

HOBBS CO
MAR 03 2020
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EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Quijote 2 State Com

#704H

OH

Design: OH

Midland PVA

03 August, 2019



Midland PVA

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Quijote 2 State Com
 Well: #704H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #704H
 TVD Reference: KB = 25 @ 3363.0usft
 MD Reference: KB = 25 @ 3363.0usft
 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	Quijote 2 State Com		
Site Position:		Northing:	393,066.99 usft
From:	Map	Easting:	756,153.00 usft
Position Uncertainty:	0.0 usft	Grid Radius:	13-3/16 "
		Latitude:	32° 4' 43.401 N
		Longitude:	103° 38' 23.163 W
		Grid Convergence:	0.37 "

Well	#704H		
Well Position	+N-S	0.0 usft	Northing:
	+E-W	0.0 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	32° 4' 43.993 N
		Longitude:	103° 38' 35.398 W
		Ground Level:	3,338.0 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination
	IGRF2015	5/29/2018	(°)
			6.77
			Dip Angle
			(°)
			59.89
			Field Strength
			(nT)
			47,845.12921714

Design	OH		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
Vertical Section:	Depth From (TVD)	+N-S	Tie On Depth:
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction
			(°)
			174.78



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Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
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Survey Program	Date	8/3/2018			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
151.0	11,515.0	Intrepid MWD (OH)	MWD	OWSG MWD - Standard	
11,621.0	17,135.0	HTMWD (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
151.0	1.01	209.34	151.0	-1.2	-0.7	0.87	0.87	0.00	-1.3	0.0
238.0	0.84	102.29	238.0	-2.0	-0.4	1.71	-0.20	-123.05	0.0	-2.0
412.0	0.75	112.84	412.0	-2.7	1.9	0.10	-0.05	6.06	-2.8	-1.7
500.0	0.62	122.59	500.0	-3.2	2.8	0.20	-0.15	11.08	-4.1	-1.1
592.0	0.70	134.72	592.0	-3.8	3.6	0.17	0.09	13.18	-5.3	-0.2
684.0	0.53	129.45	684.0	-4.5	4.4	0.19	-0.18	-5.73	-6.2	-0.7
777.0	0.57	142.72	778.9	-5.1	5.0	0.14	0.04	14.27	-7.1	0.9
917.0	0.57	129.10	918.9	-6.1	5.9	0.10	0.00	-9.73	-8.5	-1.0
1,034.0	0.31	148.34	1,033.9	-6.8	6.6	0.25	-0.22	16.44	-9.2	1.8
1,127.0	2.11	38.39	1,126.9	-5.6	7.8	2.40	1.94	-118.23	2.4	-9.1
1,219.0	5.32	42.70	1,218.7	-1.2	11.7	3.50	3.49	4.68	1.2	-8.5
1,311.0	7.30	43.84	1,310.1	6.2	18.6	2.16	2.15	1.24	-0.6	-7.7
1,402.0	7.12	40.94	1,400.4	14.6	26.3	0.45	-0.20	-3.19	-2.2	-6.7
1,494.0	6.59	38.74	1,491.8	23.0	33.4	0.64	-0.58	-2.39	-3.5	-5.3
1,589.0	6.64	36.55	1,586.1	31.7	40.1	0.27	0.05	-2.31	-4.6	-3.5
1,684.0	6.73	33.21	1,680.5	40.8	48.4	0.42	0.09	-3.52	-5.8	-1.4
1,780.0	7.21	44.98	1,775.8	49.7	53.7	1.57	0.50	12.26	-7.5	1.7
1,875.0	6.73	42.70	1,870.1	58.0	61.7	0.58	-0.51	-2.40	-9.3	2.2
1,970.0	6.64	37.07	1,964.4	66.5	68.8	0.70	-0.09	-5.93	-10.8	2.8
2,065.0	6.11	42.70	2,058.9	74.6	75.5	0.66	-0.56	5.93	-11.1	5.4



