



HOBBS OCD
FEB 27 2020
RECEIVED

EOG Resources - Midland

Lea County, NM (NAD 83 NME)
Wild Weasel 22 Fed Com
#708H
OH

Design: OH

Midland PVA

22 December, 2019



Midland PVA

Company: EOG Resources - Midland Project: Lea County, NM (NAD 83 NME) Site: Wild Weasel 22 Fed Com Well: #708H Wellbore: OH Design: OH		Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: Survey Calculation Method: Database:		Well #708H KB = 25 @ 3379.0usft KB = 25 @ 3379.0usft Grid Minimum Curvature EDM													
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 Wild Weasel 22 Fed Com																	
Site Position: From: Map Position Uncertainty: 0.0 usft		Northing: 409,434.00 usft Easting: 814,510.00 usft Slot Radius: 13-3/16 "		Latitude: 32° 7' 21.137 N Longitude: 103° 27' 3.375 W Grid Convergence: 0.47 °													
Well #708H																	
Well Position +N/-S 0.0 usft +E/-W 0.0 usft Position Uncertainty 0.0 usft		Northing: 409,268.00 usft Easting: 812,265.00 usft Wellhead Elevation: usft		Latitude: 32° 7' 19.656 N Longitude: 103° 27' 29.494 W Ground Level: 3,354.0 usft													
Wellbore OH																	
<table border="1"> <thead> <tr> <th>Magnetics</th> <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></td> <td>IGRF2015</td> <td>10/28/2019</td> <td>6.63</td> <td>59.85</td> <td>47,638.26725128</td> </tr> </tbody> </table>						Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)		IGRF2015	10/28/2019	6.63	59.85	47,638.26725128
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)												
	IGRF2015	10/28/2019	6.63	59.85	47,638.26725128												
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>180.18</td> </tr> </tbody> </table>						Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	0.0	0.0	0.0	180.18				
Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)														
0.0	0.0	0.0	180.18														



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #708H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3379.0usft
Site:	Wild Weasel 22 Fed Com	MD Reference:	KB = 25 @ 3379.0usft
Well:	#708H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM

Survey Program	Date	12/22/2019		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
158.0	18,624.0	HTMWD (OH)	EOG MWD+IFR1	MWD + IFR1
16,714.0	22,840.0	Gyrodata (OH)	EOG MWD+IFR1	MWD + IFR1

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
158.0	0.28	48.24	158.0	0.2	0.3	0.17	0.17	0.00	-0.4	0.0
333.0	0.18	244.08	333.0	0.4	0.3	0.25	-0.05	-91.62	0.4	-0.2
512.0	0.35	230.11	512.0	-0.1	-0.4	0.10	0.09	-7.80	-0.3	-0.2
696.0	0.44	179.30	696.0	-1.1	-0.8	0.19	0.05	-27.61	-1.1	-0.8
883.0	0.53	178.60	883.0	-2.7	-0.8	0.05	0.05	-0.37	-2.7	-0.8
968.0	0.48	156.45	968.0	-3.4	-0.8	0.24	-0.08	-28.69	-2.9	-1.9
1,050.0	1.01	191.08	1,050.0	-4.5	-0.6	0.80	0.63	41.23	-4.5	0.2
1,235.0	1.14	192.22	1,234.9	-7.9	-1.3	0.07	0.07	0.62	-8.0	0.4
1,421.0	1.19	190.29	1,420.9	-11.6	-2.1	0.03	0.03	-1.04	-11.8	0.0
1,607.0	0.88	191.98	1,606.9	-14.9	-2.7	0.17	-0.17	0.90	-15.1	0.4
1,794.0	1.45	169.23	1,793.8	-18.6	-2.5	0.39	0.30	-12.69	-17.7	-6.3
1,981.0	1.38	319.75	1,980.8	-19.2	-3.5	1.46	-0.05	81.03	12.4	15.1
2,168.0	1.45	316.68	2,167.8	-15.8	-6.5	0.06	0.05	-1.84	7.0	15.6
2,355.0	1.41	311.93	2,354.7	-12.5	-8.9	0.07	-0.02	-2.54	1.0	15.9
2,542.0	1.14	323.36	2,541.7	-9.5	-12.7	0.20	-0.14	8.11	0.1	15.9
2,730.0	1.10	352.80	2,729.6	-8.2	-14.0	0.30	-0.02	15.66	4.4	14.7
2,917.0	1.45	35.08	2,916.6	-2.5	-12.9	0.52	0.19	22.61	9.5	9.1
3,104.0	1.85	46.84	3,103.5	1.5	-8.3	0.28	0.21	6.34	5.8	7.5
3,291.0	2.86	51.42	3,290.3	6.5	-3.5	0.55	0.54	2.40	-1.3	7.2
3,478.0	3.82	49.49	3,477.0	13.4	4.9	0.52	0.51	-1.03	-12.4	7.0



