



HOBBS OCD
JUN 21 2018
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EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Gem 36 State Com

#705H

OH

Survey: Integrity MWD

Midland PVA

16 April, 2018





Midland PVA



Company:	EOG Resources - Midland			Local Co-ordinate Reference:	Well #705H
Project:	Lea County, NM (NAD 83 NME)			TVD Reference:	KB = 25 @ 3394.0usft
Site:	Gem 36 State Com			MD Reference:	KB = 25 @ 3394.0usft
Well:	#705H			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	Latitude:	32° 4' 49.331 N
From:	Map	Easting:	759,213.00 usft	Longitude:	103° 37' 47.552 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.37 °

Well	#705H					
Well Position	+N/-S	0.0 usft	Northing:	393,886.00 usft	Latitude:	32° 4' 51.310 N
	+E/-W	0.0 usft	Easting:	759,210.00 usft	Longitude:	103° 37' 47.552 W
Position Uncertainty	0.0 usft		Wellhead Elevation:	usft	Ground Level:	3,369.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	2/5/2018	6.90	59.91	47,781.76768316

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	2.45	

Survey Program	Date	4/16/2018		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
94.0	17,165.0	Integrity MWD (OH)	MWD	OWSG MWD - Standard



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Well:	#705H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	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)	
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0
94.0	0.20	52.60	94.0	0.1	0.1	0.21	0.21	0.00	0.0	0.0	0.0
211.0	0.40	244.50	211.0	0.0	-0.1	0.51	0.17	-143.68	0.0	0.0	0.0
336.0	0.40	218.80	336.0	-0.5	-0.7	0.14	0.00	-20.56	0.0	0.0	0.0
462.0	0.00	161.40	462.0	-0.8	-1.0	0.32	-0.32	0.00	0.0	0.0	0.0
589.0	0.40	340.80	589.0	-0.4	-1.2	0.31	0.31	0.00	0.0	0.0	0.0
716.0	0.10	338.60	716.0	0.1	-1.4	0.24	-0.24	-1.73	0.0	0.0	0.0
798.0	0.30	345.20	798.0	0.4	-1.4	0.25	0.24	8.05	0.0	0.0	0.0
894.0	0.40	23.20	894.0	0.9	-1.4	0.26	0.10	39.58	-0.5	0.1	0.1
1,080.0	0.50	332.80	1,080.0	2.3	-1.5	0.21	0.05	-27.10	-1.6	-0.8	-0.8
1,267.0	0.40	331.00	1,267.0	3.6	-2.2	0.05	-0.05	-0.96	-3.1	-0.9	-0.9
1,453.0	0.50	294.00	1,453.0	4.5	-3.2	0.16	0.05	-19.89	-3.3	-3.0	-3.0
1,640.0	0.50	259.80	1,640.0	4.6	-4.8	0.16	0.00	-18.29	-2.5	-4.7	-4.7
1,828.0	0.40	254.80	1,828.0	4.3	-6.2	0.06	-0.05	-2.66	-3.6	-5.0	-5.0
2,014.0	0.60	76.10	2,014.0	4.4	-5.9	0.54	0.11	-96.08	3.4	4.9	4.9
2,201.0	0.40	65.60	2,200.9	4.9	-4.4	0.12	-0.11	-5.61	0.8	5.3	5.3
2,388.0	0.10	259.00	2,387.9	5.1	-3.9	0.27	-0.16	-89.09	-1.5	-5.1	-5.1
2,574.0	0.30	277.20	2,573.9	5.2	-4.6	0.11	0.11	9.78	-3.7	-4.3	-4.3
2,762.0	0.60	251.70	2,761.9	4.9	-6.0	0.19	0.16	-13.56	-2.9	-5.7	-5.7
2,951.0	1.00	139.80	2,950.9	3.3	-5.9	0.71	0.21	-59.21	5.1	-1.5	-1.5
3,137.0	1.00	137.90	3,136.9	0.9	-3.7	0.02	0.00	-1.02	1.9	-1.4	-1.4
3,324.0	1.50	91.20	3,323.9	-0.4	-0.2	0.56	0.27	-24.97	-1.3	-0.8	-0.8
3,511.0	2.00	67.70	3,510.8	0.8	5.3	0.46	0.27	-12.57	-6.4	-2.2	-2.2
3,699.0	1.10	356.80	3,698.7	3.9	8.2	1.03	-0.48	-37.71	-2.9	-9.8	-9.8
3,887.0	0.80	5.30	3,886.7	7.0	8.2	0.18	-0.16	4.52	-7.4	-9.0	-9.0
4,076.0	0.80	26.20	4,075.7	9.5	8.9	0.15	0.00	11.06	-12.7	-5.3	-5.3
4,262.0	0.80	212.20	4,261.7	9.5	8.8	0.86	0.00	-93.55	13.2	-3.8	-3.8



