

HOBBS OCD
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EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Dauntless 7 Fed

#703H

OH

Design: OH

Midland PVA

25 June, 2019



Midland PVA

Company:	EOG Resources - Midland		Local Co-ordinate Reference:	Well #703H
Project:	Lea County, NM (NAD 83 NME)		TVD Reference:	KB = 25' @ 3489.0usft
Site:	Dauntless 7 Fed		MD Reference:	KB = 25' @ 3489.0usft
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 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	Slot Radius:	13-3/16 "	Grid Convergence:	0.38 "

Well	#703H					
Well Position	+N-S	0.0 usft	Northing:	414,901.00 usft	Latitude:	32° 8' 18.762 N
	+E-W	0.0 usft	Easting:	768,828.00 usft	Longitude:	103° 38' 17.379 W
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,474.0 usft	

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	8/17/2018	6.84	59.98	47,763.59285237

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	357.53	

Survey Program	Date	8/25/2019		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
138.0	22,537.0	Newsco MWD (OH)	MWD	OWSG MWD - Standard



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 MD Reference: KB = 25' @ 3499.0usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.14

Survey															
MD (usft)	Inc (°)	Azi (azimuth) (°)		TVD (usft)	NIS (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	0.0	0.00	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0
138.0	0.50	289.80	138.0	0.2	-0.6	0.36	0.36	0.36	0.00	-0.6	0.0				
318.0	0.20	305.90	318.0	0.7	-1.6	0.17	-0.17	8.94	-1.6	0.4					
497.0	1.10	326.80	497.0	2.3	-2.8	0.51	-0.50	11.73	-3.4	1.1					
685.0	0.00	310.60	685.0	3.8	-3.7	0.59	-0.59	0.00	-3.8	3.7					
872.0	1.40	126.20	872.0	2.4	-1.9	0.75	0.75	0.00	3.0	0.6					
1,059.0	1.10	103.50	1,058.9	0.7	1.7	0.31	-0.16	-12.14	-1.5	1.0					
1,127.0	1.20	106.10	1,126.9	0.3	3.0	0.17	0.15	3.82	-2.8	1.1					
1,249.0	1.50	100.50	1,248.9	-0.3	-5.8	0.27	0.25	-4.59	-5.8	0.7					
1,436.0	0.90	102.10	1,435.8	-1.1	9.7	0.32	-0.32	0.86	-9.7	1.0					
1,622.0	0.80	85.50	1,621.8	-1.3	12.4	0.14	-0.05	-8.92	-12.2	-2.2					
1,809.0	0.70	48.60	1,808.8	-0.4	14.5	0.26	-0.05	-19.73	-10.6	-9.9					
1,996.0	0.80	25.70	1,995.8	1.5	16.0	0.17	0.05	-12.25	-8.3	-13.7					
2,184.0	0.80	11.80	2,183.7	4.0	16.8	0.10	0.00	-7.39	-7.3	-15.6					
2,371.0	1.90	204.20	2,370.7	2.4	15.8	1.44	0.59	-89.63	8.7	13.4					
2,556.0	4.20	209.30	2,555.4	-8.3	11.2	1.25	1.24	2.76	3.6	15.1					
2,743.0	4.30	212.20	2,741.9	-18.2	4.1	0.13	0.05	1.55	3.3	22.5					
2,929.0	6.10	227.30	2,927.2	-30.8	-6.8	1.21	0.97	8.12	8.2	26.6					
3,117.0	5.50	233.10	3,114.2	-43.0	-21.4	0.45	-0.32	3.09	8.1	29.1					
3,304.0	6.60	236.30	3,300.2	-54.3	-37.5	0.62	0.59	1.71	6.2	30.6					
3,491.0	6.60	242.00	3,485.9	-65.3	-55.9	0.35	0.00	3.05	4.0	30.8					
3,678.0	6.30	241.70	3,671.7	-75.2	-74.5	0.16	-0.16	-0.16	-0.8	30.7					
3,866.0	3.80	239.60	3,859.0	-83.3	-88.9	1.33	-1.33	-1.12	-2.1	30.8					
4,052.0	3.40	244.10	4,044.8	-88.8	-99.2	0.26	-0.22	2.42	4.8	30.7					
4,240.0	2.10	238.50	4,232.4	-93.0	-107.1	0.71	-0.69	-2.98	9.2	31.3					
4,426.0	2.40	196.80	4,418.3	-98.6	-111.2	0.87	0.16	-22.42	-8.9	36.7					
4,614.0	3.10	209.20	4,606.1	-106.8	-114.8	0.49	0.37	6.60	4.6	49.3					



