



EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Magnolia 15 Fed Com

#703H

OH

Design: OH

Midland PVA

24 February, 2019

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Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #703H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25' @ 3326.0usft
Site:	Magnolia 15 Fed Com	MD Reference:	KB = 25' @ 3326.0usft
Well:	#703H	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	Magnolia 15 Fed Com		
Site Position:		Northing:	381,905.00 usft
From:	Map	Easting:	780,373.00 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 2' 51.321 N
		Longitude:	103° 33' 42.598 W
		Grid Convergence:	0.41 °

Well	#703H		
Well Position	+N-S	0.0 usft	Northing:
	+E-W	0.0 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	0.0 usft
		Latitude:	32° 2' 51.321 N
		Longitude:	103° 33' 42.598 W
		Ground Level:	3,301.0 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination
			(°)
	IGRF2015	4/10/2017	6.96
			Dip Angle
			(°)
			59.90
			Field Strength
			(nT)
			47,854.20837674

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
			(°)
			186.38

Survey Program	Date 2/24/2019		
From	To	Survey (Wellbore)	Tool Name
(usft)	(usft)		
195.0	17,318.0	Driltech MWD (OH)	MWD
			Description
			OWSG MWD - Standard



Midland PVA

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Project: Lea County, NM (NAD 83 NME)
Site: Magnolia 15 Fed Com
Well: #703H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #703H
TVD Reference: KB = 25' @ 3326.0usft
MD Reference: KB = 25' @ 3326.0usft
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)	Bulld (°/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
195.0	0.79	281.36	195.0	0.3	-1.3	0.41	0.41	0.00	-1.3	0.0
310.0	0.79	265.45	310.0	0.4	-2.9	0.19	0.00	-13.83	-2.8	-0.6
398.0	0.70	240.40	398.0	0.0	-4.0	0.38	-0.10	-28.47	-3.4	-2.0
575.0	0.53	214.04	575.0	-1.2	-5.4	0.18	-0.10	-14.89	-4.0	-3.8
706.0	0.70	197.42	706.0	-2.4	-5.9	0.19	0.13	-12.69	-4.1	-4.9
801.0	0.97	209.64	800.9	-3.7	-6.5	0.34	0.28	12.86	-6.4	-3.8
896.0	1.14	203.75	895.9	-5.3	-7.3	0.21	0.18	-6.20	-7.7	-4.6
991.0	1.14	208.41	990.9	-6.9	-8.1	0.10	0.00	4.91	-10.0	-3.8
1,150.0	2.11	342.00	1,149.9	-5.6	-9.8	1.89	0.61	64.02	2.3	11.0
1,244.0	5.01	332.34	1,243.7	-0.3	-12.2	3.14	3.09	-10.28	-5.1	11.0
1,339.0	9.58	334.62	1,337.9	10.6	-17.5	4.82	4.81	2.40	-13.7	11.4
1,434.0	13.28	340.51	1,431.0	28.0	-24.6	4.08	3.89	6.20	-25.1	13.1
1,529.0	14.25	341.74	1,523.3	49.4	-31.9	1.07	1.02	1.29	-38.4	12.9
1,623.0	14.07	341.74	1,614.4	71.2	-39.1	0.19	-0.19	0.00	-49.4	11.6
1,718.0	13.81	342.18	1,706.6	93.0	-46.2	0.30	-0.27	0.46	-56.8	10.3
1,813.0	13.45	341.13	1,798.9	114.2	-53.2	0.46	-0.38	-1.11	-61.2	7.3
1,907.0	13.19	341.04	1,890.4	134.7	-60.2	0.28	-0.28	-0.10	-64.4	5.5
2,002.0	14.16	338.58	1,982.7	155.8	-68.0	1.19	1.02	-2.59	-68.3	1.4
2,097.0	15.21	339.37	2,074.6	176.3	-76.6	1.13	1.11	0.83	-73.7	1.3
2,192.0	14.60	338.23	2,166.4	201.0	-85.5	0.71	-0.64	-1.20	-79.5	-1.2
2,286.0	14.33	337.26	2,257.4	222.8	-94.3	0.39	-0.29	-1.03	-84.5	-3.2
2,381.0	14.16	336.82	2,349.5	244.3	-103.5	0.21	-0.18	-0.46	-89.2	-4.3
2,476.0	13.63	335.59	2,441.7	265.2	-112.7	0.64	-0.56	-1.29	-93.1	-6.3
2,570.0	13.45	334.71	2,533.1	285.1	-121.9	0.29	-0.19	-0.94	-96.5	-7.5
2,665.0	13.01	334.53	2,625.6	304.8	-131.2	0.47	-0.46	-0.19	-99.5	-7.5
2,760.0	12.31	336.73	2,718.3	323.7	-139.8	0.89	-0.74	2.32	-101.8	-3.6