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #708H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3379.0usft
Site:	Wild Weasel 22 Fed Com	MD Reference:	KB = 25 @ 3379.0usft
Well:	#708H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM

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)	
3,664.0	4.97	18.79	3,662.5	25.2	11.9	1.46	0.62	-17.58	-27.5	-4.2	
3,851.0	2.81	353.94	3,849.1	37.5	13.8	1.40	-1.18	-12.22	-35.8	-17.7	
3,945.0	2.86	344.10	3,943.0	42.0	12.8	0.52	0.05	-10.47	-38.9	-24.0	
4,132.0	3.87	37.54	4,129.7	51.5	15.5	1.89	0.54	28.58	-50.3	19.1	
4,318.0	0.70	291.37	4,315.5	56.9	18.3	2.22	-1.70	-57.08	-3.7	-59.6	
4,506.0	1.32	298.75	4,503.5	58.4	15.3	0.34	0.33	3.93	-14.7	-58.5	
4,693.0	2.46	96.25	4,690.5	59.0	17.4	1.99	0.61	84.22	-10.9	60.5	
4,879.0	1.76	33.85	4,876.4	60.9	22.9	1.22	-0.38	-33.55	-63.4	14.9	
5,067.0	1.32	100.12	5,064.3	62.9	26.7	0.92	-0.23	35.25	-15.2	66.6	
5,254.0	1.27	153.11	5,251.3	60.7	29.7	0.62	-0.03	28.34	36.9	53.5	
5,440.0	3.03	344.36	5,437.2	63.6	28.4	2.30	0.95	-90.73	-34.0	-46.4	
5,626.0	4.97	327.75	5,622.7	75.1	23.7	1.20	1.04	-8.93	-8.6	-49.7	
5,812.0	6.64	320.90	5,807.8	90.3	12.6	0.97	0.90	-3.68	1.6	-42.6	
5,998.0	5.80	313.95	5,992.7	105.2	-0.9	0.61	-0.45	-3.74	8.5	-31.9	
6,184.0	7.34	301.38	6,177.5	117.9	-17.6	1.13	0.83	-6.76	13.0	-15.5	
6,371.0	8.48	305.78	6,362.7	132.2	-39.2	0.69	0.61	2.35	6.1	-1.0	
6,558.0	8.48	313.25	6,547.6	149.7	-60.4	0.59	0.00	3.99	0.2	11.8	
6,745.0	7.78	326.35	6,732.8	169.7	-77.5	1.06	-0.37	7.01	0.6	21.1	
6,932.0	8.92	348.41	6,917.8	194.4	-87.4	1.80	0.61	11.80	6.7	21.2	
7,119.0	8.44	348.41	7,102.7	222.0	-93.1	0.28	-0.26	0.00	3.0	18.3	
7,307.0	7.69	347.44	7,288.8	247.8	-98.6	0.41	-0.40	-0.52	1.1	15.6	
7,494.0	7.60	359.39	7,474.2	272.4	-101.4	0.85	-0.05	6.39	3.2	10.1	
7,681.0	6.55	355.53	7,659.8	295.4	-102.4	0.62	-0.56	-2.06	3.6	3.5	
7,868.0	5.76	347.44	7,845.7	315.2	-105.3	0.63	-0.42	-4.33	7.8	0.0	
8,055.0	4.40	344.10	8,031.9	331.3	-109.3	0.74	-0.73	-1.79	15.3	-1.1	
8,242.0	3.47	336.37	8,218.5	343.4	-113.5	0.57	-0.50	-4.13	16.9	1.3	



