

HOBBS OCD
JAN 02 2019
RECEIVED



EOG Resources - Midland

Lea County, NM (NAD 83 NME)
Lomas Rojas 26 State Corn
#504H
OH

Design: OH

Midland PVA

08 November, 2018



Midland PVA

Company: EOG Resources - Midland Project: Lea County, NM (NAD 83 NME) Site: Lomas Rojas 26 State Corn Well: #504H Wellbore: OH Design: OH		Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: Survey Calculation Method: Database:		Well #504H KB = 25 @ 3371.0usft KB = 25 @ 3371.0usft Grid: Minimum Curvature 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 Lomas Rojas 26 State Corn																	
Site Position: From: Map Position Uncertainty: 0.0 usft		Northing: 403,491.00 usft Easting: 785,687.00 usft Spot Radius: 13-3/16 "		Latitude: 32° 6' 24.528 N Longitude: 103° 32' 36.699 W Grid Convergence: 0.42 °													
Well #504H																	
Well Position +N-S 0.0 usft +E-W 0.0 usft Position Uncertainty 0.0 usft		Northing: 403,491.00 usft Easting: 785,687.00 usft Wellhead Elevation: usft		Latitude: 32° 6' 24.528 N Longitude: 103° 32' 36.699 W Ground Level: 3,346.0 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>10/23/2018</td> <td>6.79</td> <td>59.94</td> <td>47,733.26416001</td> </tr> </tbody> </table>						Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)		IGRF2015	10/23/2018	6.79	59.94	47,733.26416001
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)												
	IGRF2015	10/23/2018	6.79	59.94	47,733.26416001												
Design OH																	
Audit Notes:																	
Version: 1.0		Phase: ACTUAL		Tie On Depth: 0.0													
Vertical Section:		Depth From (TVD) (usft) 0.0	+N-S (usft) 0.0	+E-W (usft) 0.0	Direction (°) 187.47												



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #504H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3371.0usft
SDr:	Lomas Rojas 28 State Com	MD Reference:	KB = 25 @ 3371.0usft
Well:	#504H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey Program:	Date:	11/8/2018
From (usft)	To (usft)	Survey (Wellbore)
87.0	4,779.0	Gyrodata (OH)
4,872.0	15,768.0	Drilltech MWD (OH)
		Tool Name
		CT_GYRO_MS
		Description
		Continuous Gyro Multishot
		OWSG MWD - Standard

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	0.00	0.0
87.0	0.21	214.72	87.0	-0.1	-0.1	0.24	0.24	0.00	-0.2	0.0
177.0	0.23	235.99	177.0	-0.4	-0.3	0.09	0.02	23.63	-0.5	0.1
264.0	0.40	220.59	264.0	-0.7	-0.7	0.22	0.20	-17.70	-1.0	-0.1
354.0	0.68	206.90	354.0	-1.4	-1.1	0.34	0.31	-15.21	-1.8	-0.4
443.0	1.00	202.75	443.0	-2.6	-1.7	0.37	0.36	-4.66	-3.0	-0.5
533.0	1.28	200.44	533.0	-4.3	-2.3	0.32	0.31	-2.57	-4.8	-0.7
624.0	1.48	200.61	623.9	-6.3	-3.1	0.22	0.22	0.19	-7.0	-0.7
719.9	1.71	202.41	719.8	-8.8	-4.1	0.25	0.24	1.88	-9.7	-0.4
814.8	1.86	207.22	814.7	-11.3	-5.2	0.16	-0.05	5.07	-12.5	0.5
910.7	1.48	220.22	910.5	-13.5	-6.7	0.42	-0.19	13.56	-14.6	3.6
1,005.3	1.13	252.37	1,005.1	-14.7	-8.3	0.84	-0.37	33.97	-12.4	11.5
1,099.8	1.35	280.69	1,099.6	-14.8	-10.3	0.88	0.23	29.96	-7.4	16.5
1,194.7	1.60	296.19	1,194.4	-14.0	-12.6	0.49	0.26	16.34	-5.1	16.1
1,290.4	2.18	299.11	1,290.1	-12.5	-15.4	0.61	0.61	3.05	-6.0	16.2
1,385.3	3.71	303.45	1,384.8	-10.0	-19.5	1.63	1.61	4.58	-5.0	17.7
1,480.3	4.17	302.69	1,479.7	-6.4	-25.0	0.49	0.48	-0.80	-4.2	15.9
1,576.0	4.31	301.53	1,575.0	-2.6	-31.0	0.17	0.15	-1.21	-1.9	13.7
1,670.8	4.50	300.00	1,669.6	1.1	-37.3	0.24	0.20	-1.61	0.3	11.9
1,765.6	4.34	298.75	1,764.1	4.7	-43.6	0.20	-0.17	-1.32	2.5	10.3
1,861.0	6.21	299.13	1,859.2	8.9	-51.3	1.96	1.96	0.40	3.6	8.7



