

HOMER OGD

NOV 18 2019

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EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Dauntless 7 Fed

#724H

OH

Design: OH

Midland PVA

11 August, 2019



Midland PVA

Company: EOG Resources - Midland Project: Lea County, NM (NAD 83 NME) Site: Dauntless 7 Fed Well: #724H Wellbore: OH Design: OH		Local Co-ordinate Reference: Well #724H TVD Reference: KB = 22' @ 3508.0usft MD Reference: KB = 22' @ 3508.0usft 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 Geo Datum: North American Datum 1983 Map Zone: New Mexico Eastern Zone		System Datum: Mean Sea Level											
Site Dauntless 7 Fed													
Site Position: From: Map Position Uncertainty: 0.0 usft		Northing: 414,874.00 usft Easting: 782,795.00 usft Slot Radius: 13-3/16 "											
		Latitude: 32° 8' 18.763 N Longitude: 103° 37' 4.285 W Grid Convergence: 0.38 "											
Well #724H													
Well Position +N-S 0.0 usft +E-W 0.0 usft Position Uncertainty 0.0 usft		Northing: 414,894.00 usft Easting: 785,829.00 usft Wellhead Elevation: usft											
		Latitude: 32° 8' 18.760 N Longitude: 103° 36' 28.998 W Ground Level: 3,484.0 usft											
Wellbore OH													
Magnetics <table border="1"> <thead> <tr> <th>Model Name</th> <th>Sample Date</th> <th>Declination (°)</th> <th>Dip Angle (°)</th> <th>Field Strength (nT)</th> </tr> </thead> <tbody> <tr> <td>IGRF2015</td> <td>8/17/2018</td> <td>6.84</td> <td>59.96</td> <td>47,783.18124650</td> </tr> </tbody> </table>				Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)	IGRF2015	8/17/2018	6.84	59.96	47,783.18124650
Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)									
IGRF2015	8/17/2018	6.84	59.96	47,783.18124650									
Design OH													
Audit Notes: Version: 1.0 Phase: ACTUAL Tie On Depth: 0.0													
Vertical Section: <table border="1"> <thead> <tr> <th>Depth From (TVD) (usft)</th> <th>+N-S (usft)</th> <th>+E-W (usft)</th> <th>Direction (°)</th> </tr> </thead> <tbody> <tr> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>1.23</td> </tr> </tbody> </table>				Depth From (TVD) (usft)	+N-S (usft)	+E-W (usft)	Direction (°)	0.0	0.0	0.0	1.23		
Depth From (TVD) (usft)	+N-S (usft)	+E-W (usft)	Direction (°)										
0.0	0.0	0.0	1.23										
Survey Program Date 8/11/2019													
<table border="1"> <thead> <tr> <th>From (usft)</th> <th>To (usft)</th> <th>Survey (Wellbore)</th> <th>Tool Name</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>242.0</td> <td>22,953.0</td> <td>Newsco MWD (OH)</td> <td>MWD</td> <td>OWSG MWD - Standard</td> </tr> </tbody> </table>				From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	242.0	22,953.0	Newsco MWD (OH)	MWD	OWSG MWD - Standard
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description									
242.0	22,953.0	Newsco MWD (OH)	MWD	OWSG MWD - Standard									



