



EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Magnolia 15 Fed Com

#714H

OH

Design: OH

Final PVA Report

10 March, 2019



Final PVA Report

Company: EOG Resources - Midland Project: Lea County, NM (NAD 83 NME) Site: Magnolia 15 Fed Com Well: #714H Wellbore: OH Design: OH		Local Co-ordinate Reference: Well #714H TYO Reference: KB = 25' @ 3355.0usft (HP 465) MD Reference: KB = 25' @ 3355.0usft (HP 465) 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 Magnolia 15 Fed Com															
Site Position: From: Map Position Uncertainty: 0.0 usft		Northing: 381,905.00 usft Easting: 780,373.00 usft Slot Radius: 13-3/16"													
		Latitude: 32° 2' 51.321 N Longitude: 103° 33' 42.598 W Grid Convergence: 0.41°													
Well #714H															
Well Position +N-S 0.0 usft +E-W 0.0 usft Position Uncertainty 0.0 usft		Northing: 382,325.00 usft Easting: 782,912.00 usft Wellhead Elevation: usft													
		Latitude: 32° 2' 55.297 N Longitude: 103° 33' 13.064 W Ground Level: 3,330.0 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>1/9/2019</td> <td>6.76</td> <td>59.88</td> <td>47,675.93792051</td> </tr> </tbody> </table>				Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)		IGRF2015	1/9/2019	6.76	59.88	47,675.93792051
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)										
	IGRF2015	1/9/2019	6.76	59.88	47,675.93792051										
Design OH															
Audit Notes: Version: 1.0 Phase: ACTUAL Tie On Depth: 0.0															
Vertical Section: <table border="1"> <thead> <tr> <th>Depth From (TVD) (usft)</th> <th>+N-S (usft)</th> <th>+E-W (usft)</th> <th>Direction (°)</th> </tr> </thead> <tbody> <tr> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>177.27</td> </tr> </tbody> </table>				Depth From (TVD) (usft)	+N-S (usft)	+E-W (usft)	Direction (°)	0.0	0.0	0.0	177.27				
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Survey Program Date 3/10/2019															
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158.0	19,957.0	Intrepid MWD #1 (OH)	MWD	OWSG MWD - Standard											



