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EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Peachtree 24 Fed Com

#710H

OH

Design: OH

Final PVA Report

23 July, 2019



Final PVA Report

Company: EOG Resources - Midland Project: Lea County, NM (NAD 83 NME) Site: Peachtree 24 Fed Com Well: #710H Wellbore: OH Design: OH		Local Co-ordinate Reference: Well #710H TVD Reference: KB = 25 @ 3370.0usft MD Reference: KB = 25 @ 3370.0usft 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 Peachtree 24 Fed Com															
Site Position: From: Map Position Uncertainty: 0.0 usft		Northing: 372,756.00 usft Easting: 793,433.00 usft Slot Radius: 13-3/16" Latitude: 32° 1' 18.840 N Longitude: 103° 31' 11.665 W Grid Convergence: 0.43°													
Well #710H															
Well Position +N-S 0.0 usft +E-W 0.0 usft Position Uncertainty 0.0 usft		Northing: 372,816.00 usft Easting: 789,630.00 usft Wellhead Elevation: usft Latitude: 32° 1' 20.715 N Longitude: 103° 31' 55.832 W Ground Level: 3,345.0 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>11/7/2017</td> <td>6.88</td> <td>59.88</td> <td>47,782.71478346</td> </tr> </tbody> </table>				Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)		IGRF2015	11/7/2017	6.88	59.88	47,782.71478346
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	IGRF2015	11/7/2017	6.88	59.88	47,782.71478346										
Design OH															
Audit Notes: Version: 1.0 Phase: ACTUAL Tie On Depth: 0.0															
<table border="1"> <thead> <tr> <th>Vertical Section:</th> <th>Depth From (TVD) (usft)</th> <th>+N-S (usft)</th> <th>+E-W (usft)</th> <th>Direction (°)</th> </tr> </thead> <tbody> <tr> <td></td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>357.22</td> </tr> </tbody> </table>				Vertical Section:	Depth From (TVD) (usft)	+N-S (usft)	+E-W (usft)	Direction (°)		0.0	0.0	0.0	357.22		
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Survey Program Date 7/23/2019															
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Site:	Peachtree 24 Fed Com	MD Reference:	KB = 25 @ 3370.0usft
Well:	#710H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey												
MD (usft)	Inc (°)	Azi (grid_north_azim)	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
136.0	0.80	237.40	136.0	-0.5	-0.8	0.59	0.59	0.00	-0.9	-0.9		0.0
316.0	1.00	178.20	316.0	-2.8	-1.8	0.50	0.11	-32.89	-2.7	-1.9		-1.9
501.0	1.20	179.70	500.9	-6.3	-1.7	0.11	0.11	0.81	-6.3	-1.8		-1.8
688.0	1.10	178.20	687.9	-10.1	-1.6	0.07	-0.05	-1.87	-9.9	-2.3		-2.3
876.0	1.50	184.20	875.9	-14.3	-1.7	0.23	0.21	4.26	-14.4	-0.6		-0.6
1,052.0	1.75	179.60	1,051.8	-19.3	-1.8	0.16	0.14	-2.61	-19.3	-2.0		-2.0
1,239.0	4.80	231.90	1,238.5	-27.0	-8.0	2.13	1.63	27.97	-22.9	16.4		16.4
1,428.0	7.10	239.90	1,426.5	-37.7	-24.3	1.29	1.22	4.23	-39.9	20.6		20.6
1,615.0	6.90	239.90	1,612.1	-49.2	-44.0	0.11	-0.11	0.00	-62.7	20.6		20.6
1,709.0	6.98	240.90	1,705.4	-54.6	-53.9	0.15	0.09	1.08	-73.7	21.8		21.8
1,898.0	6.94	241.83	1,893.0	-65.7	-74.0	0.06	-0.02	0.49	-86.2	23.2		23.2
1,991.0	7.00	242.44	1,985.3	-71.0	-84.0	0.10	0.06	0.66	-107.3	24.3		24.3
2,178.0	6.90	242.44	2,170.9	-81.5	-104.0	0.05	-0.05	0.00	-129.9	24.3		24.3
2,368.0	6.70	242.62	2,359.6	-91.9	-124.0	0.11	-0.11	0.09	-152.3	24.7		24.7
2,462.0	6.37	240.80	2,453.0	-96.9	-133.4	0.41	-0.35	-1.94	-163.7	18.6		18.6
2,650.0	5.97	240.20	2,639.9	-106.9	-151.0	0.22	-0.21	-0.32	-184.1	17.8		17.8
2,838.0	8.00	244.73	2,826.5	-117.3	-171.3	1.12	1.08	2.41	-204.9	33.2		33.2
3,026.0	7.00	243.32	3,012.9	-128.0	-193.4	0.54	-0.53	-0.75	-222.1	27.4		27.4
3,121.0	6.46	242.10	3,107.2	-133.1	-203.3	0.59	-0.57	-1.28	-224.6	22.6		22.6
3,307.0	6.24	247.90	3,292.1	-141.8	-221.9	0.36	-0.12	3.12	-219.2	43.9		43.9
3,401.0	6.24	252.80	3,385.5	-145.3	-231.5	0.58	0.00	5.32	-213.5	61.0		61.0
3,496.0	6.00	255.10	3,480.0	-148.1	-241.2	0.35	-0.25	2.32	-209.9	66.7		66.7
3,589.0	5.93	256.33	3,572.5	-150.4	-250.6	0.16	-0.08	1.32	-207.1	68.6		68.6
3,684.0	6.20	248.80	3,666.9	-153.5	-260.2	0.88	0.28	-7.93	-212.7	39.1		39.1
3,872.0	4.80	242.44	3,854.1	-160.8	-276.6	0.81	-0.74	-3.38	-210.7	14.3		14.3
3,966.0	6.00	244.11	3,947.7	-164.7	-284.5	1.29	1.28	1.76	-207.6	20.1		20.1