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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)	
2,160.0	5.80	49.38	2,153.3	81.5	82.6	0.80	-0.33	7.03	-10.3	7.2	
2,255.0	5.85	59.68	2,247.9	87.0	90.4	1.10	0.05	10.62	-8.7	7.9	
2,350.0	5.71	59.84	2,342.4	91.9	98.7	0.15	-0.15	0.19	-8.5	6.1	
2,445.0	5.58	62.39	2,436.9	96.4	106.9	0.30	-0.14	2.68	-7.9	4.3	
2,540.0	5.45	64.67	2,531.5	100.4	115.0	0.27	-0.14	2.40	-7.3	2.1	
2,635.0	5.05	63.27	2,626.1	104.2	122.9	0.44	-0.42	-1.47	-6.4	-0.6	
2,731.0	5.14	59.66	2,721.7	108.3	130.3	0.35	0.09	-3.76	-5.0	-3.2	
2,826.0	5.67	57.73	2,816.3	113.0	138.0	0.59	0.56	-2.03	-4.0	-5.0	
2,921.0	5.32	55.09	2,910.8	118.0	145.6	0.45	-0.37	-2.78	-3.0	-6.4	
3,016.0	4.79	55.71	3,005.5	122.8	152.5	0.56	-0.56	0.65	-1.6	-7.5	
3,111.0	6.11	49.84	3,100.0	128.3	159.6	1.51	1.39	-6.39	0.2	-8.2	
3,207.0	6.24	54.65	3,195.5	134.6	167.7	0.58	0.14	5.22	-0.9	-8.7	
3,302.0	7.08	57.99	3,289.8	140.7	176.9	0.97	0.88	3.52	-2.6	-9.9	
3,397.0	6.81	61.77	3,384.1	146.5	186.8	0.56	-0.28	3.98	-5.0	-11.6	
3,492.0	6.73	54.56	3,478.5	152.3	196.3	0.90	-0.08	-7.59	-4.8	-13.8	
3,588.0	7.03	43.58	3,573.8	159.9	205.0	1.40	0.31	-11.44	-3.6	-14.6	
3,683.0	6.55	46.83	3,668.1	167.8	212.9	0.65	-0.51	3.42	-5.7	-13.7	
3,778.0	5.89	46.57	3,762.6	174.8	220.4	0.70	-0.69	-0.27	-6.0	-13.3	
3,874.0	5.58	47.88	3,858.1	181.4	227.5	0.35	-0.32	1.36	-5.9	-12.9	
3,969.0	4.92	51.75	3,952.7	187.0	234.1	0.79	-0.69	4.07	-5.5	-12.7	
4,064.0	6.11	61.95	4,047.2	191.9	241.7	1.62	1.25	10.74	-7.0	-13.0	
4,159.0	7.30	66.43	4,141.6	196.7	251.7	1.37	1.25	4.72	-9.6	-15.0	
4,255.0	5.63	61.68	4,237.0	201.3	261.5	1.83	-1.74	-4.95	-9.4	-18.5	
4,350.0	5.63	65.37	4,331.5	205.5	269.8	0.38	0.00	3.88	-10.3	-20.4	
4,445.0	5.80	68.80	4,426.1	209.2	278.5	0.40	0.18	3.61	-11.6	-22.8	
4,540.0	6.07	58.34	4,520.5	213.5	287.3	1.17	0.28	-11.01	-7.3	-27.0	
4,635.0	4.70	39.36	4,615.1	219.2	294.0	2.35	-1.44	-19.98	3.0	-27.9	