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #504H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3371.0ust
Site:	Lomas Rojas 26 State Corn	MD Reference:	KB = 25 @ 3371.0ust
Well:	#504H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey											
MD (ust)	Inc (°)	Alt (eustust) (°)	TVD (ust)	NS (ust)	EW (ust)	CLeg (°/100ust)	Bulk (°/100ust)	Turn (°/100ust)	High to Plan (ust)	High to Plan (ust)	High to Plan (ust)
1,956.3	6.92	301.33	1,953.8	14.4	-60.7	0.79	0.74	2.31	2.8	6.8	6.8
2,051.9	6.63	298.84	2,048.7	20.1	-70.4	0.35	-0.30	-1.58	1.2	5.0	5.0
2,146.4	6.71	298.57	2,142.6	25.5	-80.0	0.18	0.08	-1.34	-0.1	3.5	3.5
2,241.0	6.72	297.17	2,236.5	30.7	-89.8	0.17	0.01	-1.48	-1.4	2.1	2.1
2,335.9	6.66	296.40	2,330.8	35.7	-99.6	0.11	-0.06	-0.81	-2.7	0.9	0.9
2,430.4	6.61	295.92	2,424.6	40.5	-109.4	0.08	-0.05	-0.51	-3.8	-0.2	-0.2
2,525.4	6.57	295.83	2,519.0	45.2	-119.3	0.04	-0.04	-0.09	-4.8	-1.2	-1.2
2,620.3	6.49	296.83	2,613.3	50.0	-128.9	0.15	-0.08	1.05	-5.8	-2.2	-2.2
2,716.1	6.38	298.17	2,708.6	55.0	-138.5	0.19	-0.11	1.40	-6.6	-3.4	-3.4
2,812.1	6.29	287.65	2,803.9	59.1	-148.2	1.21	-0.09	-10.96	-6.4	-5.1	-5.1
2,908.6	6.25	285.44	2,897.9	62.0	-158.1	0.26	-0.04	-2.34	-6.7	-4.8	-4.8
3,001.5	5.91	289.34	2,992.3	65.0	-167.7	0.56	-0.36	4.11	-7.1	-3.8	-3.8
3,096.6	5.47	293.43	3,086.9	68.4	-176.4	0.83	-0.46	4.30	-6.8	-3.6	-3.6
3,191.4	4.84	297.97	3,181.2	72.1	-184.1	0.79	-0.67	4.79	-5.8	-4.0	-4.0
3,285.7	4.85	295.44	3,275.2	75.7	-191.3	0.26	0.12	-2.68	-3.8	-5.4	-5.4
3,378.8	6.25	287.13	3,367.9	78.9	-199.8	1.84	1.40	-8.92	-2.3	-6.0	-6.0
3,474.2	6.76	288.11	3,462.7	82.0	-210.1	0.55	0.53	-1.07	-3.1	-5.4	-5.4
3,568.6	6.71	286.97	3,556.4	85.2	-220.7	0.12	-0.05	0.91	-4.4	-4.8	-4.8
3,663.9	6.59	283.85	3,651.1	88.1	-231.4	0.40	-0.13	-3.27	-5.3	-4.3	-4.3
3,759.4	6.52	282.56	3,748.0	90.6	-242.0	0.17	-0.07	-1.35	-6.2	-3.2	-3.2
3,855.4	6.11	285.97	3,841.4	93.2	-252.2	0.58	-0.43	3.55	-6.9	-1.8	-1.8
3,950.8	5.79	290.23	3,936.3	96.3	-261.8	0.57	-0.34	4.47	-6.9	-0.9	-0.9
4,046.8	5.52	289.93	4,031.8	99.5	-270.5	0.26	-0.28	-0.31	-6.3	-1.0	-1.0
4,142.3	6.17	291.51	4,128.8	103.0	-279.6	0.70	0.68	1.85	-6.1	-1.0	-1.0
4,238.7	6.32	292.44	4,222.8	106.9	-289.3	0.19	0.16	0.97	-6.5	-1.2	-1.2
4,334.5	5.23	293.92	4,317.9	110.7	-298.2	1.15	-1.14	1.55	-6.2	-1.8	-1.8
4,430.1	5.46	293.16	4,413.1	114.2	-306.3	0.25	0.24	-0.79	-5.1	-2.3	-2.3