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Well:	#705H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey											
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4,450.0	1.70	177.00	4,449.6	5.7	8.3	0.61	0.48	-18.72	4.7	10.0	
4,668.0	2.20	165.40	4,667.5	-1.6	9.5	0.29	0.23	-5.32	-4.7	10.1	
4,815.0	1.90	167.80	4,814.4	-6.7	10.7	0.21	-0.20	1.63	-7.3	9.9	
5,003.0	4.30	173.20	5,002.1	-16.8	12.2	1.28	1.28	2.87	-3.4	6.8	
5,191.0	8.10	175.60	5,189.0	-37.0	14.1	2.03	2.02	1.28	1.1	-1.4	
5,378.0	11.50	164.40	5,373.2	-68.1	20.1	2.08	1.82	-5.99	2.1	-8.4	
5,566.0	11.80	158.40	5,557.4	-104.0	32.2	0.66	0.16	-3.19	-2.2	-11.5	
5,755.0	10.20	150.70	5,742.9	-136.6	47.5	1.15	-0.85	-4.07	-3.8	-11.1	
5,943.0	9.40	148.50	5,928.2	-164.2	63.7	0.47	-0.43	-1.17	-2.8	-7.6	
6,131.0	9.00	156.30	6,113.7	-190.8	77.6	0.70	-0.21	4.15	-0.9	-5.1	
6,320.0	10.40	155.40	6,300.0	-219.8	90.7	0.75	0.74	-0.48	0.3	-5.0	
6,507.0	11.00	154.60	6,483.8	-251.3	105.3	0.33	0.32	-0.43	-1.7	-4.3	
6,695.0	10.30	153.90	6,668.5	-282.6	120.4	0.38	-0.37	-0.37	-3.7	-3.3	
6,884.0	9.80	152.80	6,854.6	-312.0	135.2	0.28	-0.26	-0.58	-3.6	-1.8	
7,072.0	6.90	153.60	7,040.6	-336.4	147.6	1.54	-1.54	0.43	0.5	-0.2	
7,260.0	4.80	150.90	7,227.6	-353.4	156.4	1.13	-1.12	-1.44	2.2	1.2	
7,448.0	0.10	183.40	7,415.4	-360.4	160.2	2.51	-2.50	17.29	3.4	0.1	
7,636.0	0.30	255.50	7,603.4	-360.7	159.7	0.15	0.11	38.35	0.6	-3.3	
7,825.0	0.40	230.10	7,792.4	-361.3	158.7	0.10	0.05	-13.44	0.8	-3.0	
8,014.0	0.40	217.90	7,981.4	-362.2	157.8	0.04	0.00	-6.46	0.1	-2.9	
8,201.0	0.70	128.80	8,168.4	-363.4	158.3	0.43	0.16	-47.65	1.7	-0.6	
8,390.0	1.10	154.70	8,357.4	-365.8	160.0	0.30	0.21	13.70	-1.6	-0.7	
8,577.0	1.00	150.10	8,544.3	-368.8	161.6	0.07	-0.05	-2.46	-4.9	-1.0	
8,765.0	0.80	354.40	8,732.3	-368.9	162.3	0.94	-0.11	-82.82	5.1	-1.8	
8,952.0	0.30	24.00	8,919.3	-367.2	162.3	0.30	-0.27	15.83	1.9	-3.4	
9,140.0	0.50	340.50	9,107.3	-366.0	162.3	0.19	0.11	-23.14	2.6	-1.5	
9,329.0	0.60	349.40	9,296.3	-364.2	161.8	0.07	0.05	4.71	0.5	-1.7	