Midland PVA

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Well:	#703H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey										
MD (usft)	Inc (°)	Azl (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
2,854.0	12.05	338.93	2,810.2	342.1	-147.3	0.57	-0.28	2.34	-103.1	-0.4
2,949.0	13.37	337.96	2,902.8	361.5	-155.0	1.41	1.39	-1.02	-105.2	-3.0
3,043.0	15.21	336.91	2,993.9	383.0	-163.9	1.98	1.96	-1.12	-109.8	-5.5
3,138.0	14.95	337.52	3,085.7	405.7	-173.5	0.32	-0.27	0.64	-116.0	-4.7
3,232.0	14.33	337.87	3,176.6	427.7	-182.5	0.67	-0.66	0.37	-121.3	-4.6
3,327.0	12.49	338.23	3,269.0	448.2	-190.7	1.94	-1.94	0.38	-124.6	-4.6
3,421.0	11.78	339.02	3,360.9	468.6	-198.0	0.78	-0.76	0.84	-125.9	-3.8
3,516.0	11.34	335.94	3,454.0	484.1	-205.2	0.80	-0.46	-3.24	-125.7	-11.0
3,610.0	10.20	339.72	3,546.3	500.4	-211.9	1.43	-1.21	4.02	-125.1	-3.6
3,705.0	10.11	344.64	3,639.8	516.3	-217.0	0.92	-0.09	5.18	-123.0	4.8
3,799.0	12.05	344.99	3,732.1	533.8	-221.7	2.07	2.06	0.37	-122.7	2.6
3,893.0	11.96	341.48	3,824.0	552.5	-227.4	0.78	-0.10	-3.73	-123.6	-7.2
4,082.0	13.01	331.55	4,008.6	589.7	-243.7	1.26	0.56	-5.25	-124.0	-28.6
4,177.0	11.34	332.42	4,101.4	607.4	-253.1	1.77	-1.76	0.92	-125.7	-25.5
4,272.0	12.49	329.70	4,194.4	624.6	-262.7	1.35	1.21	-2.86	-125.2	-29.8
4,366.0	11.61	332.51	4,286.3	641.7	-272.1	1.12	-0.94	2.99	-127.6	-22.1
4,461.0	9.41	338.58	4,379.7	657.5	-279.4	2.59	-2.32	6.39	-127.6	-8.7
4,556.0	10.90	333.30	4,473.2	672.7	-286.3	1.85	1.57	-5.56	-124.2	-20.1
4,651.0	10.02	336.29	4,566.7	688.3	-293.6	1.09	-0.93	3.15	-123.5	-13.4
4,746.0	8.09	345.52	4,660.5	702.3	-298.6	2.54	-2.03	9.72	-120.3	4.3
4,840.0	10.46	344.64	4,753.2	717.0	-302.5	2.53	2.52	-0.94	-117.0	-0.4
4,935.0	10.73	341.92	4,846.6	733.7	-307.6	0.60	0.28	-2.86	-115.6	-8.3
5,030.0	11.43	329.52	4,939.9	750.2	-315.1	2.61	0.74	-13.05	-110.6	-32.3
5,125.0	12.57	321.79	5,032.8	766.5	-326.3	2.07	1.20	-8.14	-106.8	-43.3
5,220.0	12.57	320.65	5,125.5	782.6	-339.2	0.26	0.00	-1.20	-108.5	-40.7
5,314.0	12.57	324.34	5,217.3	798.8	-351.7	0.85	0.00	3.93	-113.1	-29.4
5,408.0	13.89	329.44	5,309.7	817.0	-363.5	1.85	1.39	5.37	-118.3	-16.5