Midland PVA

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 MD Reference: KB = 22' @ 3508.0usft
 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)	DLog (°/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
242.0	0.40	149.70	242.0	-0.7	0.4	0.17	0.17	0.00	-0.8	0.0	
425.0	0.40	148.80	425.0	-1.8	1.1	0.00	0.00	-0.44	-2.1	0.0	
608.0	0.40	163.70	608.0	-3.0	1.6	0.08	0.00	8.09	-3.3	0.7	
802.0	0.50	179.20	802.0	-4.5	1.8	0.08	0.05	7.99	-4.5	1.7	
991.0	0.40	174.30	991.0	-6.0	1.9	0.06	-0.05	-2.59	-6.1	1.3	
1,085.0	0.40	167.20	1,085.0	-6.6	2.0	0.05	0.00	-7.55	-6.9	0.5	
1,251.0	0.40	179.30	1,251.0	-7.8	2.1	0.05	0.00	7.29	-7.8	2.0	
1,441.0	0.20	178.20	1,441.0	-8.8	2.1	0.11	-0.11	-1.63	-8.9	1.6	
1,629.0	0.00	149.60	1,629.0	-9.1	2.2	0.11	-0.11	0.00	9.1	-2.2	
1,817.0	0.10	124.10	1,817.0	-9.2	2.3	0.05	0.05	0.00	-7.0	-6.3	
2,006.0	0.30	165.60	2,006.0	-9.7	2.6	0.12	0.11	21.96	-10.1	0.1	
2,196.0	0.40	178.20	2,196.0	-10.9	2.7	0.07	0.05	6.63	-11.0	2.4	
2,385.0	0.20	163.00	2,385.0	-11.9	2.7	0.11	-0.11	2.54	-11.7	3.3	
2,574.0	5.80	93.60	2,573.6	-12.8	12.2	3.07	2.96	-47.30	-12.1	-11.6	
2,763.0	5.70	92.70	2,761.7	-13.6	31.1	0.07	-0.05	-0.46	-21.2	-6.6	
2,952.0	5.50	87.80	2,949.8	-13.9	49.6	0.27	-0.11	-2.59	-22.6	1.6	
3,141.0	8.40	99.80	3,137.4	-15.9	72.2	1.71	1.53	6.35	-26.0	15.3	
3,329.0	8.20	97.80	3,323.4	-20.1	99.0	0.19	-0.11	-1.06	-35.7	21.7	
3,518.0	7.30	91.10	3,510.7	-22.2	124.4	0.67	-0.48	-3.54	-46.3	25.7	
3,707.0	8.30	106.90	3,698.0	-26.4	149.5	1.25	0.53	8.36	-43.7	45.5	
3,897.0	7.80	104.10	3,886.1	-33.5	175.1	0.33	-0.26	-1.47	-53.5	46.4	
4,086.0	6.70	101.20	4,073.6	-38.8	198.3	0.61	-0.58	-1.53	-61.2	51.7	
4,274.0	6.60	98.50	4,260.3	-42.1	219.8	0.29	-0.05	-2.50	-69.1	53.8	
4,464.0	7.00	100.50	4,449.0	-45.4	242.1	0.33	0.21	2.11	-69.0	66.3	
4,652.0	9.10	123.10	4,635.2	-55.7	265.6	2.00	1.12	12.02	-44.3	91.4	
4,841.0	6.60	107.50	4,822.4	-67.1	288.7	1.73	-1.32	-8.25	-73.3	76.8	



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5,031.0	3.30	52.70		5,011.8	-87.1	303.4	2.85	-1.74	-28.84	-109.5	-6.0
5,220.0	0.80	0.10		5,200.6	-82.4	307.8	1.53	-1.32	-27.83	-78.5	-78.0
5,409.0	4.80	113.20		5,389.4	-84.2	315.1	2.73	2.12	58.84	-28.7	104.9
5,599.0	7.80	135.20		5,578.2	-76.6	331.6	2.05	1.63	11.58	10.3	108.5
5,788.0	9.60	137.80		5,765.0	-87.5	351.3	0.82	0.90	1.38	5.1	100.9
5,978.0	8.80	138.30		5,952.6	-120.1	371.6	0.42	-0.42	0.26	-5.4	95.1
6,168.0	4.60	140.50		6,141.3	-138.9	388.1	2.21	-2.21	1.16	-5.1	88.3
6,357.0	1.30	246.50		6,330.1	-143.6	389.0	2.71	-1.75	58.08	80.0	-22.6
6,547.0	1.30	340.40		6,520.0	-142.4	388.3	1.00	0.00	49.42	-31.2	-75.1
6,735.0	1.80	236.90		6,708.0	-141.8	383.4	1.22	0.16	-55.05	78.2	-14.9
6,925.0	2.10	225.80		6,897.9	-145.7	378.7	0.32	0.26	-5.84	73.5	-0.1
7,114.0	2.00	229.10		7,088.8	-150.3	373.7	0.08	-0.05	1.75	66.6	-4.1
7,303.0	2.10	235.30		7,275.8	-154.4	368.3	0.13	0.05	3.28	59.1	-10.9
7,492.0	2.10	237.10		7,484.5	-158.3	362.6	0.03	0.00	0.95	51.8	-12.7
7,681.0	1.30	232.90		7,653.4	-161.4	358.0	0.43	-0.42	-2.22	47.0	-9.1
7,869.0	1.40	211.40		7,841.4	-164.7	355.1	0.27	0.05	-11.44	42.7	8.0
8,059.0	1.00	202.20		8,031.3	-168.2	353.2	0.23	-0.21	-4.84	37.0	14.3
8,248.0	1.30	167.10		8,220.3	-171.8	352.4	0.22	0.16	-7.99	28.2	23.0
8,437.0	1.40	182.00		8,409.3	-176.3	352.0	0.08	0.05	-2.70	21.6	25.3
8,626.0	1.50	186.70		8,598.2	-181.0	351.6	0.08	0.05	2.49	18.8	23.6
8,815.0	1.80	190.70		8,787.1	-188.1	350.9	0.08	0.05	2.12	15.3	22.4
9,004.0	1.80	195.20		8,976.0	-191.2	349.7	0.07	0.00	2.38	11.8	21.3
9,193.0	1.00	191.80		9,165.0	-195.4	348.6	0.32	-0.32	-1.75	6.2	21.8
9,383.0	1.30	184.00		9,355.0	-199.2	348.2	0.18	0.16	-4.16	-0.6	22.3
9,572.0	1.30	159.40		9,543.9	-203.3	348.8	0.29	0.00	-13.02	-13.9	19.1
9,760.0	1.20	240.90		9,731.9	-206.3	347.8	0.87	-0.05	43.35	14.5	18.7
9,949.0	1.40	253.20		9,920.8	-207.9	343.9	0.18	0.11	6.51	13.9	15.6