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MD Reference: KB = 25 @ 3394.0usft
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)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
9,517.0	0.40	327.70	9,484.3	-362.7	161.3	0.14	-0.11	-11.54	-0.5	-1.8	
9,704.0	0.40	284.80	9,671.3	-362.0	160.3	0.16	0.00	-22.94	-0.2	-2.1	
9,891.0	0.30	281.60	9,858.3	-361.7	159.2	0.05	-0.05	-1.71	-1.3	-2.1	
10,077.0	0.80	270.80	10,044.3	-361.6	157.4	0.27	0.27	-5.81	-2.6	-2.4	
10,264.0	0.60	272.20	10,231.3	-361.5	155.1	0.11	-0.11	0.75	-5.0	-2.3	
10,452.0	0.40	75.60	10,419.3	-361.3	154.8	0.53	-0.11	86.92	4.4	3.9	
10,639.0	2.10	125.40	10,606.2	-363.2	158.2	1.00	0.91	26.63	2.0	-0.3	
10,828.0	0.90	257.20	10,795.2	-365.5	159.6	1.47	-0.63	69.74	-0.7	1.3	
11,015.0	1.10	254.00	10,982.2	-366.3	156.4	0.11	0.11	-1.71	-4.1	1.2	
11,204.0	1.80	161.90	11,171.1	-369.6	155.6	1.13	0.37	-48.73	-3.9	-5.9	
11,390.0	1.40	207.60	11,357.0	-374.4	155.5	0.70	-0.22	24.57	-11.3	0.8	
11,579.0	0.30	139.20	11,546.0	-376.9	154.7	0.70	-0.58	-36.19	-6.2	-12.4	
11,769.0	1.30	131.40	11,736.0	-378.7	156.7	0.53	0.53	-4.11	-7.1	-13.2	
11,863.0	1.20	129.30	11,830.0	-380.0	158.2	0.12	-0.11	-2.23	-8.7	-13.5	
11,957.0	10.50	1.40	11,923.5	-372.0	159.2	12.00	9.89	-136.06	12.8	0.3	
12,051.0	22.30	355.60	12,013.5	-345.6	158.0	12.66	12.55	-6.17	8.2	1.5	
12,145.0	35.30	1.80	12,085.7	-300.5	157.5	14.17	13.83	6.60	1.5	-0.2	
12,239.0	50.40	2.20	12,164.4	-236.8	159.8	16.07	16.06	0.43	-10.0	-4.3	
12,333.0	59.60	1.10	12,218.3	-159.9	161.9	9.83	9.79	-1.17	-22.6	-9.4	
12,413.2	66.51	0.50	12,254.6	-88.4	162.9	8.64	8.62	-0.75	-29.5	-13.4	
FTP Crossing 12413.2' MD; 12254.6' TVD; -88.4°; 162.9°; 66.51											
12,427.0	67.70	0.40	12,260.0	-75.7	163.0	8.64	8.62	-0.70	-30.2	-14.0	
12,474.0	71.60	358.10	12,276.3	-31.7	162.4	9.48	8.30	-4.89	-31.3	-15.7	
12,521.0	73.60	357.80	12,290.4	13.2	160.8	4.30	4.26	-0.64	-30.1	-16.0	
12,568.0	74.10	358.60	12,303.5	58.3	159.4	1.95	1.06	1.70	-25.1	-16.4	
12,614.0	76.30	357.80	12,315.2	102.7	158.0	5.07	4.78	-1.74	-16.4	-16.9	
12,661.0	81.10	356.50	12,324.4	148.7	155.7	10.57	10.21	-2.77	-7.3	-16.1	