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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)	
4,730.0	4.26	22.31	4,709.8	225.5	297.8	1.47	-0.46	-17.95	12.2	-22.8	
4,824.0	3.96	20.64	4,803.6	231.7	300.3	0.34	-0.32	-1.78	11.7	-19.5	
4,919.0	3.74	18.53	4,898.4	237.7	302.4	0.28	-0.23	-2.22	9.8	-17.5	
5,014.0	3.82	18.35	4,993.2	243.7	304.4	0.09	0.08	-0.19	3.0	-17.3	
5,109.0	3.43	27.05	5,088.0	249.2	306.7	0.71	-0.41	9.16	-5.6	-17.0	
5,204.0	2.02	47.09	5,182.9	252.9	309.2	1.77	-1.48	21.09	-15.4	-13.1	
5,299.0	2.20	49.99	5,277.8	255.2	311.8	0.22	0.19	3.05	-19.8	-12.2	
5,394.0	1.45	69.51	5,372.8	256.8	314.4	1.01	-0.79	20.55	-25.4	-4.4	
5,489.0	1.54	141.93	5,467.8	256.2	316.3	1.86	0.09	76.23	-13.5	24.1	
5,584.0	1.41	140.78	5,562.7	254.3	317.8	0.14	-0.14	-1.21	-16.4	23.8	
5,679.0	1.58	150.54	5,657.7	252.2	319.2	0.32	0.18	10.27	-14.6	28.4	
5,775.0	1.49	146.23	5,753.7	250.1	320.5	0.15	-0.09	-4.49	-19.1	25.1	
5,870.0	1.27	147.73	5,848.6	248.1	321.8	0.23	-0.23	1.58	-20.8	25.7	
5,965.0	1.23	153.27	5,943.6	246.3	322.8	0.13	-0.04	5.83	-20.3	27.7	
6,060.0	1.14	140.52	6,038.6	244.7	323.9	0.29	-0.09	-13.42	-27.8	22.3	
6,155.0	1.01	147.38	6,133.6	243.3	324.9	0.19	-0.14	7.22	-26.7	25.5	
6,250.0	0.79	135.78	6,228.6	242.1	325.8	0.30	-0.23	-12.21	-32.8	19.5	
6,346.0	0.75	134.37	6,324.5	241.2	326.7	0.05	-0.04	-1.47	-34.5	18.7	
6,441.0	0.44	165.13	6,419.5	240.4	327.3	0.46	-0.33	32.38	-21.0	34.0	
6,536.0	1.05	251.53	6,514.5	239.8	328.5	1.17	0.84	90.95	31.7	23.5	
6,631.0	1.01	244.50	6,609.5	239.1	325.0	0.14	-0.04	-7.40	26.9	27.1	
6,726.0	1.45	236.87	6,704.5	238.1	323.2	0.49	0.46	-8.24	20.9	30.4	
6,821.0	1.41	245.81	6,799.5	237.0	321.1	0.24	-0.04	9.82	23.1	26.9	
6,916.0	1.41	260.71	6,894.4	236.7	318.9	0.89	0.00	36.74	32.2	9.5	
7,011.0	2.02	324.04	6,989.4	238.3	316.8	1.46	0.64	45.61	27.4	-14.4	
7,106.0	1.83	317.18	7,084.4	240.8	314.9	0.47	-0.41	-7.22	25.9	-11.3	
7,201.0	1.80	314.11	7,179.3	242.7	312.9	0.20	0.18	-3.23	23.7	-8.9	



