

HOBBS OCD
NOV 18 2019
RECEIVED



EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Dauntless 7 Fed

#701H

OH

Design: OH

Midland PVA

02 July, 2019



Midland PVA

Company:	EOG Resources - Midland			Local Co-ordinate Reference:	Well #701H
Project:	Lea County, NM (NAD 83 NME)			TVD Reference:	KB = 25' @ 3488.0usft
Site:	Dauntless 7 Fed			MD Reference:	KB = 25' @ 3488.0usft
Well:	#701H			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 1883		System Datum:	Mean Sea Level	
Geo Datum:	North American Datum 1983				
Map Zone:	New Mexico Eastern Zone				

Site	Dauntless 7 Fed				
Site Position:		Northing:	414,874.00 usft	Latitude:	32° 8' 18.763 N
From:	Map	Easting:	762,795.00 usft	Longitude:	103° 37' 4.285 W
Position Uncertainty:	0.0 usft	Spot Radius:	13-3/16 "	Grid Convergence:	0.38 °

Well	#701H					
Well Position	+N-S	0.0 usft	Northing:	414,901.00 usft	Latitude:	32° 8' 18.758 N
	+E-W	0.0 usft	Easting:	766,894.00 usft	Longitude:	103° 36' 16.612 W
Position Uncertainty	0.0 usft		Wellhead Elevation:	usft	Ground Level:	3,473.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	8/17/2018	6.84	59.96	47,763.82176647

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)	Direction (°)	
	0.0	0.0	0.0	0.88	

Survey Program	Date	7/2/2019			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
138.0	22,445.0	Newsco MWD #1 (OH)	MWD	OWSG MWD - Standard	



Midland PVA

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Dauntless 7 Fed
 Well: #701H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #701H
 TVD Reference: KB = 25' @ 3498.0usft
 MD Reference: KB = 25' @ 3498.0usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.14

Survey											
MD (usft)	Inc (°)	Asd (azimuth) (°)	TVD (usft)	N/S (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
138.0	0.10	181.00	138.0	-0.1	0.0	0.07	0.07	0.00	-0.1	0.0	
318.0	0.10	176.90	318.0	-0.4	0.0	0.00	0.00	-2.28	0.4	-0.9	
497.0	3.60	202.60	496.9	-5.8	-2.1	1.98	1.98	14.36	-3.9	-8.3	
685.0	6.10	166.90	684.2	-21.0	-2.2	2.02	1.33	-18.99	-8.9	-14.6	
872.0	4.30	113.50	870.6	-33.4	6.5	2.64	-0.86	-28.56	-0.4	-21.8	
1,059.0	3.00	86.20	1,057.2	-35.9	17.8	1.14	-0.70	-14.60	3.0	-18.1	
1,248.0	2.70	60.30	1,248.0	-33.4	26.6	0.69	-0.16	-13.70	3.8	-10.9	
1,302.0	2.70	60.60	1,299.9	-32.1	28.9	0.03	0.00	0.56	1.8	-9.1	
1,440.0	2.80	68.30	1,437.7	-29.3	34.8	0.28	0.07	5.58	-3.8	-4.5	
1,626.0	2.00	95.80	1,623.6	-27.9	42.3	0.74	-0.43	14.78	-7.5	3.7	
1,814.0	3.00	119.90	1,811.4	-30.7	49.8	0.78	0.53	12.82	-8.8	9.1	
2,001.0	4.60	142.70	1,998.0	-39.1	58.8	1.16	0.86	12.19	-8.4	11.7	
2,188.0	4.40	141.80	2,184.4	-50.7	67.6	0.11	-0.11	-0.48	-16.8	10.4	
2,375.0	3.80	139.20	2,370.9	-61.1	76.1	0.34	-0.32	-1.39	-24.2	8.4	
2,561.0	5.80	142.00	2,558.3	-73.1	85.9	1.08	1.08	1.51	-32.3	8.7	
2,748.0	5.60	141.00	2,742.4	-87.7	97.4	0.12	-0.11	-0.53	-36.4	5.6	
2,934.0	4.70	138.90	2,927.6	-100.5	108.2	0.49	-0.48	-1.13	-37.2	1.9	
3,121.0	4.50	128.70	3,114.0	-110.8	118.9	0.45	-0.11	-5.45	-35.6	-5.1	
3,308.0	4.30	118.60	3,300.5	-118.8	130.8	0.43	-0.11	-5.40	-32.5	-8.8	
3,498.0	5.40	132.30	3,487.8	-128.1	143.5	0.85	0.59	7.29	-33.0	0.6	
3,683.0	4.80	134.80	3,674.0	-139.5	155.6	0.34	-0.32	1.34	-33.3	1.6	
3,870.0	5.70	119.80	3,860.3	-149.7	169.2	0.87	0.48	-8.02	-33.5	-5.6	
4,057.0	4.90	120.70	4,046.5	-158.3	184.1	0.43	-0.43	0.48	-34.9	-1.8	
4,244.0	3.60	115.50	4,232.9	-165.0	196.3	0.72	-0.70	-2.78	-32.7	-1.1	
4,431.0	6.50	117.70	4,419.2	-172.4	211.0	1.55	1.55	1.18	-33.4	4.4	
4,618.0	6.10	128.10	4,605.1	-183.6	228.0	0.70	-0.21	6.10	-36.0	13.7	



