



EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Magnolia 15 Fed Com

#713H

OH

Design: OH

Final PVA Report

22 February, 2019



Final PVA Report

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #713H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	K8 = 25' @ 3355.0usft
Site:	Magnolia 15 Fed Com	MD Reference:	K8 = 25' @ 3355.0usft
Well:	#713H	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	Magnolia 15 Fed Com				
Site Position:		Northing:	381,905.00 usft	Latitude:	32° 2' 51.321 N
From:	Map	Easting:	780,373.00 usft	Longitude:	103° 33' 42.598 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.41 "

Well	#713H				
Well Position	+N-S 0.0 usft	Northing:	382,324.00 usft	Latitude:	32° 2' 55.289 N
	+E-W 0.0 usft	Easting:	782,877.00 usft	Longitude:	103° 33' 13.471 W
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,330.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	1/9/2019	6.76	59.88	47,875.82495815

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	182.36	

Survey Program	Date	2/22/2019		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
186.0	19,907.0	Intrepid MWD #1 (OH)	MWD	OWSG MWD - Standard



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Well:	#713H	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)	Bold ("/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
186.0	1.10	23.50	186.0	1.6	0.7	0.59	0.59	0.00	-1.8	0.0	
367.0	0.40	335.50	367.0	3.8	1.1	0.49	-0.39	-26.52	-3.0	-2.6	
543.0	0.60	314.50	543.0	5.0	0.2	0.15	0.11	-11.93	-3.3	-3.7	
736.0	0.10	279.70	736.0	5.7	-0.7	0.27	-0.26	-18.03	-1.6	-5.6	
926.0	0.50	208.50	926.0	5.0	-1.2	0.25	0.21	-37.47	3.9	-3.5	
1,019.0	0.10	291.10	1,019.0	4.7	-1.5	0.53	-0.43	88.82	-3.1	-3.9	
1,147.0	0.40	290.40	1,147.0	4.9	-2.0	0.23	0.23	-0.55	-3.6	-3.9	
1,336.0	0.40	283.50	1,336.0	5.3	-3.3	0.03	0.00	-3.65	-4.4	-4.4	
1,527.0	0.40	297.30	1,526.9	5.8	-4.5	0.05	0.00	7.23	-6.6	-3.1	
1,716.0	0.70	283.70	1,715.9	6.3	-6.2	0.17	0.16	-7.20	-7.5	-4.7	
1,906.0	0.80	270.60	1,905.9	6.6	-8.7	0.10	0.05	-6.89	-8.7	-6.5	
2,097.0	0.80	275.50	2,096.9	6.8	-11.3	0.04	0.00	2.57	-11.9	-5.7	
2,286.0	0.80	267.60	2,285.9	6.8	-14.0	0.06	0.00	-4.16	-13.7	-7.4	
2,476.0	0.90	252.40	2,475.9	6.3	-16.7	0.13	0.05	-8.00	-14.0	-11.1	
2,666.0	0.80	237.70	2,665.8	5.2	-19.3	0.13	-0.05	-7.74	-13.5	-14.7	
2,856.0	5.20	312.00	2,855.6	10.2	-26.8	2.65	2.32	39.11	-26.7	10.4	
3,046.0	8.10	323.10	3,044.3	26.7	-41.2	1.66	1.53	5.84	-45.7	17.1	
3,235.0	11.30	332.50	3,230.6	53.8	-57.8	1.88	1.69	4.97	-64.8	26.6	
3,425.0	9.70	332.90	3,417.4	64.5	-73.7	0.84	-0.84	0.21	-77.4	27.1	
3,615.0	7.90	344.50	3,605.1	111.4	-84.4	1.33	-0.95	6.11	-66.7	38.4	
3,805.0	10.70	346.80	3,792.6	141.1	-92.0	1.49	1.47	1.21	-82.2	33.2	
3,996.0	9.20	353.90	3,980.8	173.6	-97.6	1.01	-0.79	3.72	-56.0	30.2	
4,186.0	9.60	330.20	4,168.3	202.4	-107.1	2.03	0.21	-12.47	-60.3	0.4	
4,375.0	7.50	334.90	4,355.2	227.3	-120.2	1.17	-1.11	2.49	-53.6	5.3	
4,566.0	5.80	345.00	4,544.9	247.9	-128.0	1.08	-0.89	5.29	-39.6	9.4	
4,755.0	3.10	15.50	4,733.3	262.1	-129.1	1.85	-1.43	16.14	-17.2	9.6	