Final PVA Report

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Project:	Lea County, NM (NAD 83 NME)					TVD Reference:	KB = 25' @ 3355.0usft (HP 465)				
Site:	Magnolia 15 Fed Com					MD Reference:	KB = 25' @ 3355.0usft (HP 465)				
Well:	#714H					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)	DLeg (°/100usft)	Bulid (°/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
158.0	0.80	94.70	158.0	-0.1	1.2	0.57	0.57	0.00	-1.2	0.0	
337.0	0.50	99.00	337.0	-0.3	3.4	0.23	-0.22	2.40	-3.4	0.2	
512.0	0.60	108.60	512.0	-0.8	5.0	0.08	0.08	5.49	-5.0	0.9	
704.0	0.40	134.40	704.0	-1.5	6.5	0.15	-0.10	13.44	-5.7	3.4	
894.0	0.80	136.20	894.0	-3.0	7.9	0.21	0.21	0.95	-7.6	3.6	
1,017.0	0.70	138.90	1,016.9	-4.1	8.9	0.09	-0.08	2.20	-9.0	4.0	
1,146.0	0.70	128.20	1,145.9	-5.2	10.1	0.12	0.00	-9.84	-11.2	1.8	
1,336.0	0.60	106.70	1,335.9	-6.2	12.0	0.13	-0.05	-10.26	-13.3	-2.5	
1,526.0	0.70	108.70	1,525.9	-6.8	14.1	0.05	0.05	0.00	-15.4	-2.5	
1,716.0	0.10	184.90	1,715.9	-7.3	15.1	0.38	-0.32	41.16	-6.0	15.7	
1,906.0	0.20	172.00	1,905.9	-7.8	15.2	0.06	0.05	-6.79	-9.8	13.9	
2,096.0	0.20	38.80	2,095.9	-7.9	15.4	0.19	0.00	-70.11	-3.5	-17.0	
2,286.0	5.00	7.70	2,285.7	0.8	16.8	2.54	2.53	-16.37	-2.8	-16.5	
2,476.0	8.00	10.60	2,474.4	21.8	20.3	1.59	1.58	1.53	-25.1	-16.0	
2,666.0	7.90	11.40	2,662.6	47.6	25.3	0.08	-0.05	0.42	-47.0	-14.6	
2,856.0	10.60	15.80	2,850.1	77.2	32.6	1.47	1.42	2.32	-61.4	-8.0	
3,045.0	11.20	20.00	3,035.7	111.2	43.7	0.53	0.32	2.22	-69.5	-1.3	
3,235.0	11.70	27.00	3,221.9	145.7	58.7	0.78	0.26	3.68	-77.2	6.7	
3,425.0	10.00	27.10	3,408.5	177.6	75.0	0.89	-0.89	0.05	-83.5	4.2	
3,615.0	10.20	36.10	3,595.6	205.8	92.4	0.84	0.11	4.74	-86.2	12.3	
3,805.0	9.90	42.50	3,782.7	231.5	113.4	0.61	-0.16	3.37	-89.6	13.2	
3,995.0	8.90	32.90	3,970.1	255.9	132.4	0.88	-0.53	-5.05	-92.2	-10.1	
4,185.0	8.20	21.30	4,158.0	280.8	145.3	0.98	-0.37	-6.11	-86.5	-30.8	
4,375.0	7.10	25.90	4,346.3	304.0	155.3	0.66	-0.58	2.42	-84.3	-24.9	
4,565.0	6.50	42.20	4,535.0	322.6	167.7	1.06	-0.32	8.58	-81.9	-7.5	
4,755.0	6.50	43.10	4,723.8	338.4	182.3	0.05	0.00	0.47	-75.8	-16.8	



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Well: #714H			North Reference: Grid		
Wellbore: OH			Survey Calculation Method: Minimum Curvature		
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Survey											
MD (usft)	Inc (")	Asl (grid_north_usdm)	TVD (usft)	N/S (usft)	EW (usft)	DLeg ("/100usft)	Build ("/100usft)	Turn ("/100usft)	High to Plan (usft)	Right to Plan (usft)	
4,945.0	6.60	20.60	4,912.6	356.4	193.5	1.34	0.05	-11.84	-54.8	-47.7	
5,135.0	5.70	18.60	5,101.5	375.8	200.3	0.49	-0.47	-1.05	-43.7	-48.3	
5,325.0	6.40	19.30	5,290.4	394.5	206.8	0.37	0.37	0.37	-34.6	-46.2	
5,515.0	7.10	20.60	5,479.1	415.5	214.4	0.38	0.37	0.68	-28.2	-44.5	
5,705.0	7.30	19.60	5,667.8	437.9	222.6	0.12	0.11	-0.53	-21.5	-44.0	
5,894.0	8.10	19.40	5,854.9	461.8	231.1	0.42	0.42	-0.11	-17.1	-42.8	
6,084.0	8.00	16.80	6,043.0	487.1	239.3	0.20	-0.05	-1.37	-12.1	-41.5	
6,274.0	7.80	13.50	6,231.3	511.9	246.1	0.32	-0.21	-1.74	-8.0	-38.5	
6,464.0	7.50	12.60	6,419.6	536.2	251.7	0.08	-0.05	-0.47	-1.0	-34.0	
6,654.0	8.20	13.30	6,607.9	561.5	257.8	0.37	0.37	0.37	2.0	-29.4	
6,844.0	9.00	14.20	6,795.7	589.1	264.3	0.43	0.42	0.47	2.6	-25.2	
7,034.0	7.40	16.40	6,983.8	615.3	271.4	0.86	-0.84	1.16	4.2	-21.9	
7,224.0	5.00	19.10	7,172.6	634.8	277.6	1.27	-1.26	1.42	12.4	-20.0	
7,414.0	4.80	13.70	7,361.9	650.5	282.2	0.25	-0.05	-2.84	23.3	-15.9	
7,603.0	4.40	5.60	7,550.3	665.8	284.8	0.44	-0.26	-4.29	22.8	-9.8	
7,793.0	3.80	2.40	7,739.8	679.3	285.8	0.29	-0.26	-1.68	11.3	-8.3	
7,983.0	2.70	349.70	7,929.5	690.2	285.3	0.74	-0.63	-6.68	2.1	-7.0	
8,173.0	2.20	343.00	8,119.3	698.1	283.4	0.30	-0.26	-3.53	-5.2	-7.3	
8,363.0	1.80	330.70	8,309.2	704.3	280.8	0.28	-0.16	-6.47	-10.2	-9.0	
8,553.0	1.50	304.60	8,499.1	708.5	277.2	0.45	-0.21	-13.74	-10.5	-13.9	
8,742.0	1.00	257.70	8,688.1	709.5	273.6	0.58	-0.26	-24.81	-0.4	-19.0	
8,932.0	1.10	261.30	8,878.1	708.9	270.2	0.06	0.05	1.89	-5.0	-18.9	
9,122.0	0.80	263.20	9,068.0	708.4	267.0	0.16	-0.16	1.00	-8.8	-18.6	
9,311.0	0.70	247.20	9,257.0	707.8	264.7	0.12	-0.05	-8.47	-5.8	-20.7	
9,502.0	0.80	233.00	9,448.0	706.8	262.8	0.10	-0.05	-7.43	-2.6	-21.8	
9,692.0	0.70	260.90	9,638.0	706.0	260.8	0.17	0.05	14.68	-14.6	-17.5	
9,882.0	0.90	245.20	9,828.0	705.2	258.3	0.16	0.11	-8.26	-11.9	-21.1	