Midland PVA

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 TVD Reference: KB = 25' @ 3499.0usft
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 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)	DIag (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
4,801.0	2.40	241.80	4,792.9	-113.0	-120.7	0.90	-0.37	17.43	38.6	41.8	
4,988.0	4.80	286.10	4,978.5	-112.7	-131.7	1.88	1.28	23.69	57.8	-5.7	
5,175.0	4.80	280.80	5,165.9	-109.1	-146.9	0.24	0.00	-2.83	55.1	-11.3	
5,362.0	4.80	279.10	5,352.2	-106.3	-162.5	0.09	0.05	-0.91	52.5	-19.8	
5,550.0	4.80	278.00	5,539.5	-103.9	-178.3	0.05	0.00	-0.59	50.1	-28.7	
5,738.0	8.10	252.90	5,726.3	-106.7	-199.0	2.24	1.70	-13.35	53.0	-11.5	
5,925.0	8.00	250.20	5,911.5	-115.0	-223.8	0.21	-0.05	-1.44	43.4	-12.1	
6,113.0	7.10	250.40	6,097.8	-123.3	-247.0	0.48	-0.48	0.11	34.8	-14.7	
6,300.0	6.70	249.50	6,283.5	-131.0	-268.1	0.22	-0.21	-0.48	28.7	-16.6	
6,487.0	6.90	248.40	6,469.2	-139.0	-288.8	0.13	0.11	-0.59	23.0	-18.2	
6,674.0	6.70	249.60	6,654.8	-146.9	-309.5	0.13	-0.11	0.64	16.6	-20.7	
6,860.0	6.60	247.10	6,839.6	-154.9	-329.5	0.16	-0.05	-1.34	12.1	-22.0	
7,047.0	6.40	245.40	7,025.4	-163.4	-348.9	0.15	-0.11	-0.91	7.8	-23.0	
7,233.0	3.20	226.20	7,210.7	-171.3	-362.0	1.90	-1.72	-10.32	15.6	-18.3	
7,420.0	1.20	239.40	7,397.6	-175.9	-367.5	1.10	-1.07	7.06	16.3	-19.7	
7,606.0	1.40	235.20	7,583.5	-178.2	-371.0	0.12	0.11	-2.28	15.2	-18.4	
7,793.0	1.40	238.00	7,770.5	-180.7	-374.9	0.04	0.00	1.50	9.7	-19.0	
7,980.0	1.60	217.20	7,957.4	-184.0	-378.4	0.31	0.11	-11.12	11.1	-15.2	
8,166.0	1.50	223.20	8,143.3	-187.8	-381.6	0.10	-0.05	3.23	4.4	-16.0	
8,353.0	1.80	220.80	8,330.3	-191.6	-385.0	0.08	0.05	-1.28	0.0	-15.9	
8,541.0	1.60	212.50	8,518.2	-195.8	-388.1	0.12	0.00	-4.41	-2.9	-16.1	
8,728.0	1.90	214.80	8,705.1	-200.6	-391.3	0.17	0.16	1.28	-9.3	-15.8	
8,915.0	1.60	217.90	8,892.0	-205.2	-394.7	0.17	-0.16	1.60	-15.8	-15.2	
9,102.0	1.60	222.00	9,079.0	-209.2	-398.0	0.08	0.00	2.19	-22.1	-13.8	
9,288.0	0.90	119.20	9,264.9	-211.8	-398.5	1.08	-0.38	-53.27	17.5	-21.0	
9,476.0	2.00	83.80	9,452.9	-212.2	-393.9	0.73	0.59	-18.83	21.9	-7.8	
9,664.0	1.20	62.40	9,640.8	-210.9	-388.9	0.52	-0.43	-11.38	18.2	-0.5	