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Database: EDM 5000.14

Survey											
MD (usft)	Inc (")	Asl (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLog (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
4,060.0	8.35	235.90	4,040.9	-170.7	-294.8	2.72	2.50	-8.73	-208.7	-8.9	
4,247.0	8.35	236.20	4,225.9	-185.9	-317.1	0.02	0.00	0.16	-213.2	-5.4	
4,434.0	7.29	236.60	4,411.2	-200.0	-338.3	0.57	-0.57	0.21	-216.1	-1.5	
4,528.0	5.67	233.00	4,504.6	-208.0	-347.0	1.78	-1.72	-3.83	-214.8	-13.5	
4,715.0	4.60	222.23	4,690.8	-217.2	-359.4	0.77	-0.57	-5.76	-203.7	-47.1	
4,902.0	4.40	223.40	4,877.3	-227.9	-369.4	0.12	-0.11	0.63	-197.7	-35.4	
4,985.0	9.45	212.21	4,869.6	-237.0	-375.9	5.60	5.43	-12.03	-188.5	-67.8	
5,163.0	10.40	246.60	5,154.9	-256.2	-399.9	3.32	0.51	16.36	-189.0	63.1	
5,370.0	8.90	255.40	5,339.3	-266.0	-429.7	1.01	-0.80	3.64	-189.3	82.8	
5,558.0	7.10	287.30	5,525.6	-264.4	-454.1	3.16	-0.96	22.29	-103.8	185.0	
5,746.0	3.10	327.00	5,712.8	-254.8	-467.2	2.48	-2.13	15.80	-10.9	195.0	
5,934.0	4.40	18.20	5,900.5	-243.7	-467.7	1.83	0.69	27.23	118.2	118.8	
6,122.0	3.30	37.80	6,088.1	-232.5	-462.1	0.80	-0.59	10.43	118.6	64.5	
6,309.0	3.30	35.90	6,274.8	-223.9	-455.7	0.06	0.00	-1.02	85.3	58.1	
6,497.0	2.00	70.60	6,462.6	-218.5	-449.4	1.07	-0.69	18.46	72.8	5.2	
6,684.0	2.20	71.80	6,649.4	-216.3	-442.9	0.11	0.11	0.64	43.7	7.5	
6,872.0	2.00	122.80	6,837.3	-216.9	-436.7	0.97	-0.11	27.18	19.1	-11.5	
7,060.0	1.80	121.10	7,025.2	-220.2	-431.4	0.11	-0.11	-0.96	10.5	-6.6	
7,247.0	0.60	208.40	7,212.2	-222.6	-428.4	1.00	-0.64	46.68	-7.2	-7.9	
7,435.0	0.70	207.30	7,400.2	-224.5	-430.4	0.05	0.05	-0.59	-9.2	-8.1	
7,623.0	0.80	326.00	7,588.2	-224.7	-431.4	0.60	-0.05	64.20	-2.6	13.0	
7,810.0	0.40	289.70	7,775.2	-223.5	-432.5	0.17	-0.11	-15.13	-10.0	9.8	
7,998.0	0.80	245.30	7,963.2	-223.7	-434.3	0.35	0.21	-28.84	-15.4	-3.0	
8,186.0	1.00	235.30	8,151.1	-225.2	-436.8	0.13	0.11	-5.32	-17.6	-5.9	
8,374.0	1.10	207.40	8,339.1	-227.8	-439.0	0.27	0.05	-14.84	-16.1	-14.2	
8,562.0	1.10	196.00	8,527.1	-231.1	-440.3	0.12	0.00	-6.06	-16.5	-17.5	
8,750.0	1.10	187.10	8,715.0	-234.6	-441.1	0.09	0.00	-4.73	-17.2	-20.1	