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7,288.0	1.67	336.69	7,274.3	245.0	311.3	0.73	-0.14	23.77	15.3	-17.7	
7,391.0	1.54	326.06	7,369.2	247.3	310.0	0.34	-0.14	-11.19	15.6	-14.8	
7,488.0	1.19	338.36	7,464.2	249.3	308.9	0.48	-0.37	12.95	9.9	-17.5	
7,581.0	1.41	322.28	7,559.2	251.1	307.9	0.45	0.23	-16.83	12.2	-14.4	
7,676.0	1.23	314.98	7,654.2	252.8	306.4	0.26	-0.19	-7.68	11.8	-12.9	
7,770.0	1.19	310.06	7,748.1	254.1	305.0	0.12	-0.04	-5.23	10.9	-11.9	
7,865.0	1.14	307.51	7,843.1	255.3	303.5	0.08	-0.05	-2.88	9.5	-11.4	
7,960.0	0.88	282.13	7,938.1	256.2	302.0	0.39	-0.27	-16.19	10.5	-8.8	
8,055.0	0.70	297.85	8,033.1	256.7	300.8	0.21	-0.19	6.02	8.3	-9.7	
8,150.0	0.68	282.20	8,128.1	257.1	299.6	0.29	0.18	-16.47	9.3	-7.3	
8,245.0	0.68	265.85	8,223.1	257.2	298.2	0.26	0.00	-17.21	9.5	-4.6	
8,340.0	0.75	267.52	8,318.1	257.2	296.8	0.14	-0.14	1.78	8.0	-4.8	
8,435.0	1.14	268.05	8,413.0	257.1	295.3	0.41	0.41	0.56	6.4	-4.9	
8,529.0	1.23	262.34	8,507.0	256.9	293.3	0.16	0.10	-6.07	4.9	-4.3	
8,624.0	1.67	252.14	8,602.0	256.4	291.0	0.54	0.46	-10.74	3.2	-3.5	
8,719.0	1.41	250.85	8,697.0	255.6	288.6	0.28	-0.27	-1.57	0.8	-3.5	
8,814.0	1.58	250.74	8,791.9	254.7	286.2	0.16	0.18	0.09	-1.7	-3.5	
8,909.0	2.20	241.51	8,886.9	253.4	283.4	0.73	0.65	-6.72	-4.2	-3.9	
9,004.0	2.15	253.37	8,981.8	252.1	280.1	0.48	-0.05	12.48	-6.5	-2.6	
9,099.0	1.23	273.76	9,076.8	251.6	277.4	1.14	-0.97	21.46	-11.6	1.2	
9,194.0	1.05	282.29	9,171.7	251.9	275.5	0.26	-0.19	8.98	-13.2	3.0	
9,289.0	0.75	252.32	9,266.7	251.9	274.1	0.58	-0.32	-31.55	-14.3	-4.4	
9,383.0	0.62	242.39	9,360.7	251.4	273.0	0.19	-0.14	-10.56	-14.4	-6.8	
9,478.0	1.10	259.53	9,455.7	251.0	271.7	0.57	0.51	18.04	-17.2	-2.2	
9,573.0	0.44	241.51	9,550.7	250.7	270.5	0.73	-0.69	-18.97	-16.9	-7.7	
9,668.0	0.62	255.39	9,645.7	250.4	269.6	0.23	0.19	14.61	-19.1	-3.3	
9,763.0	0.70	199.06	9,740.7	249.7	268.9	0.66	0.08	-59.29	-8.7	-16.2	



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9,858.0	0.44	211.54	9,835.7	248.8	268.6	0.30	-0.27	13.14	-13.4	-15.8	
9,853.0	0.40	221.91	9,930.7	248.3	268.2	0.09	-0.04	10.92	-16.7	-13.0	
10,048.0	0.68	200.55	10,025.7	247.5	267.7	0.34	0.27	-22.48	-11.6	-18.3	
10,143.0	0.48	185.17	10,120.7	246.6	267.5	0.25	-0.19	-16.19	-7.3	-20.9	
10,238.0	0.44	235.27	10,215.7	246.0	267.2	0.41	-0.04	52.74	-21.3	-7.5	
10,333.0	0.84	201.08	10,310.7	245.2	266.6	0.56	0.42	-35.99	-14.4	-16.4	
10,428.0	0.88	192.90	10,405.7	243.8	266.2	0.14	0.04	-8.61	-13.1	-20.4	
10,522.0	1.05	196.51	10,499.7	242.3	265.8	0.19	0.18	3.84	-15.9	-19.5	
10,617.0	0.79	204.77	10,594.6	240.8	265.3	0.31	-0.27	8.69	-20.1	-18.9	
10,712.0	0.70	232.98	10,689.6	239.9	264.5	0.39	-0.09	29.69	-26.8	-5.1	
10,807.0	1.49	279.92	10,784.6	239.8	262.9	1.19	0.83	49.41	-23.6	18.6	
10,902.0	1.71	316.57	10,879.6	241.0	260.7	1.08	0.23	38.58	-11.5	28.1	
10,997.0	2.20	296.70	10,974.5	242.9	258.1	0.87	0.52	-20.92	-23.5	22.1	
11,092.0	1.54	291.34	11,069.5	244.1	255.3	0.72	-0.69	-5.84	-28.6	19.6	
11,187.0	0.22	282.11	11,164.5	244.6	253.9	1.39	-1.39	-9.72	-32.8	14.6	
11,281.0	1.67	249.59	11,258.4	244.2	252.4	1.58	1.54	-34.60	-37.0	-5.4	
11,376.0	1.23	262.25	11,353.4	243.6	250.1	0.57	-0.46	13.33	-39.7	3.1	
11,471.0	0.88	265.74	11,448.4	243.8	248.5	0.73	-0.37	35.25	-32.9	25.0	
11,515.0	0.88	263.75	11,492.4	243.9	247.8	1.10	0.00	-72.70	-41.8	3.6	
11,621.0	1.49	260.83	11,598.4	243.6	245.6	0.58	0.58	-2.75	-44.1	1.4	
11,715.0	2.51	200.98	11,692.3	241.4	243.7	2.32	1.09	-63.67	-25.8	-38.6	
11,811.0	17.01	160.64	11,786.7	226.1	247.6	15.81	15.10	-42.02	1.4	-43.6	
11,905.0	30.20	171.18	11,872.7	189.6	255.8	14.68	14.03	11.21	-13.5	-36.7	
12,000.0	40.75	170.13	11,950.0	135.3	264.8	11.12	11.11	-1.11	-21.0	-30.2	
12,095.0	48.40	171.45	12,017.6	69.5	275.5	8.11	8.05	1.39	-24.6	-21.1	
12,190.0	59.43	174.35	12,073.5	-6.5	284.8	11.87	11.61	3.05	-23.6	-13.0	
12,284.0	66.73	177.25	12,116.0	-90.0	290.9	8.24	7.77	3.09	-17.5	-8.9	