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Survey

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9,850.0	0.70	44.80	9,828.8	-209.2	-388.4	0.31	-0.27	-9.41	14.5	4.4
10,038.0	0.30	292.80	10,014.8	-208.2	-388.0	0.48	-0.21	-59.63	-9.6	10.8
10,225.0	0.80	328.20	10,201.7	-206.9	-387.2	0.31	0.27	18.93	-3.3	14.6
10,412.0	0.80	302.30	10,388.7	-205.1	-389.0	0.19	0.00	-13.85	-11.9	11.1
10,600.0	0.70	300.50	10,576.7	-203.8	-391.1	0.05	-0.05	-0.96	-14.7	10.7
10,787.0	0.70	252.10	10,763.7	-203.6	-393.1	0.31	0.00	-25.88	-19.6	-4.7
10,974.0	1.30	256.30	10,950.7	-204.4	-396.3	0.32	0.32	2.25	-23.2	-3.2
11,162.0	1.80	220.50	11,138.6	-207.2	-400.3	0.57	0.27	-19.04	-21.6	-17.4
11,348.0	2.80	238.00	11,324.5	-211.8	-406.0	0.65	0.54	9.41	-33.2	-9.2
11,535.0	2.80	247.50	11,511.2	-218.0	-414.1	0.25	0.00	5.08	-43.3	-2.8
11,653.0	3.30	238.40	11,629.1	-216.9	-419.7	0.58	0.42	-7.71	-48.6	-10.1
11,749.0	3.50	218.60	11,724.9	-222.6	-423.9	1.23	0.21	-20.62	-47.8	-26.9
11,843.0	6.50	357.10	11,818.7	-219.5	-425.9	10.01	3.19	147.34	14.7	53.8
11,936.0	21.40	359.50	11,808.7	-197.2	-426.3	16.03	16.02	2.58	-4.7	53.3
12,029.0	28.30	15.50	11,993.2	-158.9	-420.6	10.30	7.42	17.20	-18.4	54.0
12,123.0	33.30	12.80	12,073.9	-112.2	-408.9	5.52	5.32	-2.87	-41.5	44.7
12,215.0	40.90	7.70	12,147.2	-57.6	-399.3	8.91	8.26	-5.54	-55.1	31.6
12,309.0	52.20	7.50	12,211.8	9.9	-380.3	12.02	12.02	-0.21	-60.7	21.2
12,402.0	53.90	6.70	12,267.7	83.7	-381.1	1.95	1.83	-0.86	-55.7	9.5
12,496.0	64.40	0.30	12,315.8	164.0	-376.4	12.60	11.17	-8.81	-39.7	1.2
12,590.0	79.20	356.40	12,345.1	253.0	-379.1	16.23	15.74	-4.15	-24.3	3.1
12,683.0	83.00	1.20	12,359.5	344.8	-381.0	6.53	4.09	5.16	-10.4	4.5
12,777.0	87.40	0.80	12,367.4	438.5	-379.3	4.69	4.68	-0.32	-2.8	2.2
12,867.0	88.70	2.50	12,370.4	528.4	-376.6	2.29	1.44	1.78	0.5	-1.1
12,960.0	89.80	3.60	12,371.7	621.2	-371.7	1.67	1.18	1.18	1.7	-6.8
13,054.0	91.00	1.60	12,371.0	715.1	-367.4	2.48	1.28	-2.13	1.0	-11.5
13,148.0	92.20	1.80	12,368.4	809.1	-364.6	1.29	1.28	0.21	-1.6	-14.9