Midland PVA

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Dauntless 7 Fed
 Well: #701H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #701H
 TVD Reference: KB = 25' @ 3498.0usft
 MD Reference: KB = 25' @ 3498.0usft
 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)	DLog (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
4,805.0	3.10	161.20	4,781.5	-194.8	237.4	2.08	-1.80	17.17	-22.5	28.0
4,992.0	2.40	175.90	4,878.3	-203.3	239.3	0.53	-0.37	7.86	-12.0	23.0
5,178.0	2.30	174.30	5,165.1	-211.0	240.0	0.06	-0.05	-0.88	-14.8	17.6
5,368.0	1.20	138.50	5,352.0	-216.1	241.7	0.82	-0.59	-20.21	-27.4	2.5
5,554.0	1.80	341.90	5,540.0	-214.8	242.1	1.61	0.37	-82.23	22.3	-14.9
5,743.0	2.00	347.70	5,728.9	-208.4	240.4	0.12	0.05	3.07	14.3	-16.7
5,829.0	1.90	314.80	5,814.8	-203.0	237.5	0.59	-0.05	-17.63	15.3	-8.1
6,117.0	2.20	312.60	6,102.7	-198.4	232.6	0.17	0.16	-1.22	8.8	-7.6
6,304.0	2.30	316.00	6,289.5	-193.3	227.4	0.09	0.05	1.82	1.0	-7.9
6,481.0	2.10	319.30	6,476.4	-188.0	222.6	0.13	-0.11	1.76	-8.6	-7.7
6,678.0	2.20	316.50	6,663.3	-182.8	217.8	0.08	0.05	-1.50	-13.2	-8.2
6,864.0	1.00	270.90	6,849.2	-180.2	213.8	0.89	-0.65	-24.52	-7.5	-17.7
7,051.0	1.30	252.00	7,038.1	-180.8	210.1	0.26	0.16	-10.11	-5.0	-19.7
7,237.0	1.00	248.90	7,222.1	-182.0	206.6	0.16	-0.16	-1.67	-7.7	-20.1
7,424.0	0.80	242.70	7,409.1	-183.2	203.9	0.12	-0.11	-3.32	-8.4	-21.0
7,610.0	0.70	222.00	7,595.1	-184.7	202.0	0.15	-0.05	-11.13	-2.8	-23.0
7,797.0	0.90	222.30	7,782.1	-186.6	200.2	0.11	0.11	0.16	-5.5	-23.0
7,984.0	1.20	223.10	7,969.0	-189.1	197.9	0.16	0.16	0.43	-9.3	-22.8
8,170.0	1.60	207.30	8,155.0	-192.8	195.4	0.30	0.22	-8.49	-7.1	-25.1
8,357.0	1.70	202.80	8,341.9	-197.7	193.1	0.09	0.05	-2.41	-10.5	-25.8
8,545.0	1.80	194.80	8,529.8	-203.1	191.3	0.14	0.05	-4.26	-12.6	-27.4
8,732.0	2.10	197.40	8,716.7	-209.2	189.5	0.17	0.16	1.39	-20.1	-26.7
8,919.0	2.30	197.80	8,903.6	-216.1	187.3	0.11	0.11	0.21	-27.5	-26.5
9,106.0	1.20	230.50	9,090.5	-220.9	184.7	0.77	-0.59	17.48	-42.6	-5.4
9,293.0	0.40	286.30	9,277.4	-222.0	182.6	0.55	-0.43	29.84	-30.2	33.8
9,481.0	0.60	269.70	9,465.4	-221.8	180.9	0.13	0.11	-8.63	-40.2	23.6
9,669.0	0.70	311.80	9,653.4	-221.0	178.1	0.25	0.05	22.45	-15.8	45.1