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Well:	#703H	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)
5,503.0	11.96	332.07	5,401.4	835.3	-373.8	2.15	-2.05	2.80	-121.4	-9.4
5,598.0	10.99	333.65	5,494.5	852.1	-382.4	1.07	-1.02	1.66	-121.7	-5.1
5,693.0	10.38	332.51	5,587.8	867.9	-390.4	0.68	-0.64	-1.20	-120.4	-6.6
5,787.0	10.55	332.42	5,680.2	883.0	-398.3	0.18	0.18	-0.10	-118.8	-5.7
5,882.0	10.64	330.40	5,773.6	898.3	-406.6	0.40	0.09	-2.13	-117.2	-8.4
5,977.0	10.29	329.08	5,867.1	913.2	-415.3	0.45	-0.37	-1.39	-115.6	-9.0
6,072.0	10.29	327.68	5,960.5	927.7	-424.2	0.28	0.00	-1.47	-113.6	-9.3
6,166.0	10.99	331.63	6,052.9	942.7	-433.0	1.08	0.74	4.20	-112.7	0.3
6,261.0	11.87	334.62	6,146.0	959.5	-441.5	1.12	0.93	3.15	-112.6	6.9
6,356.0	11.17	333.92	6,239.1	976.6	-449.7	0.75	-0.74	-0.74	-112.8	6.1
6,451.0	10.64	332.60	6,332.4	992.6	-457.8	0.62	-0.56	-1.39	-112.1	4.4
6,545.0	10.55	331.63	6,424.8	1,007.9	-465.9	0.21	-0.10	-1.03	-110.8	3.7
6,640.0	10.82	331.98	6,518.1	1,023.4	-474.2	0.29	0.28	0.37	-109.6	5.7
6,735.0	10.90	331.19	6,611.4	1,039.1	-482.7	0.18	0.08	-0.83	-108.8	5.6
6,830.0	9.76	336.64	6,704.9	1,054.4	-490.2	1.58	-1.20	5.74	-106.0	16.3
6,925.0	8.00	346.14	6,798.8	1,068.2	-495.0	2.41	-1.85	10.00	-97.9	31.2
7,019.0	4.22	16.11	6,892.2	1,077.9	-495.6	5.13	-4.02	31.88	-64.4	66.9
7,114.0	3.25	25.25	6,987.0	1,083.7	-493.5	1.19	-1.02	9.62	-46.7	62.5
7,209.0	2.99	24.10	7,081.9	1,088.4	-491.3	0.28	-0.27	-1.21	-40.5	47.5
7,304.0	0.79	345.61	7,176.8	1,091.3	-490.5	2.55	-2.32	-40.52	-45.7	7.7
7,398.0	0.70	275.03	7,270.8	1,092.0	-491.2	0.92	-0.10	-75.09	-15.8	-27.7
7,493.0	0.70	278.02	7,365.8	1,092.1	-492.4	0.04	0.00	3.15	-11.7	-16.2
7,588.0	0.88	267.47	7,460.8	1,092.1	-493.7	0.24	0.19	-11.11	-6.3	-9.4
7,683.0	1.06	269.23	7,555.8	1,092.1	-495.3	0.19	0.19	1.85	-5.7	-3.4
7,777.0	1.23	256.14	7,649.8	1,091.8	-497.1	0.33	0.18	-13.93	-6.1	-1.7
7,871.0	1.06	248.14	7,743.8	1,091.3	-498.9	0.25	-0.18	-8.51	-7.6	-2.3
7,966.0	1.06	238.29	7,838.7	1,090.5	-500.5	0.19	0.00	-10.37	-8.8	-3.7