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8,937.0	1.50	184.20	8,902.0	-238.8	-441.5	0.22	0.21	-1.55	-20.4	-21.0	
9,125.0	1.50	197.50	9,089.9	-243.6	-442.4	0.18	0.00	7.07	-29.6	-15.2	
9,312.0	1.70	211.70	9,276.8	-248.3	-444.6	0.24	0.11	7.59	-37.5	-6.9	
9,511.0	1.80	308.80	9,475.8	-248.9	-448.6	1.32	0.05	48.69	-5.1	41.0	
9,686.0	1.30	315.70	9,650.7	-245.8	-452.1	0.31	-0.29	4.06	-4.7	41.7	
9,875.0	1.40	331.70	9,839.7	-242.2	-454.7	0.21	0.05	8.47	2.6	41.9	
10,062.0	1.40	326.60	10,026.6	-238.3	-457.0	0.07	0.00	-2.73	-5.7	41.8	
10,249.0	0.40	298.70	10,213.6	-236.1	-458.9	0.57	-0.53	-14.92	-27.3	33.2	
10,438.0	0.80	338.10	10,400.6	-234.8	-459.8	0.21	0.11	21.07	-1.5	43.4	
10,623.0	1.30	322.20	10,587.6	-232.2	-461.5	0.40	0.37	-8.50	-18.3	41.1	
10,811.0	2.80	304.80	10,775.4	-227.9	-466.5	0.85	0.80	-9.26	-34.5	33.7	
10,999.0	2.30	325.10	10,963.2	-222.2	-472.5	0.54	-0.27	10.80	-28.8	45.1	
11,189.0	2.40	320.40	11,153.1	-216.0	-477.2	0.11	0.05	-2.47	-40.1	42.3	
11,375.0	1.80	305.60	11,339.0	-211.3	-482.0	0.43	-0.32	-7.96	-56.3	29.7	
11,563.0	2.70	317.50	11,526.8	-208.3	-487.4	0.54	0.46	6.33	-56.3	41.3	
11,708.0	3.60	328.50	11,671.6	-199.9	-492.1	0.74	0.62	7.59	-55.3	51.9	
11,803.0	1.90	340.50	11,766.5	-195.9	-494.2	1.88	-1.79	12.63	-47.6	62.9	
11,897.0	1.40	356.20	11,860.4	-193.3	-494.8	0.71	-0.53	16.70	-31.7	73.9	
11,990.0	1.00	311.30	11,953.4	-191.6	-495.5	1.08	-0.43	-48.28	-76.2	29.2	
12,085.0	1.80	72.60	12,048.4	-190.6	-494.7	2.60	0.84	127.68	63.4	50.7	
12,138.3	3.66	48.21	12,101.7	-189.3	-492.6	4.04	3.50	-45.74	34.3	72.0	
KOP (PT 24 Fed Com #710H)											
12,178.0	5.20	42.10	12,141.2	-187.1	-490.5	4.04	3.87	-15.41	24.7	73.9	
12,271.0	6.40	25.80	12,233.8	-179.3	-485.4	2.18	1.29	-17.53	10.5	68.8	
12,337.6	14.27	41.78	12,299.2	-169.8	-478.3	12.47	11.82	23.99	34.3	48.3	
HL Crossing, MD:12337.6', TVD:12289.2', N/S:-169.8', E/W:-478.3', INC:14.37											
12,364.0	17.50	44.10	12,324.6	-164.5	-473.4	12.47	12.23	6.81	37.2	39.0	