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12,708.0	85.60	355.60	12,329.9	195.3	152.5	9.76	9.57	-1.91	-1.9	-13.2
12,804.0	92.00	359.10	12,331.9	291.1	148.1	7.60	6.67	3.65	0.3	-8.1
12,897.0	89.20	358.40	12,330.9	384.1	146.0	3.10	-3.01	-0.75	-0.5	-5.3
12,992.0	91.30	358.40	12,330.5	479.0	143.4	2.21	2.21	0.00	-0.7	-1.9
13,086.0	92.90	357.20	12,327.0	572.9	139.8	2.13	1.70	-1.28	-3.9	2.5
13,181.0	92.90	359.10	12,322.2	667.7	136.7	2.00	0.00	2.00	-8.5	6.3
13,275.0	92.10	359.20	12,318.1	761.6	135.3	0.86	-0.85	0.11	-12.4	8.5
13,368.0	91.40	0.20	12,315.3	854.6	134.8	1.31	-0.75	1.08	-15.0	9.7
13,461.0	92.40	2.90	12,312.2	947.5	137.4	3.09	1.08	2.90	-17.9	7.9
13,554.0	89.60	6.40	12,310.6	1,040.1	144.9	4.82	-3.01	3.76	-19.0	1.0
13,648.0	90.70	6.60	12,310.3	1,133.5	155.5	1.19	1.17	0.21	-17.8	-9.0
13,743.0	85.20	6.20	12,313.7	1,227.8	166.1	5.80	-5.79	-0.42	-13.1	-18.9
13,837.0	86.80	1.10	12,320.3	1,321.4	172.1	5.67	1.70	-5.43	-5.0	-24.4
13,932.0	91.40	1.10	12,321.8	1,416.3	173.9	4.84	4.84	0.00	-2.0	-25.6
14,026.0	87.00	358.10	12,323.1	1,510.3	173.2	5.66	-4.68	-3.19	0.7	-24.4
14,119.0	89.30	357.70	12,326.1	1,603.2	169.8	2.51	2.47	-0.43	5.1	-20.4
14,212.0	90.00	358.00	12,326.7	1,696.1	166.3	0.82	0.75	0.32	7.1	-16.4
14,306.0	93.50	1.10	12,323.8	1,790.0	165.6	4.97	3.72	3.30	5.7	-15.1
14,401.0	95.00	0.60	12,316.7	1,884.8	167.0	1.66	1.58	-0.53	0.1	-15.9
14,494.0	93.50	359.20	12,309.9	1,977.5	166.9	2.20	-1.61	-1.51	-5.4	-15.1
14,588.0	91.40	358.90	12,305.8	2,071.4	165.3	2.26	-2.23	-0.32	-7.9	-13.0
14,682.0	90.20	358.50	12,304.5	2,165.4	163.2	1.35	-1.28	-0.43	-7.7	-10.3
14,776.0	91.50	357.80	12,303.1	2,259.3	160.1	1.57	1.38	-0.74	-7.5	-6.7
14,870.0	92.80	356.60	12,299.6	2,353.1	155.5	1.88	1.38	-1.28	-9.4	-1.5
14,965.0	88.90	355.00	12,298.2	2,447.8	148.6	4.44	-4.11	-1.68	-9.3	6.0
15,059.0	95.20	357.10	12,294.8	2,541.5	142.1	7.06	6.70	2.23	-11.0	13.1
15,153.0	93.80	357.80	12,287.5	2,635.1	137.9	1.66	-1.49	0.74	-16.6	17.8



