



EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Wild Weasel 22 Fed Com

#712H

OH

Design: OH

Midland PVA

20 November, 2019

HOBBS OCD
FEB 27 2020
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Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #712H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3368.0usft
Site:	Wild Weasel 22 Fed Com	ND Reference:	KB = 25 @ 3368.0usft
Well:	#712H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM

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	Wild Weasel 22 Fed Com		
Site Position:		Northing:	409,434.00 usft
From:	Map	Easting:	814,510.00 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 7' 21.137 N
		Longitude:	103° 27' 3.375 W
		Grid Convergence:	0.47 "

Well	#712H		
Well Position	+N/-S	0.0 usft	Northing:
	+E/-W	0.0 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	32° 7' 21.488 N
		Longitude:	103° 27' 42.512 W
		Ground Level:	3,343.0 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination
	IGRF2015	8/28/2018	6.77
			Dip Angle
			59.97
			Field Strength
			47,768.92005056

Design	OH		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction
			(°)
			185.43

Survey Program	Date 11/20/2019		
From	To	Survey (Wellbore)	Tool Name
(usft)	(usft)		
149.0	21,011.0	Gyrodata MWD (OH)	MWD
			Description
			OWSG MWD - Standard



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Well:	#712H	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)	E/W (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
149.0	1.96	127.73	149.0	-1.6	2.0	1.32	1.32	0.00	-2.5	0.0	
326.0	0.22	113.87	325.9	-3.5	4.7	0.99	-0.88	-7.83	-5.8	-1.3	
503.0	0.26	220.60	502.9	-4.0	4.8	0.22	0.02	60.30	0.1	6.2	
690.0	0.46	234.28	689.9	-4.8	3.9	0.12	0.11	7.32	0.4	6.1	
881.0	0.47	222.73	880.9	-5.8	2.7	0.05	0.01	-8.05	-2.4	5.9	
949.0	0.37	228.14	948.9	-6.1	2.4	0.16	-0.15	7.96	-2.3	6.1	
1,067.0	0.40	222.58	1,066.9	-6.7	1.8	0.04	0.03	-4.71	-3.7	5.9	
1,258.0	5.18	291.34	1,257.6	-4.0	-6.7	2.64	2.50	36.00	-0.5	5.3	
1,450.0	9.45	286.21	1,448.0	3.5	-29.9	2.25	2.22	-2.67	-8.6	2.3	
1,642.0	9.73	288.28	1,637.4	13.0	-60.4	0.23	0.15	1.08	-12.0	-1.4	
1,833.0	10.41	269.51	1,825.5	17.9	-93.0	1.75	0.36	-8.83	-12.8	-5.1	
2,025.0	10.95	269.70	2,014.1	17.7	-128.6	0.28	0.28	0.10	-17.6	0.2	
2,217.0	11.00	270.15	2,202.6	17.6	-165.2	0.05	0.03	0.23	-23.3	5.3	
2,408.0	9.97	283.88	2,390.5	21.7	-189.4	1.41	-0.54	7.19	-24.6	12.4	
2,600.0	10.91	287.00	2,579.3	31.0	-232.9	0.57	0.49	1.62	-27.7	10.3	
2,792.0	9.21	282.91	2,768.3	39.7	-265.3	0.96	-0.89	-2.13	-30.7	5.0	
2,984.0	9.16	285.91	2,957.9	47.3	-295.0	0.25	-0.03	1.56	-28.9	3.7	
3,176.0	9.12	294.87	3,147.4	57.9	-323.5	0.74	-0.02	4.67	-29.1	2.2	
3,367.0	8.96	281.64	3,336.1	67.3	-351.8	1.09	-0.08	-6.93	-27.3	-9.3	
3,559.0	9.17	286.33	3,525.7	74.6	-381.1	0.40	0.11	2.44	-27.1	-9.7	
3,751.0	11.47	284.75	3,714.6	83.8	-414.3	1.21	1.20	-0.82	-30.1	-14.0	
3,943.0	12.17	274.11	3,902.5	90.1	-452.9	1.19	0.36	-5.54	-35.0	-20.0	
4,135.0	9.24	274.19	4,091.2	92.6	-488.5	1.53	-1.53	0.04	-39.6	-17.2	
4,326.0	10.48	280.71	4,279.3	97.0	-520.8	0.87	0.65	3.41	-42.7	-11.7	
4,518.0	12.52	277.79	4,467.5	103.1	-558.6	1.10	1.06	-1.52	-49.2	-14.0	
4,710.0	7.48	281.57	4,656.5	108.4	-591.5	2.65	-2.62	1.97	-52.0	-10.7	