Midland PVA

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Dauntless 7 Fed
 Well: #701H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #701H
 TVD Reference: KB = 25' @ 3488.0usft
 MD Reference: KB = 25' @ 3488.0usft
 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)
9,855.0	0.70	52.30	9,839.4	-218.6	179.2	0.58	0.00	53.98	48.3	8.5
10,043.0	0.60	5.20	10,027.4	-217.9	180.1	0.28	-0.05	-25.05	23.5	38.9
10,228.0	1.30	62.00	10,213.4	-215.9	182.1	0.59	0.38	30.54	42.8	2.4
10,417.0	1.20	67.70	10,401.3	-214.2	185.8	0.08	-0.05	3.03	38.7	-1.6
10,604.0	1.30	320.90	10,588.3	-211.8	186.3	1.07	0.05	-57.11	-11.2	35.6
10,781.0	1.30	10.80	10,775.3	-208.1	185.3	0.59	0.00	26.68	16.6	33.1
10,979.0	1.90	350.30	10,963.2	-202.9	185.2	0.44	0.32	-10.90	-1.2	36.1
11,166.0	0.40	309.50	11,150.2	-199.4	184.2	0.87	-0.80	-21.82	-27.5	24.5
11,353.0	2.20	276.40	11,337.1	-198.6	180.1	1.00	0.96	-17.70	-40.6	5.2
11,540.0	1.60	281.90	11,524.0	-197.7	174.0	0.33	-0.32	2.94	-46.1	9.4
11,673.0	1.60	259.50	11,657.0	-197.6	170.4	0.47	0.00	-16.84	-49.7	-9.6
11,741.0	1.80	255.10	11,724.9	-198.1	168.4	0.35	0.29	-6.47	-50.9	-13.5
11,835.0	9.30	353.60	11,818.5	-190.9	168.1	10.35	7.98	104.79	-13.0	53.8
11,929.0	32.20	10.00	11,905.9	-158.2	169.7	24.90	24.38	17.45	-26.5	59.3
12,021.0	45.10	9.10	11,877.6	-101.7	179.1	14.03	14.02	-0.98	-78.8	61.9
12,115.0	47.60	9.30	12,042.5	-34.5	190.0	2.66	2.66	0.21	-127.0	53.9
12,207.0	49.20	6.50	12,103.5	33.6	199.4	2.86	1.74	-3.04	-158.6	35.4
12,301.0	47.60	5.10	12,168.0	103.5	206.5	2.03	-1.70	-1.49	-161.5	21.4
12,394.0	49.30	4.10	12,227.6	172.9	212.1	2.00	1.83	-1.08	-137.0	10.7
12,488.0	63.90	351.70	12,278.4	250.8	208.5	19.00	15.53	-13.19	-101.5	9.0
12,582.0	68.10	355.40	12,317.6	336.1	198.9	5.73	4.47	3.94	-64.0	19.7
12,676.0	78.20	353.90	12,344.8	425.6	190.5	10.85	10.74	-1.60	-37.1	26.5
12,769.0	83.20	357.80	12,359.9	517.1	183.9	6.78	5.38	4.19	-22.1	32.5
12,862.0	85.00	3.70	12,369.4	608.5	185.1	6.60	1.94	6.34	-12.4	30.7
12,955.0	88.00	3.30	12,375.1	702.2	190.8	3.25	3.23	-0.43	-6.8	24.4
13,049.0	88.50	3.30	12,378.0	796.0	196.2	0.53	0.53	0.00	-4.0	18.4
13,143.0	89.30	3.80	12,378.8	889.8	202.0	1.00	0.85	0.53	-2.2	12.0