Midland PVA

Company:	EOG Resources - Midland	Local Coordinate Reference:	Well #504H
Project:	Lee County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3371.0usft
Site:	Lomas Rojas 26 State Corn	MD Reference:	KB = 25 @ 3371.0usft
Well:	0504H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey											
MD (usft)	Inc (°)	Asl (usmmsl) (°)	TVD (usft)	N/E (usft)	EW (usft)	Drag (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
4,524.1	7.14	289.69	4,506.5	117.9	-315.9	1.83	1.79	-3.69	-5.4	-2.8	
4,617.2	6.42	290.83	4,599.0	121.7	-326.3	0.79	-0.77	1.22	-6.8	-2.7	
4,712.0	4.49	292.14	4,693.4	125.0	-334.7	2.04	-2.04	1.38	-6.9	-2.8	
4,779.0	5.02	285.03	4,760.1	126.8	-339.9	1.18	0.79	-10.62	-4.1	-3.2	
4,872.0	6.77	291.93	4,852.6	129.9	-348.9	2.03	1.88	7.42	-4.2	-2.6	
4,924.0	7.30	296.94	4,904.2	132.5	-354.7	1.56	1.02	9.63	-5.4	-2.6	
5,050.0	6.77	296.15	5,029.3	139.4	-368.5	0.43	-0.42	-0.63	-7.7	-4.0	
5,145.0	6.66	304.76	5,123.6	145.1	-378.2	1.08	0.09	9.06	-8.3	-2.4	
5,241.0	6.35	317.33	5,218.8	153.5	-387.6	2.32	1.35	13.09	-8.1	0.1	
5,335.0	9.67	323.22	5,311.6	164.9	-397.0	1.71	1.40	6.27	-7.5	1.6	
5,429.0	11.52	332.44	5,404.0	179.5	-406.1	2.68	1.97	9.81	-6.7	3.0	
5,525.0	13.28	336.58	5,497.8	198.1	-414.9	2.05	1.83	4.31	-6.2	3.1	
5,621.0	13.81	333.94	5,591.1	218.5	-424.3	0.85	0.55	-2.75	-6.2	3.7	
5,714.0	13.19	335.08	5,681.5	238.1	-433.7	0.73	-0.67	1.23	-2.6	5.6	
5,810.0	14.85	339.74	5,774.7	259.7	-442.6	2.18	1.83	4.85	-0.4	6.1	
5,905.0	15.30	339.56	5,866.4	282.9	-451.2	0.37	0.37	-0.19	-0.5	5.7	
5,999.0	14.60	336.93	5,957.2	305.4	-460.2	1.04	-0.74	-2.80	-0.8	5.8	
6,094.0	14.42	338.42	6,049.2	327.5	-469.2	0.44	-0.16	1.57	0.5	6.3	
6,189.0	13.10	336.66	6,141.4	348.3	-477.8	1.48	-1.39	-1.85	2.5	6.8	
6,294.0	13.69	340.27	6,233.8	369.0	-485.9	1.22	0.63	3.80	5.8	6.6	
6,380.0	16.80	340.09	6,326.4	392.9	-494.5	3.03	3.03	-0.19	5.1	6.0	
6,474.0	16.71	339.39	6,416.4	418.3	-503.9	0.24	-0.10	-0.74	2.3	5.5	
6,568.0	17.06	338.95	6,506.3	443.8	-513.6	0.40	0.37	-0.47	-0.7	5.3	
6,662.0	16.97	337.37	6,596.2	469.3	-523.9	0.50	-0.10	-1.68	-4.0	5.5	
6,756.0	16.97	336.05	6,686.1	494.5	-534.7	0.41	0.00	-1.40	-7.2	6.2	
6,851.0	15.96	337.19	6,777.3	518.9	-545.3	1.52	-1.48	1.20	-6.1	7.2	
6,945.0	13.28	344.22	6,869.3	541.2	-553.2	3.02	-2.40	7.40	-7.1	7.4	



Midland PVA

Company: EOG Resources - Midland		Local Co-ordinate Reference:		Well #504H	
Project: Lea County, NM (NAD 83 NME)		TVD Reference:		KB = 25 @ 3371.0usft	
Site: Lomas Rojas 26 State Corn		MD Reference:		KB = 25 @ 3371.0usft	
Well: #504H		North Reference:		Grid	
Wellbore: OH		Survey Calculation Method:		Minimum Curvature	
Design: OH		Database:		EDM 5000.14	