Midland PVA

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Well:	#712H	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)	
4,902.0	7.54	282.70	4,846.8	113.7	-818.0	0.08	0.03	0.59	-46.0	-11.4	
5,093.0	3.08	239.53	5,037.1	113.8	-832.7	2.98	-2.34	-22.60	-16.0	-28.4	
5,284.0	7.72	287.70	5,227.2	110.7	-850.0	2.73	2.43	14.75	-14.3	-8.8	
5,476.0	9.13	270.87	5,417.1	110.4	-878.1	0.77	0.73	1.65	-11.8	-2.8	
5,668.0	10.64	268.22	5,608.3	110.1	-711.0	0.82	0.79	-1.38	-13.9	1.9	
5,860.0	10.13	268.22	5,795.1	109.0	-745.6	0.27	-0.27	0.00	-17.8	7.8	
6,052.0	9.47	274.78	5,984.3	109.8	-778.2	0.68	-0.34	3.42	-18.2	14.1	
6,244.0	8.92	276.94	6,173.8	112.9	-808.7	0.34	-0.29	1.12	-17.0	16.6	
6,435.0	8.27	275.48	6,362.7	118.0	-837.1	0.36	-0.34	-0.76	-14.9	17.7	
6,627.0	8.41	278.65	6,552.7	119.5	-864.7	0.25	0.07	1.65	-10.3	19.6	
6,819.0	8.21	277.63	6,742.6	123.4	-892.2	0.13	-0.10	-0.53	-7.1	20.0	
7,010.0	8.24	277.94	6,931.7	127.1	-919.3	0.03	0.02	0.18	-3.1	20.7	
7,202.0	8.39	277.21	7,121.7	130.8	-948.8	0.10	0.08	-0.38	0.2	21.6	
7,394.0	8.80	278.44	7,311.5	134.2	-975.3	0.22	0.21	-0.40	2.5	22.8	
7,585.0	8.78	278.48	7,500.3	137.4	-1,004.3	0.01	-0.01	0.02	4.5	24.3	
7,778.0	7.18	281.37	7,691.4	141.5	-1,030.8	0.90	-0.83	2.53	10.0	24.0	
7,970.0	6.47	280.25	7,882.0	145.8	-1,053.2	0.38	-0.37	-0.58	5.9	23.6	
8,162.0	4.69	295.53	8,073.1	151.1	-1,070.9	1.20	-0.83	7.98	-0.4	22.2	
8,260.8	3.33	289.93	8,171.7	154.3	-1,077.0	1.41	-1.38	4.46	-5.5	22.5	
Brushy Top(WW 22 FC #712H)											
8,353.0	2.10	309.14	8,263.8	156.7	-1,080.7	1.41	-1.33	9.98	-6.2	23.5	
8,545.0	1.38	306.15	8,455.7	160.2	-1,085.3	0.38	-0.37	-1.56	-13.2	23.0	
8,736.0	0.74	279.60	8,646.7	161.8	-1,088.3	0.41	-0.34	-13.80	-25.4	13.6	
8,928.0	0.20	153.69	8,838.6	161.7	-1,089.4	0.45	-0.28	-65.58	4.3	-29.8	
9,118.0	0.49	220.03	9,028.6	160.8	-1,089.8	0.24	0.15	34.92	-28.3	-15.5	
9,310.0	0.81	279.63	9,220.6	160.3	-1,091.3	0.29	0.06	31.04	-28.1	15.6	
9,502.0	0.37	271.77	9,412.6	160.5	-1,093.0	0.13	-0.12	-4.09	-31.6	11.5	