Midland PVA

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Dauntless 7 Fed
 Well: #701H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #701H
 TVD Reference: KB = 25' @ 3488.0usft
 MD Reference: KB = 25' @ 3488.0usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.14

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)
13,236.0	91.70	4.50	12,379.0	982.5	208.8	2.89	2.58	0.75	-3.0	4.8
13,330.0	89.00	0.20	12,378.4	1,076.4	212.8	5.40	-2.87	-4.57	-3.6	0.2
13,423.0	91.00	1.50	12,378.4	1,169.4	214.0	2.58	2.15	1.40	-3.6	-1.8
13,517.0	91.30	1.60	12,376.5	1,263.3	216.5	0.34	0.32	0.11	-5.5	-4.9
13,611.0	89.70	1.80	12,375.7	1,357.3	219.3	1.72	-1.70	0.21	-6.3	-8.3
13,704.0	88.00	0.50	12,377.6	1,450.2	221.2	2.30	-1.83	-1.40	-4.4	-10.8
13,797.0	89.00	1.10	12,380.0	1,543.2	222.5	1.25	1.08	0.85	-2.0	-12.7
13,890.0	90.50	0.70	12,380.4	1,636.2	223.9	1.67	1.61	-0.43	-1.6	-14.8
13,983.0	93.00	2.20	12,377.6	1,729.1	226.3	3.13	2.69	1.61	-4.4	-17.7
14,077.0	90.10	359.50	12,375.0	1,823.0	227.7	4.21	-3.09	-2.87	-7.0	-19.7
14,171.0	90.40	359.30	12,374.6	1,917.0	228.7	0.38	0.32	-0.21	-7.4	-19.3
14,265.0	91.10	358.80	12,373.4	2,011.0	225.1	0.92	0.74	-0.53	-8.6	-18.4
14,358.0	90.80	357.80	12,371.8	2,104.0	222.4	1.12	-0.32	-1.08	-10.2	-16.2
14,452.0	89.80	357.30	12,372.3	2,197.9	218.4	2.40	-2.34	-0.53	-9.6	-12.8
14,477.0	88.00	357.50	12,373.1	2,222.8	217.2	2.53	-2.40	0.80	-8.9	-11.8
14,570.0	89.00	358.40	12,375.5	2,315.7	213.9	1.45	1.08	0.97	-6.5	-9.1
14,664.0	90.00	359.80	12,376.3	2,409.7	212.4	1.83	1.06	1.49	-5.7	-8.2
14,759.0	88.90	358.80	12,377.2	2,504.7	211.3	1.56	-1.16	-1.05	-4.7	-7.7
14,852.0	89.50	359.50	12,378.5	2,597.7	209.9	0.99	0.65	0.75	-3.4	-6.9
14,945.0	88.50	0.40	12,379.3	2,690.7	209.8	0.97	0.00	0.97	-2.6	-7.4
15,039.0	89.30	0.60	12,380.3	2,784.7	210.8	0.30	-0.21	0.21	-1.7	-8.8
15,133.0	90.50	1.00	12,380.5	2,878.7	211.9	1.35	1.28	0.43	-1.5	-10.8
15,227.0	90.20	1.10	12,379.9	2,972.6	213.7	0.34	-0.32	0.11	-2.1	-13.1
15,321.0	89.60	0.00	12,380.1	3,066.6	214.6	1.33	-0.64	-1.17	-1.9	-14.6
15,414.0	91.30	0.60	12,379.3	3,159.6	215.1	1.94	1.83	0.65	-2.6	-15.7
15,508.0	90.90	359.30	12,377.5	3,253.6	215.0	1.45	-0.43	-1.38	-4.4	-16.2
15,602.0	91.00	359.50	12,376.0	3,347.6	214.0	0.24	0.11	0.21	-6.0	-15.8



Midland PVA

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Dauntless 7 Fed
 Well: #701H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #701H
 TVD Reference: KB = 25' @ 3498.0usft
 MD Reference: KB = 25' @ 3488.0usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.14