Survey											
MD (usft)	Inc (")	Asl (elevation) (")	TVD (usft)	W/S (usft)	ENR (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
7,041.0	13.10	344.40	8,961.8	562.1	-559.1	0.19	-0.19	0.19	-4.1	5.0	
7,137.0	11.61	345.87	7,055.8	581.9	-564.3	1.59	-1.55	1.53	-0.3	2.3	
7,233.0	9.23	342.90	7,150.0	598.6	-569.0	2.54	-2.48	-3.09	3.6	0.2	
7,328.0	7.91	340.82	7,244.0	612.1	-573.4	1.43	-1.39	-2.40	7.4	-0.5	
7,423.0	6.24	338.16	7,338.2	623.0	-577.5	1.79	-1.76	-2.59	10.6	-0.4	
7,517.0	5.45	337.81	7,431.7	631.9	-581.0	0.84	-0.84	-0.37	12.7	-0.2	
7,612.0	3.78	345.01	7,526.4	639.1	-583.8	1.88	-1.76	7.58	13.6	-2.1	
7,707.0	3.69	343.25	7,621.2	645.1	-585.3	0.15	-0.09	-1.85	12.9	-2.3	
7,803.0	1.76	339.12	7,717.1	649.4	-586.7	2.02	-2.01	-4.30	10.8	-1.6	
7,899.0	1.58	321.81	7,813.1	651.8	-588.0	0.56	-0.19	-18.03	8.1	1.3	
7,993.0	1.23	328.66	7,907.0	653.7	-589.3	0.41	-0.37	7.29	5.9	0.5	
8,088.0	1.23	328.23	8,002.0	655.5	-590.4	0.01	0.00	-0.45	3.9	0.5	
8,184.0	1.14	304.32	8,098.0	656.9	-591.7	0.52	-0.09	-24.91	1.4	1.6	
8,279.0	0.70	296.50	8,192.0	657.6	-593.0	0.49	-0.47	-8.32	-0.3	1.7	
8,374.0	0.62	293.07	8,288.0	658.1	-594.0	0.09	-0.08	-3.57	-1.5	1.6	
8,469.0	0.70	302.21	8,383.0	658.6	-595.0	0.14	0.08	9.62	-2.3	1.9	
8,564.0	0.79	275.49	8,478.0	659.0	-596.1	0.37	0.08	-28.13	-4.1	0.4	
8,659.0	0.79	261.89	8,573.0	659.0	-597.4	0.20	0.00	-14.53	-5.4	-0.7	
8,754.0	0.82	261.89	8,668.0	658.8	-598.6	0.18	-0.18	0.00	-6.5	-0.7	
8,848.0	0.79	241.30	8,761.9	658.4	-599.7	0.32	0.18	-21.69	-7.0	-3.2	
8,944.0	0.70	220.47	8,857.9	657.6	-600.6	0.30	-0.09	-21.70	-8.6	-5.7	
9,040.0	0.70	211.77	8,953.9	656.7	-601.3	0.11	0.00	-9.06	-6.9	-6.7	
9,135.0	0.70	211.95	9,048.9	655.7	-601.9	0.00	0.00	0.19	-8.0	-6.7	
9,229.0	0.53	222.58	9,142.9	654.9	-602.5	0.22	-0.18	11.31	-10.1	-5.0	
9,325.0	0.44	213.26	9,238.9	654.3	-603.0	0.12	-0.09	-9.71	-10.0	-6.6	
9,420.0	0.26	263.01	9,333.9	653.9	-603.4	0.35	-0.19	52.37	-12.0	3.6	
9,516.0	0.09	8.66	9,429.9	654.0	-603.6	0.31	-0.18	110.05	6.7	10.8	



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #504H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3371.0ust
Site:	Lomas Rojas 26 State Com	MD Reference:	KB = 25 @ 3371.0ust
Well:	#504H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