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Design:	OH	Database:	EDM

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)
9,694.0	1.12	301.33	9,604.6	161.5	-1,095.2	0.43	0.39	15.40	-24.3	25.9
9,888.0	1.11	280.19	9,798.6	162.8	-1,098.6	0.21	-0.01	-11.01	-35.6	14.7
10,077.0	1.09	318.23	9,987.5	164.5	-1,101.6	0.38	-0.01	19.82	-22.2	34.6
10,269.0	1.58	3.34	10,179.5	168.5	-1,102.7	0.58	0.26	23.49	4.9	41.5
10,461.0	2.52	10.24	10,371.4	175.3	-1,101.8	0.51	0.49	3.59	3.0	40.9
10,652.0	2.15	22.65	10,562.2	182.7	-1,099.7	0.33	-0.19	6.50	4.0	40.2
10,844.0	2.37	358.93	10,754.1	180.0	-1,098.4	0.50	0.11	-12.35	-18.7	37.0
11,036.0	1.81	39.82	10,946.0	198.3	-1,098.5	0.81	-0.29	21.35	3.3	43.5
11,228.0	1.50	41.99	11,138.9	200.6	-1,092.8	0.16	-0.16	1.07	-0.7	43.4
11,421.0	1.44	8.10	11,330.8	204.8	-1,090.8	0.45	-0.03	-17.65	-28.3	34.3
11,613.0	2.12	99.13	11,522.7	206.6	-1,087.0	1.35	0.35	47.41	31.3	31.1
11,805.0	0.48	357.01	11,714.7	208.9	-1,083.5	1.18	-0.85	-53.19	-37.0	20.6
11,947.0	0.38	15.10	11,858.7	207.9	-1,083.4	0.12	-0.07	12.74	-29.8	31.3
12,038.0	0.68	352.32	11,947.7	208.7	-1,083.4	0.40	0.33	-25.03	-40.4	17.2
12,134.0	0.71	359.03	12,043.7	209.9	-1,083.5	0.09	0.03	6.99	-39.3	21.8
12,230.0	1.92	138.59	12,139.7	209.3	-1,082.4	2.61	1.28	145.37	42.9	9.3
12,277.0	11.21	159.91	12,186.3	204.4	-1,080.3	20.11	19.77	45.35	38.4	-6.6
KOP: MD:12277.0', TVD:12186.3', N/S:204.4', E/W:-1080.3', INC:11.21										
12,326.0	21.05	161.93	12,233.3	191.5	-1,078.0	20.11	20.08	4.13	28.4	-6.8
12,422.0	31.44	164.47	12,319.3	150.9	-1,063.9	10.88	10.82	2.65	5.5	-1.8
12,476.2	37.85	167.49	12,363.9	121.0	-1,056.5	12.24	11.82	5.57	-7.1	2.9
FTP Crossing: MD:12476.2', TVD:12363.9', N/S:121.0', E/W:-1056.5', INC:37.85										
12,517.0	42.71	169.24	12,395.0	95.2	-1,051.2	12.24	11.82	4.29	-16.3	6.9
12,613.0	47.48	175.41	12,462.8	27.9	-1,042.3	8.73	4.97	6.43	-31.4	15.9
12,649.8	50.30	177.12	12,487.0	0.2	-1,040.5	8.41	7.85	4.65	-34.2	18.1
FTP (WW 22 FC #712H)										
12,709.0	54.87	179.60	12,523.0	-46.8	-1,039.2	8.41	7.73	4.19	-36.1	20.0



