

HOBBS OCD
JUN 21 2018
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EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Gem 36 State Com

#706H

OH

Design: OH

Midland PVA

02 May, 2018





Midland PVA



Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #706H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3394.0usft (H&P 424)
Site:	Gem 36 State Com	MD Reference:	KB = 25 @ 3394.0usft (H&P 424)
Well:	#706H	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 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Gem 36 State Com		
Site Position:		Northing:	393,886.00 usft
From:	Map	Easting:	759,213.00 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 4' 49.331 N
		Longitude:	103° 37' 47.552 W
		Grid Convergence:	0.37 °

Well	#706H		
Well Position	+N-S	0.0 usft	Northing:
	+E-W	0.0 usft	Easting:
Position Uncertainty	0.0 usft		Wellhead Elevation:
			Ground Level:

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination
			(°)
	IGRF2015	2/5/2018	6.80
			Dip Angle
			(°)
			Field Strength
			(nT)
			47,781.75680426

Design	OH		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N-S	+E/W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction
			(°)
			356.30



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Survey Program		Date	5/2/2018		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
96.0	799.0	Integrity MWD (OH)	MWD	OWSG MWD - Standard	
894.0	17,180.0	Newsco MWD (OH)	MWD	OWSG MWD - Standard	

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)
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0
96.0	1.40	357.70	96.0	1.2	0.0	1.46	1.46	0.00	0.0	0.0
211.0	1.00	317.60	211.0	3.3	-0.8	0.79	-0.35	-34.87	0.0	0.0
337.0	0.50	350.50	337.0	4.7	-1.6	0.51	-0.40	26.11	0.0	0.0
463.0	0.30	319.80	463.0	5.5	-1.9	0.23	-0.16	-24.37	0.0	0.0
589.0	0.40	315.00	589.0	6.0	-2.4	0.08	0.08	-3.81	0.0	0.0
716.0	0.40	310.30	715.9	6.6	-3.1	0.03	0.00	-3.70	0.0	0.0
799.0	0.20	334.80	798.9	6.9	-3.4	0.28	-0.24	29.52	0.0	0.0
894.0	0.70	14.50	893.9	7.7	-3.3	0.59	0.53	41.79	-0.5	-0.1
1,080.0	0.80	7.90	1,079.9	10.0	-2.8	0.07	0.05	-3.55	-2.3	-0.6
1,266.0	0.80	358.70	1,265.9	12.6	-2.7	0.07	0.00	-4.95	-4.2	-1.5
1,453.0	0.50	9.20	1,452.9	14.7	-2.6	0.17	-0.16	5.61	-5.9	-0.8
1,640.0	0.50	337.20	1,639.9	16.3	-2.8	0.15	0.00	-17.11	-5.5	-4.3
1,828.0	0.50	332.80	1,827.9	17.8	-3.5	0.02	0.00	-2.34	-6.1	-4.7
2,014.0	0.40	299.10	2,013.9	18.8	-4.4	0.15	-0.05	-18.12	-3.2	-7.4
2,200.0	0.70	275.00	2,199.9	19.2	-6.1	0.20	0.16	-12.96	-1.3	-7.8
2,388.0	0.80	271.90	2,387.8	19.4	-8.6	0.06	0.05	-1.65	-3.1	-7.3
2,574.0	2.60	241.20	2,573.8	17.4	-13.6	1.05	0.97	-16.51	-3.4	-8.3
2,762.0	2.60	224.20	2,761.6	12.3	-20.3	0.41	0.00	-9.04	-2.8	-10.6
2,951.0	3.20	227.80	2,950.3	5.7	-27.2	0.33	0.32	1.90	-6.5	-11.1
3,137.0	1.30	233.50	3,136.2	0.9	-32.7	1.03	-1.02	3.06	-8.5	-11.4



Midland PVA



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Site: Gem 36 State Com
Well: #706H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #706H
TVD Reference: KB = 25 @ 3394.0usft (H&P 424)
MD Reference: KB = 25 @ 3394.0usft (H&P 424)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.14