MD (ust)	Inc (°)	Asl (psdmust) (°)	TVD (ust)	MRS (ust)	SNV (ust)	OLag (°/100ust)	SVLag (°/100ust)	Turn (°/100ust)	High to Plan (ust)	Right to Plan (ust)
9,611.0	0.18	338.24	9,524.9	654.2	-603.7	0.12	0.09	-32.02	0.1	12.6
9,706.0	0.35	256.24	9,619.9	654.3	-604.0	0.39	0.16	-66.32	-12.8	1.7
9,801.0	0.44	151.74	9,714.9	653.9	-604.1	0.66	0.09	-110.00	1.2	-13.1
9,896.0	0.70	172.66	9,809.9	653.0	-603.9	0.35	0.27	22.02	-4.4	-12.6
9,991.0	1.23	165.26	9,904.9	651.4	-603.6	0.57	0.56	-7.77	-4.4	-13.1
10,087.0	1.41	154.55	10,000.9	649.4	-602.8	0.32	0.19	-11.16	-4.1	-13.9
10,183.0	1.32	158.86	10,096.8	647.3	-601.9	0.14	-0.09	4.49	-7.4	-13.4
10,279.0	0.79	177.76	10,192.8	645.6	-601.5	0.65	-0.55	19.69	-13.0	-10.0
10,308.0	0.79	168.09	10,221.8	645.2	-601.4	0.46	0.00	-33.34	-11.6	-12.1
10,403.0	5.45	176.35	10,316.7	640.0	-601.0	4.92	4.91	8.69	-17.7	-10.1
10,450.0	13.19	182.59	10,363.0	632.4	-601.1	16.66	16.47	13.28	-21.9	-7.9
10,497.0	19.35	185.14	10,408.1	619.3	-602.0	13.19	13.11	5.43	-27.3	-7.1
10,544.0	21.81	183.21	10,452.1	602.8	-603.2	5.43	5.23	-4.11	-31.6	-6.4
10,591.0	26.62	180.82	10,494.9	583.5	-603.9	10.84	10.66	-4.87	-34.7	-9.5
10,638.0	32.36	178.11	10,535.8	560.3	-603.6	12.15	11.79	-5.98	-38.1	-10.0
10,686.0	34.65	178.28	10,575.8	533.8	-602.8	4.77	4.77	0.35	-41.1	-8.0
10,734.0	36.34	179.43	10,614.4	505.3	-602.2	7.82	7.69	2.40	-42.3	-6.5
10,782.0	44.05	181.16	10,650.5	473.7	-602.4	12.13	11.90	3.65	-43.1	-3.3
10,829.0	48.98	180.83	10,682.8	439.6	-603.0	10.50	10.49	-0.74	-43.9	-2.6
10,877.0	52.23	179.87	10,713.3	402.5	-603.2	6.94	6.77	-2.00	-43.8	-1.6
10,925.0	57.68	178.37	10,740.8	363.2	-602.6	11.64	11.35	-3.12	-43.0	0.2
10,973.0	62.70	180.83	10,764.7	321.6	-602.4	11.36	10.46	5.12	-42.2	3.3
11,021.0	64.81	183.91	10,785.9	278.6	-604.1	7.24	4.40	6.42	-40.1	4.3
11,069.0	68.06	183.73	10,805.1	234.7	-607.1	6.78	6.77	-0.37	-35.9	3.0
11,116.0	70.67	182.77	10,821.6	190.6	-609.6	6.28	5.98	-2.04	-30.2	2.2
11,164.0	73.34	181.10	10,836.3	145.1	-611.1	6.12	5.15	-3.48	-22.5	2.5
11,211.0	77.38	179.60	10,848.2	99.7	-611.4	6.13	6.60	-3.19	-13.6	4.2



Midland PVA

Company:	EOG Resources - Midland	Local Coordinate Reference:	Well #504H
Project:	Las County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3371.0usft
Site:	Lomas Rojas 26 State Com	MB Reference:	KB = 25 @ 3371.0usft
Well:	6504H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

