Northing 435327.00 Easting 774028.00 Latitude 32° 11' 40.394 N Longitude 103° 34' 51.984 W

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VSec	Target
1	11592.0	1.06	303.07	11584.2	418.7	252.9	0.00	0.00	-489.1	
2	11769.3	1.06	303.07	11741.5	420.5	250.2	0.00	0.00	-411.0	
3	12524.7	90.00	174.90	12224.3	-55.7	285.7	12.00	-128.17	66.1	
4	12758.8	90.05	179.58	12224.2	-289.4	298.9	2.00	69.37	300.1	
5	15219.7	90.05	179.58	12222.0	-2750.3	314.9	0.00	0.00	2760.0	TGT#1(Caravan 28 State Com #601H)
6	15221.0	90.06	179.60	12222.0	-2751.5	315.0	2.00	62.88	2761.2	
7	17049.6	90.06	179.60	12220.0	-4580.1	327.6	0.00	0.00	4589.0	TGT#2(Caravan 28 State Com #601H)
8	17058.0	89.90	179.60	12220.0	-4588.3	327.7	2.00	-180.00	4597.4	
9	19793.8	89.90	179.60	12225.0	-7324.2	348.7	0.00	0.00	7332.0	TGT#3(Caravan 28 State Com #601H)
10	19798.6	89.80	179.60	12225.0	-7329.2	348.7	2.00	180.00	7337.0	
11	21194.4	89.80	179.60	12230.0	-8724.8	358.4	0.00	0.00	8732.0	TGT#4(Caravan 28 State Com #601H)
12	21195.8	89.77	179.60	12230.0	-8726.2	358.4	2.00	-180.00	8733.4	
13	22430.6	89.77	179.60	12235.0	-9961.0	365.0	0.00	0.00	9967.7	PSHL (Caravan 28 State Com #601H)

WELLBORE TARGET DETAILS (MAP COORDINATES)

Name	TVD	+N-S	+E-W	Northing	Easting
RSP (Caravan 28 State Com #601H)	11741.5	418.0	253.0	435782.00	774321.00
TGT#1(Caravan 28 State Com #601H)	12220.0	-4580.1	327.8	435748.80	774355.65
TGT#2(Caravan 28 State Com #601H)	12225.0	-7324.2	348.7	435276.70	774342.85
TGT#3(Caravan 28 State Com #601H)	12225.0	-7329.2	348.7	435712.00	774321.00
TGT#4(Caravan 28 State Com #601H)	12230.0	-8724.8	358.4	435002.80	774374.70
PSHL (Caravan 28 State Com #601H)	12235.0	-9961.0	365.0	434862.20	774384.42