Midland PVA

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 Site: Magnolia 15 Fed Com
 Well: #703H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #703H
 TVD Reference: KB = 25' @ 3326.0usft
 MD Reference: KB = 25' @ 3326.0usft
 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)
8,081.0	1.32	229.59	7,933.7	1,089.3	-502.1	0.33	0.27	-9.16	-10.1	-5.1
8,156.0	1.32	241.63	8,028.7	1,088.1	-503.8	0.29	0.00	12.67	-13.2	-2.7
8,251.0	1.32	237.85	8,123.7	1,087.0	-505.7	0.09	0.00	-3.98	-15.1	-3.6
8,345.0	1.49	235.74	8,217.6	1,085.7	-507.7	0.19	0.18	-2.24	-17.3	-4.2
8,440.0	1.58	237.33	8,312.8	1,084.3	-509.8	0.10	0.09	1.67	-20.0	-3.7
8,534.0	1.58	231.81	8,406.6	1,082.8	-511.9	0.17	0.00	-6.09	-22.1	-5.8
8,629.0	1.67	227.13	8,501.5	1,081.1	-513.9	0.16	0.09	-4.72	-24.2	-7.6
8,724.0	1.67	223.44	8,596.5	1,079.1	-515.9	0.11	0.00	-3.88	-26.5	-9.2
8,818.0	1.58	223.18	8,690.5	1,077.2	-517.7	0.10	-0.10	-0.28	-29.1	-9.4
8,913.0	0.79	39.05	8,785.5	1,076.7	-518.2	2.49	-0.83	185.13	29.0	11.5
9,008.0	1.32	37.73	8,880.4	1,078.1	-517.1	0.56	0.56	-1.39	27.0	12.2
9,103.0	1.06	24.19	8,975.4	1,079.8	-516.1	0.40	-0.27	-14.25	21.4	17.9
9,197.0	0.70	7.58	9,069.4	1,081.1	-515.7	0.47	-0.38	-17.67	14.0	23.0
9,292.0	0.44	359.58	9,164.4	1,082.1	-515.6	0.29	-0.27	-8.42	9.7	24.7
9,387.0	0.70	303.07	9,259.4	1,082.8	-516.1	0.62	0.27	-59.48	-16.0	21.4
9,481.0	0.53	118.59	9,353.4	1,082.9	-516.2	1.31	-0.18	186.72	17.7	-20.1
9,576.0	0.70	122.54	9,448.4	1,082.3	-515.3	0.18	0.18	4.16	15.3	-21.2
9,671.0	0.88	173.78	9,543.4	1,081.3	-514.7	0.74	0.19	53.94	-8.1	-24.8
9,766.0	0.44	260.97	9,638.4	1,080.5	-515.0	1.02	-0.46	91.78	-25.5	7.6
9,860.0	0.88	237.68	9,732.4	1,080.1	-516.0	0.54	0.47	-24.78	-27.5	-3.3
9,955.0	1.06	246.20	9,827.4	1,079.3	-517.4	0.24	0.19	8.97	-29.3	0.9
10,050.0	1.06	24.28	9,922.4	1,079.8	-517.9	2.08	0.00	145.35	22.2	19.5
10,144.0	0.88	21.38	10,016.3	1,081.2	-517.2	0.20	-0.19	-3.09	19.6	20.5
10,239.0	0.79	353.25	10,111.3	1,082.6	-517.0	0.44	-0.09	-29.61	6.3	27.0
10,333.0	1.23	23.84	10,205.3	1,084.1	-516.7	0.72	0.47	32.54	17.6	20.3
10,428.0	1.85	5.38	10,300.3	1,086.6	-516.2	0.83	0.65	-19.43	7.7	24.5
10,523.0	1.76	28.67	10,395.2	1,089.4	-515.3	0.77	-0.09	24.52	13.9	20.1