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12,459.0	32.30	25.80	12,410.7	-131.2	-452.2	17.39	15.58	-19.26	31.1	22.4	
12,552.0	50.20	9.50	12,480.5	-72.9	-435.3	22.32	19.25	-17.53	28.4	12.0	
FIP (PT 24 Fed Com #710H)											
12,615.0	64.50	8.10	12,514.4	-20.6	-427.3	22.77	22.70	-2.22	22.5	5.0	
12,643.0	71.30	5.80	12,524.9	5.1	-424.2	25.45	24.29	-8.21	17.3	2.6	
12,736.0	77.00	3.60	12,550.3	94.2	-416.9	6.54	6.13	-2.37	1.9	-4.5	
12,830.0	78.20	1.00	12,570.5	185.9	-413.2	2.99	1.28	-2.77	-1.1	-8.8	
12,924.0	85.40	357.20	12,583.9	278.9	-414.7	8.64	7.66	-4.04	7.0	-8.0	
13,018.0	88.90	357.20	12,588.6	372.6	-419.3	3.72	3.72	0.00	11.9	-4.1	
13,112.0	89.90	357.50	12,589.6	466.5	-423.6	1.11	1.06	0.32	13.1	-0.4	
13,205.0	91.00	357.80	12,588.9	559.4	-427.4	1.23	1.18	0.32	12.6	2.7	
13,299.0	91.10	359.20	12,587.1	653.4	-429.9	1.49	0.11	1.49	11.1	4.5	
13,393.0	89.20	1.40	12,588.9	747.4	-429.4	3.09	-2.02	2.34	11.1	3.3	
13,486.0	89.40	2.80	12,588.0	840.3	-426.0	1.52	0.22	1.51	12.4	-0.8	
13,579.0	90.10	3.00	12,588.4	933.2	-421.3	0.78	0.75	0.22	13.1	-8.1	
13,672.0	89.80	1.50	12,588.5	1,026.1	-417.6	1.64	-0.32	-1.61	13.4	-10.5	
13,766.0	91.20	2.10	12,587.7	1,120.1	-414.7	1.62	1.49	0.64	12.8	-14.1	
13,859.0	91.20	1.30	12,585.7	1,213.0	-411.9	0.88	0.00	-0.86	11.0	-17.6	
13,953.0	90.00	2.60	12,584.8	1,308.9	-408.7	1.88	-1.28	1.38	10.3	-21.4	
14,045.0	88.90	4.10	12,585.7	1,398.8	-403.3	2.09	-1.30	1.63	11.4	-27.5	
14,139.0	88.10	0.70	12,588.3	1,492.6	-399.4	3.69	-0.74	-3.62	14.2	-32.1	
14,233.0	88.20	359.00	12,591.3	1,586.6	-399.6	1.81	0.11	-1.81	17.5	-32.6	
14,326.0	93.90	358.50	12,589.6	1,679.5	-401.7	6.15	6.13	-0.54	15.9	-31.2	
14,419.0	93.70	357.80	12,583.4	1,772.3	-404.7	0.78	-0.22	-0.75	10.0	-28.9	
14,511.0	90.20	357.70	12,580.3	1,864.1	-408.3	3.81	-3.80	-0.11	7.1	-26.0	
14,605.0	87.60	358.70	12,582.1	1,958.1	-411.2	2.98	-2.77	1.08	9.1	-23.7	
14,698.0	88.10	358.70	12,587.2	2,050.9	-413.3	1.61	-1.61	0.00	14.5	-22.3	



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Database: EDM 5000.14

Survey											
MD (usft)	Inc (")	Azi (grid_north_azim)	TVD (usft)	NIS (usft)	EW (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
14,782.0	87.70	359.20	12,592.3	2,144.7	-415.1	1.78	1.70	0.53	19.8	-21.2	
14,851.0	89.80	356.40	12,593.6	2,203.7	-417.3	5.93	3.56	-4.75	21.2	-19.4	
14,888.0	91.10	355.70	12,593.3	2,238.6	-419.7	4.22	3.71	-2.00	21.0	-17.2	
14,981.0	94.20	357.10	12,588.9	2,333.3	-425.7	3.58	3.26	1.47	16.8	-12.0	
15,074.0	95.70	358.00	12,580.9	2,425.8	-429.7	1.88	1.81	0.97	9.0	-8.7	
15,168.0	91.60	0.00	12,574.9	2,519.6	-431.3	4.85	-4.36	2.13	3.3	-7.7	
15,262.0	90.20	0.70	12,573.4	2,613.6	-430.7	1.87	-1.49	0.74	2.0	-9.0	
15,355.0	89.90	1.30	12,573.4	2,706.6	-429.1	0.72	-0.32	0.65	2.1	-11.3	
15,449.0	90.70	2.80	12,572.9	2,800.5	-425.7	1.81	0.85	1.60	1.9	-15.3	
15,542.0	89.10	2.70	12,573.0	2,893.4	-421.3	1.72	-1.72	-0.11	2.2	-20.5	
15,635.0	89.60	1.20	12,574.1	2,986.3	-418.1	1.70	0.54	-1.61	3.5	-24.3	
15,729.0	84.30	359.20	12,579.1	3,080.2	-417.8	6.03	-5.64	-2.13	8.7	-25.4	
15,823.0	86.50	357.30	12,586.6	3,173.8	-420.6	3.09	2.34	-2.02	16.5	-23.2	
15,915.0	88.50	357.10	12,589.8	3,265.6	-425.1	3.27	3.26	-0.22	19.9	-19.3	
16,008.0	90.10	357.50	12,590.2	3,358.5	-429.5	0.78	0.65	0.43	20.5	-15.8	
16,102.0	91.00	357.10	12,589.3	3,452.4	-433.9	1.05	0.98	-0.43	19.8	-11.9	
16,196.0	89.70	357.70	12,588.7	3,546.3	-438.2	1.52	-1.38	0.64	19.4	-8.3	
16,289.0	89.50	358.50	12,589.3	3,639.2	-442.9	1.31	-0.22	-1.29	20.3	-4.3	
16,382.0	86.70	357.20	12,592.4	3,732.0	-448.0	3.10	-3.01	0.75	23.6	0.1	
16,475.0	89.80	358.90	12,595.2	3,824.9	-451.2	3.80	3.33	1.83	26.7	2.8	
16,568.0	91.30	359.10	12,594.4	3,917.9	-452.8	1.63	1.61	0.22	26.0	3.5	
16,662.0	90.20	358.50	12,593.1	4,011.8	-454.8	1.33	-1.17	-0.64	25.0	4.8	
16,755.0	88.50	357.50	12,594.2	4,104.8	-458.0	2.12	-1.83	-1.08	26.2	7.4	
16,849.0	88.40	356.90	12,596.7	4,198.6	-462.6	0.65	-0.11	-0.64	29.0	11.3	
16,942.0	92.70	358.20	12,595.8	4,291.5	-466.6	4.83	4.62	1.40	28.3	14.6	
17,036.0	92.80	357.10	12,591.3	4,385.3	-470.4	1.17	0.11	-1.17	24.1	17.7	
17,130.0	91.80	357.80	12,587.5	4,479.1	-474.6	1.30	-1.06	0.74	20.5	21.2	