Midland PVA

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Wild Weasel 22 Fed Com
 Well: #708H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #708H
 TVD Reference: KB = 25 @ 3379.0usft
 MD Reference: KB = 25 @ 3379.0usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM

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)
8,369.3	2.35	342.78	8,345.6	348.4	-115.8	0.81	-0.88	5.03	13.3	-0.2
Brushy Top (WW 22 FC #708H)										
8,428.0	1.85	348.41	8,405.3	351.5	-116.4	0.81	-0.84	9.43	11.0	-1.4
8,616.0	1.23	348.74	8,592.2	358.4	-117.5	0.33	-0.33	-0.89	6.0	-1.2
8,803.0	0.66	340.41	8,779.2	359.4	-118.3	0.31	-0.30	-3.39	3.1	-0.7
8,989.0	0.18	301.21	8,965.2	360.5	-118.9	0.29	-0.26	-21.08	1.7	0.7
9,176.0	0.31	265.98	9,152.2	360.6	-119.6	0.10	0.07	-18.85	0.3	1.4
9,363.0	0.18	214.72	9,339.2	360.4	-120.3	0.13	-0.07	-27.40	-1.5	0.7
9,550.0	0.53	224.04	9,526.2	359.5	-121.1	0.19	0.19	4.98	-2.5	1.0
9,737.0	0.66	291.72	9,713.2	359.3	-122.7	0.38	0.07	36.18	-1.5	3.5
9,924.0	1.98	300.33	9,900.1	361.3	-126.5	0.71	0.71	4.60	-5.2	3.9
10,111.0	1.58	311.58	10,087.0	364.7	-131.2	0.28	-0.21	6.02	-10.1	5.4
10,298.0	1.45	2.73	10,274.0	368.7	-133.0	0.70	-0.07	27.35	-6.1	13.3
10,486.0	1.14	327.49	10,461.9	372.7	-133.9	0.45	-0.16	-18.74	-18.5	6.0
10,673.0	0.84	237.40	10,648.9	373.5	-136.1	0.76	-0.16	-48.18	-7.3	-18.4
10,860.0	1.45	210.86	10,835.9	370.7	-138.4	0.42	0.33	-14.19	-1.9	-20.3
11,047.0	1.14	208.22	11,022.8	367.1	-140.5	0.17	-0.17	-1.41	-5.2	-20.5
11,235.0	2.24	245.66	11,210.8	363.9	-144.8	0.80	0.59	19.91	-21.8	-12.0
11,422.0	1.14	247.24	11,397.7	361.7	-149.6	0.59	-0.59	0.84	-27.6	-11.2
11,609.0	2.15	3.52	11,584.6	364.5	-151.3	1.52	0.54	62.18	-0.5	31.4
11,796.0	1.76	340.32	11,771.5	370.7	-152.0	0.47	-0.21	-12.41	-19.0	27.3
11,911.0	1.41	51.25	11,888.5	373.2	-151.5	1.62	-0.30	61.68	17.6	28.5
12,020.0	1.05	325.12	11,995.5	374.9	-151.1	1.56	-0.33	-79.02	-28.3	18.1
12,113.0	1.45	325.64	12,088.4	376.6	-152.2	0.43	0.43	0.56	-30.2	18.4
12,158.0	1.29	191.44	12,133.4	376.5	-152.6	5.61	-0.36	-298.22	7.8	-34.9
KOP, MD:12158.0', TVD:12133.4', N/S:376.5', E/W:-152.6', INC:1.29										
12,207.0	3.96	174.82	12,182.4	374.3	-152.6	5.61	5.45	-33.92	18.5	-31.1



Midland PVA

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Wild Weasel 22 Fed Com
 Well: #708H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #708H
 TVD Reference: KB = 25 @ 3379.0usft
 MD Reference: KB = 25 @ 3379.0usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM