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12,805.0	61.69	176.83	12,573.4	-128.3	-1,036.5	7.62	7.10	-2.89	-33.3	21.3	
12,901.0	82.39	176.70	12,602.8	-219.0	-1,031.4	21.56	21.56	-0.14	-32.2	26.0	
12,997.0	90.86	180.00	12,608.4	-314.7	-1,028.7	9.56	8.93	3.44	-35.1	28.2	
13,093.0	89.29	180.10	12,608.2	-410.7	-1,028.8	1.74	-1.74	0.10	-36.2	27.3	
13,189.0	87.17	182.10	12,611.2	-506.6	-1,030.6	3.04	-2.21	2.08	-34.1	24.7	
13,228.0	85.01	181.67	12,613.8	-545.5	-1,031.9	5.85	-5.54	-1.10	-31.8	23.1	
13,284.0	88.27	182.88	12,617.1	-601.4	-1,034.1	6.20	5.82	2.12	-29.0	20.4	
13,360.0	87.93	183.01	12,620.3	-697.2	-1,039.0	0.39	-0.35	0.16	-26.7	14.7	
13,476.0	87.71	181.69	12,623.9	-783.0	-1,042.8	1.39	-0.23	-1.37	-23.9	9.9	
13,572.0	83.91	179.85	12,631.0	-888.8	-1,044.2	4.40	-3.96	-1.92	-17.8	7.8	
13,668.0	83.38	179.24	12,641.6	-984.2	-1,043.5	0.85	-0.57	-0.64	-8.0	7.8	
13,764.0	86.66	179.11	12,649.9	-1,079.8	-1,042.1	3.44	3.44	-0.14	-0.5	8.3	
13,860.0	87.96	179.66	12,654.5	-1,175.7	-1,041.1	1.47	1.35	0.57	3.1	8.5	
13,956.0	84.98	180.20	12,660.4	-1,271.5	-1,040.9	3.15	-3.10	0.58	8.2	7.9	
14,052.0	86.06	181.24	12,667.9	-1,367.2	-1,042.1	1.56	1.12	1.08	14.8	5.6	
14,148.0	87.17	181.33	12,673.5	-1,463.0	-1,044.3	1.16	1.16	0.09	19.6	2.9	
14,244.0	88.98	182.10	12,678.8	-1,558.9	-1,047.2	2.05	1.89	0.80	22.0	-0.8	
14,339.0	87.48	177.17	12,679.7	-1,653.8	-1,046.6	5.42	-1.58	-5.19	24.1	-1.0	
14,435.0	87.62	176.64	12,683.8	-1,749.6	-1,041.4	0.57	0.15	-0.55	27.3	3.4	
14,531.0	91.76	175.95	12,684.3	-1,845.3	-1,035.2	4.37	4.31	-0.72	27.0	8.8	
14,627.0	86.26	176.88	12,686.0	-1,941.1	-1,029.2	5.81	-5.73	0.97	27.7	14.0	
14,744.0	89.80	177.81	12,690.0	-2,057.9	-1,023.8	3.13	3.03	0.79	30.7	18.4	
14,840.0	90.23	178.75	12,690.0	-2,153.8	-1,020.9	1.08	0.45	0.98	28.8	20.4	
14,936.0	90.82	179.33	12,689.1	-2,249.8	-1,019.3	0.86	0.61	0.60	28.1	21.2	
15,031.0	90.99	180.33	12,687.6	-2,344.8	-1,019.0	1.07	0.18	1.05	25.7	20.7	
15,126.0	85.95	177.49	12,690.1	-2,439.7	-1,017.2	6.09	-5.31	-2.99	27.4	21.8	
15,222.0	86.39	178.80	12,694.9	-2,535.5	-1,014.1	2.88	2.54	1.36	31.3	24.0	