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	NS (usft)	EW (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
3,324.0	1.10	176.00	3,323.1	-2.1	-34.3	0.62	-0.11	-30.75	6.8	-10.6	
3,511.0	0.80	119.70	3,510.1	-4.6	-33.0	0.50	-0.16	-30.11	9.1	4.7	
3,699.0	1.80	174.80	3,698.1	-8.2	-31.6	0.79	0.53	29.31	10.0	0.9	
3,887.0	2.30	202.20	3,886.0	-14.6	-32.8	0.58	0.27	14.57	9.2	-0.4	
4,076.0	2.60	190.30	4,074.8	-22.3	-35.0	0.31	0.16	-6.30	6.8	3.9	
4,262.0	3.70	186.90	4,260.5	-32.4	-36.4	0.60	0.59	-1.83	1.8	7.6	
4,450.0	4.00	175.80	4,448.1	-45.0	-36.7	0.43	0.16	-5.90	-7.5	11.2	
4,638.0	5.00	219.30	4,635.6	-57.9	-41.4	1.84	0.53	23.14	-4.1	17.9	
4,824.0	4.00	225.30	4,821.0	-68.7	-51.2	0.59	-0.54	3.23	-7.8	18.2	
5,012.0	7.40	229.20	5,008.0	-81.2	-85.0	1.82	1.81	2.07	-4.8	15.8	
5,199.0	8.70	229.80	5,193.2	-98.2	-84.9	0.70	0.70	0.32	0.3	10.5	
5,386.0	10.50	225.50	5,377.6	-119.3	-107.9	1.04	0.96	-2.30	1.6	6.2	
5,574.0	11.10	222.90	5,562.2	-144.6	-132.4	0.41	0.32	-1.38	-0.4	3.7	
5,763.0	10.20	223.80	5,748.0	-170.0	-156.4	0.48	-0.48	0.48	-1.7	1.7	
5,951.0	10.50	221.50	5,932.9	-194.8	-179.2	0.27	0.16	-1.22	-2.0	0.0	
6,136.0	10.00	219.50	6,115.0	-219.8	-200.6	0.33	-0.27	-1.08	-1.9	-0.4	
6,324.0	9.80	219.70	6,300.2	-244.8	-221.2	0.11	-0.11	0.11	-0.7	-0.3	
6,510.0	9.50	217.60	6,483.5	-269.1	-240.7	0.25	-0.16	-1.13	1.3	0.5	
6,698.0	8.40	217.70	6,669.2	-292.3	-258.6	0.59	-0.59	0.05	5.6	1.7	
6,887.0	7.70	217.80	6,856.4	-313.2	-274.8	0.37	-0.37	0.05	12.9	3.0	
7,074.0	6.50	218.50	7,041.9	-331.4	-289.0	0.64	-0.64	0.37	22.8	3.8	
7,260.0	6.60	218.40	7,226.7	-348.0	-302.2	0.05	0.05	-0.05	25.4	4.4	
7,447.0	6.50	217.10	7,412.5	-364.8	-315.3	0.10	-0.05	-0.70	15.5	5.3	
7,635.0	3.10	227.40	7,599.8	-376.8	-325.5	1.86	-1.81	5.48	1.9	4.2	
7,823.0	1.00	276.30	7,787.7	-380.0	-330.8	1.36	-1.12	26.01	-0.6	5.1	
8,012.0	1.10	254.70	7,976.6	-380.3	-334.2	0.21	0.05	-11.43	-5.8	4.0	
8,200.0	0.40	280.00	8,164.6	-380.7	-336.6	0.40	-0.37	13.46	-5.8	6.8	



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Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