Final PVA Report

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #710H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3370.0usft
Site:	Peachtree 24 Fed Com	MD Reference:	KB = 25 @ 3370.0usft
Well:	#710H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey											
MD (usft)	Inc (")	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
17,222.0	92.40	0.00	12,584.2	4,571.1	-478.4	2.48	0.65	2.39	17.3	22.4	
17,315.0	88.50	0.70	12,583.4	4,664.0	-475.8	4.26	-4.19	0.75	16.8	21.1	
17,409.0	89.50	1.10	12,585.1	4,758.0	-474.3	1.15	1.06	0.43	18.7	18.9	
17,503.0	92.70	0.90	12,583.3	4,852.0	-472.7	3.41	3.40	-0.21	17.1	16.6	
17,582.0	89.64	0.14	12,581.7	4,831.0	-472.0	3.99	-3.87	-0.97	15.7	15.3	
TGT 1 (PT 24 Fed Com #710H)											
17,596.0	89.10	0.00	12,581.8	4,844.9	-471.9	3.99	-3.87	-0.97	15.8	15.2	
17,690.0	88.20	358.70	12,584.0	5,038.9	-473.0	1.68	-0.96	-1.38	17.6	15.6	
17,784.0	93.10	359.20	12,583.0	5,132.8	-474.7	5.24	5.21	0.53	16.0	16.6	
17,878.0	87.60	358.90	12,582.4	5,226.8	-476.3	5.88	-5.85	-0.32	15.0	17.5	
17,972.0	90.00	359.50	12,584.4	5,320.8	-477.6	2.63	2.55	0.64	16.5	18.1	
18,066.0	92.80	0.10	12,582.1	5,414.7	-477.9	3.05	2.98	0.64	13.7	17.8	
18,159.0	90.50	0.90	12,579.4	5,507.7	-477.1	2.62	-2.47	0.86	10.5	16.3	
18,253.0	89.80	1.80	12,579.1	5,601.6	-474.9	1.21	-0.74	0.86	9.8	13.4	
18,348.0	90.00	0.70	12,579.3	5,696.6	-472.8	1.18	0.21	-1.16	9.5	10.6	
18,441.0	89.70	1.20	12,579.6	5,789.6	-471.3	0.63	-0.32	0.54	9.3	8.4	
18,535.0	89.80	1.50	12,580.0	5,883.6	-469.1	0.34	0.11	0.32	9.2	5.5	
18,628.0	89.70	1.70	12,580.4	5,976.5	-466.5	0.24	-0.11	0.22	9.1	2.2	
18,721.0	89.00	0.10	12,581.4	6,069.5	-465.0	1.88	-0.75	-1.72	9.7	0.1	
18,816.0	90.30	1.60	12,582.0	6,164.5	-463.6	2.09	1.37	1.58	9.8	-2.1	
18,909.0	89.70	0.30	12,582.0	6,257.5	-462.1	1.54	-0.65	-1.40	9.3	-4.3	
19,002.0	90.40	359.60	12,581.9	6,350.5	-462.2	1.06	0.75	-0.75	8.8	-4.9	
19,086.0	90.40	0.00	12,581.3	6,444.5	-462.5	0.43	0.00	0.43	7.6	-5.2	
19,189.0	91.20	358.20	12,580.0	6,537.5	-463.9	2.12	0.86	-1.94	5.9	-4.5	
19,282.0	89.90	359.70	12,579.1	6,630.4	-465.6	2.13	-1.40	1.61	4.5	-3.4	
19,376.0	89.20	1.40	12,579.8	6,724.4	-464.7	1.96	-0.74	1.81	4.8	-5.0	
19,469.0	90.70	1.50	12,579.9	6,817.4	-462.4	1.62	1.81	0.11	4.4	-8.0	