Midland PVA

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Wellbore: OH
Design: OH

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Survey

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15,318.0	91.98	180.67	12,694.6	-2,631.5	-1,013.6	4.22	3.74	1.95	30.1	23.7
15,414.0	90.54	179.69	12,692.4	-2,727.5	-1,013.9	1.81	-1.50	-1.02	27.1	22.5
15,510.0	92.12	179.71	12,690.2	-2,823.5	-1,013.4	1.65	1.65	0.02	24.0	22.2
15,606.0	91.98	185.64	12,686.8	-2,919.2	-1,017.9	6.17	-0.15	6.18	19.8	16.9
15,703.0	92.46	194.78	12,683.0	-3,014.5	-1,035.1	9.43	0.49	9.42	15.1	-1.0
15,799.0	92.89	194.82	12,678.5	-3,107.3	-1,059.6	0.45	0.45	0.04	10.4	-26.1
15,861.0	85.27	185.80	12,679.5	-3,168.1	-1,070.7	19.04	-12.29	-14.55	10.0	-38.0
15,894.0	88.13	184.79	12,681.4	-3,200.9	-1,073.7	9.19	8.67	-3.06	11.8	-41.3
15,990.0	89.43	175.03	12,683.5	-3,296.8	-1,073.5	10.25	1.35	-10.17	13.1	-41.9
16,086.0	88.87	167.53	12,684.9	-3,391.6	-1,059.0	7.83	-0.58	-7.81	14.0	-28.0
16,182.0	86.26	165.11	12,689.0	-3,484.8	-1,036.3	3.71	-2.72	-2.52	16.9	-6.0
16,278.0	87.48	165.22	12,694.2	-3,577.4	-1,011.8	1.28	1.27	0.11	21.4	17.3
16,373.0	89.18	172.70	12,697.0	-3,670.6	-993.6	8.07	1.79	7.87	23.3	34.8
16,469.0	91.58	174.99	12,696.4	-3,766.0	-983.3	3.46	2.50	2.39	21.8	44.3
16,564.0	89.35	178.36	12,695.6	-3,860.8	-977.8	4.25	-2.35	3.55	20.1	49.1
16,660.0	90.76	181.32	12,695.5	-3,956.8	-977.5	3.42	1.47	3.08	19.1	48.5
16,756.0	90.68	186.47	12,694.3	-4,052.5	-984.1	5.38	-0.08	5.38	17.1	41.2
16,852.0	89.63	184.36	12,694.0	-4,148.1	-993.1	2.45	-1.09	-2.20	16.0	31.3
16,948.0	88.64	185.10	12,695.5	-4,243.8	-1,001.0	1.28	-1.03	0.77	16.6	22.5
16,954.0	88.78	185.05	12,695.6	-4,249.7	-1,001.6	2.52	2.35	-0.90	16.7	22.0
TGT#1(WW 22 FC #712H)										
17,044.0	90.80	184.24	12,695.9	-4,339.4	-1,008.9	2.52	2.35	-0.90	16.2	13.9
17,139.0	88.56	177.70	12,696.3	-4,434.4	-1,010.5	7.31	-2.46	-8.88	15.9	11.6
17,235.0	86.39	169.13	12,700.5	-4,529.6	-999.5	8.20	-2.26	-8.93	16.4	21.7
17,331.0	86.58	168.03	12,706.4	-4,623.5	-980.5	1.16	0.20	-1.15	24.6	39.9
17,427.0	86.08	169.66	12,710.9	-4,717.6	-982.0	2.31	1.56	1.70	28.4	57.6
17,523.0	87.69	174.22	12,714.5	-4,812.5	-948.5	4.76	-0.41	4.75	31.1	70.4