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Site:	Dauntless 7 Fed	MD Reference:	KB = 22' @ 3508.0usft
Well:	#724H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey											
MD (usft)	Inc (")	Asi (azimuth) (")	TVD (usft)	N/S (usft)	EW (usft)	DLog ("/100usft)	Build ("/100usft)	Turn ("/100usft)	High to Plan (usft)	Right to Plan (usft)	
10,139.0	1.40	253.60	10,110.8	-209.2	339.4	0.01	0.00	0.21	9.4	15.5	
10,327.0	2.00	252.50	10,268.7	-210.9	334.1	0.32	0.32	-0.59	3.5	15.6	
10,517.0	1.80	250.20	10,488.6	-212.9	328.1	0.11	-0.11	-1.21	-3.4	15.6	
10,706.0	1.50	207.60	10,677.5	-216.1	324.2	0.65	-0.16	-22.54	-17.7	7.2	
10,895.0	2.80	301.50	10,866.4	-216.0	319.4	1.63	0.58	49.68	4.3	19.7	
11,084.0	2.80	304.70	11,055.2	-211.1	311.8	0.18	0.16	1.69	-3.7	19.7	
11,273.0	2.10	298.60	11,244.0	-206.7	304.8	0.45	-0.42	-3.23	-14.0	18.6	
11,463.0	3.40	288.20	11,433.8	-203.2	296.4	0.73	0.68	-5.47	-26.2	15.2	
11,653.0	5.20	276.70	11,633.2	-200.3	281.8	0.99	0.90	-5.75	-43.5	8.5	
11,735.0	4.30	266.10	11,705.0	-200.1	275.8	1.74	-1.25	-14.72	-50.3	-0.3	
11,876.0	3.82	239.83	11,845.7	-202.9	266.5	1.36	-0.34	-18.77	-54.3	-25.1	
11,971.0	4.44	316.01	11,940.5	-201.8	281.2	5.40	0.65	80.40	-41.5	50.0	
12,066.0	4.04	355.38	12,035.2	-195.8	258.4	3.03	-0.42	41.44	-6.6	67.3	
12,162.0	4.18	2.68	12,131.0	-189.0	258.3	0.56	0.15	7.60	-4.8	68.0	
12,256.0	5.78	17.80	12,224.8	-181.1	259.9	2.17	1.68	16.09	11.4	65.7	
12,350.0	10.46	4.70	12,317.7	-168.1	262.0	5.34	5.00	-13.94	8.2	63.2	
12,414.0	11.69	10.68	12,380.5	-155.9	263.7	2.63	1.92	9.34	28.5	57.7	
12,445.0	13.93	9.36	12,410.7	-149.1	264.9	7.29	7.23	-4.26	35.6	56.0	
12,539.0	21.98	351.16	12,500.1	-120.5	264.0	10.34	8.56	-19.36	47.4	69.3	
12,559.0	25.10	349.49	12,518.5	-112.8	262.7	15.95	15.60	-8.35	52.5	72.4	
12,610.0	31.58	345.36	12,563.3	-89.1	257.3	13.23	12.67	-8.10	64.4	82.6	
12,634.0	37.88	344.49	12,583.0	-75.9	253.8	26.83	26.75	-3.62	71.4	86.2	
12,728.0	64.31	352.13	12,641.5	-4.7	240.0	28.68	28.01	8.13	89.5	89.4	
12,749.0	70.73	355.21	12,649.6	14.6	237.8	33.44	30.57	14.67	89.2	89.0	
12,766.0	76.18	355.82	12,654.4	30.8	236.6	32.24	32.08	3.59	88.3	89.9	
12,831.0	89.80	3.12	12,662.3	85.1	236.0	23.72	20.95	11.23	69.8	88.3	
12,925.0	93.89	3.62	12,659.3	188.9	241.7	4.41	4.35	0.74	43.5	80.8	