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Buflid (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
15,695.0	89.50	358.80	12,375.6	3,440.6	212.8	1.78	-1.61	-0.75	-8.4	-15.0
15,788.0	89.00	0.60	12,376.8	3,533.8	212.1	2.01	-0.54	1.94	-5.2	-15.2
15,881.0	88.70	359.30	12,378.7	3,626.5	212.0	1.43	-0.32	-1.40	-3.3	-15.7
15,975.0	89.50	359.40	12,380.1	3,720.5	211.0	0.86	0.85	0.11	-1.8	-15.2
16,067.0	91.50	0.50	12,379.3	3,812.5	210.9	2.48	2.17	1.20	-2.6	-15.7
16,160.0	91.40	0.00	12,377.0	3,905.5	211.3	0.55	-0.11	-0.54	-5.0	-16.7
16,253.0	90.90	359.20	12,375.1	3,998.5	210.6	1.01	-0.54	-0.88	-8.9	-16.7
16,347.0	88.50	355.80	12,377.2	4,092.3	206.4	6.05	-4.68	-3.83	-4.7	-13.0
16,440.0	89.10	357.80	12,380.6	4,185.1	201.0	3.66	2.80	2.37	-1.2	-8.3
16,534.0	90.40	359.50	12,381.2	4,278.0	198.8	2.28	1.38	1.81	-0.8	-6.7
16,628.0	91.60	1.00	12,379.6	4,373.0	199.2	2.04	1.28	1.60	-2.4	-7.7
16,723.0	93.60	3.90	12,375.1	4,467.8	203.3	3.83	2.32	3.05	-6.8	-12.4
16,816.0	92.40	2.40	12,370.1	4,560.5	208.4	2.20	-1.51	-1.61	-11.9	-18.1
16,909.0	91.00	3.10	12,367.3	4,653.4	212.9	1.68	-1.51	0.75	-14.7	-23.1
17,003.0	90.30	359.00	12,366.3	4,747.3	214.6	4.42	-0.74	-4.36	-15.7	-25.4
17,097.0	88.10	353.20	12,367.6	4,841.1	208.2	6.60	-2.34	-8.17	-14.4	-19.6
17,190.0	91.50	0.90	12,367.9	4,933.8	203.4	9.05	3.66	8.28	-14.1	-15.5
17,285.0	91.50	359.30	12,365.4	5,028.8	203.6	1.68	0.00	-1.68	-16.6	-16.2
17,378.0	90.50	357.60	12,363.8	5,121.8	201.1	2.12	-1.08	-1.83	-18.2	-14.3
17,473.0	90.00	357.80	12,363.4	5,216.7	197.2	0.57	-0.53	0.21	-18.6	-11.1
17,567.0	85.10	358.10	12,367.4	5,310.5	193.9	5.22	-5.21	0.32	-14.8	-8.4
17,662.0	88.50	357.90	12,374.3	5,405.2	190.6	1.49	1.47	-0.21	-7.6	-5.7
17,755.0	87.40	357.60	12,379.3	5,498.0	188.9	1.02	0.97	-0.32	-2.7	-2.8
17,848.0	83.90	353.50	12,386.3	5,590.4	178.7	5.79	-3.76	-4.41	4.3	4.0
17,941.0	87.30	355.40	12,393.5	5,682.7	170.8	4.18	3.66	2.04	11.5	12.3
18,034.0	88.80	356.50	12,398.6	5,775.4	164.2	2.00	1.61	1.16	14.7	18.3
18,127.0	90.80	356.40	12,398.9	5,868.2	158.5	2.26	2.26	-0.11	14.9	23.4