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)
12,300.0	21.27	163.57	12,272.8	354.8	-147.5	18.71	18.61	-12.10	22.2	-22.5
12,394.0	28.66	158.04	12,358.0	317.5	-134.2	8.24	7.86	-5.88	18.2	-9.1
12,405.9	30.13	160.32	12,368.3	312.0	-132.1	15.50	12.34	19.12	17.5	-7.8
FTP Crossing, MD:12405.9', TVD:12368.3', N/S:312.0', E/W:-132.1', INC:30.13										
12,487.0	40.88	171.66	12,434.3	268.4	-121.4	15.50	13.28	13.99	14.0	-0.7
12,564.8	55.40	178.22	12,486.0	209.0	-116.7	19.73	18.71	8.48	7.7	2.1
FTP (WW 22 FC #708H)										
12,581.0	58.51	179.30	12,494.9	185.3	-116.4	19.73	18.95	6.55	5.5	2.2
12,675.0	69.49	183.98	12,536.1	111.0	-119.0	12.50	11.68	4.98	-8.3	-0.8
12,768.0	77.05	181.85	12,562.9	22.1	-123.4	8.41	8.13	-2.27	-18.7	-6.1
12,862.0	80.44	178.69	12,581.2	-70.1	-123.9	4.89	3.61	-3.36	-19.2	-7.8
12,955.0	85.98	175.88	12,592.2	-162.3	-119.5	6.67	5.96	-3.02	-11.1	-3.9
13,048.0	88.29	176.05	12,588.5	-254.8	-112.9	0.38	0.33	0.18	-6.1	1.8
13,142.0	86.02	175.96	12,604.8	-348.4	-108.4	0.30	-0.29	-0.10	-1.2	7.6
13,236.0	86.73	178.43	12,610.7	-442.1	-101.8	2.73	0.76	2.63	3.5	11.4
13,330.0	89.63	179.39	12,613.7	-536.0	-100.0	3.25	3.09	1.02	5.2	12.4
13,424.0	89.71	179.39	12,614.3	-630.0	-99.0	0.09	0.09	0.00	4.5	12.6
13,518.0	89.54	180.10	12,614.9	-724.0	-98.6	0.78	-0.18	0.76	3.8	12.2
13,611.0	89.85	178.74	12,615.4	-817.0	-98.5	0.51	0.33	-0.39	3.0	11.5
13,704.0	88.53	178.92	12,616.7	-910.0	-98.2	1.43	-1.42	0.19	3.1	11.0
13,798.0	88.48	179.22	12,619.1	-1,003.9	-97.5	0.75	-0.05	-0.74	4.2	10.9
13,892.0	89.63	178.69	12,620.7	-1,097.9	-95.8	1.35	1.22	-0.56	4.5	11.9
13,986.0	86.73	177.81	12,623.7	-1,191.8	-92.9	3.22	-3.09	-0.94	6.1	13.9
14,080.0	84.70	179.22	12,630.7	-1,285.5	-90.5	2.63	-2.16	1.50	11.9	15.6
14,095.8	85.83	179.56	12,632.0	-1,301.3	-90.3	7.42	7.10	2.16	13.0	15.6
TGT#1(WW 22 FC #708H)										
14,174.0	91.38	181.24	12,633.9	-1,379.4	-90.9	7.42	7.11	2.15	14.2	14.4