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13,019.0	95.43	4.00	12,651.7	282.3	248.1	1.65	1.64	0.19	28.4	73.2
13,129.0	95.08	6.72	12,641.6	391.4	258.3	2.48	-0.32	2.47	18.7	61.8
13,208.0	92.75	7.51	12,636.2	469.6	268.1	3.11	-2.95	1.00	14.0	51.1
13,302.0	90.33	8.66	12,633.7	562.6	281.3	2.85	-2.57	1.22	12.2	36.8
13,397.0	88.79	3.91	12,634.4	657.0	291.7	5.28	-1.62	-5.00	13.2	25.5
13,492.0	89.80	2.15	12,635.6	751.9	298.7	2.14	1.06	-1.85	14.7	19.5
13,586.0	90.77	2.50	12,635.1	845.8	300.5	1.10	1.03	0.37	14.6	14.7
13,681.0	90.99	2.24	12,633.6	940.7	304.5	0.38	0.23	-0.27	13.5	9.8
13,775.0	92.18	3.21	12,631.0	1,034.5	308.9	1.63	1.27	1.03	11.3	4.4
13,870.0	90.55	3.56	12,628.8	1,128.3	314.5	1.75	-1.72	0.37	9.4	-2.2
13,964.0	88.92	2.59	12,629.2	1,223.2	319.6	2.02	-1.73	-1.03	10.3	-8.2
14,059.0	87.43	0.81	12,632.2	1,317.8	327.4	4.71	-1.57	4.44	13.7	-16.9
14,154.0	86.33	4.26	12,637.4	1,412.2	336.5	2.92	-1.16	-2.68	19.1	-27.1
14,249.0	86.42	359.25	12,643.4	1,507.0	339.4	5.28	0.09	-5.27	25.6	-31.0
14,343.0	87.69	358.81	12,648.3	1,600.8	337.8	1.43	1.35	-0.47	30.8	-30.3
14,437.0	88.35	358.11	12,651.5	1,694.7	335.3	1.02	0.70	-0.74	34.4	-28.8
14,532.0	88.35	356.79	12,654.2	1,789.6	331.1	1.39	0.00	-1.39	37.6	-25.5
14,626.0	90.42	359.87	12,655.2	1,883.5	328.3	3.95	2.20	3.28	38.9	-23.7
14,720.0	91.21	358.81	12,653.9	1,977.5	327.3	1.41	0.84	-1.13	38.0	-23.6
14,815.0	90.11	356.88	12,652.8	2,072.4	323.7	2.34	-1.16	-2.03	37.3	-21.0
14,909.0	91.69	357.23	12,651.3	2,166.3	318.9	1.72	1.68	0.37	36.2	-17.2
15,004.0	92.97	357.84	12,647.5	2,261.1	314.8	1.49	1.35	0.64	32.7	-14.1
15,098.0	90.33	358.16	12,644.8	2,355.0	312.3	3.14	-2.81	1.40	30.4	-12.6
15,192.0	92.70	359.25	12,642.3	2,449.0	311.0	2.52	2.52	0.10	28.3	-12.2
15,287.0	88.57	358.48	12,641.2	2,544.0	309.1	4.43	-4.35	-0.83	27.6	-11.3
15,381.0	85.58	357.23	12,646.0	2,637.7	305.6	3.44	-3.18	-1.31	32.8	-8.8
15,476.0	85.93	357.05	12,653.1	2,732.4	300.9	0.41	0.37	-0.19	40.1	-5.0