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Survey										
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10,618.0	2.02	25.07	10,490.2	1,092.2	-513.9	0.30	0.27	-3.79	9.5	20.8
10,712.0	2.11	26.48	10,584.1	1,095.3	-512.4	0.11	0.10	1.50	6.6	20.6
10,807.0	1.93	31.14	10,679.1	1,098.2	-510.8	0.26	-0.19	4.91	5.0	20.2
10,902.0	1.93	29.90	10,774.0	1,100.9	-509.2	0.04	0.00	-1.31	1.3	20.2
10,996.0	2.11	27.44	10,867.9	1,103.9	-507.6	0.21	0.19	-2.62	-2.9	20.2
11,091.0	2.02	41.86	10,962.9	1,106.6	-505.7	0.55	-0.09	15.18	-1.1	20.7
11,185.0	1.67	37.29	11,056.8	1,109.0	-503.7	0.40	-0.37	-4.66	-5.8	20.4
11,280.0	1.14	13.21	11,151.8	1,111.0	-502.7	0.82	-0.56	-25.35	-15.8	15.7
11,374.0	1.41	24.28	11,245.8	1,113.0	-502.0	0.39	0.29	11.78	-14.6	18.7
11,469.0	1.32	36.94	11,340.8	1,114.9	-500.9	0.33	-0.09	13.33	-12.4	21.7
11,564.0	0.97	24.19	11,435.7	1,116.5	-499.9	0.45	-0.37	-13.42	-18.7	18.1
11,648.0	1.06	355.19	11,519.7	1,117.9	-499.7	0.61	0.11	-34.52	-26.6	6.5
11,785.0	1.23	332.86	11,656.7	1,120.5	-500.4	0.35	0.12	-16.30	-29.7	-4.6
11,879.0	1.76	346.93	11,750.7	1,122.8	-501.2	0.68	0.56	14.97	-32.3	3.0
11,926.0	2.55	135.73	11,797.7	1,122.8	-500.7	8.84	1.68	316.60	28.8	14.6
11,974.0	7.74	163.76	11,845.5	1,118.9	-499.0	11.70	10.81	58.40	30.3	0.4
12,068.0	25.59	179.41	11,935.2	1,092.3	-497.0	19.41	18.99	16.65	20.0	-6.0
12,163.0	38.43	183.27	12,015.6	1,042.1	-498.5	13.68	13.52	4.06	2.4	-8.0
12,210.0	46.43	182.04	12,050.2	1,010.4	-499.9	17.11	17.02	-2.62	-7.5	-9.4
12,258.0	48.45	183.01	12,082.7	975.1	-501.5	4.46	4.21	2.02	-17.7	-10.7
12,305.0	52.23	182.48	12,112.7	939.0	-503.2	8.09	8.04	-1.13	-25.0	-12.6
12,352.0	55.66	181.16	12,140.3	901.0	-504.4	7.64	7.30	-2.81	-30.3	-14.4
12,399.0	58.04	179.76	12,166.0	861.7	-504.7	5.64	5.06	-2.98	-33.1	-15.5
12,447.0	60.32	178.79	12,190.6	820.4	-504.2	5.06	4.75	-2.02	-32.9	-15.5
12,494.0	62.17	178.53	12,213.2	779.3	-503.2	3.97	3.94	-0.55	-29.4	-14.9
12,542.0	64.89	177.56	12,234.6	736.3	-501.8	5.95	5.67	-2.02	-22.7	-13.9
12,589.0	70.43	177.30	12,252.5	692.9	-499.8	11.80	11.79	-0.55	-14.9	-12.2



Midland PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Magnolia 15 Fed Com
Well: #703H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #703H
TVD Reference: KB = 25' @ 3328.0usft
MD Reference: KB = 25' @ 3328.0usft
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)
12,638.0	75.01	176.95	12,266.5	648.1	-497.6	9.77	9.74	-0.74	-6.4	-10.1
12,683.0	80.72	176.51	12,276.3	602.2	-494.9	12.18	12.15	-0.94	2.0	-7.7
12,731.0	89.16	177.21	12,280.6	554.5	-492.3	17.64	17.58	1.46	5.8	-5.5
12,826.0	86.79	176.86	12,283.9	459.7	-487.4	2.52	-2.49	-0.37	6.3	-1.3
12,920.0	93.74	178.53	12,283.5	365.9	-483.6	7.60	7.39	1.78	7.1	1.7
13,015.0	90.31	177.12	12,280.1	271.0	-480.0	3.90	-3.61	-1.48	3.0	4.6
13,108.0	89.16	177.39	12,280.5	180.1	-475.7	1.30	-1.26	0.30	2.6	8.2
13,200.0	89.52	179.32	12,281.6	86.2	-473.0	2.09	0.38	2.05	3.0	10.2
13,295.0	88.37	180.29	12,283.4	-8.8	-472.7	1.58	-1.21	1.02	3.9	9.8
13,389.0	87.93	179.58	12,286.4	-102.8	-472.5	0.89	-0.47	-0.76	6.2	9.1
13,484.0	89.16	179.58	12,288.8	-197.7	-471.8	1.29	1.29	0.00	7.8	9.1
13,579.0	90.75	179.32	12,288.9	-292.7	-470.9	1.70	1.67	-0.27	7.1	9.3
13,673.0	89.08	178.62	12,289.0	-386.7	-469.2	1.93	-1.78	-0.74	6.4	10.2
13,767.0	90.92	179.85	12,289.0	-480.7	-468.0	2.35	1.96	1.31	5.6	10.7
13,862.0	88.37	179.32	12,289.6	-575.7	-467.3	2.74	-2.68	-0.56	5.4	10.7
13,956.0	90.40	179.41	12,290.6	-669.7	-466.3	2.16	2.16	0.10	5.7	11.0
14,051.0	90.04	179.06	12,290.3	-764.6	-465.0	0.53	-0.38	-0.37	4.5	11.5
14,145.0	89.87	180.90	12,290.3	-858.6	-465.0	1.97	-0.18	1.96	3.8	10.8
14,240.0	88.72	182.04	12,291.5	-953.6	-467.4	1.70	-1.21	1.20	4.2	7.6
14,334.0	89.08	181.52	12,293.3	-1,047.5	-470.3	0.67	0.38	-0.55	5.2	4.0
14,429.0	90.57	180.55	12,293.6	-1,142.5	-472.0	1.87	1.57	-1.02	4.7	1.5
14,523.0	89.43	179.76	12,293.6	-1,236.5	-472.3	1.48	-1.21	-0.84	3.8	0.5
14,618.0	91.10	179.14	12,293.2	-1,331.5	-471.4	1.88	1.76	-0.65	2.4	0.7
14,713.0	89.25	180.73	12,292.9	-1,426.5	-471.3	2.57	-1.95	1.67	1.1	0.1
14,808.0	88.11	181.34	12,295.1	-1,521.5	-473.0	1.36	-1.20	0.64	2.3	-2.4
14,901.0	88.46	181.60	12,297.9	-1,614.4	-475.4	0.47	0.38	0.28	4.2	-5.5
14,996.0	89.25	182.57	12,299.8	-1,709.3	-478.8	1.32	0.83	1.02	5.1	-9.7