Midland PVA

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Dauntless 7 Fed
 Well: #701H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #701H
 TVD Reference: KB = 25' @ 3488.0usft
 MD Reference: KB = 25' @ 3488.0usft
 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)	DLag (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
18,220.0	91.10	358.80	12,395.3	5,861.1	154.6	2.70	0.22	2.69	13.3	28.7
18,314.0	92.80	0.00	12,392.0	6,055.0	153.7	2.24	1.91	1.17	10.0	27.0
18,407.0	91.50	1.60	12,388.4	6,148.0	155.0	2.29	-1.51	1.72	6.4	25.1
18,503.0	89.50	2.00	12,387.6	6,243.9	158.1	2.12	-2.08	0.42	5.6	21.4
18,598.0	88.60	1.90	12,389.1	6,336.8	161.2	0.97	-0.97	-0.11	7.2	17.7
18,689.0	88.40	2.20	12,391.6	6,429.7	164.5	0.39	-0.22	0.32	9.6	13.7
18,783.0	88.70	2.80	12,393.9	6,523.6	168.6	0.71	0.32	0.84	12.0	9.0
18,876.0	88.70	3.40	12,398.0	6,616.5	173.7	0.84	0.00	0.65	14.1	3.4
18,970.0	90.40	1.60	12,398.8	6,710.4	177.8	2.63	1.81	-1.91	14.8	-1.3
19,062.0	90.90	1.40	12,395.7	6,802.3	180.2	0.59	0.54	-0.22	13.7	-4.3
19,156.0	90.90	1.10	12,394.3	6,896.3	182.2	0.32	0.00	-0.32	12.3	-6.9
19,250.0	91.50	1.50	12,392.3	6,990.2	184.4	0.77	0.64	0.43	10.3	-8.7
19,343.0	92.80	1.80	12,388.8	7,083.1	187.0	1.43	1.40	0.32	6.8	-12.9
19,438.0	90.80	0.40	12,385.9	7,176.1	188.8	2.62	-2.15	-1.51	3.9	-15.3
19,530.0	89.30	359.80	12,385.8	7,270.1	189.0	1.72	-1.60	-0.64	3.8	-16.1
19,624.0	88.40	359.70	12,387.7	7,364.0	188.6	0.98	-0.98	-0.11	5.7	-16.3
19,717.0	88.40	0.80	12,390.3	7,457.0	189.0	1.18	0.00	1.18	8.3	-17.3
19,812.0	90.40	1.80	12,391.3	7,552.0	191.1	2.35	2.11	1.05	9.3	-20.1
19,906.0	89.80	358.90	12,391.1	7,648.0	191.7	3.15	-0.84	-3.09	9.1	-21.3
19,999.0	89.30	0.40	12,391.8	7,738.9	191.1	1.70	-0.54	1.61	9.8	-21.3
20,093.0	88.40	357.00	12,393.7	7,832.9	189.0	3.74	-0.98	-3.62	11.8	-19.7
20,186.0	88.40	355.70	12,398.3	7,925.7	183.1	1.40	0.00	-1.40	14.4	-14.4
20,280.0	88.90	357.60	12,398.5	8,019.5	177.8	2.09	0.53	2.02	16.6	-9.5
20,373.0	90.20	359.30	12,399.3	8,112.4	175.1	2.30	1.40	1.83	17.3	-7.8
20,468.0	91.00	359.20	12,398.3	8,207.4	173.8	0.85	0.84	-0.11	16.3	-7.0
20,561.0	92.30	359.20	12,395.6	8,300.4	172.5	1.40	1.40	0.00	13.6	-6.3
20,655.0	88.00	358.10	12,385.4	8,394.3	170.3	4.72	-4.57	-1.17	13.4	-4.7



Midland PVA

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Dauntless 7 Fed
 Well: #701H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #701H
 TVD Reference: KB = 25' @ 3498.0usft
 MD Reference: KB = 25' @ 3498.0usft
 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)	
20,749.0	88.00	357.90	12,398.6	8,488.2	167.1	0.21	0.00	-0.21	16.6	-2.0	
20,842.0	89.00	357.10	12,401.1	8,581.1	163.0	1.38	1.08	-0.88	19.1	1.4	
20,935.0	91.30	357.10	12,400.8	8,674.0	158.3	2.47	2.47	0.00	18.8	5.5	
21,028.0	90.40	357.10	12,398.4	8,768.8	153.6	0.97	-0.97	0.00	17.5	9.6	
21,122.0	88.50	357.30	12,400.4	8,860.7	148.0	2.03	-2.02	0.21	18.1	13.6	
21,215.0	86.80	356.70	12,404.2	8,953.5	144.1	1.94	-1.83	-0.65	21.6	17.9	
21,308.0	86.10	358.80	12,409.9	9,046.2	140.3	2.17	-0.75	2.04	27.0	21.1	
21,351.0	88.20	358.90	12,412.1	9,089.2	139.4	4.93	4.88	0.70	29.0	21.8	
21,401.0	88.10	358.20	12,413.7	9,139.1	138.1	1.41	-0.20	-1.40	30.4	22.7	
21,494.0	88.80	357.90	12,416.2	9,232.0	135.0	0.82	0.75	-0.32	32.6	25.3	
21,587.0	88.30	358.60	12,418.5	9,325.0	132.1	0.82	-0.54	0.75	34.6	27.5	
21,680.0	88.90	359.30	12,420.8	9,417.9	130.4	0.99	0.65	0.75	36.6	28.6	
21,774.0	88.50	358.30	12,423.0	9,511.9	128.5	1.15	-0.43	-1.06	38.4	30.0	
21,867.0	88.00	0.70	12,425.8	9,604.8	127.6	2.63	-0.54	2.58	40.9	30.2	
21,959.0	92.60	1.70	12,425.3	9,698.8	129.6	5.12	5.00	1.09	40.1	27.7	
22,052.0	92.60	1.70	12,421.1	9,789.6	132.3	0.00	0.00	0.00	35.5	24.3	
22,145.0	93.30	1.40	12,416.3	9,882.5	134.8	0.82	0.75	-0.32	30.4	21.2	
22,239.0	94.60	2.10	12,409.7	9,976.2	137.7	1.76	1.60	0.74	23.4	17.8	
22,333.0	92.00	2.00	12,404.1	10,070.0	141.1	2.88	-2.98	-0.11	17.6	13.8	
22,382.0	95.70	0.40	12,400.8	10,116.8	142.1	8.22	7.55	-3.27	14.1	12.5	
22,445.0	95.70	0.40	12,394.5	10,181.5	142.5	0.00	0.00	0.00	7.6	11.8	