MD	Inc	Alt (azimuth)	TVD	N/E	E/W	D Log	Build	Turn	High to Plan	Right to Plan
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)	(usft)	(usft)
11,258.0	81.80	179.89	10,856.8	53.6	-611.1	8.98	8.98	0.19	-5.2	6.1
11,305.0	83.71	180.48	10,862.8	6.9	-611.2	4.79	4.49	1.68	0.8	6.6
11,353.0	87.93	181.27	10,866.3	-41.0	-611.9	8.94	8.79	1.65	4.3	5.6
11,444.0	89.08	181.27	10,868.7	-131.9	-613.9	1.26	1.26	0.00	6.7	2.9
11,540.0	89.87	181.89	10,869.5	-227.9	-616.6	1.05	0.82	0.65	7.5	-0.4
11,636.0	89.60	180.57	10,870.0	-323.9	-618.6	1.40	-0.26	-1.37	8.0	-3.2
11,731.0	90.22	180.39	10,870.1	-418.9	-619.4	0.88	0.65	-0.19	8.6	-4.7
11,826.0	91.63	181.01	10,868.6	-513.8	-620.6	1.62	1.48	0.65	7.5	-6.6
11,920.0	91.01	180.22	10,866.4	-607.8	-621.6	1.07	-0.66	-0.84	5.6	-8.3
12,016.0	90.31	178.99	10,865.3	-703.8	-620.9	1.47	-0.73	-1.28	5.1	-8.3
12,111.0	89.25	178.90	10,865.7	-788.8	-619.2	1.12	-1.12	-0.09	5.9	-7.2
12,206.0	90.13	178.90	10,866.2	-893.8	-617.3	0.93	0.93	0.00	6.9	-6.1
12,299.0	88.90	179.51	10,867.0	-986.8	-616.1	1.48	-1.32	0.66	8.1	-5.5
12,394.0	88.72	180.04	10,869.0	-1,081.7	-615.7	0.59	-0.19	0.56	10.5	-5.8
12,490.0	89.96	179.25	10,870.1	-1,177.7	-615.1	1.53	1.29	-0.82	12.1	-5.9
12,583.0	90.84	179.34	10,869.4	-1,270.7	-613.9	0.95	0.95	0.10	11.9	-5.5
12,678.0	89.43	180.22	10,869.2	-1,365.7	-613.6	1.75	-1.48	0.93	12.1	-5.8
12,774.0	90.31	179.43	10,869.4	-1,461.7	-613.3	1.23	0.92	-0.82	12.6	-6.2
12,867.0	88.90	179.69	10,870.1	-1,554.7	-612.6	1.54	-1.52	0.28	13.9	-6.2
12,962.0	88.99	179.69	10,871.8	-1,649.7	-612.1	0.09	0.09	0.00	16.1	-6.4
13,057.0	89.60	179.16	10,873.0	-1,744.7	-611.1	0.85	0.64	-0.56	17.7	-6.1
13,152.0	90.48	178.90	10,872.9	-1,839.7	-609.5	0.97	0.93	-0.27	18.1	-5.2
13,246.0	91.71	178.99	10,871.1	-1,933.6	-607.8	1.31	1.31	0.10	16.8	-4.2
13,341.0	89.52	178.64	10,870.1	-2,028.6	-605.8	2.33	-2.31	-0.37	16.2	-2.9
13,437.0	89.96	178.72	10,870.5	-2,124.6	-603.6	0.47	0.46	0.08	17.1	-1.4
13,533.0	90.84	179.16	10,869.9	-2,220.5	-601.8	1.02	0.92	0.46	16.9	-0.3
13,627.0	89.52	179.34	10,869.6	-2,314.5	-600.6	1.42	-1.40	0.19	17.0	0.2



Midland PVA

Company: EOG Resources - Midland		Local Co-ordinate Reference: Well #504H	
Project: Lea County, NM (NAD 83 NME)		TVD Reference: KB = 25 @ 3371.0usft	
Site: Lomas Rojas 26 State Com		MD Reference: KB = 25 @ 3371.0usft	
Well: #504H		North Reference: Grid	
Wellbore: OH		Survey Calculation Method: Minimum Curvature	
Design: OH		Database: EDM 5000.14	

Survey											
MD (usft)	Inc (")	Asl (astmsh) (")	TVD (usft)	N/S (usft)	E/W (usft)	Dog (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
13,722.0	88.81	180.31	10,870.9	-2,409.5	-800.3	1.27	-0.75	1.02	18.9	-0.2	
13,817.0	88.16	180.22	10,872.6	-2,504.5	-800.7	0.38	0.37	-0.09	21.0	-1.3	
13,910.0	89.78	180.48	10,873.5	-2,587.5	-801.3	0.72	0.67	0.28	22.3	-2.6	
14,004.0	90.66	181.27	10,873.1	-2,691.5	-802.7	1.26	0.94	0.84	22.4	-4.7	
14,098.0	89.96	179.60	10,872.6	-2,785.5	-803.4	1.93	-0.74	-1.78	22.3	-6.1	
14,193.0	89.25	178.46	10,873.3	-2,880.5	-801.8	1.41	-0.75	-1.20	23.4	-6.2	
14,289.0	90.57	179.16	10,873.4	-2,976.4	-809.8	1.56	1.37	0.73	23.8	-3.9	
14,384.0	92.07	179.25	10,871.2	-3,071.4	-808.5	1.58	1.58	0.09	21.8	-3.3	
14,480.0	91.45	178.02	10,868.3	-3,167.3	-806.2	1.43	-0.65	-1.28	19.1	-1.7	
14,574.0	90.48	178.37	10,866.7	-3,261.3	-803.3	1.10	-1.03	0.37	17.7	0.6	
14,669.0	91.01	178.72	10,865.5	-3,356.2	-800.9	0.67	0.56	0.37	16.7	2.3	
14,764.0	90.84	178.81	10,863.9	-3,451.2	-808.8	0.20	-0.18	0.09	15.4	3.6	
14,860.0	90.84	178.81	10,862.5	-3,547.2	-806.8	0.00	0.00	0.00	14.3	4.9	
14,953.0	92.24	178.20	10,860.0	-3,640.1	-804.4	1.64	1.51	-0.66	12.0	6.7	
15,049.0	90.82	178.72	10,857.4	-3,736.0	-801.8	1.48	-1.37	0.54	9.8	8.5	
15,145.0	89.08	179.60	10,857.4	-3,832.0	-800.4	2.12	-1.92	0.92	9.8	9.2	
15,241.0	89.87	179.87	10,858.3	-3,928.0	-800.0	0.87	0.82	0.28	10.9	8.0	
15,336.0	90.92	180.83	10,857.6	-4,023.0	-800.6	1.50	1.11	1.01	10.5	7.7	
15,431.0	91.19	180.04	10,855.9	-4,118.0	-801.3	0.88	0.28	-0.83	9.0	6.3	
15,526.0	90.31	180.66	10,854.6	-4,213.0	-801.9	1.13	-0.93	0.65	8.0	5.0	
15,621.0	90.75	180.92	10,853.7	-4,307.9	-803.2	0.54	0.46	0.27	7.4	3.0	
15,705.0	92.07	180.48	10,851.7	-4,391.9	-804.2	1.66	1.57	-0.52	5.8	1.3	
15,768.0	92.07	180.48	10,849.4	-4,454.9	-804.7	0.00	0.00	0.00	3.4	0.3	