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #708H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3379.0usft
Site:	Wild Weasel 22 Fed Com	MD Reference:	KB = 25 @ 3379.0usft
Well:	#708H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	NIS (usft)	ENW (usft)	DLog (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
14,267.0	92.18	180.36	12,631.0	-1,472.3	-92.2	1.28	0.88	-0.85	10.5	12.3	
14,360.0	92.70	180.01	12,627.1	-1,565.3	-92.5	0.87	0.56	-0.38	5.8	11.2	
14,453.0	91.52	181.24	12,623.6	-1,658.2	-93.5	1.83	-1.27	1.32	1.6	9.4	
14,547.0	90.02	181.68	12,622.4	-1,752.1	-95.9	1.68	-1.60	0.47	-0.4	6.2	
14,641.0	89.88	182.38	12,622.4	-1,846.1	-99.2	0.75	-0.04	0.74	-1.2	2.1	
14,735.0	91.25	181.50	12,621.4	-1,940.0	-102.4	1.84	1.35	-0.94	-3.0	-1.9	
14,829.0	88.35	181.85	12,621.7	-2,034.0	-105.1	3.11	-3.09	0.37	-3.4	-5.4	
14,922.0	88.75	182.29	12,624.0	-2,128.9	-108.5	0.64	0.43	0.47	-1.9	-8.6	
15,016.0	89.63	182.38	12,625.4	-2,220.8	-112.3	0.94	0.94	0.10	-1.3	-14.2	
15,110.0	89.27	178.25	12,626.3	-2,314.8	-112.8	4.41	-0.38	-4.39	-1.2	-15.5	
15,204.0	91.34	178.34	12,625.8	-2,408.7	-110.0	2.20	2.20	0.10	-2.5	-13.5	
15,298.0	90.51	178.69	12,624.3	-2,502.7	-107.6	0.98	-0.88	0.37	-4.7	-11.9	
15,391.0	89.63	178.43	12,624.1	-2,595.6	-105.3	0.99	-0.95	-0.28	-5.6	-10.3	
15,485.0	90.24	179.04	12,624.2	-2,689.6	-103.2	0.82	0.65	0.65	-6.3	-9.0	
15,578.0	88.48	179.30	12,625.3	-2,782.6	-101.9	1.81	-1.89	0.28	-6.0	-8.5	
15,694.0	88.62	179.83	12,628.2	-2,898.6	-101.0	0.47	0.12	0.46	-4.1	-8.6	
15,787.0	89.58	178.43	12,628.7	-2,991.5	-99.8	1.83	1.03	-1.51	-3.4	-7.9	
15,880.0	90.15	180.36	12,628.9	-3,084.5	-98.6	2.16	0.61	2.08	-3.8	-7.7	
15,972.0	90.33	181.33	12,629.5	-3,178.5	-99.9	1.07	0.20	1.05	-5.1	-9.9	
16,065.0	90.77	181.50	12,628.6	-3,269.5	-102.2	0.51	0.47	0.18	-6.7	-13.0	
16,158.0	88.57	180.45	12,629.2	-3,362.5	-103.8	2.62	-2.37	-1.13	-7.0	-15.3	
16,251.0	88.97	180.62	12,631.2	-3,455.4	-104.7	0.47	0.43	0.18	-5.7	-17.0	
16,344.0	87.82	179.39	12,633.8	-3,548.4	-104.7	1.81	-1.24	-1.32	-3.9	-17.8	
16,437.0	90.86	179.74	12,634.8	-3,641.4	-104.0	3.29	3.27	0.38	-3.6	-17.9	
16,531.0	92.09	179.57	12,632.4	-3,735.3	-103.4	1.32	1.31	-0.18	-6.8	-18.1	
16,624.0	92.44	179.13	12,628.7	-3,828.3	-102.4	0.60	0.38	-0.47	-11.2	-17.8	
16,714.0	90.62	177.10	12,626.3	-3,918.2	-99.4	3.03	-2.02	-2.26	-14.4	-15.6	