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15,570.0	89.38	358.44	12,658.9	2,828.1	285.5	3.71	3.65	-0.85	44.1	-0.6	
15,664.0	91.03	358.61	12,658.6	2,919.9	289.8	1.79	1.78	0.18	43.9	4.1	
15,758.0	93.01	357.67	12,653.3	3,013.8	285.1	2.39	2.11	1.13	40.8	7.8	
15,852.0	94.64	358.55	12,647.0	3,107.5	282.0	1.97	1.73	0.94	34.6	10.0	
15,947.0	91.25	1.45	12,642.1	3,202.4	282.1	4.69	-3.57	3.05	28.9	9.0	
16,041.0	89.49	1.82	12,641.5	3,296.3	284.6	1.88	-1.87	0.18	29.5	5.5	
16,138.0	89.67	2.77	12,642.2	3,391.2	288.2	1.23	0.19	1.21	30.3	0.9	
16,230.0	90.20	6.72	12,642.3	3,484.9	296.0	4.24	0.56	4.20	30.6	-7.8	
16,325.0	87.47	0.57	12,644.3	3,579.6	302.0	7.08	-2.87	-8.47	32.6	-14.9	
16,419.0	89.27	1.54	12,646.9	3,673.6	303.7	2.18	1.91	1.03	35.5	-17.6	
16,514.0	89.71	2.41	12,647.8	3,768.5	307.0	1.03	0.46	0.92	38.5	-21.8	
16,609.0	88.97	1.71	12,648.9	3,863.4	310.4	1.07	-0.78	-0.74	37.7	-26.2	
16,703.0	88.22	358.81	12,651.2	3,957.4	310.9	3.19	-0.80	-3.09	40.1	-27.6	
16,798.0	89.01	358.55	12,653.5	4,052.3	308.7	0.88	0.83	-0.27	42.6	-26.4	
16,893.0	89.01	357.58	12,655.1	4,147.3	305.5	1.02	0.00	-1.02	44.4	-24.2	
16,987.0	90.59	357.23	12,655.5	4,241.2	301.2	1.72	1.68	-0.37	44.8	-20.9	
17,082.0	92.88	358.72	12,652.6	4,336.1	297.9	2.88	2.41	1.57	42.1	-18.5	
17,177.0	90.68	358.64	12,649.6	4,431.0	295.7	2.32	-2.32	-0.08	39.3	-17.3	
17,271.0	91.82	359.25	12,647.6	4,525.0	293.9	1.36	1.21	0.65	37.4	-16.5	
17,365.0	91.16	359.43	12,645.1	4,618.9	292.9	0.73	-0.70	0.19	35.1	-16.4	
17,460.0	89.80	358.55	12,644.3	4,713.9	291.2	1.71	-1.43	-0.93	34.5	-15.7	
17,555.0	90.81	0.57	12,643.8	4,808.9	290.5	2.38	1.06	2.13	34.1	-16.0	
17,649.0	89.63	1.89	12,643.5	4,902.9	292.5	1.88	-1.26	1.40	33.9	-18.9	
17,743.0	87.52	359.16	12,645.8	4,998.8	293.3	3.67	-2.24	-2.90	36.4	-20.8	
17,838.0	88.66	0.22	12,649.0	5,091.8	292.8	1.64	1.20	1.12	39.7	-21.2	
17,933.0	89.67	359.08	12,650.4	5,186.7	292.2	1.60	1.06	-1.20	41.2	-21.6	
18,028.0	92.09	0.13	12,648.8	5,281.7	291.6	2.78	2.55	1.11	39.9	-22.0	



Midland PVA

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Dauntless 7 Fed
 Well: #724H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #724H
 TVD Reference: KB = 22' @ 3508.0usft
 MD Reference: KB = 22' @ 3508.0usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.14