Midland PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Magnolia 15 Fed Com
Well: #703H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #703H
TVD Reference: KB = 25' @ 3326.0usft
MD Reference: KB = 25' @ 3326.0usft
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)
15,091.0	85.58	180.90	12,304.1	-1,804.1	-481.7	4.26	-3.88	-1.76	8.4	-13.3
15,185.0	88.81	179.41	12,308.7	-1,898.0	-481.9	3.80	3.46	-1.59	12.1	-14.3
15,280.0	89.25	179.41	12,310.3	-1,993.0	-481.0	0.46	0.46	0.00	12.7	-14.1
15,375.0	88.90	179.14	12,311.8	-2,088.0	-479.8	0.47	-0.37	-0.28	13.3	-13.6
15,470.0	90.84	178.53	12,312.0	-2,182.9	-477.8	2.14	2.04	-0.64	12.5	-12.4
15,564.0	92.51	179.06	12,309.3	-2,276.9	-475.9	1.86	1.78	0.56	8.7	-11.2
15,658.0	90.22	179.41	12,307.0	-2,370.8	-474.6	2.46	-2.44	0.37	5.2	-10.6
15,752.0	88.46	178.70	12,308.1	-2,464.8	-473.1	2.02	-1.87	-0.76	5.0	-9.8
15,847.0	89.52	178.53	12,309.8	-2,559.8	-470.8	1.13	1.12	-0.18	5.4	-8.3
15,942.0	89.34	178.88	12,310.7	-2,654.7	-468.6	0.41	-0.19	0.37	5.0	-6.9
16,037.0	89.96	179.85	12,311.3	-2,749.7	-467.6	1.21	0.65	1.02	4.3	-6.6
16,132.0	89.52	179.06	12,311.8	-2,844.7	-466.7	0.95	-0.46	-0.83	3.4	-6.4
16,227.0	86.35	178.62	12,315.2	-2,939.6	-464.7	3.37	-3.34	-0.46	5.6	-5.2
16,322.0	88.55	178.18	12,319.4	-3,034.5	-462.1	2.36	2.32	-0.46	8.2	-3.3
16,416.0	89.78	178.44	12,320.8	-3,128.4	-459.3	1.34	1.31	0.28	7.8	-1.3
16,511.0	88.90	178.00	12,321.9	-3,223.4	-456.4	1.04	-0.93	-0.46	7.1	0.9
16,606.0	90.22	177.65	12,322.6	-3,318.3	-452.8	1.44	1.39	-0.37	6.0	3.8
16,701.0	91.10	177.74	12,321.5	-3,413.2	-448.9	0.93	0.93	0.09	3.1	6.9
16,795.0	88.11	178.18	12,322.2	-3,507.2	-445.6	3.22	-3.18	0.47	2.0	9.5
16,890.0	88.64	178.35	12,324.8	-3,602.1	-442.7	0.59	0.56	0.18	2.9	11.6
16,984.0	88.81	178.18	12,326.9	-3,696.0	-439.9	0.26	0.18	-0.18	3.2	13.7
17,079.0	90.04	179.49	12,327.9	-3,791.0	-437.9	1.89	1.29	1.38	2.4	14.9
17,173.0	89.08	177.91	12,328.6	-3,884.9	-435.8	1.97	-1.02	-1.68	1.4	16.3
17,318.0	89.08	177.91	12,330.9	-4,029.8	-430.5	0.00	0.00	0.00	0.9	20.5