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #704H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3363.0usft
Site:	Quijote 2 State Com	MD Reference:	KB = 25 @ 3363.0usft
Well:	#704H	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)	
12,379.0	77.76	178.48	12,144.9	-180.3	294.2	11.68	11.61	1.29	-6.8	-6.3	
12,474.0	88.44	178.66	12,156.3	-274.5	296.5	11.24	11.24	0.19	2.0	-8.9	
12,569.0	88.88	179.10	12,158.5	-369.4	298.4	0.65	0.46	0.46	3.6	-10.0	
12,664.0	90.46	178.74	12,159.1	-464.4	300.2	1.71	1.66	-0.38	3.5	-11.2	
12,759.0	91.78	178.04	12,167.2	-559.3	302.9	1.57	1.39	-0.74	1.0	-11.4	
12,854.0	91.12	178.74	12,154.8	-654.3	305.5	1.01	-0.69	0.74	-2.0	-11.7	
12,949.0	88.48	178.63	12,155.2	-749.2	309.4	3.56	-2.78	-2.22	-2.3	-10.9	
13,044.0	90.29	178.55	12,156.2	-844.0	315.0	1.91	1.91	-0.08	-1.9	-8.2	
13,139.0	90.99	177.16	12,155.1	-938.9	320.2	0.98	0.74	0.64	-3.6	-5.9	
13,234.0	88.79	178.19	12,155.3	-1,033.7	325.7	2.53	-2.32	-1.02	-3.6	-3.4	
13,329.0	90.73	178.19	12,155.7	-1,128.5	332.1	2.04	2.04	0.00	-2.8	0.0	
13,423.0	91.47	178.57	12,153.9	-1,222.3	336.3	2.65	0.78	2.53	-4.1	1.3	
13,518.0	86.51	178.46	12,155.6	-1,317.2	340.5	5.67	-5.22	-2.22	-2.0	2.5	
13,613.0	88.22	178.04	12,159.9	-1,412.0	345.0	2.45	1.80	1.66	2.8	4.1	
13,708.0	89.63	178.83	12,161.7	-1,506.9	347.6	1.70	1.48	0.83	5.0	3.7	
13,802.0	90.46	179.18	12,161.6	-1,600.9	349.2	0.96	0.88	0.37	5.3	2.4	
13,897.0	91.69	179.89	12,159.9	-1,695.9	350.0	1.49	1.29	0.75	4.0	0.2	
13,992.0	91.38	179.45	12,157.3	-1,790.9	350.6	0.57	-0.33	-0.46	1.9	-2.2	
14,086.0	90.07	178.66	12,156.1	-1,884.8	352.1	1.63	-1.39	-0.84	1.1	-3.6	
14,181.0	90.46	178.48	12,155.7	-1,979.8	354.5	0.45	0.41	-0.19	1.1	-4.2	
14,276.0	89.89	178.57	12,155.4	-2,074.8	356.9	0.61	-0.60	0.09	1.3	-4.7	
14,371.0	89.85	178.74	12,155.6	-2,169.7	359.2	0.18	-0.04	0.18	1.9	-5.4	
14,466.0	90.68	179.10	12,155.2	-2,264.7	360.9	0.95	0.87	0.38	1.9	-6.6	
14,561.0	88.84	178.99	12,155.6	-2,359.7	364.2	2.95	-1.94	-2.22	2.7	-6.3	
14,656.0	89.58	177.16	12,158.9	-2,454.5	369.0	0.80	0.78	0.18	4.5	-4.4	
14,751.0	90.29	177.51	12,157.0	-2,549.4	373.4	0.83	0.75	0.37	5.0	-3.0	
14,845.0	90.46	177.86	12,156.4	-2,643.3	377.2	0.41	0.18	0.37	4.9	-2.1	