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8,388.0	0.70	101.60	8,352.6	-380.8	-336.1	0.59	0.16	-94.89	5.1	-7.0	
8,576.0	0.30	126.20	8,540.6	-381.3	-334.6	0.24	-0.21	13.09	0.2	-8.0	
8,761.0	0.60	131.40	8,725.6	-382.3	-333.5	0.16	0.16	2.81	-2.0	-7.9	
8,948.0	0.70	153.90	8,912.6	-383.9	-332.2	0.15	0.05	12.03	-6.9	-6.2	
9,136.0	0.70	256.40	9,100.6	-385.2	-332.9	0.58	0.00	54.52	-5.5	9.2	
9,323.0	0.80	272.30	9,287.6	-385.4	-335.3	0.12	0.05	8.50	-5.1	10.7	
9,508.0	1.20	323.00	9,472.5	-383.9	-337.7	0.50	0.22	27.41	2.2	11.7	
9,696.0	1.40	197.90	9,660.5	-384.5	-339.6	1.23	0.11	-66.54	-12.1	-6.5	
9,883.0	0.40	160.90	9,847.5	-387.3	-340.1	0.59	-0.53	-19.79	-8.2	-13.8	
10,071.0	0.50	173.90	10,035.5	-388.7	-339.8	0.08	0.05	6.91	-12.5	-11.5	
10,260.0	0.30	228.70	10,224.5	-389.8	-340.1	0.22	-0.11	28.99	-17.6	4.3	
10,448.0	0.50	114.80	10,412.5	-390.5	-339.7	0.36	0.11	-60.59	2.6	-18.3	
10,636.0	1.70	121.50	10,600.4	-392.3	-336.6	0.64	0.64	3.56	-3.2	-18.4	
10,823.0	1.20	125.80	10,787.4	-394.9	-332.6	0.27	-0.27	2.30	-9.3	-17.9	
11,011.0	0.60	350.40	10,975.4	-395.1	-331.2	0.89	-0.32	-72.02	19.5	4.8	
11,199.0	0.90	199.70	11,163.4	-395.5	-331.9	0.77	0.16	-80.16	-20.0	4.9	
11,388.0	1.40	196.10	11,352.3	-399.1	-333.0	0.27	0.26	-1.90	-24.1	3.5	
11,576.0	0.80	184.10	11,540.3	-402.6	-333.7	0.34	-0.32	-6.38	-27.9	-2.1	
11,684.0	1.00	181.10	11,648.3	-404.3	-333.8	0.19	0.19	-2.78	-29.4	-3.5	
11,827.0	1.40	171.80	11,791.2	-407.3	-333.6	0.31	0.28	-6.50	-31.4	-8.5	
11,948.0	6.70	4.30	11,912.0	-401.7	-332.8	6.67	4.38	-138.43	29.3	1.0	
12,042.0	21.00	8.60	12,003.0	-379.5	-328.9	15.24	15.21	4.57	24.3	-3.2	
12,137.0	34.00	5.60	12,087.1	-336.0	-324.7	13.76	13.68	-3.16	14.6	-6.0	
12,230.0	45.40	359.70	12,158.6	-276.8	-322.4	12.90	12.26	-6.34	3.5	-6.7	
12,324.0	56.60	359.40	12,217.7	-203.9	-323.0	11.92	11.91	-0.32	-8.6	-5.8	
12,418.0	65.80	358.10	12,262.9	-121.6	-324.8	9.86	9.79	-1.38	-18.8	-3.8	