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	EW (usft)	DLog (°/100usft)	Buird (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
18,122.0	88.57	355.47	12,648.4	5,375.6	288.0	8.21	-3.74	-4.96	39.5	-19.3
18,217.0	89.63	356.26	12,649.8	5,470.3	281.1	1.39	1.12	0.83	41.1	-13.4
18,312.0	91.69	357.49	12,648.8	5,565.2	275.9	2.53	2.17	1.29	40.2	-8.2
18,406.0	90.59	357.93	12,648.9	5,659.1	272.2	1.28	-1.17	0.47	38.5	-6.4
18,501.0	89.14	357.05	12,647.1	5,754.0	268.0	1.79	-1.53	-0.93	38.8	-3.3
18,595.0	90.24	356.79	12,647.6	5,847.9	263.0	1.20	1.17	-0.28	39.5	0.8
18,690.0	91.82	357.84	12,645.9	5,942.7	258.5	2.00	1.66	1.11	37.9	4.3
18,785.0	89.41	358.72	12,644.9	6,037.7	255.7	2.70	-2.54	0.93	36.6	6.2
18,879.0	91.60	0.48	12,644.1	6,131.7	255.0	2.99	2.33	1.87	35.6	5.9
18,973.0	90.33	0.04	12,642.5	6,225.6	255.5	1.43	-1.35	-0.47	33.7	4.5
19,068.0	90.46	1.10	12,641.8	6,320.6	256.4	1.12	0.14	1.12	32.8	2.5
19,163.0	90.07	359.78	12,641.4	6,415.6	257.1	1.45	-0.41	-1.39	32.2	0.8
19,258.0	91.25	1.36	12,640.3	6,510.6	258.1	2.08	1.24	1.66	30.8	-1.1
19,353.0	88.48	1.71	12,640.5	6,605.6	260.6	2.94	-2.82	0.37	30.8	-4.6
19,447.0	87.91	0.39	12,643.5	6,699.5	262.3	1.53	-0.61	-1.40	33.5	-7.3
19,542.0	89.32	1.89	12,645.8	6,794.5	264.2	2.17	1.48	1.58	35.6	-10.2
19,637.0	88.75	358.90	12,647.4	6,889.4	264.9	3.20	-0.60	-3.15	36.9	-11.8
19,732.0	91.16	359.34	12,647.4	6,984.4	263.4	2.58	2.54	0.46	36.8	-11.3
19,827.0	94.59	0.83	12,642.7	7,079.3	263.8	3.94	3.61	1.57	31.7	-12.5
19,921.0	91.65	1.54	12,637.6	7,173.1	265.5	3.22	-3.13	0.76	26.4	-15.3
20,016.0	87.47	359.78	12,638.3	7,268.1	266.6	4.77	-4.40	-1.85	26.9	-17.4
20,110.0	88.40	358.99	12,641.7	7,362.0	265.6	1.30	0.89	-0.84	30.0	-17.4
20,205.0	90.99	0.31	12,642.2	7,457.0	265.0	3.08	2.73	1.39	30.3	-17.8
20,300.0	88.44	357.93	12,642.7	7,552.0	263.6	3.67	-2.68	-2.51	30.5	-17.3
20,394.0	89.63	358.11	12,644.2	7,645.9	260.3	1.28	1.27	0.19	31.9	-15.0
20,489.0	89.80	357.93	12,644.7	7,740.8	257.0	0.26	0.18	-0.19	32.1	-12.7
20,583.0	91.52	358.20	12,643.8	7,834.8	253.8	1.85	1.83	0.29	30.8	-10.5



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #724H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 22' @ 3506.0usft
Site:	Dauntless 7 Fed	MD Reference:	KB = 22' @ 3506.0usft
Well:	#724H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	EW (usft)	DLeg (°/100usft)	Buflid (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
20,677.0	91.74	357.78	12,641.0	7,928.7	250.5	0.52	0.23	-0.47	27.9	-8.1
20,772.0	92.79	358.11	12,637.2	8,023.5	247.1	1.18	1.11	0.37	23.8	-5.7
20,867.0	94.24	358.55	12,631.4	8,118.3	244.4	1.59	1.53	0.46	17.7	-3.9
20,962.0	89.63	1.27	12,628.2	8,213.2	244.2	5.63	-4.85	2.88	14.2	-4.7
21,056.0	87.56	1.10	12,630.5	8,307.2	246.2	2.21	-2.20	-0.18	16.2	-7.7
21,151.0	88.48	3.21	12,632.8	8,402.1	249.7	3.01	2.03	2.22	18.4	-12.2
21,246.0	88.44	3.65	12,634.8	8,498.8	255.4	1.20	-1.11	0.46	19.8	-18.9
21,340.0	88.13	3.65	12,637.5	8,590.6	261.4	0.33	-0.33	0.00	22.3	-25.8
21,435.0	89.85	4.00	12,639.1	8,685.4	267.7	1.85	1.81	0.37	23.8	-33.1
21,530.0	91.16	4.17	12,638.3	8,780.2	274.5	1.39	1.38	0.18	22.7	-40.8
21,625.0	88.48	2.77	12,638.6	8,875.0	280.2	3.18	-2.82	-1.47	22.8	-47.8
21,765.0	85.10	358.28	12,646.4	9,014.7	281.5	4.01	-2.41	-3.21	30.0	-50.3
21,815.0	86.37	358.72	12,650.1	9,064.5	280.2	2.69	2.54	0.88	33.6	-49.5
21,909.0	87.47	358.84	12,655.2	9,158.4	278.1	1.17	1.17	-0.09	38.4	-48.3
22,004.0	87.78	358.55	12,659.1	9,253.3	275.7	0.34	0.33	-0.09	42.0	-47.0
22,099.0	86.37	359.08	12,664.0	9,348.1	273.8	1.59	-1.48	0.56	46.5	-46.0
22,194.0	87.87	0.22	12,668.8	9,443.0	273.2	1.98	1.58	1.20	51.0	-46.4
22,288.0	88.00	0.39	12,672.1	9,536.9	273.7	0.23	0.14	0.18	54.1	-47.9
22,381.0	89.76	359.89	12,674.0	9,628.9	273.8	2.04	1.89	-0.75	55.7	-48.9
22,476.0	90.98	0.04	12,673.3	9,724.9	273.5	1.35	1.29	0.37	54.8	-48.6
22,569.0	91.34	359.25	12,671.4	9,817.9	273.0	0.93	0.38	-0.85	52.6	-50.0
22,664.0	91.47	359.51	12,669.1	9,912.8	271.9	0.31	0.14	0.27	50.0	-50.0
22,758.0	90.55	0.39	12,667.5	10,008.8	271.8	1.35	-0.98	0.94	48.1	-50.8
22,852.0	90.29	0.31	12,666.8	10,100.8	272.4	0.28	-0.28	-0.09	47.1	-52.4
22,896.0	90.89	0.31	12,666.3	10,144.8	272.7	1.59	1.59	0.00	46.5	-53.1
22,953.0	90.99	0.31	12,665.3	10,201.8	273.0	0.00	0.00	0.00	45.3	-54.0