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15,246.0	91.30	0.60	12,283.3	2,728.0	136.6	4.03	-2.69	3.01	-18.2	19.7
15,339.0	90.40	2.80	12,281.9	2,820.9	139.4	2.56	-0.97	2.37	-17.0	17.5
15,433.0	91.40	2.80	12,280.5	2,914.8	144.0	1.06	1.06	0.00	-15.9	13.4
15,526.0	93.10	3.70	12,276.8	3,007.6	149.3	2.07	1.83	0.97	-17.0	8.7
15,620.0	93.20	4.40	12,271.6	3,101.2	155.9	0.75	0.11	0.74	-19.6	2.7
15,714.0	91.30	3.80	12,268.0	3,194.9	162.6	2.12	-2.02	-0.64	-20.7	-3.5
15,808.0	91.60	1.20	12,265.6	3,288.7	166.7	2.78	0.32	-2.77	-20.4	-7.0
15,902.0	93.00	2.70	12,261.8	3,382.6	169.9	2.18	1.49	1.60	-21.6	-9.6
15,997.0	91.60	0.20	12,258.0	3,477.5	172.3	3.01	-1.47	-2.63	-22.8	-11.4
16,090.0	86.10	356.80	12,259.9	3,570.4	169.9	6.95	-5.91	-3.66	-18.4	-8.4
16,184.0	90.60	357.90	12,262.6	3,664.2	165.5	4.93	4.79	1.17	-13.1	-3.4
16,279.0	92.50	356.30	12,260.0	3,759.1	162.4	2.04	2.00	0.42	-13.0	0.3
16,372.0	91.90	358.50	12,256.4	3,852.0	159.8	0.68	-0.65	0.22	-13.7	3.4
16,466.0	91.80	357.50	12,253.4	3,945.9	156.5	1.07	-0.11	-1.06	-13.6	7.3
16,560.0	91.60	0.60	12,250.6	4,039.9	155.0	3.30	-0.21	3.30	-13.2	9.4
16,654.0	91.80	0.80	12,247.8	4,133.8	156.1	0.30	0.21	0.21	-12.8	8.9
16,748.0	92.70	0.30	12,244.1	4,227.7	157.0	1.10	0.96	-0.53	-13.2	8.5
16,841.0	91.80	2.70	12,240.5	4,320.6	159.4	2.75	-0.97	2.58	-13.7	6.6
16,933.0	90.80	3.30	12,238.4	4,412.5	164.2	1.27	-1.09	0.65	-12.4	2.4
17,028.0	91.20	4.20	12,236.7	4,507.3	170.5	1.04	0.42	0.95	-10.7	-3.2
17,049.4	91.54	4.54	12,236.2	4,528.6	172.1	2.26	1.60	1.59	-10.4	-4.7
LTP Crossing 17049.4' MD; 12236.2' TVD; 4528.6'; 172.1'; 91.54										
17,122.0	92.70	5.70	12,233.5	4,600.9	178.6	2.25	1.59	1.60	-10.5	-10.8
Last MWD Survey (MD = 17122.0)										
17,165.0	94.70	6.50	12,230.8	4,643.5	183.1	5.01	4.65	1.86	-15.3	-18.8
Projection to Bit (MD = 17165.0)										



Midland PVA



Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #705H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3394.0usft
Site:	Gem 36 State Com	MD Reference:	KB = 25 @ 3394.0usft
Well:	#705H	North Reference:	Grid
Wellbore:	:OH	Survey Calculation Method:	Minimum Curvature
Design:	:OH	Database:	EDM 5000.14

Survey Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
12,413.2	12,254.6	-88.4	162.9	FTP Crossing 12413.2' MD; 12254.6' TVD; -88.4'; 162.9'; 66.51
17,049.4	12,236.2	4,528.6	172.1	LTP Crossing 17049.4' MD; 12236.2' TVD; 4528.6'; 172.1'; 91.54
17,122.0	12,233.5	4,600.9	178.6	Last MWD Survey (MD = 17122.0)
17,165.0	12,230.8	4,643.5	183.1	Projection to Bit (MD = 17165.0)

Checked By: _____ Approved By: _____ Date: _____



Lea County, NM (NAD 83 NME)

Gem 36 State Com #705H

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: #705H

KB = 25 @ 3394.0usft
Northing 33388.00 Easting 799210.00 Latitude 32° 4' 51.310 N Longitude 103° 37' 47.572 W



Adjustments to Grid North
True North: 0.0°
Magnetic North: 4.63°
Grid North: 4.63°
Magnetic Declination: 4.63°
Grid Declination: 0.0°
Magnetic Declination: 4.63°
Grid Declination: 0.0°
Magnetic Declination: 4.63°
Grid Declination: 0.0°

To convert a Magnetic Direction to a Grid Direction, Add 6.53°
To convert a Magnetic Direction to a True Direction, Add 8.90° East
To convert a True Direction to a Grid Direction, Subtract 0.37°