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Design: OH

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12,446.6	69.45	357.85	12,273.8	-95.2	-325.7	12.76	12.74	-0.89	-21.4	-2.7
FTP Crossing 12446.6' MD; 12273.8' TVD; -95.2; -325.7; 69.45										
12,513.0	77.90	357.30	12,292.4	-31.6	-328.4	12.76	12.74	-0.82	-27.4	0.4
12,607.0	80.80	358.40	12,309.8	60.7	-331.9	3.29	3.09	1.17	-28.5	4.7
12,699.0	82.30	357.80	12,323.3	151.7	-334.9	1.75	1.63	-0.65	-16.8	8.4
12,793.0	83.70	356.20	12,334.8	244.8	-339.8	2.25	1.49	-1.70	-5.1	13.8
12,887.0	89.80	350.80	12,340.1	338.0	-350.4	8.66	6.49	-5.74	0.6	25.0
12,981.0	92.50	354.40	12,338.2	431.2	-362.5	4.79	2.87	3.83	-0.9	37.6
13,073.0	90.60	0.40	12,335.7	523.0	-366.7	6.84	-2.07	6.52	-3.2	42.4
13,090.0	91.00	1.30	12,335.5	540.0	-366.4	5.79	2.35	5.29	-3.4	42.2
13,167.0	89.20	359.40	12,335.4	617.0	-366.0	3.40	-2.34	-2.47	-3.3	42.2
13,259.0	91.70	2.00	12,334.6	709.0	-364.8	3.92	2.72	2.83	-3.8	41.6
13,353.0	92.50	7.90	12,331.2	802.5	-356.7	6.33	0.85	6.28	-7.2	34.0
13,377.0	90.70	5.90	12,330.5	826.3	-353.9	11.21	-7.50	-8.33	-7.6	31.3
13,447.0	89.70	4.30	12,330.3	896.1	-347.6	2.70	-1.43	-2.29	-7.6	25.5
13,472.0	92.50	5.70	12,329.8	920.9	-345.5	12.52	11.20	5.60	-8.1	23.5
13,484.0	91.70	5.60	12,329.4	932.9	-344.3	6.72	-6.67	-0.83	-8.4	22.4
13,541.0	90.90	4.40	12,328.1	989.6	-339.3	2.53	-1.40	-2.11	-9.5	17.8
13,636.0	92.10	0.60	12,325.6	1,084.5	-335.2	4.19	1.26	-4.00	-11.7	14.2
13,662.0	91.90	0.50	12,324.7	1,110.5	-334.9	0.86	-0.77	-0.38	-12.5	14.1
13,730.0	91.00	358.40	12,323.0	1,178.5	-335.6	3.36	-1.32	-3.09	-14.0	15.2
13,822.0	87.60	359.10	12,324.1	1,270.4	-337.6	3.77	-3.70	0.76	-12.6	17.7
13,913.0	91.80	359.80	12,324.6	1,361.4	-338.5	4.68	4.62	0.77	-11.9	19.1
14,008.0	95.30	4.20	12,318.7	1,456.1	-335.2	5.91	3.68	4.63	-17.5	16.4
14,102.0	92.00	3.90	12,312.7	1,549.7	-328.5	3.53	-3.51	-0.32	-23.2	10.3
14,194.0	91.90	3.40	12,309.6	1,641.4	-322.7	0.55	-0.11	-0.54	-26.0	5.0
14,287.0	91.30	2.00	12,307.0	1,734.3	-318.3	1.64	-0.65	-1.51	-28.3	1.2