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13,241.0	90.90	359.80	12,365.9	902.0	-363.3	2.56	-1.40	-2.15	-4.1	-16.8	
13,334.0	91.00	359.60	12,364.3	995.0	-383.8	0.24	0.11	-0.22	-5.6	-16.9	
13,428.0	88.60	359.80	12,364.7	1,089.0	-364.3	2.56	-2.55	0.21	-5.3	-17.0	
13,522.0	88.00	359.90	12,367.4	1,182.9	-364.5	0.85	-0.64	0.11	-2.5	-17.4	
13,615.0	90.40	357.00	12,368.7	1,275.9	-367.1	4.05	2.58	-3.12	-1.2	-15.5	
13,709.0	87.50	355.60	12,370.5	1,369.7	-373.1	3.43	-3.09	-1.49	0.5	-10.0	
13,802.0	88.10	355.60	12,374.0	1,462.3	-380.3	0.65	0.65	0.00	4.1	-3.5	
13,895.0	90.70	356.80	12,375.0	1,555.1	-388.4	3.08	2.80	1.29	5.0	2.1	
13,988.0	92.50	357.70	12,372.4	1,647.9	-390.9	2.16	1.94	0.97	2.4	6.0	
14,082.0	92.40	2.20	12,368.4	1,741.8	-391.0	4.78	-0.11	4.79	-1.6	5.4	
14,175.0	89.30	356.90	12,367.0	1,834.8	-391.7	6.80	-3.33	-5.70	-3.0	5.8	
14,269.0	89.10	356.40	12,368.3	1,928.6	-397.2	0.57	-0.21	-0.53	-1.7	10.5	
14,362.0	89.60	356.20	12,369.4	2,021.4	-403.2	0.58	0.54	-0.22	-0.6	15.9	
14,457.0	90.80	358.60	12,369.0	2,116.3	-407.5	2.82	1.26	2.53	-0.9	18.6	
14,551.0	90.20	359.50	12,368.2	2,210.3	-409.1	1.15	-0.64	0.96	-1.7	20.5	
14,645.0	92.00	1.90	12,368.4	2,304.2	-407.9	3.19	1.91	2.55	-3.6	18.8	
14,739.0	88.50	1.40	12,366.0	2,398.2	-405.2	3.76	-3.72	-0.53	-4.0	15.4	
14,833.0	91.30	2.50	12,366.2	2,492.1	-402.0	3.20	2.98	1.17	-3.8	11.6	
14,926.0	88.40	3.00	12,366.4	2,585.0	-397.5	3.16	-3.12	0.54	-3.6	6.6	
15,020.0	88.30	2.80	12,369.1	2,678.8	-392.6	0.24	-0.11	-0.21	-0.9	1.2	
15,113.0	89.90	2.90	12,370.6	2,771.7	-388.2	1.72	1.72	0.11	0.6	-4.0	
15,207.0	89.10	0.40	12,371.4	2,865.7	-385.5	2.79	-0.85	-2.66	1.4	-7.3	
15,301.0	88.90	2.60	12,373.0	2,959.6	-383.0	2.35	-0.21	2.34	3.1	-10.4	
15,396.0	90.80	1.40	12,373.3	3,054.6	-379.7	2.37	2.00	-1.26	3.3	-14.3	
15,489.0	90.70	1.10	12,372.1	3,147.5	-377.7	0.34	-0.11	-0.32	2.1	-16.9	
15,582.0	91.30	359.30	12,370.5	3,240.5	-377.3	2.04	0.65	-1.94	0.5	-17.9	
15,676.0	93.50	359.00	12,366.5	3,334.4	-378.7	2.36	2.34	-0.32	-3.5	-17.1	