SECTION DETAILS

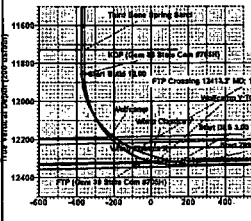
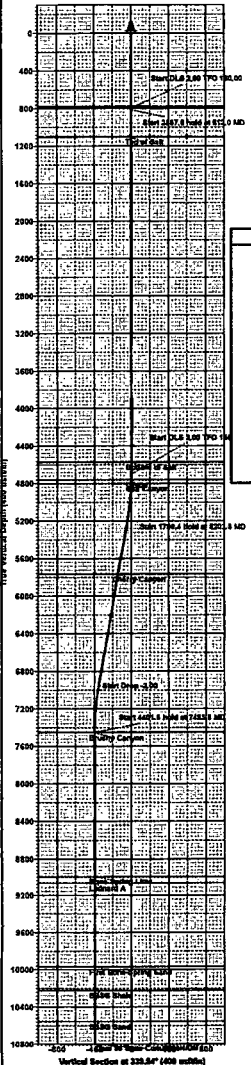
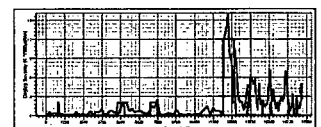
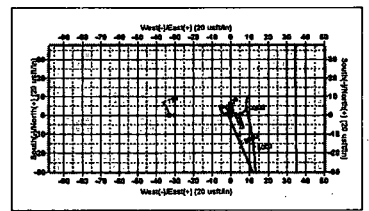
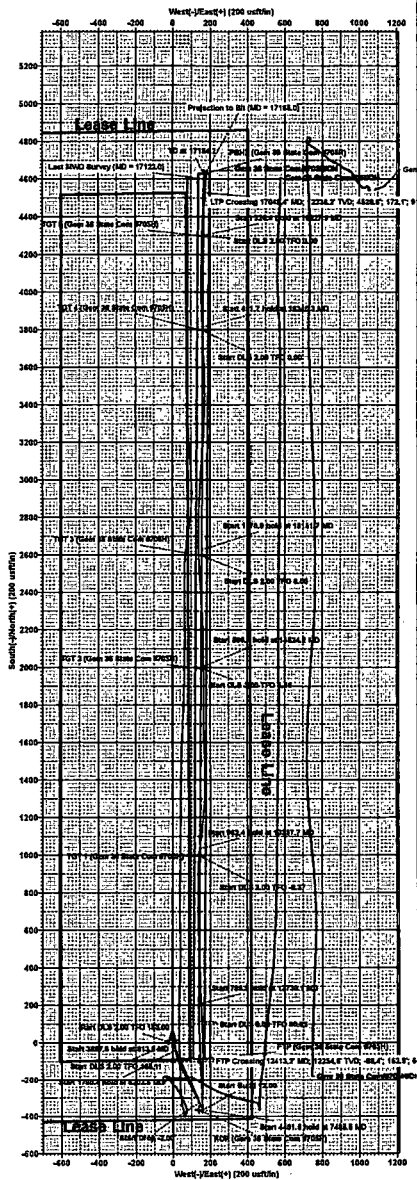
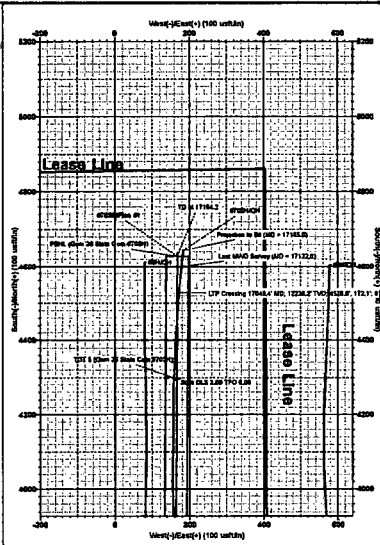
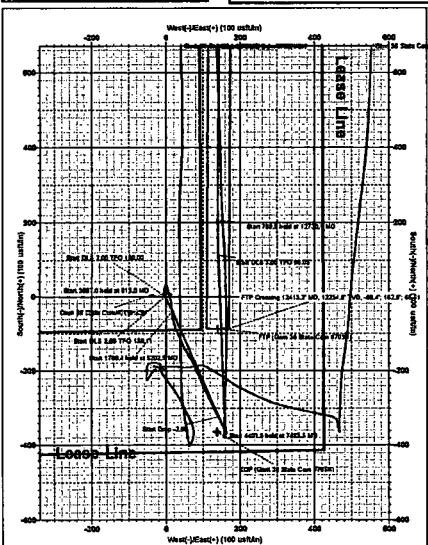
Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VSeal	Target	Annotation
1	788.0	0.30	345.20	788.0	0.4	-1.4	0.00	0.00	0.3		
2	813.0	0.00	0.00	813.0	0.4	-1.4	2.00	180.00	0.4		
3	4700.0	0.00	0.00	4700.0	0.4	-1.4	0.00	0.00	0.4		
4	5202.5	10.05	156.11	5202.0	-39.9	16.4	2.00	156.11	-39.1		
5	6982.9	10.05	156.11	6983.0	-323.9	142.2	0.00	0.00	-319.6		
6	7485.0	0.00	0.00	7485.0	-364.1	160.0	2.00	180.00	-359.0		
7	11887.0	0.00	0.00	11887.0	-364.1	160.0	0.00	0.00	-359.0		
8	12638.1	90.13	357.70	12232.0	114.1	140.8	12.00	357.70	111.1		
9	12730.1	90.13	0.46	12331.8	206.1	139.3	3.00	90.05	211.0		