Midland PVA

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Quijote 2 State Com
 Well: #704H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #704H
 TVD Reference: KB = 25 @ 3363.0usft
 MD Reference: KB = 25 @ 3363.0usft
 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)	
14,940.0	91.25	177.43	12,155.0	-2,738.3	381.1	0.95	0.83	-0.45	3.9	-1.2	
15,035.0	90.64	177.16	12,153.4	-2,833.1	385.6	0.70	-0.64	-0.28	2.7	0.4	
15,130.0	89.54	176.11	12,153.2	-2,928.0	381.2	1.60	-1.16	-1.11	3.0	3.0	
15,225.0	88.09	176.72	12,155.2	-3,022.8	397.1	1.66	-1.53	0.64	5.3	6.0	
15,320.0	88.88	176.72	12,157.7	-3,117.6	402.6	0.83	0.83	0.00	8.1	8.4	
15,415.0	89.36	176.46	12,159.2	-3,212.4	408.2	0.57	0.51	-0.27	9.9	11.1	
15,510.0	90.15	176.55	12,159.6	-3,307.2	414.0	0.84	0.83	0.09	10.6	14.0	
15,605.0	90.33	176.72	12,159.2	-3,402.0	419.6	0.26	0.19	0.18	10.5	16.8	
15,700.0	90.95	176.99	12,158.1	-3,496.9	424.8	0.71	0.65	0.28	9.7	18.8	
15,795.0	90.20	176.22	12,157.2	-3,591.8	428.8	1.52	-0.79	1.29	9.0	19.8	
15,890.0	92.31	178.66	12,155.1	-3,686.7	431.4	2.27	2.22	0.46	7.2	19.5	
15,984.0	88.48	180.59	12,154.4	-3,780.7	432.0	4.56	-4.07	2.05	6.9	17.1	
16,079.0	91.34	181.82	12,154.6	-3,875.7	430.0	3.28	3.01	1.29	7.3	12.2	
16,174.0	88.18	179.89	12,155.0	-3,970.7	428.6	3.90	-3.33	-2.03	8.0	7.8	
16,269.0	89.36	180.24	12,157.0	-4,065.6	428.5	1.30	1.24	0.37	10.8	4.7	
16,364.0	90.95	181.20	12,156.8	-4,160.6	427.3	1.96	1.67	1.01	11.4	0.6	
16,459.0	90.07	179.53	12,155.9	-4,255.6	426.7	1.99	-0.93	-1.76	11.5	-3.0	
16,554.0	90.29	179.27	12,155.6	-4,350.6	427.7	0.36	0.23	-0.27	12.1	-5.0	
16,649.0	90.95	179.36	12,154.6	-4,445.6	428.8	0.70	0.69	0.09	11.9	-6.8	
16,743.0	90.64	178.74	12,153.3	-4,539.6	430.3	0.74	-0.33	-0.66	11.5	-8.2	
16,838.0	90.24	178.30	12,152.6	-4,634.5	432.8	0.63	-0.42	-0.46	11.7	-8.7	
16,935.0	89.63	177.95	12,152.7	-4,731.5	436.0	0.73	-0.63	-0.36	12.7	-8.5	
17,135.0	89.63	177.95	12,154.0	-4,931.4	443.1	0.00	0.00	0.00	15.9	-7.6	