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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)	
15,769.0	90.70	356.30	12,363.1	3,427.2	-382.5	4.18	-3.01	-2.90	-6.9	-13.8	
15,882.0	89.50	355.50	12,362.9	3,520.0	-389.2	1.55	-1.29	-0.86	-7.0	-7.8	
15,956.0	89.90	354.30	12,363.4	3,613.6	-397.5	1.35	0.43	-1.28	-6.5	0.0	
16,049.0	88.70	355.30	12,364.6	3,708.2	-408.0	1.68	-1.29	1.08	-5.4	7.8	
16,141.0	88.40	357.20	12,366.9	3,798.0	-412.0	2.09	-0.33	2.07	-3.1	13.2	
16,234.0	90.50	358.10	12,367.8	3,890.9	-415.8	2.46	2.26	0.97	-2.2	16.4	
16,327.0	88.90	358.50	12,368.3	3,983.9	-418.6	1.77	-1.72	0.43	-1.7	18.6	
16,421.0	88.60	358.80	12,370.3	4,077.8	-420.8	0.45	-0.32	0.32	0.3	20.2	
16,514.0	86.60	356.20	12,374.2	4,170.6	-424.8	3.53	-2.15	-2.80	4.2	23.7	
16,608.0	87.60	357.10	12,379.0	4,264.4	-430.3	1.43	1.08	0.96	9.0	28.5	
16,702.0	89.50	0.00	12,381.4	4,358.3	-432.7	3.69	2.02	3.09	11.4	30.3	
16,797.0	94.70	2.20	12,377.9	4,453.2	-430.9	5.94	5.47	2.32	7.8	27.9	
16,890.0	92.20	1.70	12,372.3	4,545.9	-427.7	2.74	-2.69	-0.54	2.3	24.1	
16,984.0	88.80	2.50	12,371.5	4,639.9	-424.3	3.72	-3.62	0.85	1.5	20.1	
17,077.0	88.80	2.30	12,373.4	4,732.8	-420.4	0.22	0.00	-0.22	3.4	15.6	
17,171.0	89.50	2.10	12,374.8	4,826.7	-416.8	0.77	0.74	-0.21	4.8	11.4	
17,264.0	90.10	1.90	12,375.1	4,919.6	-413.5	0.68	0.65	-0.22	5.1	7.5	
17,359.0	91.40	1.80	12,373.9	5,014.6	-410.4	1.37	1.37	-0.11	3.9	3.8	
17,452.0	88.70	0.80	12,373.8	5,107.5	-408.3	3.10	-2.90	-1.08	3.8	1.1	
17,547.0	87.90	0.40	12,376.6	5,202.5	-407.3	0.94	-0.84	-0.42	6.6	-0.5	
17,641.0	89.50	1.00	12,378.8	5,298.4	-406.2	1.82	1.70	0.64	8.8	-2.2	
17,736.0	90.60	0.90	12,378.7	5,391.4	-404.6	1.16	1.16	-0.11	8.7	-4.4	
17,829.0	92.00	1.30	12,378.6	5,484.4	-402.8	1.57	1.51	0.43	6.6	-6.8	
17,922.0	89.30	1.40	12,375.5	5,577.3	-400.6	2.91	-2.90	0.11	5.5	-9.6	
18,016.0	87.90	1.00	12,377.8	5,671.3	-398.7	1.55	-1.49	-0.43	7.8	-12.2	
18,108.0	88.80	1.90	12,380.5	5,763.2	-396.3	1.38	0.98	0.98	10.5	-15.1	
18,201.0	90.70	2.20	12,380.9	5,856.2	-393.0	2.07	2.04	0.32	10.9	-19.0	



Midland PVA

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Dauntless 7 Fed
 Well: #703H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #703H
 TVD Reference: KB = 25' @ 3499.0usft
 MD Reference: KB = 25' @ 3499.0usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.14