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14,381.0	90.60	358.90	12,305.4	1,828.3	-317.6	3.38	-0.74	-3.30	-29.6	1.0
14,476.0	91.60	356.20	12,303.6	1,923.2	-321.6	3.03	1.05	-2.84	-31.1	5.7
14,570.0	93.30	354.20	12,299.6	2,016.7	-329.5	2.79	1.81	-2.13	-34.9	14.1
14,664.0	90.20	356.20	12,296.7	2,110.3	-337.3	3.92	-3.30	2.13	-37.5	22.5
14,679.0	90.90	357.70	12,296.5	2,125.3	-338.1	11.03	4.67	10.00	-37.5	23.4
14,700.0	92.40	359.60	12,295.9	2,146.3	-338.6	11.52	7.14	9.05	-38.1	24.0
14,759.0	96.00	1.50	12,291.6	2,205.1	-338.1	6.90	6.10	3.22	-42.2	23.9
14,790.0	96.40	1.30	12,288.3	2,235.9	-337.3	1.44	1.29	-0.65	-45.4	23.3
14,853.0	95.40	1.00	12,281.8	2,298.6	-336.1	1.66	-1.59	-0.48	-51.7	22.4
14,898.0	95.20	3.00	12,277.6	2,343.4	-334.5	4.45	-0.44	4.44	-55.8	21.1
14,946.0	94.80	2.60	12,273.5	2,391.1	-332.2	1.18	-0.83	-0.83	-59.8	19.0
14,998.0	90.50	5.60	12,271.0	2,442.9	-328.4	10.08	-8.27	5.77	-62.1	15.5
15,040.0	89.40	8.00	12,271.1	2,484.6	-323.5	6.29	-2.62	5.71	-61.9	10.7
15,134.0	88.80	9.30	12,272.6	2,577.5	-309.3	1.52	-0.64	1.38	-59.4	-2.8
15,227.0	93.00	5.80	12,271.1	2,669.7	-297.1	5.88	4.52	-3.76	-59.7	-14.3
15,321.0	88.20	3.50	12,270.1	2,763.3	-289.5	5.66	-5.11	-2.45	-59.6	-21.3
15,414.0	87.90	359.40	12,273.3	2,856.2	-287.2	4.42	-0.32	-4.41	-55.3	-23.1
15,509.0	94.90	357.30	12,271.0	2,951.1	-289.9	7.69	7.37	-2.21	-56.5	-19.7
15,602.0	92.50	358.90	12,265.0	3,043.8	-293.0	3.10	-2.58	1.72	-61.4	-16.1
15,694.0	91.00	356.50	12,262.2	3,135.7	-296.6	3.08	-1.63	-2.61	-63.2	-11.7
15,788.0	91.60	357.00	12,260.0	3,229.5	-302.0	0.83	0.64	0.53	-64.2	-5.8
15,883.0	91.00	359.90	12,257.9	3,324.5	-304.5	3.12	-0.63	3.05	-65.2	-2.7
15,977.0	92.40	359.30	12,255.1	3,418.4	-305.2	1.62	1.49	-0.64	-66.6	-1.4
15,997.0	92.30	0.60	12,254.3	3,438.4	-305.2	6.51	-0.50	6.50	-67.1	-1.3
16,071.0	89.00	359.30	12,253.4	3,512.4	-305.3	4.79	-4.46	-1.76	-66.8	-0.8
16,164.0	91.20	0.60	12,253.3	3,605.4	-305.4	2.75	2.37	1.40	-65.5	-0.1
16,258.0	88.40	2.20	12,253.6	3,699.3	-303.1	3.43	-2.98	1.70	-63.8	-1.8