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #712H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3368.0usft
Site:	Wild Weasel 22 Fed Com	MD Reference:	KB = 25 @ 3368.0usft
Well:	#712H	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)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
17,619.0	91.86	182.51	12,714.8	-4,908.4	-945.8	9.66	4.34	8.64	30.8	72.3	
17,715.0	88.53	181.31	12,714.5	-5,004.3	-949.0	3.89	-3.47	-1.25	29.9	68.2	
17,811.0	89.94	184.22	12,715.8	-5,100.2	-953.6	3.37	1.47	3.03	30.5	62.7	
17,907.0	90.17	184.32	12,715.7	-5,195.9	-960.8	0.28	0.24	0.10	29.8	54.8	
18,003.0	91.38	183.31	12,714.4	-5,291.7	-967.1	1.83	1.24	-1.05	27.5	47.6	
18,099.0	91.38	183.57	12,712.1	-5,387.5	-972.9	0.27	0.02	0.27	24.5	41.1	
18,195.0	89.63	179.34	12,711.3	-5,483.4	-975.3	4.77	-1.82	-4.41	23.0	37.8	
18,291.0	89.94	182.56	12,711.6	-5,579.4	-978.9	3.37	0.32	3.35	22.6	35.4	
18,387.0	90.71	185.79	12,711.1	-5,675.1	-983.9	3.46	0.80	3.36	21.4	27.6	
18,482.0	89.38	183.94	12,711.0	-5,769.8	-992.0	2.40	-1.40	-1.85	20.6	18.7	
18,578.0	89.92	179.02	12,711.6	-5,865.7	-994.4	5.16	0.56	-5.12	20.4	15.5	
18,674.0	88.13	178.27	12,713.2	-5,961.7	-992.2	2.02	-1.86	-0.78	21.3	16.9	
18,770.0	89.32	180.35	12,715.4	-6,057.6	-991.0	2.50	1.24	2.17	22.7	17.3	
18,866.0	90.57	181.44	12,715.5	-6,153.6	-992.5	1.73	1.30	1.14	22.1	14.9	
18,962.0	90.45	178.67	12,714.6	-6,249.6	-993.5	1.85	-0.12	-1.84	20.5	13.2	
19,058.0	88.05	177.21	12,715.9	-6,345.5	-990.8	3.58	-2.50	-2.56	21.1	15.0	
19,153.0	90.11	178.99	12,717.4	-6,440.5	-987.7	2.87	2.17	1.87	21.9	17.4	
19,249.0	87.68	175.48	12,719.2	-6,536.3	-983.1	4.45	-2.53	-3.66	23.0	21.2	
19,302.0	89.80	176.83	12,720.4	-6,589.2	-979.5	4.74	4.00	2.55	23.8	24.3	
19,450.0	89.26	180.11	12,721.6	-6,737.1	-975.6	2.25	-0.36	2.22	23.9	27.0	
19,545.0	94.08	178.72	12,718.8	-6,832.0	-974.6	5.28	5.07	-1.46	20.4	27.2	
19,641.0	93.85	177.19	12,712.2	-6,927.7	-971.2	1.61	-0.24	-1.59	13.1	29.7	
19,737.0	92.12	175.63	12,707.2	-7,023.4	-965.2	2.43	-1.80	-1.62	7.4	34.9	
19,833.0	87.45	177.28	12,707.8	-7,119.2	-959.2	5.15	-4.88	1.70	8.9	40.1	
19,929.0	89.63	178.17	12,710.0	-7,215.1	-955.4	2.46	2.27	0.95	8.7	43.1	
20,025.0	87.93	178.33	12,712.1	-7,310.9	-950.8	2.61	-1.77	-1.92	9.9	46.9	
20,121.0	87.08	178.80	12,716.2	-7,406.8	-946.7	2.72	-0.89	2.57	13.4	50.2	