MD (usft)	Inc (°)	Asl (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Buid (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
18,294.0	92.50	3.30	12,378.3	5,949.0	-388.6	2.27	1.94	1.18	8.3	-24.0
18,388.0	92.60	2.50	12,374.1	6,042.8	-383.8	0.88	0.11	-0.85	4.2	-29.4
18,481.0	93.10	2.00	12,369.5	6,135.6	-380.2	0.78	0.54	-0.54	-0.5	-33.7
18,575.0	91.00	358.50	12,366.1	6,228.5	-379.8	4.34	-2.23	-3.72	-3.9	-34.7
18,668.0	88.50	358.60	12,366.5	6,322.4	-383.7	3.38	-2.69	-2.04	-3.5	-31.3
18,761.0	88.60	358.40	12,368.9	6,415.2	-389.4	0.24	0.11	-0.22	-1.1	-26.2
18,855.0	89.50	358.40	12,370.4	6,509.0	-395.3	0.98	0.88	0.00	0.4	-20.9
18,948.0	89.30	358.00	12,371.4	6,601.9	-398.8	1.73	-0.22	1.72	1.3	-17.0
19,042.0	91.80	358.50	12,370.5	6,695.8	-402.7	2.71	2.68	0.53	0.2	-14.7
19,164.0	88.60	355.50	12,370.1	6,817.8	-409.1	3.60	-2.62	-2.46	-0.3	-9.1
19,258.0	87.20	354.80	12,373.5	6,911.2	-417.0	1.86	-1.49	-0.74	3.0	-1.8
19,351.0	90.20	356.80	12,375.6	7,004.0	-423.9	3.88	3.23	2.15	5.0	4.4
19,444.0	90.90	356.80	12,374.7	7,096.8	-429.0	0.75	0.75	0.00	3.9	9.0
19,538.0	90.90	0.00	12,373.2	7,180.7	-431.7	3.40	0.00	3.40	2.3	11.0
19,632.0	87.70	0.70	12,374.4	7,284.7	-431.1	3.48	-3.40	0.74	3.4	9.9
19,726.0	89.40	0.80	12,376.8	7,378.7	-429.9	1.81	1.81	0.11	5.6	8.0
19,820.0	88.70	0.70	12,378.3	7,472.7	-428.6	0.75	-0.74	-0.11	7.0	6.2
19,914.0	89.70	0.50	12,379.6	7,566.6	-427.6	1.08	1.08	-0.21	8.2	4.6
20,007.0	89.80	2.00	12,380.1	7,659.6	-425.6	1.82	0.11	1.81	8.5	2.0
20,101.0	88.00	0.00	12,381.9	7,753.6	-424.0	2.86	-1.81	-2.13	10.2	-0.3
20,185.0	90.10	359.30	12,383.4	7,847.6	-424.6	2.35	2.23	-0.74	11.6	-0.3
20,288.0	89.90	357.10	12,383.4	7,940.5	-427.5	2.38	-0.22	-2.37	11.5	2.0
20,382.0	90.90	357.50	12,382.8	8,034.4	-431.9	1.15	1.08	0.43	10.7	5.8
20,476.0	90.50	359.20	12,381.6	8,128.4	-434.6	1.88	-0.43	1.81	9.4	7.9
20,570.0	91.20	359.30	12,380.2	8,222.3	-435.8	0.75	0.74	0.11	7.9	8.8
20,663.0	88.40	358.20	12,380.5	8,315.3	-437.9	3.23	-3.01	-1.18	8.1	10.0
20,757.0	87.60	357.80	12,383.8	8,409.2	-441.1	0.85	-0.85	-0.43	11.2	12.7



Midland PVA

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Dauntless 7 Fed
 Well: #703H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #703H
 TVD Reference: KB = 25' @ 3499.0usft
 MD Reference: KB = 25' @ 3499.0usft
 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)	Buile (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
20,649.0	90.20	359.40	12,385.6	8,501.1	-443.4	3.32	2.83	1.74	12.9	14.3	
20,642.0	90.80	359.30	12,384.8	8,594.1	-444.4	0.65	0.65	-0.11	12.0	14.8	
21,035.0	90.20	359.20	12,384.0	8,687.1	-445.7	0.65	-0.65	-0.11	11.0	15.4	
21,129.0	91.00	1.10	12,383.0	8,781.1	-445.4	2.19	0.85	2.02	9.9	14.5	
21,221.0	92.90	2.90	12,379.8	8,873.0	-442.2	2.84	2.07	1.96	6.6	10.8	
21,315.0	90.90	2.10	12,376.7	8,966.8	-438.1	2.29	-2.13	-0.85	3.4	6.0	
21,408.0	88.80	1.90	12,377.0	9,059.8	-434.9	2.27	-2.26	-0.22	3.5	2.2	
21,500.0	83.40	359.90	12,383.2	9,151.5	-433.4	6.26	-5.87	-2.17	8.7	0.2	
21,594.0	86.60	356.40	12,391.4	9,245.1	-436.5	5.03	3.40	-3.72	17.7	2.6	
21,625.0	89.40	357.80	12,382.5	9,276.0	-438.0	10.10	9.03	4.52	18.8	4.0	
21,687.0	91.30	359.40	12,382.1	9,338.0	-439.5	4.01	3.06	2.58	18.3	5.1	
21,781.0	95.40	359.80	12,388.6	9,431.8	-440.1	4.39	4.36	0.53	12.7	5.1	
21,871.0	92.60	358.30	12,380.4	9,521.8	-440.7	3.18	-3.11	-0.67	6.3	5.1	
21,963.0	91.10	359.30	12,377.4	9,613.5	-441.9	1.63	-1.63	0.00	3.2	5.6	
22,057.0	91.70	359.40	12,375.1	9,707.5	-442.9	0.65	0.64	0.11	0.8	6.1	
22,150.0	90.80	0.60	12,373.1	9,800.5	-442.9	1.61	-0.97	1.29	-1.4	5.5	
22,244.0	89.90	0.50	12,372.5	9,894.4	-442.0	0.96	-0.98	-0.11	-2.1	4.0	
22,337.0	88.00	359.70	12,373.4	9,987.4	-441.9	1.29	-0.97	-0.86	-1.3	3.2	
22,431.0	88.80	358.70	12,375.2	10,081.4	-443.2	1.08	-0.21	-1.06	0.3	3.9	
22,488.0	89.40	359.30	12,376.1	10,138.4	-444.2	1.49	1.05	1.05	1.2	4.5	
22,537.0	89.40	359.30	12,376.6	10,187.4	-444.8	0.00	0.00	0.00	1.6	4.8	