Midland PVA



Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Gem 36 State Com
Well: #706H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #706H
TVD Reference: KB = 25 @ 3394.0usft (H&P 424)
MD Reference: KB = 25 @ 3394.0usft (H&P 424)
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)
16,352.0	92.70	2.20	12,252.7	3,793.2	-299.5	4.57	4.57	0.00	-63.2	-4.8
16,446.0	91.80	1.90	12,249.0	3,887.1	-296.1	1.01	-0.96	-0.32	-65.5	-7.6
16,540.0	93.00	4.00	12,245.1	3,980.9	-291.3	2.57	1.28	2.23	-68.0	-11.9
16,634.0	91.70	2.10	12,241.2	4,074.7	-286.3	2.45	-1.38	-2.02	-70.1	-16.2
16,653.0	91.40	1.80	12,240.7	4,093.7	-285.6	2.23	-1.58	-1.58	-70.2	-16.8
16,728.0	91.70	2.10	12,238.7	4,168.6	-283.1	0.57	0.40	0.40	-70.9	-18.8
16,822.0	89.80	0.80	12,237.4	4,262.5	-280.7	2.45	-2.02	-1.38	-70.3	-20.6
16,916.0	94.30	3.30	12,234.1	4,356.4	-277.3	5.48	4.79	2.66	-71.9	-23.4
17,011.0	90.50	2.50	12,230.1	4,451.1	-272.5	4.09	-4.00	-0.84	-74.1	-27.6
17,082.3	91.57	4.90	12,228.8	4,522.3	-267.9	3.68	1.50	3.36	-74.0	-31.7
LTP Crossing 17082.3' MD; 12228.8' TVD; 4522.3'; -267.9'; 91.57										
17,118.0	92.10	6.10	12,227.7	4,557.8	-264.5	3.68	1.49	3.36	-74.5	-34.9
Last MWD Survey (MD = 17118.0)										
17,180.0	92.10	6.10	12,225.4	4,619.4	-257.9	0.00	0.00	0.00	-75.6	-41.1
Projection to Bit (MD = 17180.0)										

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N-S (usft)	+E-W (usft)	
12,446.6	12,273.8	-95.2	-325.7	FTP Crossing 12446.6' MD; 12273.8' TVD; -95.2'; -325.7'; 89.45
17,082.3	12,228.8	4,522.3	-267.9	LTP Crossing 17082.3' MD; 12228.8' TVD; 4522.3'; -267.9'; 91.57
17,118.0	12,227.7	4,557.8	-264.5	Last MWD Survey (MD = 17118.0)
17,180.0	12,225.4	4,619.4	-257.9	Projection to Bit (MD = 17180.0)