Final PVA Report

Company:	EOG Resources - Midland					Local Co-ordinate Reference:			Well #710H		
Project:	Lea County, NM (NAD 83 NME)					TVD Reference:			KB = 25 @ 3370.0usft		
Site:	Peachtree 24 Fed Com					MD Reference:			KB = 25 @ 3370.0usft		
Well:	#710H					North Reference:			Grid		
Wellbore:	OH					Survey Calculation Method:			Minimum Curvature		
Design:	OH					Database:			EDM 5000.14		
Survey											
MD (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	EW (usft)	DLog (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
19,563.0	91.60	2.60	12,578.0	6,911.3	-459.0	1.51	0.98	1.17	2.0	-12.1	
19,657.0	90.10	2.70	12,578.6	7,005.2	-454.7	1.60	-1.60	0.11	0.1	-17.1	
19,751.0	89.70	3.60	12,578.8	7,099.1	-449.5	1.05	-0.43	0.96	-0.2	-23.0	
19,844.0	89.60	0.50	12,577.3	7,192.0	-446.2	3.34	-0.11	-3.33	-0.1	-27.0	
19,937.0	90.30	358.90	12,577.4	7,285.0	-446.7	1.88	0.75	-1.72	-0.5	-27.2	
20,031.0	90.80	359.00	12,576.5	7,378.0	-448.4	0.54	0.53	0.11	-1.9	-26.1	
20,124.0	89.10	359.80	12,576.6	7,471.9	-449.4	2.02	-1.83	0.86	-2.2	-25.8	
20,218.0	89.80	357.70	12,577.5	7,565.9	-451.4	2.35	0.74	-2.23	-1.8	-24.5	
20,312.0	90.00	355.60	12,577.7	7,659.7	-450.9	2.24	0.21	-2.23	-2.1	-19.7	
20,406.0	88.70	356.90	12,578.7	7,753.5	-463.1	1.96	-1.38	1.38	-1.5	-14.2	
20,500.0	90.90	358.00	12,579.1	7,847.4	-467.2	2.62	2.34	1.17	-1.7	-10.7	
20,593.0	89.10	358.90	12,579.1	7,940.4	-469.8	2.16	-1.94	0.97	-2.2	-8.9	
20,686.0	91.10	0.00	12,578.9	8,033.4	-470.7	2.45	2.15	1.18	-2.8	-8.7	
20,780.0	89.30	358.20	12,578.6	8,127.4	-472.1	2.71	-1.91	-1.91	-3.6	-7.9	
20,874.0	88.40	358.50	12,580.5	8,221.3	-474.8	1.01	-0.96	0.32	-2.2	-5.9	
20,939.3	89.10	358.28	12,581.9	8,286.6	-476.7	1.12	1.08	-0.32	-1.1	-4.5	
TGT 2 (PT 24 Fed Com #710H)											
20,967.0	89.40	358.20	12,582.3	8,314.2	-477.5	1.12	1.08	-0.32	-0.8	-3.9	
21,061.0	89.20	357.80	12,583.4	8,408.2	-480.8	0.48	-0.21	-0.43	0.7	-1.3	
21,154.0	91.60	357.30	12,582.8	8,501.1	-484.8	2.64	2.58	-0.54	0.4	2.0	
21,247.0	90.50	357.00	12,581.0	8,594.0	-489.4	1.23	-1.18	-0.32	-0.9	6.0	
21,341.0	89.70	359.70	12,580.9	8,687.9	-492.1	3.00	-0.85	2.87	-0.7	8.0	
21,434.0	89.00	1.30	12,581.9	8,780.9	-491.3	1.88	-0.75	1.72	0.7	6.5	
21,528.0	89.50	2.30	12,583.2	8,874.8	-488.3	1.19	0.53	1.06	2.3	2.9	
21,621.0	90.50	3.90	12,583.2	8,967.7	-483.3	2.03	1.08	1.72	2.6	-2.8	
21,715.0	88.30	358.80	12,584.2	9,061.6	-481.3	6.10	-2.34	-5.84	4.0	-5.6	
21,809.0	89.40	358.40	12,586.0	9,155.6	-483.7	1.19	1.17	-0.21	6.2	-3.8	



Final PVA Report

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #710H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	K3 = 25 @ 8370.0usft
Site:	Peachtree 24 Fed Com	MD Reference:	K3 = 25 @ 3370.0usft
Well:	#710H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