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #704H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3363.0usft
Site:	Quijote 2 State Com	MD Reference:	KB = 25 @ 3363.0usft
Well:	#704H	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)	
11,696.0	11,673.3	242.2	244.0	KOP, MD:11696.0', TVD:11673.3', N/S:242.2', E/W:244.0', INC:2.17
11,876.6	11,849.5	202.0	253.7	FTP Crossing, MD:11876.6', TVD:11849.5', N/S:202.0', E/W:253.7', INC:26.44
16,935.0	12,152.7	-4,731.5	436.0	Last MWD Survey (MD=16935.0')
17,135.0	12,154.0	-4,931.4	443.1	Projection to Bit (MD=17135.0')

Checked By: _____ Approved By: _____ Date: _____

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

Kay Maddox 03/02/20
Signed Date



Lea County, NM (NAD 83 NME)

Quijote 2 State Com #704H

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: #704H

KB = 25 @ 3383.0m
Northing 393120.00 Easting 755100.00 Latitude 32° 4' 43.993 N Longitude 103° 36' 33.398 W



To convert a Magnetic Direction to a Grid Direction, Add 6.40°
To convert a Magnetic Direction to a True Direction, Add 6.77° East
To convert a True Direction to a Grid Direction, Subtract 0.37°

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VFace	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1000.0	0.00	0.00	1000.0	0.0	0.0	0.00	0.00	0.0	
3	1289.9	6.00	48.91	1289.3	10.3	11.8	2.00	48.91	-9.2	
4	4669.7	6.00	48.91	4650.7	241.7	277.2	0.00	0.00	-215.5	
5	4969.5	0.00	0.00	4950.0	252.0	289.0	2.00	180.00	-224.7	
6	11696.0	0.00	0.00	11676.5	252.0	289.0	0.00	0.00	-224.7	KOP(Quijote 2 State Com #704H)
7	12442.8	89.62	178.21	12154.0	-222.0	303.8	12.00	178.21	248.7	
8	13195.5	89.62	178.21	12159.0	-974.3	327.3	0.00	0.00	1000.0	TGT 1(Quijote 2 State Com #704H)
9	13227.8	90.26	178.21	12159.0	-1006.6	328.3	2.00	0.00	1032.3	
10	15199.1	90.26	178.21	12150.0	-2976.9	369.7	0.00	0.00	3000.0	TGT 2(Quijote 2 State Com #704H)
11	15203.6	90.17	178.21	12150.0	-2981.5	369.9	2.00	180.00	3004.6	
12	16200.9	90.17	178.21	12147.0	-3978.2	421.0	0.00	0.00	4000.0	TGT 3(Quijote 2 State Com #704H)
13	16219.3	90.54	178.21	12146.9	-3996.8	421.6	2.00	0.00	4018.4	
14	17163.2	90.54	178.21	12138.0	-4940.0	451.0	0.00	0.00	4960.5	PBHL(Quijote 2 State Com #704H)

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N-S	+E-W	Northing	Easting
KOP(Quijote 2 State Com #704H)	11676.5	252.0	289.0	393120.00	755100.00
TGT 1(Quijote 2 State Com #704H)	12159.0	-974.3	327.3	392146.70	754427.28
TGT 2(Quijote 2 State Com #704H)	12150.0	-2976.9	369.7	389143.10	754899.76
TGT 3(Quijote 2 State Com #704H)	12147.0	-3978.2	421.0	389141.80	755220.99
PBHL(Quijote 2 State Com #704H)	12138.0	-4940.0	451.0	388189.00	755561.00
FTP(Quijote 2 State Com #704H)	12154.0	202.9	289.0	393322.00	755389.00