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Survey											
MD (usft)	Inc (")	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	EAH (usft)	DLog ("/100usft)	Build ("/100usft)	Turn ("/100usft)	High to Plan (usft)	Right to Plan (usft)	
10,072.0	1.20	235.60	10,017.9	703.4	255.3	0.18	0.16	-5.05	-11.7	-23.1	
10,262.0	1.70	197.40	10,207.9	699.6	252.9	0.56	0.26	-20.11	0.7	-26.6	
10,452.0	0.80	223.70	10,397.8	696.2	251.3	0.63	-0.58	13.84	-14.6	-22.9	
10,643.0	0.80	205.70	10,588.8	694.3	250.1	0.15	0.10	-9.42	-9.1	-26.6	
10,833.0	0.70	149.30	10,778.8	692.1	250.1	0.38	-0.05	-29.68	15.2	-23.4	
11,022.0	0.30	253.80	10,967.8	691.0	250.2	0.44	-0.21	55.29	-26.7	-7.7	
11,212.0	1.80	325.70	11,157.8	693.3	248.0	0.91	0.79	37.84	-16.8	23.5	
11,402.0	2.10	311.70	11,347.7	698.1	243.8	0.30	0.16	-7.37	-30.3	17.5	
11,592.0	1.10	268.40	11,537.6	700.4	239.3	0.79	-0.53	-22.79	-38.4	-10.4	
11,731.0	1.40	279.20	11,676.6	700.6	236.3	0.27	0.22	7.77	-42.7	-2.8	
11,826.0	1.70	276.20	11,771.5	700.9	233.8	0.33	0.32	-3.16	-45.0	-5.1	
11,921.0	5.00	158.90	11,866.4	697.2	233.9	6.29	3.47	-123.47	21.6	-39.0	
11,965.1	11.02	148.69	11,910.0	691.8	236.8	13.99	13.66	-23.16	21.9	-35.0	
KOP (Magnolia 15 Fed Com #714H)											
12,016.0	18.10	145.40	11,959.3	681.1	243.8	13.99	13.90	-6.46	13.1	-32.4	
12,063.0	23.60	153.60	12,003.2	666.7	252.1	13.22	11.70	17.45	-1.8	-29.4	
12,111.0	27.00	158.50	12,046.6	647.9	260.4	8.31	7.08	10.21	-13.4	-23.6	
12,128.5	28.43	160.35	12,062.1	640.3	263.2	9.55	8.19	10.56	-17.1	-21.3	
HL Crossing, MD:12128.5", TVD:12062.1", N/S:640.3", EAH:263.2", INC:28.43											
12,158.0	30.90	163.10	12,087.7	626.4	267.8	9.55	8.36	9.33	-22.4	-17.0	
12,206.0	36.70	165.20	12,127.6	600.8	275.1	12.32	12.08	4.37	-29.5	-10.2	
12,253.0	43.90	168.10	12,163.4	571.2	282.0	15.83	15.32	6.17	-36.5	-2.9	
12,300.0	47.50	169.70	12,198.2	538.2	288.5	8.04	7.66	3.40	-42.6	3.9	
12,342.7	51.22	172.35	12,224.0	506.2	293.5	9.91	8.72	6.20	-46.0	10.2	
FTP (Magnolia 15 Fed Com #714H)											
12,347.0	51.60	172.60	12,228.7	502.9	294.0	9.91	8.79	5.84	-46.3	10.8	
12,395.0	53.50	177.60	12,255.9	464.9	297.2	9.17	3.96	10.42	-46.6	16.5	