Midland PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Dauntless 7 Fed
Well: #703H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #703H
TVD Reference: KB = 25' @ 3489.0usft
MD Reference: KB = 25' @ 3489.0usft
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)	
11,788.0	11,771.9	-222.9	-425.3	KOP, MD:11796.0', TVD:11771.9', N/S:-222.9', E/W:-425.3', INC:2.26
12,043.8	12,008.1	-152.0	-418.7	FTP Crossing, MD:12043.8', TVD:12008.1', N/S:-152.0', E/W:-418.7', INC:29.08
22,488.0	12,378.1	10,138.4	-444.2	Last MWD Survey (MD=22488.0')
22,537.8	12,378.8	10,187.4	-444.8	Projection to Bit (MD=22537.0')

Checked By: _____ Approved By: _____ Date: _____

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

Kay Maddox 11/12/2019
Signed Date



Lea County, NM (NAD 83 NME)

Dauntless 7 Fed #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

KB = 25' @ 3499.0uzR 3474.0
Northing 414901.00 Easting 766229.00 Latitude 32° 5' 18.762 N Longitude 103° 35' 17.379 W

SECTION DETAILS

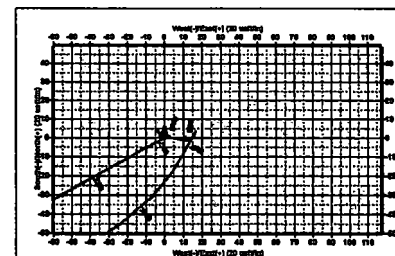
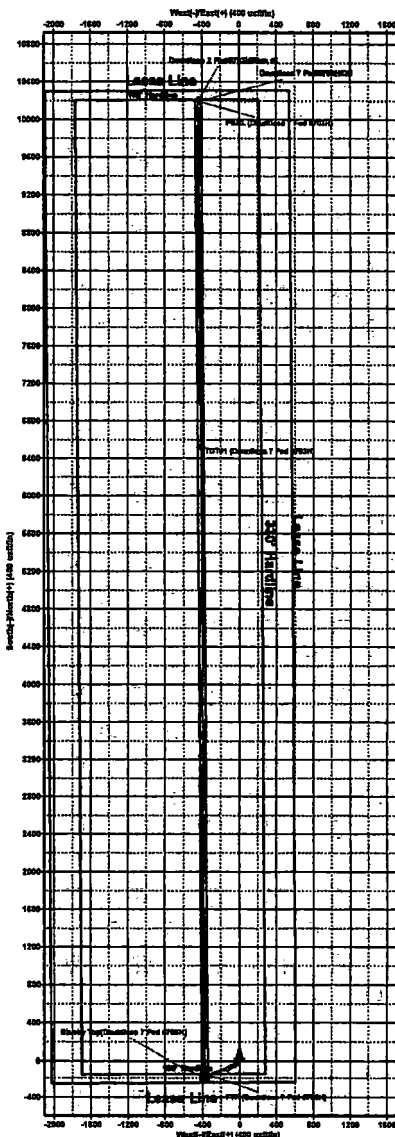
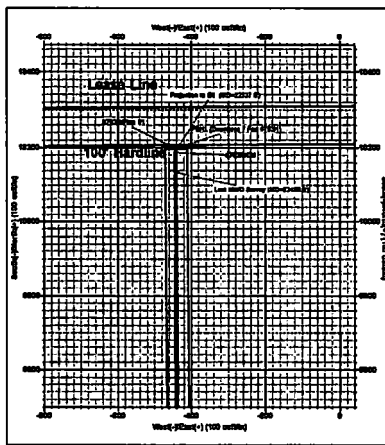
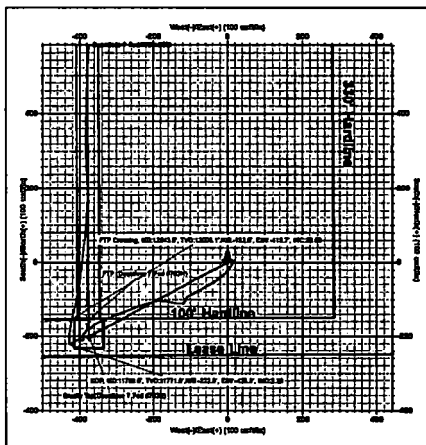
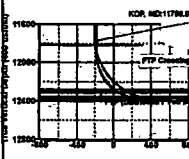