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #724H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 22' @ 3506.0usft
Site:	Dauntless 7 Fed	MD Reference:	KB = 22' @ 3506.0usft
Well:	#724H	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)	
12,151.0	12,120.0	-189.8	258.2	KOP, MD:12151.0', TVD:12120.0', N/S:-189.8', E/W:258.2', INC:4.16
12,448.0	12,413.6	-148.4	265.0	FTP Crossing, MD:12448.0', TVD:12413.6', N/S:-148.4', E/W:265.0', INC:14.16
22,896.0	12,666.3	10,144.8	272.7	Last MWD Survey (MD=22896.0')
22,953.0	12,665.3	10,201.8	273.0	Projection to Bit (MD=22953.0')

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 #724H

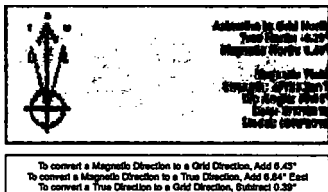
Plan #2

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: #724H

KB = 27 @ 3508.0ust
Northing 414894.00 Easting 785629.00
3484.0
Latitude 32° 8' 13.788 N Longitude 103° 38' 23.588 W



SECTION DETAILS

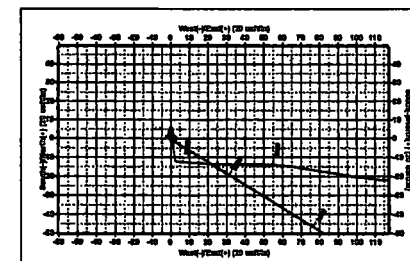
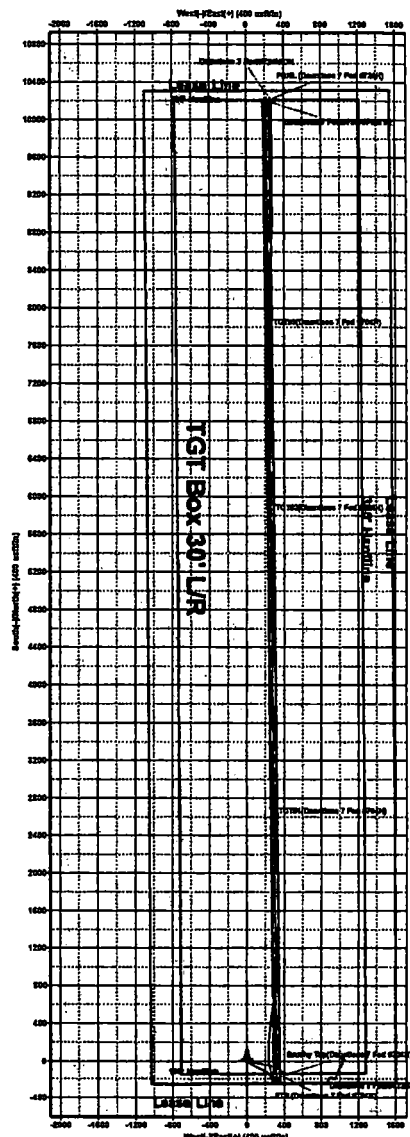
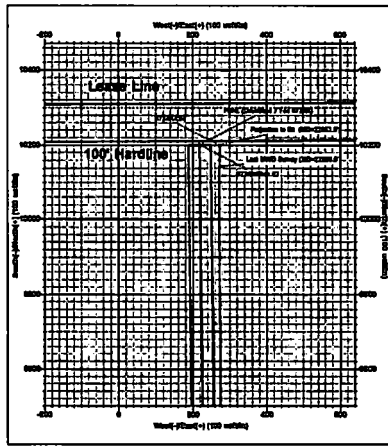
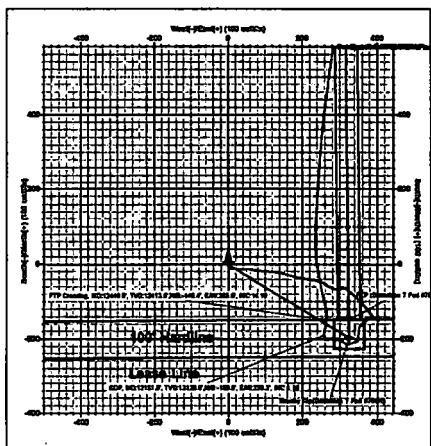
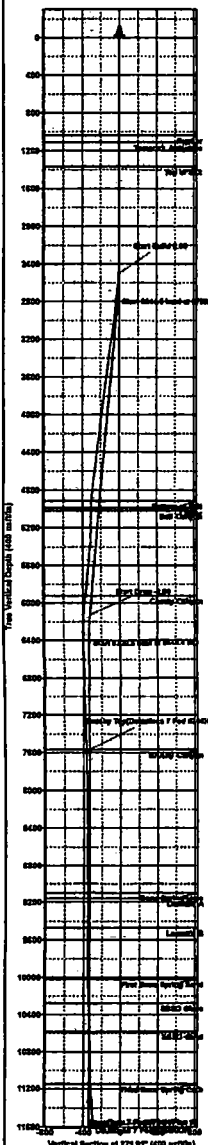
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	V/Sect	Target
1	0.0	0.00	0.00	0.0	0.0	0.00	0.00	0.00	0.0	
2	2500.0	0.00	0.00	2500.0	0.0	0.00	0.00	0.00	0.0	
3	2789.9	6.00	121.14	2789.4	-8.1	13.4	2.00	121.14	-7.8	
4	6144.5	6.00	121.14	6125.6	-188.9	312.8	0.00	0.00	-182.1	