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Well:	#714H	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)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
12,442.0	58.30	182.80	12,282.3	428.0	297.0	13.71	10.21	11.06	-44.5	18.2
12,490.0	62.90	181.90	12,305.8	384.3	295.3	9.72	9.58	-1.87	-42.0	15.7
12,537.0	67.30	180.90	12,325.6	341.7	294.3	9.56	9.36	-2.13	-38.1	13.9
12,585.0	70.70	179.70	12,342.8	296.8	294.0	7.46	7.08	-2.50	-32.2	13.2
12,632.0	73.20	178.90	12,357.4	252.2	284.6	5.56	5.32	-1.70	-23.8	13.4
12,680.0	74.70	177.50	12,370.7	208.1	296.0	4.20	3.12	-2.92	-12.2	14.5
12,758.0	84.60	179.40	12,384.7	129.5	298.1	12.92	12.69	2.44	1.5	15.8
12,774.0	89.30	181.30	12,385.5	113.5	298.0	31.68	29.37	11.87	2.3	15.6
12,889.0	90.20	182.50	12,386.0	-1.4	294.2	1.30	0.78	1.04	2.6	10.9
12,964.0	85.30	181.20	12,389.0	-76.3	291.8	6.76	-6.53	-1.73	5.3	7.9
13,059.0	87.30	182.40	12,395.1	-171.1	288.8	2.45	2.11	1.26	11.2	4.2
13,154.0	88.90	181.90	12,398.2	-265.9	285.2	1.78	1.68	-0.53	14.2	-0.1
13,249.0	90.20	181.70	12,399.0	-360.9	282.2	1.38	1.37	-0.21	14.7	-3.8
13,344.0	90.80	181.20	12,398.2	-455.9	279.8	0.82	0.83	-0.53	13.7	-6.9
13,439.0	90.10	180.80	12,397.4	-550.8	278.2	0.85	-0.74	-0.42	12.7	-9.3
13,534.0	91.20	181.40	12,396.3	-645.8	276.3	1.32	1.16	0.63	11.4	-11.8
13,629.0	88.40	179.60	12,396.7	-740.8	275.5	3.50	-2.95	-1.69	11.5	-13.4
13,724.0	87.30	179.30	12,400.2	-835.7	276.4	1.20	-1.16	-0.32	14.9	-13.2
13,819.0	86.50	179.20	12,405.4	-930.6	277.7	0.85	-0.84	-0.11	19.8	-12.7
13,914.0	87.60	180.10	12,410.3	-1,025.5	278.2	1.50	1.16	0.95	24.4	-12.8
14,009.0	88.00	179.60	12,413.9	-1,120.4	278.5	0.67	0.42	-0.53	27.9	-13.3
14,104.0	87.30	179.50	12,417.8	-1,215.3	279.2	0.74	-0.74	-0.11	31.6	-13.2
14,199.0	93.30	182.10	12,417.3	-1,310.2	277.9	6.88	6.32	2.74	30.8	-15.3
14,294.0	92.30	180.50	12,412.7	-1,405.1	275.8	1.98	-1.05	-1.68	28.0	-18.2
14,389.0	91.60	179.90	12,408.4	-1,500.0	275.4	0.97	-0.74	-0.63	22.5	-19.2
14,484.0	92.20	179.70	12,406.3	-1,595.0	275.8	0.67	0.63	-0.21	19.2	-19.6
14,579.0	92.10	179.40	12,402.7	-1,689.9	276.5	0.33	-0.11	-0.32	15.4	-19.6