Midland PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Dauntless 7 Fed
Well: #701H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #701H
TVD Reference: KB = 25' @ 3498.0usft
MD Reference: KB = 25' @ 3498.0usft
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)	
11,792.0	11,775.8	-198.1	187.0	KOP, MD:11792.0', TVD:11775.8', N/S:-198.1', E/W:187.0', INC:4.89
11,947.8	11,921.8	-148.0	171.4	FTP Crossing, MD:11947.8', TVD:11921.8', N/S:-148.0', E/W:171.4', INC:34.84
22,382.0	12,400.8	10,118.8	142.1	Last MWD Survey (MD=22382.0')
22,445.0	12,394.5	10,181.5	142.5	Projection to Bit (MD=22445.0')

Checked By: _____ Approved By: _____ Date: _____

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

Signed Kay Maddox Date 11/12/2019



Lea County, NM (NAD 83 NME)

Dauntless 7 Fed #701H

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: #701H

KB = 25' @ 3488.0ust
Northing 414901.00 Easting 768894.00
Latitude 32° 5' 18.758 N Longitude 103° 39' 16.812 W

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	Target
2	200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	
3	400.0	2.00	131.88	400.0	-2.3	2.8	1.00	131.88	-2.3	
4	2501.3	2.00	131.88	2500.0	-51.3	57.2	0.00	0.00	-50.4	
5	2651.2	5.00	131.88	2649.5	-57.4	64.0	2.00	0.00	-56.4	
6	4945.8	5.00	131.88	4935.5	-190.7	212.9	0.00	0.00	-187.5	
7	5195.7	0.00	0.00	5185.0	-198.0	221.0	2.00	180.00	-194.6	
8	11915.2	0.00	0.00	11904.5	-198.0	221.0	0.00	0.00	-194.6	
9	12665.2	90.00	359.63	12382.0	279.5	217.9	12.00	359.63	282.7	
10	21174.4	90.00	359.63	12382.0	8788.5	163.1	0.00	0.00	8790.0	TGT#1(Dauntless 7 Fed #701H)
11	21184.5	89.80	359.63	12382.0	8798.7	163.0	2.00	179.99	8800.1	
12	22586.9	89.80	359.63	12387.0	10201.0	154.0	0.00	0.00	10202.2	PEHL (Dauntless 7 Fed #701H)

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N-S	+E-W	Northing	Easting
Brushy Top(Dauntless 7 Fed #701H)	7614.0	-185.0	221.0	414703.00	767118.00
FTP (Dauntless 7 Fed #701H)	12382.0	-448.0	221.0	414763.00	767118.00
TGT#1(Dauntless 7 Fed #701H)	12382.0	8788.5	163.1	423889.50	767087.10
PEHL (Dauntless 7 Fed #701H)	12387.0	10201.0	154.0	425102.00	767048.00