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #708H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3379.0usft
Site:	Wild Weasel 22 Fed Com	MD Reference:	KB = 25 @ 3379.0usft
Well:	#708H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	EW (usft)	DLeg (°/100usft)	Bulid (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
16,807.0	91.61	177.33	12,624.5	-4,011.0	-94.9	1.09	1.06	0.25	-17.0	-11.9	
16,901.0	92.21	177.90	12,621.4	-4,104.9	-91.0	0.88	0.64	0.61	-20.9	-8.8	
16,995.0	89.21	177.28	12,620.2	-4,198.8	-87.0	3.26	-3.19	-0.66	-22.8	-5.6	
17,089.0	89.32	176.77	12,621.4	-4,292.7	-82.1	0.55	0.12	-0.54	-22.4	-1.5	
17,182.0	88.93	176.06	12,622.8	-4,385.5	-76.3	0.87	-0.42	-0.76	-21.7	3.5	
17,276.0	90.11	176.72	12,623.6	-4,479.3	-70.4	1.44	1.26	0.70	-21.7	8.6	
17,370.0	90.14	177.95	12,623.4	-4,573.2	-66.0	1.31	0.03	1.31	-22.7	12.2	
17,463.0	88.78	178.11	12,624.3	-4,666.1	-62.8	1.47	-1.46	0.17	-22.6	14.6	
17,557.0	89.04	180.50	12,626.1	-4,760.1	-61.7	2.56	0.28	2.54	-21.6	14.9	
17,651.0	90.11	180.39	12,626.8	-4,854.1	-62.4	1.14	1.14	-0.12	-21.7	13.4	
17,744.0	89.66	180.52	12,627.0	-4,947.1	-63.2	0.50	-0.48	0.14	-22.3	11.9	
17,838.0	90.00	180.66	12,627.3	-5,041.1	-64.1	0.39	0.36	0.15	-22.8	10.1	
17,932.0	87.79	182.21	12,629.1	-5,135.0	-68.5	2.87	-2.35	1.65	-21.7	7.0	
18,025.0	87.25	182.21	12,633.1	-5,227.9	-70.1	0.58	-0.58	0.00	-18.5	2.6	
18,118.0	88.02	183.88	12,636.9	-5,320.6	-75.0	1.98	0.83	1.80	-15.4	-3.1	
18,212.0	91.78	183.44	12,637.1	-5,414.4	-81.0	4.03	4.00	-0.47	-16.0	-9.9	
18,306.0	92.60	180.76	12,633.5	-5,508.3	-84.5	2.98	0.87	-2.85	-20.4	-14.1	
18,399.0	91.47	180.55	12,630.2	-5,601.2	-85.5	1.24	-1.22	-0.23	-24.5	-16.0	
18,492.0	90.48	179.15	12,628.6	-5,694.2	-85.3	1.84	-1.06	-1.51	-26.8	-16.5	
18,586.0	88.16	178.64	12,629.7	-5,788.2	-83.5	2.53	-2.47	-0.54	-28.5	-15.5	
18,678.0	88.25	178.40	12,632.6	-5,880.1	-81.1	0.26	0.10	-0.28	-24.4	-13.9	
18,773.0	88.53	178.27	12,635.3	-5,975.0	-78.3	0.32	0.29	-0.14	-22.5	-12.0	
18,866.0	89.01	178.16	12,637.3	-6,068.0	-75.4	0.53	0.52	-0.12	-21.2	-9.8	
18,960.0	87.96	178.10	12,639.8	-6,161.9	-72.4	1.12	-1.12	-0.06	-19.5	-7.6	
19,054.0	86.44	177.22	12,644.4	-6,255.7	-68.5	1.87	-1.62	-0.94	-15.7	-4.5	
19,147.0	90.40	179.45	12,646.9	-6,348.6	-65.8	4.89	4.28	2.40	-13.9	-2.6	
19,241.0	88.16	179.14	12,648.1	-6,442.6	-64.7	2.41	-2.38	-0.33	-13.5	-2.3	



Midland PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Wild Wessel 22 Fed Com
Well: #708H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #708H
TVD Reference: KB = 25 @ 3379.0usft
MD Reference: KB = 25 @ 3379.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM