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MD (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	EW (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
14,874.0	90.90	179.10	12,400.2	-1,784.9	277.7	1.30	-1.26	-0.32	12.7	-19.0	
14,769.0	89.10	178.80	12,400.2	-1,879.9	279.5	1.92	-1.89	-0.32	12.5	-18.0	
14,864.0	88.80	178.90	12,402.0	-1,974.8	281.4	0.33	-0.32	0.11	14.0	-16.8	
14,877.4	88.97	178.97	12,402.2	-1,988.2	281.6	1.37	1.26	0.53	14.2	-16.7	
TGT 1 (Magnolia 15 Fed Com #714H)											
14,959.0	90.00	179.40	12,403.0	-2,069.8	282.8	1.37	1.26	0.53	14.5	-16.2	
15,054.0	91.00	179.10	12,402.1	-2,164.8	284.0	1.10	1.05	-0.32	13.1	-15.6	
15,149.0	89.40	178.00	12,401.8	-2,259.7	286.5	2.04	-1.68	-1.16	12.2	-13.9	
15,244.0	88.70	177.60	12,403.4	-2,354.7	290.1	0.85	-0.74	-0.42	13.2	-11.0	
15,339.0	89.30	177.10	12,405.0	-2,449.5	294.5	0.82	0.83	-0.53	14.3	-7.3	
15,434.0	89.50	176.80	12,406.0	-2,544.4	299.5	0.38	0.21	-0.32	14.7	-3.0	
15,529.0	89.20	179.20	12,407.1	-2,639.3	302.9	2.55	-0.32	2.53	15.2	-0.4	
15,624.0	91.40	179.80	12,406.6	-2,734.3	303.7	2.40	2.32	0.63	14.1	-0.3	
15,719.0	90.80	179.40	12,404.9	-2,829.3	304.4	0.94	-0.84	-0.42	11.9	-0.4	
15,815.0	89.30	179.20	12,405.0	-2,925.3	305.5	1.37	-1.35	-0.21	11.4	0.1	
15,910.0	89.70	179.70	12,405.9	-3,020.3	308.4	0.67	0.42	0.53	11.7	0.3	
16,005.0	88.60	178.60	12,408.9	-3,115.2	307.8	3.46	-3.26	-1.16	14.2	0.9	
16,100.0	88.30	179.70	12,413.2	-3,210.1	309.3	2.13	1.79	1.16	17.8	1.6	
16,195.0	87.90	179.00	12,416.3	-3,305.0	310.3	0.85	-0.42	-0.74	20.4	2.0	
16,290.0	89.40	179.00	12,418.5	-3,400.0	312.0	1.58	1.58	0.00	22.1	2.9	
16,385.0	88.90	179.40	12,420.0	-3,495.0	313.3	0.67	-0.53	0.42	22.9	3.5	
16,480.0	90.50	179.70	12,420.4	-3,590.0	314.1	1.71	1.68	0.32	22.8	3.6	
16,575.0	91.40	180.20	12,418.9	-3,685.0	314.1	1.08	0.95	0.53	20.7	2.9	
16,670.0	91.60	180.00	12,416.4	-3,779.9	314.0	0.30	0.21	-0.21	17.6	2.0	
16,765.0	90.50	179.90	12,414.6	-3,874.9	314.1	1.16	-1.16	-0.11	15.3	1.4	
16,860.0	90.10	179.00	12,414.1	-3,969.9	315.0	1.04	-0.42	-0.95	14.3	1.6	