MD (usft)	Inc (°)	Adj (usft, north, down)	TVD (usft)	N/S (usft)	E/W (usft)	Dip (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
21,902.0	91.50	357.90	12,585.3	9,248.5	-488.7	2.32	2.28	-0.54	5.8	-1.5
21,998.0	90.10	357.80	12,584.0	9,342.4	-480.4	1.52	-1.49	-0.32	4.9	1.5
22,090.0	88.40	356.30	12,585.2	9,438.3	-485.4	2.28	-1.81	-1.38	6.4	5.8
22,184.0	89.80	355.90	12,588.7	9,530.1	-501.8	1.55	1.49	-0.43	8.3	11.5
22,276.0	90.70	357.20	12,586.3	9,621.9	-507.3	1.72	0.98	1.41	8.2	16.4
22,368.0	87.80	359.30	12,587.5	9,714.8	-510.2	3.85	-3.12	2.28	9.8	18.8
22,462.0	91.00	0.60	12,588.5	9,807.8	-510.3	3.71	3.44	1.40	11.1	18.0
22,558.0	91.60	358.70	12,588.4	9,801.8	-510.8	2.12	0.84	-2.02	9.3	17.8
22,651.0	89.80	357.90	12,585.2	9,896.7	-513.7	2.07	-1.89	-0.84	8.5	20.0
22,745.0	91.10	357.40	12,584.5	10,090.6	-517.5	1.48	1.38	-0.53	8.2	23.1
22,774.0	91.60	357.10	12,583.8	10,119.6	-518.9	2.01	1.72	-1.03	7.8	24.3
Final MWD Survey (MD=22774.0')										
22,831.0	91.80	357.10	12,582.2	10,176.5	-521.8	0.00	0.00	0.00	6.2	28.8
Final Projection to Bit (MD=22831.0') - PBHL (PT 24 Fed Com #710H)										

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/S (usft)	+E/W (usft)	
12,337.8	12,299.2	-169.8	-478.3	HL Crossing, MD:12337.8', TVD:12299.2', N/S:-169.8', E/W:-478.3', INC:14.27
22,774.0	12,583.8	10,119.8	-518.9	Final MWD Survey (MD=22774.0')
22,831.0	12,582.2	10,176.5	-521.8	Final Projection to Bit (MD=22831.0')

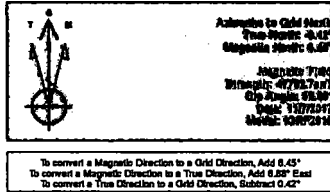
Checked By: _____ Approved By: _____ Date: _____

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

Signed Kemp Maddox Date 2/10/2020



Lea County, NM (NAD 83 NME)
Peachtree 24 Fed Com #710H
Plan #1



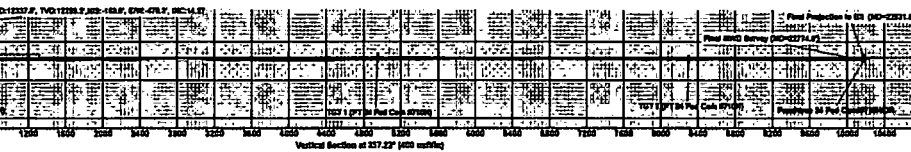
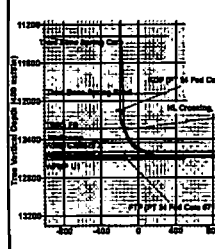
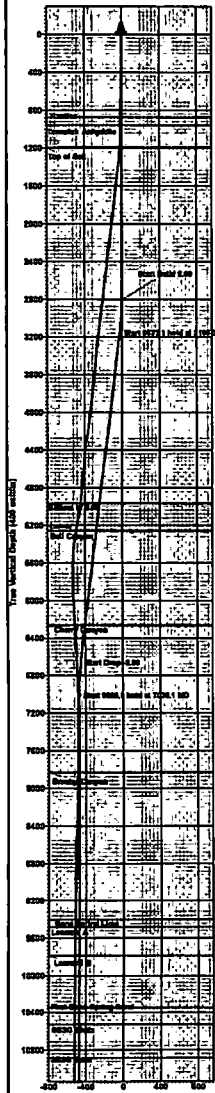
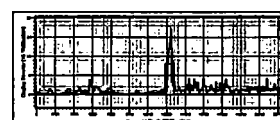
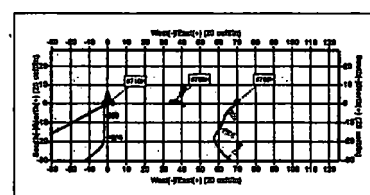
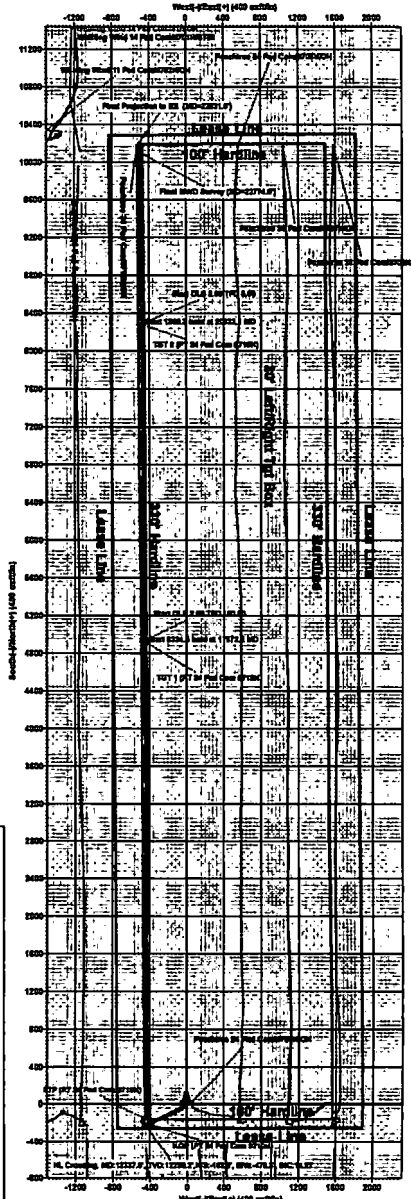
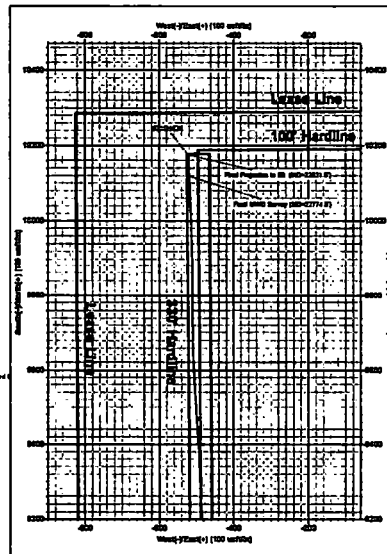
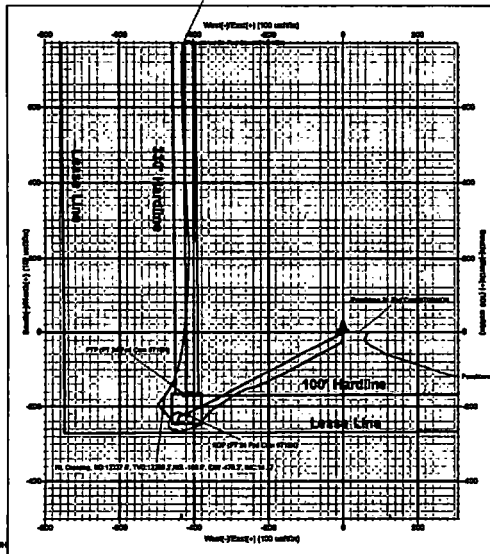
PROJECT DETAILS: Lea County, NM (NAD 83 NME)
 Geodetic System: US State Plane 1983
 Datum: North American Datum 1983
 Ellipsoid: GRS 1980
 Zone: New Mexico Eastern Zone
 System Datum: Mean Sea Level