10	13520.0	90.13	0.46	12330.0	896.0	145.7	0.00	0.00	1000.6		TGT 1 (Gem 36 State Com #705H)
11	13567.7	90.97	0.35	12329.7	1033.7	145.9	2.00	-8.37	1033.3		TGT 2 (Gem 36 State Com #705H)
12	14520.1	90.87	0.35	12315.0	1994.0	151.8	0.00	0.00	2000.2		TGT 3 (Gem 36 State Com #705H)
13	14524.2	90.85	0.35	12314.9	2000.1	151.8	2.00	1.46	2004.3		TGT 4 (Gem 36 State Com #705H)
14	16120.3	90.85	0.35	12305.0	2596.1	155.5	0.00	0.00	2600.0		
15	15151.7	91.58	0.35	12304.3	2627.5	155.7	2.00	0.00	2631.4		
16	16321.7	91.58	0.35	12272.0	3797.0	162.8	0.00	0.00	3806.4		
17	16340.3	91.58	0.35	12271.4	3818.4	163.0	2.00	0.00	3819.0		
18	16822.0	91.85	0.35	12255.0	4297.0	166.0	0.00	0.00	4300.2		TGT 5 (Gem 36 State Com #705H)
19	16827.8	92.07	0.35	12254.8	4302.8	166.0	2.00	0.00	4306.0		
20	17154.2	92.07	0.35	12343.0	4623.0	168.0	0.00	0.00	4632.0		PBHL (Gem 36 State Com #705H)