Final PVA Report

Company: EOG Resources - Midland		Local Co-ordinate Reference: Well #714H	
Project: Lea County, NM (NAD 83 NME)		TVD Reference: KB = 25' @ 3355.0usft (HP 485)	
Site: Magnolia 15 Fed Com		MD Reference: KB = 25' @ 3355.0usft (HP 485)	
Well: #714H		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)	DLeg (°/100usft)	Bulid (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
16,879.3	89.47	178.72	12,414.2	-3,989.2	315.4	3.58	-3.26	-1.47	14.2	1.8	
TGT 2 (Magnolia 15 Fed Com #714H)											
16,955.0	87.00	177.60	12,418.6	-4,084.8	317.8	3.58	-3.26	-1.47	16.0	3.7	
17,050.0	88.80	179.30	12,420.0	-4,159.7	320.4	2.88	2.00	1.79	18.7	5.5	
17,145.0	91.00	181.30	12,420.0	-4,254.7	319.9	3.05	2.21	2.11	18.1	4.3	
17,241.0	91.60	180.70	12,417.9	-4,350.7	318.2	0.88	0.62	-0.62	15.2	1.9	
17,336.0	89.20	178.80	12,417.2	-4,445.7	318.6	3.22	-2.53	-2.00	13.8	1.8	
17,430.0	88.90	178.30	12,418.8	-4,539.6	321.0	0.62	-0.32	-0.53	14.6	3.3	
17,526.0	89.70	179.40	12,419.9	-4,635.6	322.9	1.42	0.83	1.15	15.1	4.5	
17,620.0	87.00	178.50	12,422.6	-4,729.5	324.6	3.03	-2.87	-0.96	17.1	5.5	
17,715.0	89.70	180.90	12,425.4	-4,824.5	325.1	3.80	2.84	2.53	19.1	5.2	
17,811.0	91.30	181.80	12,424.5	-4,920.4	323.0	1.82	1.67	0.73	17.6	2.4	
17,905.0	90.80	180.60	12,422.8	-5,014.4	321.2	1.19	-0.53	-1.06	15.1	-0.1	
18,000.0	91.00	181.10	12,421.3	-5,109.4	319.8	0.57	0.21	0.53	12.9	-2.2	
18,085.0	89.10	180.20	12,421.2	-5,204.4	318.7	2.21	-2.00	-0.95	12.1	-4.0	
18,180.0	89.90	180.40	12,422.1	-5,299.4	318.2	0.87	0.84	0.21	12.2	-5.2	
18,285.0	90.50	180.70	12,421.7	-5,394.3	317.3	0.71	0.63	0.32	11.2	-6.9	
18,380.0	88.60	179.20	12,422.5	-5,489.3	317.4	2.55	-2.00	-1.58	11.2	-7.5	
18,475.0	91.40	181.50	12,422.5	-5,584.3	316.8	3.81	2.95	2.42	10.5	-8.8	
18,570.0	90.20	181.30	12,421.1	-5,679.3	314.5	1.28	-1.26	-0.21	8.5	-11.9	
18,665.0	89.40	181.10	12,421.5	-5,774.3	312.5	0.87	-0.84	-0.21	8.1	-14.6	
18,760.0	91.50	181.90	12,420.7	-5,869.2	310.0	2.37	2.21	0.84	6.7	-17.8	
18,855.0	90.90	181.30	12,418.7	-5,964.2	307.4	0.89	-0.63	-0.83	4.0	-21.1	
18,881.8	90.82	181.16	12,418.3	-5,990.7	308.8	0.61	-0.32	-0.53	3.4	-21.9	
TGT 3 (Magnolia 15 Fed Com #714H)											
18,950.0	90.60	180.80	12,417.5	-6,059.1	305.6	0.61	-0.32	-0.53	1.9	-23.6	
19,045.0	90.20	181.20	12,416.8	-6,154.1	304.0	0.60	-0.42	0.42	0.3	-26.0	