Survey										
MD (usft)	Ino (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLag (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
19,334.0	88.53	180.59	12,650.8	-6,535.5	-64.5	1.61	0.40	1.56	-11.6	-2.8
19,428.0	88.67	180.81	12,653.1	-6,628.5	-65.6	0.28	0.15	0.23	-10.1	-4.8
19,522.0	88.16	180.58	12,655.7	-6,723.4	-66.7	0.60	-0.54	-0.24	-8.3	-6.7
19,616.0	90.71	180.57	12,656.6	-6,817.4	-67.7	2.71	2.71	-0.01	-8.1	-8.4
19,709.0	90.51	181.54	12,655.6	-6,910.4	-69.4	1.06	-0.22	1.04	-9.9	-10.9
19,802.0	90.71	181.68	12,654.6	-7,003.4	-72.0	0.26	0.22	0.15	-11.7	-14.3
19,896.0	92.63	183.66	12,651.9	-7,097.2	-76.4	2.83	2.04	2.11	-15.1	-19.6
19,990.0	91.70	181.53	12,648.3	-7,191.0	-80.6	2.47	-0.99	-2.27	-19.5	-24.6
20,083.0	90.03	180.72	12,646.9	-7,284.0	-82.5	2.00	-1.80	-0.87	-21.7	-27.2
20,177.0	89.10	177.84	12,647.7	-7,378.0	-81.3	3.22	-0.99	-3.06	-21.7	-26.8
20,270.0	89.07	177.39	12,649.1	-7,470.9	-77.4	0.48	-0.03	-0.48	-21.0	-23.7
20,363.0	90.14	177.42	12,649.8	-7,563.8	-73.2	1.15	1.15	0.03	-21.2	-20.3
20,457.0	88.84	178.99	12,650.6	-7,657.7	-70.3	2.17	-1.38	1.67	-21.1	-18.1
20,551.0	88.06	177.03	12,653.1	-7,751.6	-67.0	2.24	-0.81	-2.09	-19.3	-15.7
20,653.0	88.19	177.44	12,656.5	-7,853.5	-62.1	0.42	0.11	0.40	-16.9	-11.6
20,747.0	88.36	177.62	12,659.3	-7,947.3	-58.0	0.26	0.18	0.19	-14.8	-8.4
20,840.0	88.64	177.82	12,661.7	-8,040.2	-54.3	0.37	0.30	0.22	-13.1	-5.4
20,935.0	89.12	177.15	12,663.6	-8,135.1	-50.2	0.87	0.51	-0.71	-12.1	-2.1
21,028.0	89.49	176.92	12,664.7	-8,228.0	-45.4	0.47	0.40	-0.25	-11.7	1.9
21,122.0	89.49	177.05	12,665.5	-8,321.9	-40.4	0.14	0.00	0.14	-11.7	6.1
21,215.0	89.80	176.70	12,666.1	-8,414.7	-35.3	0.50	0.33	-0.38	-11.9	10.4
21,308.0	87.28	174.16	12,666.5	-8,507.4	-28.0	3.83	-2.71	-2.71	-10.3	16.9
21,337.4	86.16	174.10	12,670.2	-8,536.5	-25.0	3.81	-3.80	-0.28	-8.9	19.7
TGT#2(WW 22 FC #708H)										
21,402.0	83.71	173.92	12,675.9	-8,600.6	-18.2	3.81	-3.80	-0.28	-3.7	25.9
21,469.0	83.21	175.06	12,683.5	-8,666.8	-11.9	1.85	-0.75	1.70	3.6	31.8
21,484.0	86.09	178.59	12,685.8	-8,691.7	-10.5	18.17	11.52	14.12	6.1	32.9



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #708H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3379.0usft
Site:	Wild Weasel 22 Fed Corn	MD Reference:	KB = 25 @ 3379.0usft
Well:	#708H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM

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)
21,525.0	88.58	182.84	12,687.3	-8,722.6	-10.9	15.88	8.03	13.71	7.5	32.2
21,587.0	90.08	184.04	12,688.0	-8,784.5	-14.6	3.10	2.42	1.94	7.9	28.0
21,681.0	92.07	185.28	12,686.2	-8,878.2	-22.2	2.50	2.12	1.33	5.6	19.6
21,775.0	91.81	185.23	12,683.1	-8,971.7	-30.8	0.28	-0.28	-0.06	2.0	10.2
21,868.0	89.92	181.30	12,681.7	-9,064.5	-36.1	4.69	-2.03	-4.23	0.2	4.1
21,982.0	89.72	180.41	12,682.0	-9,158.5	-37.5	0.97	-0.21	-0.95	0.0	1.9
22,055.0	89.80	179.85	12,682.3	-9,251.5	-37.7	0.61	0.09	-0.60	0.0	0.9
22,148.0	91.30	180.69	12,681.4	-9,344.5	-38.2	1.85	1.61	0.90	-1.3	-0.3
22,241.0	91.84	179.65	12,678.9	-9,437.5	-38.5	1.26	0.58	-1.12	-4.3	-1.4
22,335.0	91.81	178.46	12,675.9	-9,531.4	-38.9	1.27	-0.03	-1.27	-7.7	-0.6
22,429.0	90.03	179.74	12,674.4	-9,625.4	-35.4	2.33	-1.89	1.38	-9.7	0.0
22,522.0	89.63	180.17	12,674.7	-9,718.4	-35.4	0.63	-0.43	0.48	-9.8	-0.7
22,616.0	89.04	178.73	12,675.8	-9,812.4	-34.5	1.66	-0.63	-1.53	-9.2	-0.6
22,709.0	89.23	177.39	12,677.2	-9,905.3	-31.3	1.46	0.20	-1.44	-8.2	1.8
22,790.0	90.91	177.25	12,677.1	-9,988.2	-27.5	2.08	2.07	-0.17	-8.7	4.9
Last MWD Survey (MD=22790.0')										
22,840.0	90.91	177.25	12,676.3	-10,038.2	-25.1	0.00	0.00	0.00	-9.7	6.9
Projection to Bit (MD=22840.0') - PBHL (WW 22 FC #708H)										