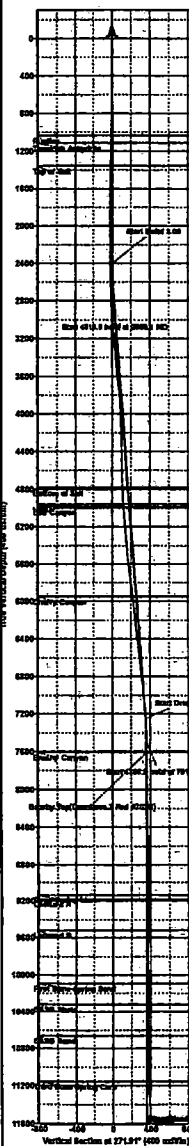
MD	Inc	Azi	TVD	+N-S	+E-W	Diag	TFace	VSect	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2400.0	0.00	0.00	2400.0	0.0	0.0	0.00	0.00	0.0	
2650.1	5.00	241.56	2649.8	-5.2	-9.6	2.00	241.56	-4.8	
7264.1	5.00	241.56	7246.2	-196.8	-363.4	0.00	0.00	-181.0	
7514.2	0.00	0.00	7496.0	-202.0	-373.0	2.00	180.00	-185.7	
11910.7	0.00	0.00	11892.5	-202.0	-373.0	0.00	0.00	-185.7	
12660.7	90.00	359.63	12370.0	275.5	-376.1	12.00	359.63	291.4	TGT#1 (Dauntless 7 Fed #703H)
18902.5	90.00	359.63	12370.0	6517.1	-416.3	0.00	0.00	6529.0	
18906.4	89.92	359.63	12370.0	6521.0	-416.3	2.00	180.00	6532.9	
22582.5	89.92	359.63	12375.0	10197.0	-440.0	0.00	0.00	10206.5	PBHL (Dauntless 7 Fed #703H)

CUSING DETAILS

No casing data is available

WELLSBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N-S	+E-W	Northing	Easting
Brachy Top (Dauntless 7 Fed #703H)	7608.0	-202.0	-373.0	414639.00	766458.00
FTP (Dauntless 7 Fed #703H)	12370.0	-152.0	-373.0	414749.00	766458.00
TGT#1 (Dauntless 7 Fed #703H)	12370.0	6517.1	-416.3	421418.10	766411.71
PBHL (Dauntless 7 Fed #703H)	12376.0	10197.0	-440.0	425938.00	766388.00



Lea County, NM (NAD 83 NME)
Dauntless 7 Fed #703H
Plan #1