Final PVA Report

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #714H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25' @ 3355.0usft (HP 465)
Site:	Magnolia 15 Fed Com	MD Reference:	KB = 25' @ 3355.0usft (HP 465)
Well:	#714H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

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)
19,140.0	89.90	181.30	12,418.8	-6,249.1	301.9	0.33	-0.32	0.11	-0.6	-28.8
19,235.0	89.30	182.30	12,417.4	-6,344.0	298.9	1.23	-0.63	1.05	-0.9	-32.5
19,330.0	90.40	182.10	12,417.7	-6,439.0	295.3	1.18	1.18	-0.21	-1.5	-36.9
19,425.0	90.20	182.50	12,417.2	-6,533.9	291.5	0.47	-0.21	0.42	-2.9	-41.4
19,520.0	89.70	180.80	12,417.3	-6,628.8	288.7	1.87	-0.53	-1.79	-3.7	-44.8
19,615.0	89.00	180.90	12,418.3	-6,723.8	287.3	0.74	-0.74	0.11	-3.5	-47.0
19,710.0	89.80	181.50	12,418.3	-6,818.8	285.3	1.05	0.84	0.63	-3.4	-49.7
19,805.0	89.30	180.90	12,420.1	-6,913.8	283.3	0.82	-0.53	-0.63	-3.5	-52.4
19,892.0	89.30	181.20	12,421.1	-7,000.8	281.7	0.34	0.00	0.34	-3.2	-54.6
Final MWD Survey (MD=19892.0')										
19,957.0	89.30	181.20	12,421.9	-7,065.7	280.4	0.00	0.00	0.00	-3.1	-56.5
Final Projection to Bit (MD=19957.0') - PBHL (Magnolia 15 Fed Com #714H)										

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/S (usft)	+E/W (usft)	
12,128.5	12,062.1	640.3	283.2	HL Crossing, MD:12128.5', TVD:12062.1', N/S:640.3', E/W:283.2', INC:28.43
19,892.0	12,421.1	-7,000.8	281.7	Final MWD Survey (MD=19892.0')
19,957.0	12,421.9	-7,065.7	280.4	Final Projection to Bit (MD=19957.0')

Checked By: _____	Approved By: _____	Date: _____
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Lea County, NM (NAD 83 NME)
Magnolia 15 Fed Com #714H
HP 465
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

To convert a Magnetic Direction to a Grid Direction, Add 8.35°
To convert a Magnetic Direction to a True Direction, Add 8.76° East
To convert a True Direction to a Grid Direction, Subtract 0.41°