Midland PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Magnolia 15 Fed Com
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Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #703H
TVD Reference: KB = 25' @ 3326.0usft
MD Reference: KB = 25' @ 3326.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.14

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
11,895.0	11,766.7	1,123.1	-501.2	KOP, MD:11895.0', TVD:11766.7', N/S:1123.1', E/W:-501.2', INC:0.61
12,163.1	12,015.6	1,042.0	-498.5	FTP Crossing, MD:12163.1', TVD:12015.6', N/S:1042.0', E/W:-498.5', INC:38.43
17,173.0	12,328.6	-3,884.9	-435.8	Last MWD Survey (MD=17173.0')
17,318.0	12,330.9	-4,029.8	-430.5	Projection to Bit (MD=17318.0')

Checked By: _____ Approved By: _____ Date: _____



Lea County, NM (NAD 83 NME)

Magnolia 15 Fed Com #703H

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: #703H

Ground Level: 3301.0
KB = 25' @ 3328.0'alt
Northing: 381905.00
Easting: 780373.00
Latitude: 32° 2' 51.321 N
Longitude: 103° 33' 42.598 W

To convert a Magnetic Direction to a Grid Direction, Add 8.53°
To convert a Magnetic Direction to a True Direction, Add 8.96° East
To convert a True Direction to a Grid Direction, Subtract 0.41°

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	1200.0	0.00	0.00	1200.0	0.0	0.0	0.00	0.00	0.0	
3	1771.1	11.42	335.79	1767.3	51.8	-23.3	2.00	335.79	-48.8	
4	7243.8	11.42	335.79	7131.7	1040.2	-467.7	0.00	0.00	-881.8	
5	7814.9	0.00	0.00	7699.0	1092.0	-491.0	2.00	180.00	-1030.6	Brushy Top(Magnolia 15 Fed Com #703H)
6	11912.7	0.00	0.00	11795.8	1092.0	-491.0	0.00	0.00	-1030.6	
7	12058.8	89.52	179.55	12274.2	618.5	-487.3	12.00	179.55	-560.5	
8	14431.9	89.52	179.55	12289.0	-1154.5	-473.5	0.00	0.00	1200.0	TGT#1(Magnolia 15 Fed Com #703H)
9	14437.3	89.41	179.55	12289.1	-1159.9	-473.4	2.00	-180.00	1205.4	
10	15509.8	89.41	179.55	12300.0	-2232.1	-465.0	0.00	0.00	2270.0	TGT#2(Magnolia 15 Fed Com #703H)
11	15519.4	89.22	179.55	12300.1	-2241.9	-465.0	2.00	-180.00	2279.7	
12	16244.9	89.22	179.55	12310.0	-2967.3	-459.3	0.00	0.00	3000.0	TGT#3(Magnolia 15 Fed Com #703H)
13	16259.8	88.92	179.55	12310.2	-2982.2	-459.2	2.00	180.00	3014.8	
14	17308.8	88.92	179.55	12330.0	-4031.0	-451.0	0.00	0.00	4059.2	PEHL (Magnolia 15 Fed Com #703H)

CASING DETAILS

No casing data is available

WELLSBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N-S	+E-W	Northing	Easting
Brushy Top(Magnolia 15 Fed Com #703H)	7699.0	1092.0	-491.0	382997.00	778882.00
FTP (Magnolia 15 Fed Com #703H)	12278.0	1042.0	-491.0	382941.00	778882.00
TGT#1(Magnolia 15 Fed Com #703H)	12283.0	-1154.5	-473.5	380765.00	778889.54
TGT#2(Magnolia 15 Fed Com #703H)	12300.0	-2232.1	-465.0	378673.90	778907.95
TGT#3(Magnolia 15 Fed Com #703H)	12310.0	-2967.3	-459.3	377657.70	778915.89
PEHL (Magnolia 15 Fed Com #703H)	12330.0	-4031.0	-451.0	377674.00	778922.00