Checked By: _____ Approved By: _____ Date: _____



Lea County, NM (NAD 83 NME)

Gem 36 State Com #706H

H&P 424

Plan #3

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: #706H

KB = 25 @ 3394.0usft (H&P 424)
Northing 383686.00 Easting 759177.00
Latitude 32° 4' 51.312 N Longitude 103° 37' 47.855 W

SECTION DETAILS

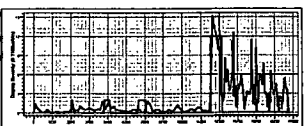
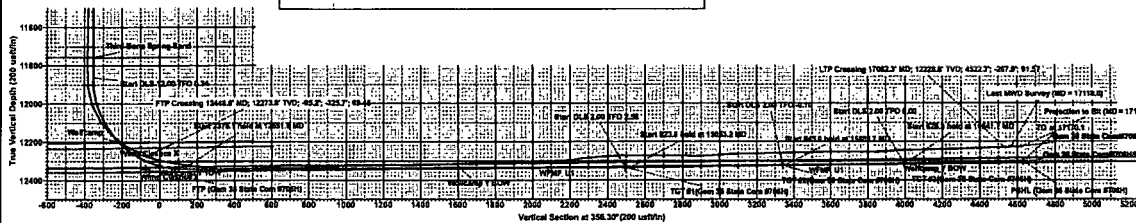
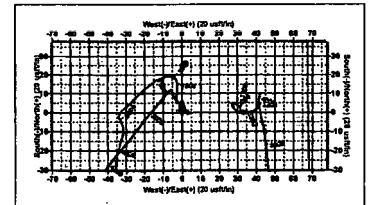
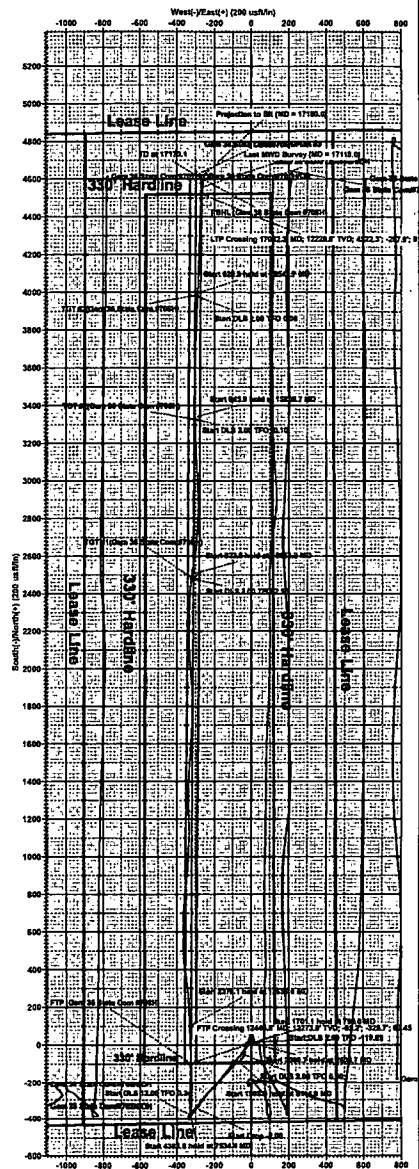
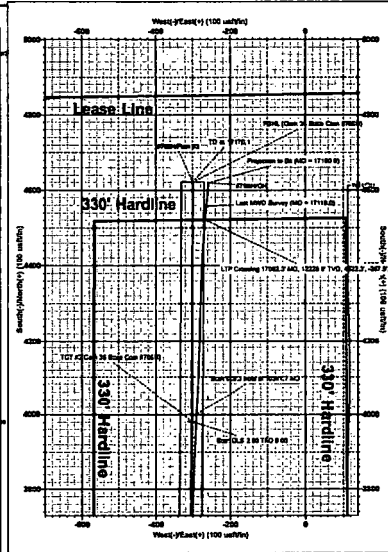
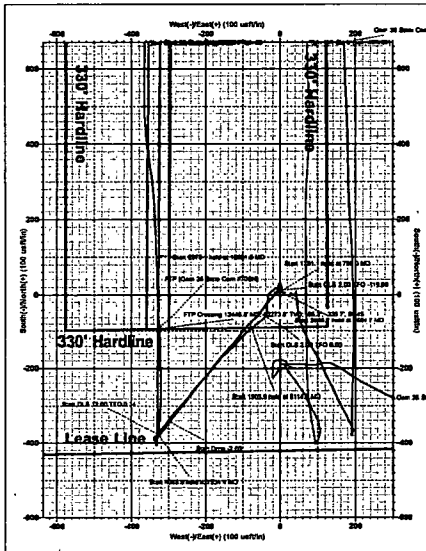
Sec	MD	Inc	Ad	TVD	+N/S	+E/W	Dlog	TFace	VSeal	Target	Annotation
1	789.0	0.28	334.80	789.9	6.9	-3.4	0.00	0.00	7.1		
2	2500.1	0.20	334.80	2500.0	12.3	-5.9	0.00	0.00	12.7		
3	2604.7	2.00	219.88	2604.6	11.1	-7.2	2.00	-119.89	11.5		
4	4701.4	2.00	219.88	4700.0	-45.1	-64.1	0.00	0.00	-41.5		
5	5114.9	10.27	219.88	5116.8	71.0	-82.4	2.00	0.00	-73.5		
6	7020.8	10.27	219.88	6986.2	-338.8	-300.3	0.00	0.00	-319.7		
7	7534.4	0.00	0.00	7497.0	-375.0	-329.7	2.00	180.00	-352.9		
8	11900.2	0.00	0.00	11882.8	-375.0	-329.7	0.00	0.00	-352.9		
9	12651.6	90.18	0.34	12240.3	-103.8	-329.8	12.00	6.34	124.8		
10	15027.8	90.18	0.34	12333.0	-2480.0	-312.6	0.00	0.00	2495.0		
11	15053.2	90.68	0.37	12332.8	-2505.4	-312.5	2.00	2.56	2520.3		
12	15877.0	90.68	0.37	12332.0	-3329.1	-307.2	0.00	0.00	3342.0		
13	15885.7	90.88	0.38	12322.9	-3338.8	-307.2	2.00	-4.10	3351.7		
14	16531.6	90.88	0.38	12313.0	-3983.7	-303.1	0.00	0.00	3995.0		
15	16541.7	91.08	0.36	12312.8	-3993.8	-303.0	2.00	0.00	4005.0		
16	17170.1	91.08	0.38	12301.0	-4622.0	-299.0	0.00	0.00	4631.7		