Midland PVA

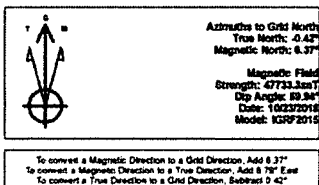
Company:	EOG Resources - Midland	Local Coordinate Reference:	Well 6504H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3371.0usft
Site:	Lomas Rojas 26 State Com	MD Reference:	KB = 25 @ 3371.0usft
Well:	#504H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		N/E	S/W	
(usft)	(usft)	(usft)	(usft)	
10,377.0	10,290.7	642.2	-601.1	KOP, MD:10377.0', TVD:10290.7', N/S:642.2', E/W:-601.1', INC:4.17
10,527.0	10,436.3	609.0	-602.6	FTP Crossing, MD:10527.0', TVD:10436.3', N/S:609.0', E/W:-602.6', INC:20.92
15,705.0	10,851.7	-4,391.9	-584.2	Last MWD Survey (MD=15705.0')
15,766.0	10,849.4	-4,454.9	-584.7	Projection to Bit (MD=15766.0')

Checked By: _____	Approved By: _____	Date: _____
-------------------	--------------------	-------------



Lea County, NM (NAD 83 NME)
Lomas Rojas 26 State Com #504H
Plan #1



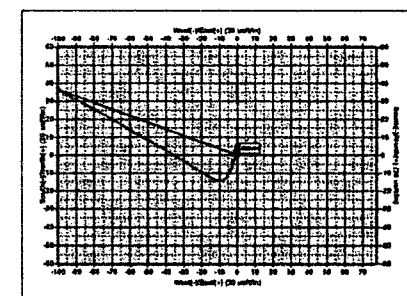
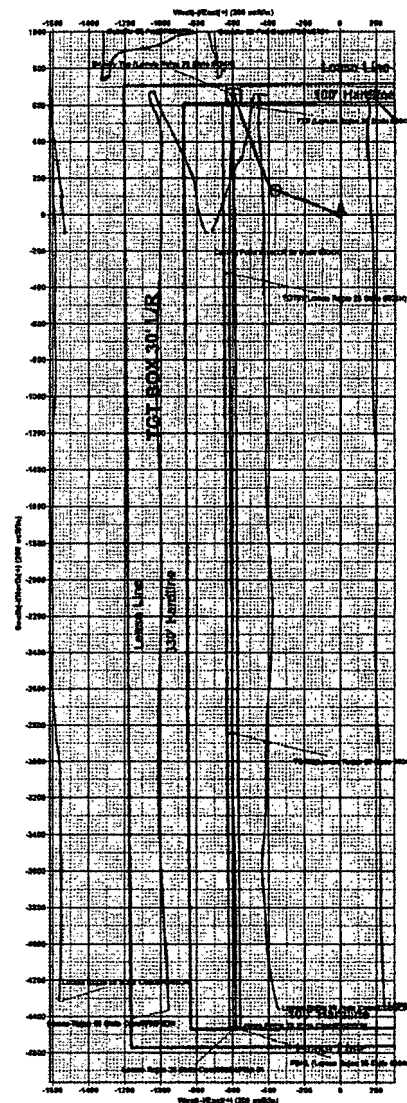
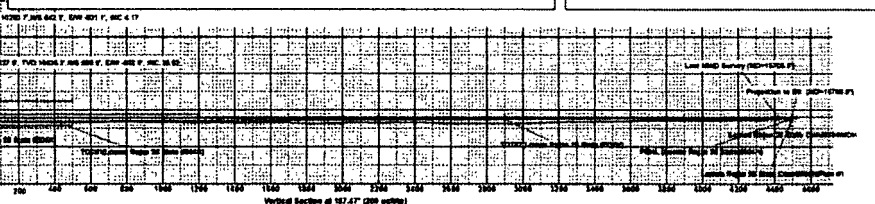
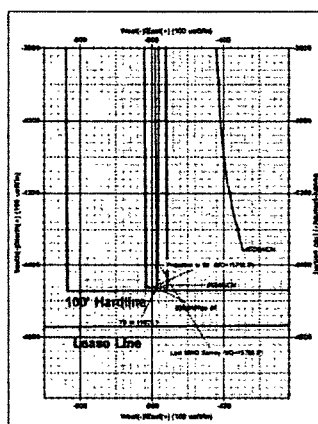
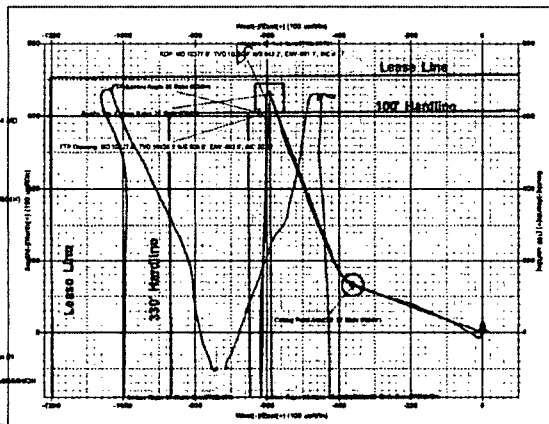
PROJECT DETAILS: Lea County, NM (NAD 83 NME)
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level