5	6444.4	0.00	0.00	6425.0	-197.0	326.0	2.00	180.00	-180.0	
6	12184.7	0.00	0.00	12145.3	-197.0	326.0	0.00	0.00	-180.0	
7	12916.6	90.23	359.41	12822.8	282.4	321.1	12.00	359.41	289.2	
8	15337.7	90.23	359.41	12813.0	2703.3	296.2	0.00	0.00	2709.0	TGT#1(Dauntless 7 Fed #704H)
9	15344.8	90.09	359.41	12813.0	2710.4	296.1	2.00	180.00	2716.1	
10	18559.3	90.09	359.41	12608.0	5924.7	263.0	0.00	0.00	5929.0	TGT#2(Dauntless 7 Fed #704H)
11	18571.0	89.85	359.41	12608.0	5936.4	262.9	2.00	-180.00	5940.7	
12	20528.3	89.85	359.41	12613.0	7853.6	242.8	0.00	0.00	7897.0	TGT#3(Dauntless 7 Fed #704H)
13	20529.7	89.83	359.41	12613.0	7855.0	242.7	2.00	180.00	7898.4	
14	22836.8	89.83	359.41	12620.0	10202.0	219.0	0.00	0.00	10204.4	PBHL (Dauntless 7 Fed #724H)

CASING DETAILS

No casing data is available

WELLBORE TYPING DETAILS (MAP COORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting
Brusky Top(Dauntless 7 Fed #704H)	7870.0	-187.0	326.0	414897.00	785158.00
TGT#1(Dauntless 7 Fed #704H)	12608.0	624.7	263.0	420916.70	786322.91
TGT#2(Dauntless 7 Fed #704H)	12813.0	2703.3	296.1	417397.30	785155.16
TGT#3(Dauntless 7 Fed #704H)	12813.0	7853.6	242.8	422787.80	786271.78
PBHL (Dauntless 7 Fed #724H)	12620.0	10202.0	219.0	422096.00	786341.00
FTP (Dauntless 7 Fed #704H)	12624.0	-147.0	326.0	414747.00	785158.00



Lea County, NM (NAD 83 NME)