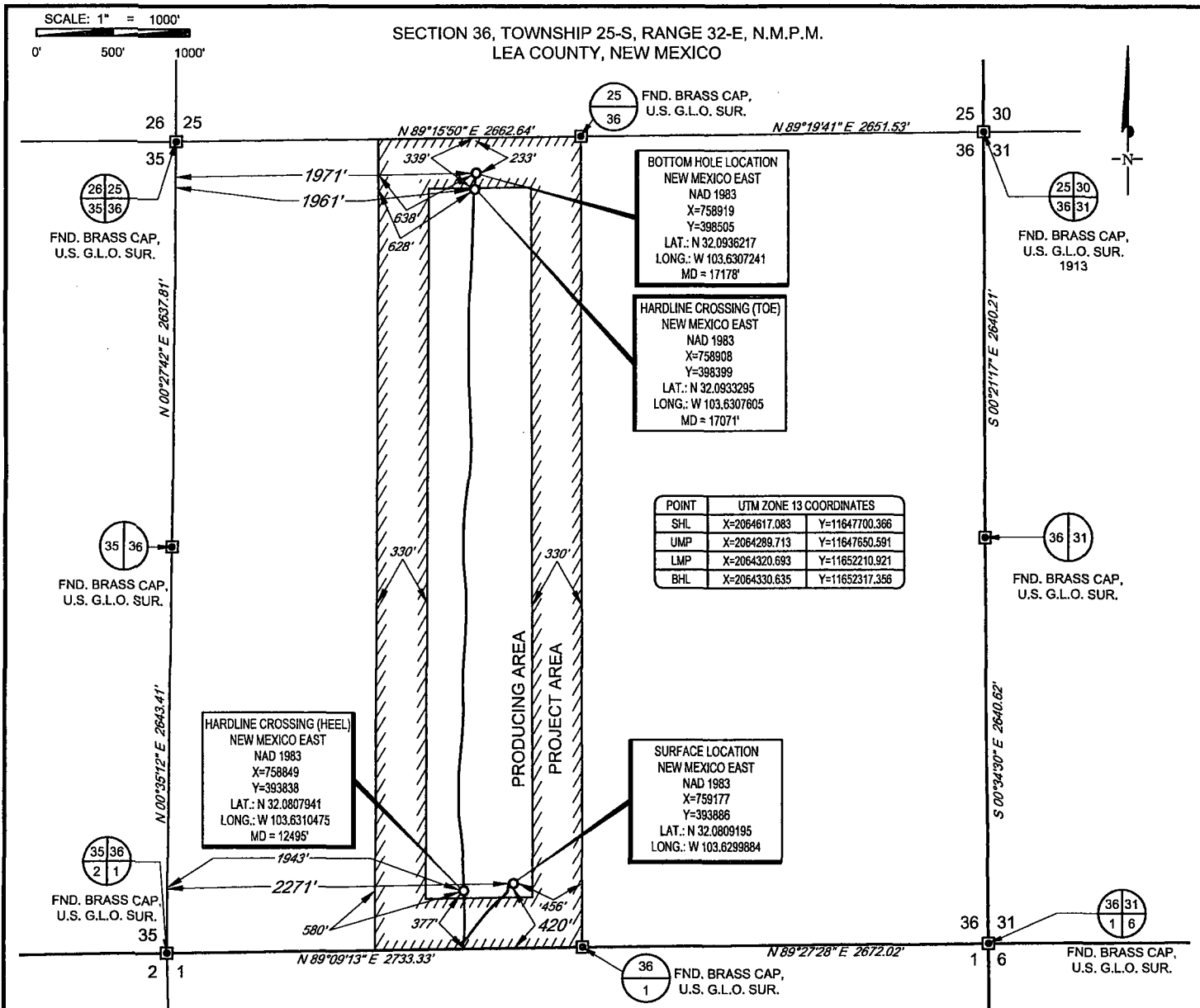
CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/S	+E/W	Northing	Easting
TGT #1(Gem 36 State Com #706H)	12333.0	-2480.0	-312.6	386368.00	758854.36
TGT #2(Gem 36 State Com #706H)	12323.0	-3329.1	-307.2	397215.16	758669.77
TGT #3(Gem 36 State Com #706H)	12313.0	-3983.7	-303.1	397868.70	758873.94
PBHL (Gem 36 State Com #706H)	12301.0	-4622.0	-299.0	388508.00	758878.00
FTP (Gem 36 State Com #706H)	12341.0	-45.0	-328.0	393791.00	758849.00



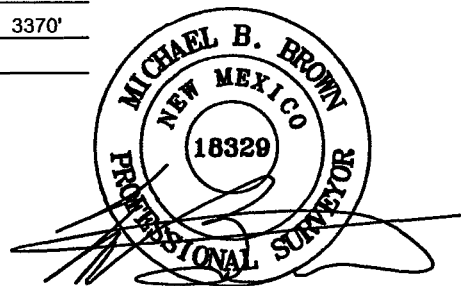


eg resources, Inc.



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Michael Blake Brown, P.S. No. 18329
JUNE 5, 2018

GEM 36 STATE COM #706H AS-COMPLETED	REVISION:		NOTES:
	INT	DATE	
DATE: 06/05/2018			1. ORIGINAL DOCUMENT SIZE: 8.5" X 11" 2. ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREIN ARE GRID BASED UPON THE NEW MEXICO COORDINATE SYSTEM OF 1983, EAST ZONE, U.S. SURVEY FEET. 3. THIS WELL LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY EOG RESOURCES, INC. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.
FILE:AD_GEM_36_STATE_COM_706H			
DRAWN BY: A.V.F.			
SHEET: 1 OF 1			