WELL DETAILS: #714H

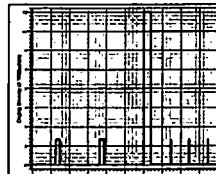
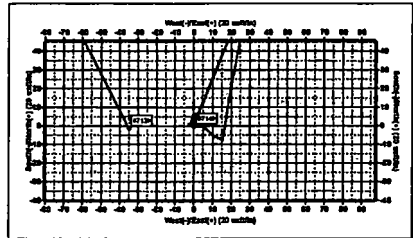
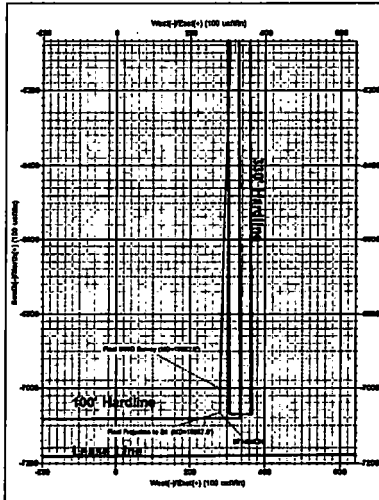
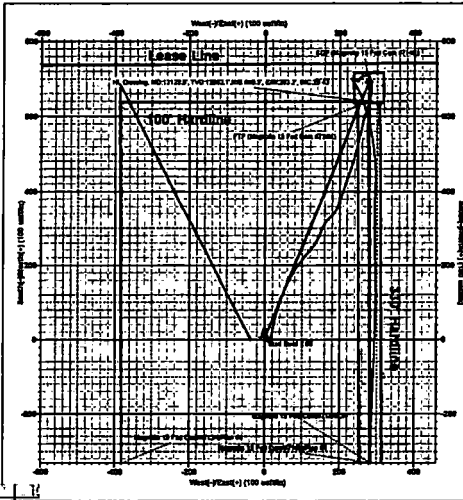
3330.0
KB = 29' @ 3355.000 (HP 465)
Northing 762912.00 32° 2' 55.297 N Longitude 103° 33' 13.064 W Sht

SECTION DETAILS

MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VFace	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2500.0	0.00	0.00	2500.0	0.0	0.0	0.00	0.00	0.0	
2949.9	9.00	21.92	2948.0	32.7	13.2	2.00	21.92	-32.0	
7261.9	9.00	21.92	7207.0	658.3	264.8	0.00	0.00	-644.9	
7711.7	0.00	0.00	7655.0	691.0	278.0	2.00	180.00	-677.0	
11982.2	0.00	0.00	11905.5	691.0	278.0	0.00	0.00	-677.0	KOP (Magnolia 15 Fed Com #714H)
12711.2	89.87	179.56	12383.0	214.6	281.6	12.00	179.56	-201.0	
14914.0	89.87	179.56	12388.0	-1988.1	298.3	0.00	0.00	2000.0	TGT 1 (Magnolia 15 Fed Com #714H)
14924.6	89.66	179.56	12388.0	-1988.8	298.4	2.00	-180.00	2010.7	
16915.6	89.66	179.56	12400.0	-3989.6	313.5	0.00	0.00	4000.0	TGT 2 (Magnolia 15 Fed Com #714H)
16919.8	89.57	179.56	12400.0	-3989.9	313.6	2.00	180.00	4004.3	
18917.2	89.57	179.56	12415.0	-5991.1	328.7	0.00	0.00	6000.0	TGT 3 (Magnolia 15 Fed Com #714H)
18922.3	89.47	179.56	12415.0	-5996.2	328.8	2.00	180.00	6005.0	
18996.1	89.47	179.56	12425.0	-7070.0	336.9	0.00	0.00	7078.0	PBHL (Magnolia 15 Fed Com #714H)

WELLBORE TARGET DETAIL (MAP CO-ORDINATES)

Name	TVD	+N-S	+E-W	Northing	Eastings	Shape
KOP (Magnolia 15 Fed Com #714H)	11905.5	691.0	278.0	333016.00	763180.00	Rectangle (Sides: L80.0 W80.0)
FTP (Magnolia 15 Fed Com #714H)	12383.0	641.0	276.0	332996.00	763180.00	Point
TGT 1 (Magnolia 15 Fed Com #714H)	12388.0	-1988.1	298.3	332536.00	763210.34	Point
TGT 2 (Magnolia 15 Fed Com #714H)	12400.0	-3989.6	313.5	328338.40	763226.54	Point
TGT 3 (Magnolia 15 Fed Com #714H)	12415.0	-5991.1	328.7	326333.80	763240.73	Point
PBHL (Magnolia 15 Fed Com #714H)	12425.0	-7070.0	336.9	325335.00	763248.82	Rectangle (Sides: L8.0 W80.0)



Lea County, NM (NAD 83 NME)
Magnolia 15 Fed Com #714H
HP 465
Plan #1