Midland PVA

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Wild Weasel 22 Fed Com
 Well: #712H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #712H
 TVD Reference: KB = 25 @ 3368.0usft
 MD Reference: KB = 25 @ 3368.0usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	D/Leg (°/100usft)	Bulld (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
20,217.0	88.39	177.39	12,720.0	-7,502.6	-643.5	2.00	1.36	-1.47	18.5	52.5
20,313.0	88.64	179.22	12,722.5	-7,598.5	-640.7	1.92	0.26	1.91	18.3	54.6
20,408.0	88.56	177.41	12,724.8	-7,693.5	-637.9	1.91	-0.08	-1.91	19.9	56.6
20,504.0	88.27	177.97	12,727.5	-7,789.4	-634.0	0.68	-0.30	0.58	21.8	59.6
20,600.0	89.04	180.30	12,728.8	-7,885.3	-632.6	2.58	0.80	2.43	23.4	60.2
20,696.0	90.08	181.41	12,730.5	-7,981.3	-634.0	1.58	1.08	1.16	23.4	58.0
20,792.0	90.57	180.95	12,729.9	-8,077.3	-636.0	0.70	0.51	-0.48	22.1	55.2
20,888.0	90.45	182.02	12,728.1	-8,173.2	-638.5	1.12	-0.12	1.11	20.6	51.9
Last MWD Survey (MD=20888.0')										
21,011.0	90.45	182.02	12,728.1	-8,269.2	-642.8	0.00	0.00	0.00	18.7	46.5
Projection to Bit (MD=21011.0') - PBHL (WW 22 FC #712H)										

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/S (usft)	+E/W (usft)	
12,277.0	12,188.3	204.4	-1,080.3	KOP, MD:12277.0', TVD:12188.3', N/S:204.4', E/W:-1080.3', INC:11.21
12,476.2	12,363.9	121.0	-1,056.5	FTP Crossing, MD:12476.2', TVD:12363.9', N/S:121.0', E/W:-1056.5', INC:37.85
20,888.0	12,729.1	-8,173.2	-938.5	Last MWD Survey (MD=20888.0')
21,011.0	12,728.1	-8,269.2	-642.8	Projection to Bit (MD=21011.0')

Checked By: _____ Approved By: _____ Date: _____

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

Kay Maddox 2/25/2020
 Signed Date



Lea County, NM (NAD 83 NME)
Wild Weasel 22 Fed Com #712H
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: #712H

KB = 25 @ 3388.0ust
Northing 409442.00 Easting 811144.00
Latitude 32° 7' 21.488 N Longitude 103° 27' 42.612 W

Azimuth to Grid North
True North: 4.49°
Magnetic North: 1.39°
Magnetic Field
Strength: -4770.0nT
Clp Angle: 68.87°
Date: 03/20/19
Model: ROM2019

To convert a Magnetic Direction to a Grid Direction, Add 6.30°
To convert a Magnetic Direction to a True Direction, Add 6.77° East
To convert a True Direction to a Grid Direction, Subtract 0.46°

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	1100.0	0.00	0.00	1100.0	0.0	0.0	0.00	0.00	0.0	
3	1569.3	8.39	278.16	1567.2	6.1	-37.9	2.00	278.16	-2.5	
4	7688.8	8.39	278.16	7604.8	164.9	-1023.1	0.00	0.00	-87.3	
5	8158.1	0.00	0.00	8072.0	171.0	-1061.0	2.00	180.00	-89.8	
6	12252.1	0.00	0.00	12168.0	171.0	-1061.0	0.00	0.00	-89.8	
7	12997.8	89.48	179.52	12843.4	-302.1	-1057.0	12.00	179.52	400.9	
8	16944.0	89.48	179.52	12879.0	-4248.0	-1023.6	0.00	0.00	4325.8	TGT#1(WW 22 FC #712H)
9	16948.2	89.57	179.52	12879.0	-4252.3	-1023.6	2.00	0.07	4330.1	
10	22924.4	89.57	179.52	12724.0	-10228.0	-973.0	0.00	0.00	10274.2	PBHL (WW 22 FC #712H)

CASING DETAILS

No casing data is available

WELLSBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N-S	+E-W	Northing	Easting
Brushy Top(WW 22 FC #712H)	8172.0	171.0	-1061.0	409813.00	810083.00
FTP (WW 22 FC #712H)	12838.0	121.0	-1061.0	409583.00	810083.00
TGT#1(WW 22 FC #712H)	12879.0	-4248.0	-1023.6	408194.00	810120.40
PBHL (WW 22 FC #712H)	12734.0	-10228.0	-973.0	399214.00	810171.00