WELL DETAILS: #710H
 3345.0
 KB = 25 @ 3370.0m
 Northing: 372819.00 Easting: 788330.00
 Latitude: 32° 1' 20.715 N Longitude: 103° 31' 25.832 W

SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VFace	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	Target
2	2805.0	0.00	0.00	2805.0	0.0	0.0	0.00	0.00	0.0	
3	3155.0	7.00	242.30	3154.1	-6.9	-18.9	2.00	242.30	-0.0	
4	6588.1	7.00	242.30	6580.9	-210.1	-400.1	0.00	0.00	-190.4	
5	7038.1	0.00	0.00	7010.0	-220.0	-419.0	2.00	180.00	-199.4	
6	12127.8	0.00	0.00	12099.5	-220.0	-419.0	0.00	0.00	-199.4	KOP (PT 24 Fed Com #710H)
7	12576.7	90.13	359.58	12577.0	258.6	-422.5	12.00	359.58	278.8	TGT 1 (PT 24 Fed Com #710H)
8	17550.9	90.13	359.58	12568.0	4930.6	-456.6	0.00	0.00	4947.0	TGT 2 (PT 24 Fed Com #710H)
9	17572.2	89.71	359.58	12566.0	4951.9	-456.8	2.00	180.00	4988.2	
10	20906.6	89.71	359.58	12583.0	8286.4	-481.2	0.00	0.00	8300.0	
11	20932.1	90.22	359.58	12583.0	8311.7	-481.4	2.00	0.00	8325.3	
12	22798.5	90.22	359.58	12576.0	10178.0	-495.0	0.00	0.00	10190.0	PBHL (PT 24 Fed Com #710H)

CASING DETAILS
 No casing data is available

WELLSHIRT TARGET DETAILS (MAP CO-ORDINATES)					
Name	TVD	+N-S	+E-W	Northing	Easting
KOP (PT 24 Fed Com #710H)	12099.5	-220.0	-419.0	372819.00	788330.00
TGT 1 (PT 24 Fed Com #710H)	12577.0	258.6	-422.5	377146.50	789173.35
PBHL (PT 24 Fed Com #710H)	12576.0	10178.0	-481.2	382864.00	789153.00
FTP (PT 24 Fed Com #710H)	12577.0	-176.0	-418.0	372848.00	788211.00
TGT 2 (PT 24 Fed Com #710H)	12566.0	4951.9	-456.8	381102.40	789148.33



100' Hardline
 100' Casing