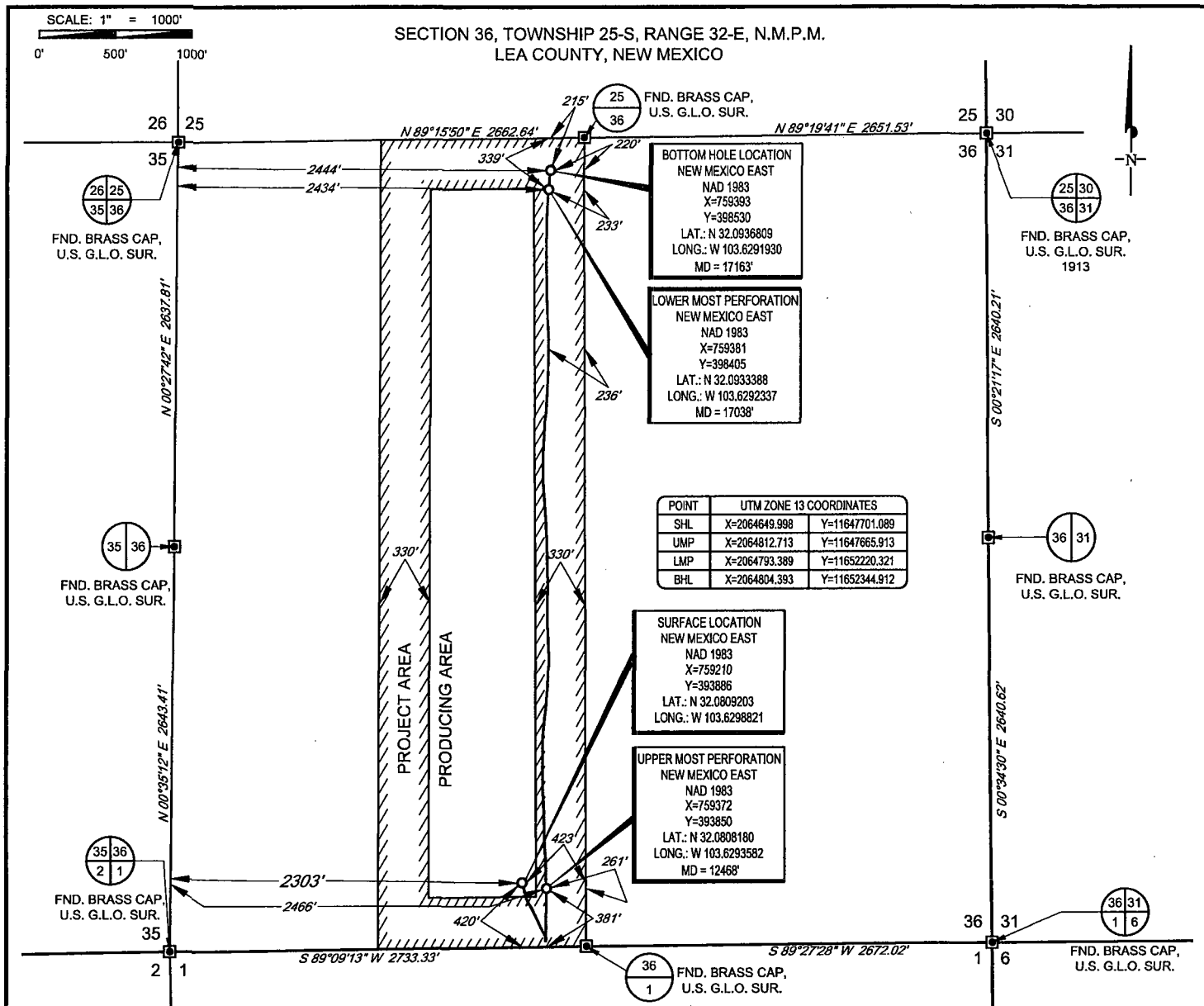
WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N-S	+E-W	Northing	Easting
TGT 1 (Gem 36 State Com #705H)	12330.0	896.0	145.7	394882.00	799355.66
TGT 2 (Gem 36 State Com #705H)	12316.0	1033.7	151.8	395092.00	799381.81
TGT 3 (Gem 36 State Com #705H)	12305.0	2596.1	155.5	395482.10	799385.50
TGT 4 (Gem 36 State Com #705H)	12272.0	3797.0	162.8	397683.00	799372.28
TGT 5 (Gem 36 State Com #705H)	12255.0	4297.0	166.0	399183.00	799375.96
PBHL (Gem 36 State Com #705H)	12343.0	4623.0	168.0	398515.00	799378.00
FTP (Gem 36 State Com #705H)	12332.0	-47.0	139.0	393788.00	799348.00
KDP (Gem 36 State Com #705H)	11854.5	-364.1	137.3	393521.94	799347.20

CASING DETAILS

No casing data is available





LEASE NAME & WELL NO.: GEM 36 STATE COM #705H

SECTION 36 TWP. 25-S RGE 32-E SURVEY N.M.P.M.

COUNTY LEA STATE NM ELEVATION 3370'

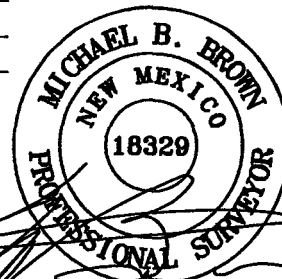
DESCRIPTION 420' FSL & 2303' FWL



TOPOGRAPHIC
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EOG resources, Inc.



Michael Blake Brown, P.S. No. 18329
JUNE 6, 2018

GEM 36 STATE COM #705H AS-COMPLETED DATE: 06/05/2018 FILE: AD_GEM_36_STATE_COM_705H DRAWN BY: A.V.F. SHEET: 1 OF 1	REVISION:		NOTES: 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.
	INT	DATE	