WELL DETAILS: #504H
3346.0
KB = 25 @ 3371.0m
Northing 403481.00 Easting 785287.00 Latitude 32° 6' 34.528 N Longitude 103° 32' 36.696 W

Sec	MD	Inc	Alt	TVD	+N/-S	+E/-W	Diag	TF sec	V/Sec	Target
1	0.0	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.0	
2	1200.0	0.00	0.00	1200.0	0.0	0.0	0.00	0.00	0.0	
3	1500.0	6.00	290.00	1499.6	6.4	-14.7	2.00	290.00	-3.4	
4	5018.8	6.00	290.00	5000.0	131.2	-360.6	0.00	0.00	-63.2	
5	5818.7	18.08	338.66	5389.1	214.8	-418.6	2.00	70.29	-168.8	
6	7072.3	18.08	338.66	6992.6	647.1	-456.1	0.00	0.00	-490.0	
7	7828.4	0.00	0.00	7728.0	639.0	-592.0	2.00	180.00	-678.5	Brushy Top (Lomas Rojas 26 State #504H)
8	10377.4	0.00	0.00	10288.0	639.0	-592.0	0.00	0.00	-678.5	
9	11277.4	90.00	182.41	10862.0	86.6	-416.1	10.00	182.41	-6.7	
10	11371.6	89.99	178.58	10862.0	-7.9	-417.7	3.00	-90.14	86.1	TGT#1 (Lomas Rojas 26 State #504H)
11	11688.9	89.99	178.58	10862.0	-322.9	-416.4	0.00	0.00	400.2	
12	11700.9	90.27	178.58	10862.0	-336.9	-416.3	2.00	0.67	414.0	
13	14210.7	90.27	178.58	10860.0	-2846.6	-396.9	0.00	0.00	2800.0	TGT#2 (Lomas Rojas 26 State #504H)
14	14217.2	90.14	178.58	10860.0	-2953.2	-396.9	2.00	-178.88	2906.6	
15	15825.1	90.14	178.58	10844.0	-4462.0	-635.0	0.00	0.00	4500.2	PBHL (Lomas Rojas 26 State #504H)

CASING DETAILS
No casing data is available

Name	TVD	+N/-S	+E/-W	Northing	Easting
Casing Point Area (LR 26 State #504H)	8000.6	131.2	-360.6	403422.30	785226.82
Brushy Top (Lomas Rojas 26 State #504H)	7728.0	69.9	-362.0	403150.00	785226.00
PBHL (Lomas Rojas 26 State #504H)	10844.0	-463.2	-422.9	399529.00	785302.00
TGT#1 (Lomas Rojas 26 State #504H)	10862.0	-2846.6	-396.9	403844.40	786290.79
TGT#2 (Lomas Rojas 26 State #504H)	10862.0	639.0	-422.9	403150.00	785302.00
TGT#3 (Lomas Rojas 26 State #504H)	10862.0	-322.9	-416.4	403158.10	785271.60



Scale: 1 inch = 100 feet
Vertical Scale: 1 inch = 1000 feet