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/S (usft)	+E/W (usft)	
12,158.0	12,133.4	376.5	-152.6	KOP, MD:12158.0', TVD:12133.4', N/S:376.5', E/W:-152.6', INC:1.29
12,405.9	12,368.3	312.0	-132.1	FTP Crossing, MD:12405.9', TVD:12368.3', N/S:312.0', E/W:-132.1', INC:30.13
22,790.0	12,677.1	-9,988.2	-27.5	Last MWD Survey (MD=22790.0')
22,840.0	12,676.3	-10,038.2	-25.1	Projection to Bit (MD=22840.0')



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #708H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3379.0usft
Site:	Wild Weasel 22 Fed Com	MD Reference:	KB = 25 @ 3379.0usft
Well:	#708H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM

Checked By: _____ Approved By: _____ Date: _____

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

Kay Maddox 2/25/2020
Signed Date



Lea County, NM (NAD 83 NME)
Wild Weasel 22 Fed Com #708H
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: #708H

KB = 25 @ 3379.0usft 3354.0
Northing 409266.00 Easting 612263.00 Latitude 32° 7' 19.856 N Longitude 103° 27' 29.494 W

Abscissa to Grid North
True North: 45.47°
Magnetic North: 6.16°
Magnetic Field
Strength: 47553.3uT
Dip Angle: 66.85°
Date: 10/24/2019
Model: IGRF2018

To convert a Magnetic Direction to a Grid Direction, Add 6.16°
To convert a Magnetic Direction to a True Direction, Add 6.63° East
To convert a True Direction to a Grid Direction, Subtract 0.47°

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Diag	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	5107.0	0.00	0.00	5107.0	0.0	0.0	0.00	0.00	0.0	
3	5487.1	7.60	341.66	5486.0	23.9	-7.9	2.00	341.66	-23.9	
4	7989.1	7.60	341.66	7988.0	338.1	-112.1	0.00	0.00	-337.7	
5	8369.2	0.00	0.00	8345.0	362.0	-120.0	2.00	180.00	-361.6	Brushy Top (WW 22 FC #708H)
6	12149.4	0.00	0.00	12125.2	362.0	-120.0	0.00	0.00	-361.6	
7	12892.9	89.21	179.52	12602.6	-108.9	-116.0	12.00	179.52	109.3	
8	14085.8	89.21	179.52	12619.0	-1301.7	-105.9	0.00	0.00	1302.0	TGT#1(WW 22 FC #708H)
9	14101.4	89.53	179.52	12619.2	-1317.3	-105.8	2.00	0.00	1317.6	
10	21322.5	89.53	179.52	12679.0	-8537.9	-44.7	0.00	0.00	8538.0	TGT#2(WW 22 FC #708H)
11	21332.9	89.73	179.52	12679.1	-8548.3	-44.6	2.00	0.00	8548.4	
12	22821.7	89.73	179.52	12686.0	-10037.0	-32.0	0.00	0.00	10037.1	PBHL (WW 22 FC #708H)

WELLSBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N-S	+E-W	Northing	Easting
Brushy Top (WW 22 FC #708H)	8345.0	353.0	-120.0	409873.30	612145.00
FTP (WW 22 FC #708H)	12607.0	313.0	-120.0	408878.00	612145.00
TGT#1(WW 22 FC #708H)	12619.0	-1301.7	-105.9	407964.30	612159.08
TGT#2(WW 22 FC #708H)	12679.0	-8537.9	-44.7	400725.10	612220.31
PBHL (WW 22 FC #708H)	12686.0	-10037.0	-32.0	399229.00	612233.00

CASING DETAILS

No casing data is available