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Well:	#713H	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)	
4,945.0	2.40	18.80	4,823.1	270.8	-128.4	0.38	-0.37	1.74	-1.6	-13.9	
5,135.0	2.00	17.20	5,113.0	277.7	-124.2	0.21	-0.21	-0.84	16.4	-38.3	
5,325.0	5.50	314.70	5,302.6	287.3	-128.7	2.58	1.84	-32.89	63.9	4.5	
5,515.0	7.20	305.70	5,491.4	300.6	-145.8	1.03	0.89	-4.74	72.6	28.6	
5,705.0	8.80	306.50	5,678.5	316.3	-167.3	0.90	0.89	0.42	77.6	43.1	
5,895.0	9.30	308.70	5,867.1	334.3	-191.4	0.21	0.21	0.11	78.9	58.2	
6,085.0	8.50	305.00	6,054.9	351.5	-215.2	0.44	-0.42	-0.89	78.5	76.3	
6,274.0	9.30	319.90	6,241.6	371.2	-236.5	1.29	0.42	7.88	100.1	65.3	
6,464.0	9.00	319.50	6,428.2	394.2	-256.0	0.16	-0.16	-0.21	103.2	73.9	
6,654.0	11.40	333.70	6,616.2	422.4	-274.0	1.82	1.28	7.47	119.5	49.9	
6,845.0	11.70	334.30	6,803.3	456.7	-280.8	0.17	0.16	0.31	116.5	48.1	
7,035.0	11.30	332.20	6,989.5	490.6	-307.8	0.30	-0.21	-1.11	111.4	51.9	
7,224.0	10.50	343.70	7,175.1	523.5	-321.3	1.22	-0.42	6.08	117.9	26.3	
7,414.0	9.10	340.10	7,362.3	554.2	-331.3	0.80	-0.74	-1.89	112.8	28.7	
7,604.0	8.30	337.10	7,550.2	581.0	-341.7	0.48	-0.42	-1.58	98.8	32.6	
7,793.0	7.50	338.90	7,737.4	604.9	-351.9	0.42	-0.42	-0.11	76.4	32.7	
7,983.0	5.50	333.30	7,926.1	624.4	-360.8	1.07	-1.05	-1.89	52.7	36.6	
8,173.0	4.50	329.70	8,115.4	639.0	-368.7	0.55	-0.53	-1.89	33.8	39.2	
8,363.0	4.30	350.10	8,304.9	652.5	-373.7	0.83	-0.11	10.74	31.2	27.5	
8,553.0	2.70	341.30	8,494.5	663.7	-378.3	0.89	-0.84	-4.63	15.2	30.8	
8,743.0	1.20	314.40	8,684.4	669.4	-379.2	0.90	-0.79	-14.16	-6.4	32.3	
8,932.0	1.00	287.20	8,873.4	671.2	-382.2	0.29	-0.11	-14.39	-23.8	24.9	
9,122.0	1.10	48.50	9,063.3	672.9	-382.4	0.96	0.05	63.84	32.7	8.8	
9,312.0	0.40	64.50	9,253.3	674.4	-380.4	0.38	-0.37	8.42	31.5	0.0	
9,502.0	0.60	319.00	9,443.3	675.5	-380.5	0.42	0.11	-55.53	-9.2	29.7	
9,692.0	2.10	38.80	9,633.3	679.0	-379.0	1.08	0.79	40.95	23.4	16.3	
9,882.0	1.30	47.80	9,823.2	683.2	-375.4	0.45	-0.42	5.79	20.5	12.2	



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Survey											
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10,072.0	0.30	246.50	10,013.2	684.5	-374.2	0.84	-0.53	-84.89	-21.8	-5.6	
10,263.0	1.60	258.20	10,204.1	683.7	-377.3	0.68	0.68	6.13	-25.6	-1.0	
10,453.0	3.50	270.50	10,393.8	683.2	-385.7	1.03	1.00	6.47	-33.6	5.1	
10,643.0	2.80	253.10	10,583.7	681.9	-395.9	0.62	-0.37	-9.16	-43.8	-7.0	
10,833.0	0.50	280.50	10,773.6	680.7	-401.2	1.25	-1.21	14.42	-47.0	16.1	
11,023.0	0.70	330.00	10,963.6	681.9	-402.6	0.28	0.11	26.05	-20.0	46.8	
11,213.0	0.80	298.00	11,153.5	683.5	-404.3	0.22	0.05	-16.84	-44.1	28.5	
11,403.0	3.70	253.10	11,343.4	682.4	-411.4	1.68	1.53	-23.63	-58.4	-11.9	
11,593.0	5.10	257.80	11,532.8	678.8	-425.5	0.76	0.74	2.53	-73.8	-6.4	
11,675.0	4.50	250.50	11,614.5	677.0	-432.1	1.05	-0.73	-9.02	-79.2	-16.4	
11,733.0	4.60	237.80	11,672.4	675.0	-436.2	1.74	0.17	-21.90	-78.1	-33.9	
11,828.0	4.90	213.20	11,767.0	669.6	-441.6	2.15	0.32	-25.89	-84.4	-65.0	
11,923.0	10.90	168.70	11,861.2	657.3	-442.1	8.58	6.32	-46.84	-12.2	-94.4	
11,951.0	16.13	168.09	11,888.4	651.0	-440.6	18.82	18.70	-9.31	-14.1	-95.0	
KOP (Magnolia 15 Fed Com #713H)											
11,970.0	19.70	165.10	11,908.5	645.3	-439.2	18.82	18.76	-5.23	-18.0	-95.3	
11,993.3	22.47	165.75	11,928.2	637.2	-437.1	11.91	11.87	2.81	-26.3	-94.8	
100' HL Crossing, MD:11993.3, TVD:11928.2, N/S:637.2, E/W:-437.1, INC:22.47											
12,018.0	25.40	166.30	11,950.8	627.5	-434.7	11.91	11.88	2.21	-34.8	-93.9	
12,065.0	29.10	168.00	11,992.5	606.5	-429.9	8.04	7.87	3.62	-51.5	-90.6	
12,113.0	31.60	167.70	12,034.0	582.8	-424.8	5.22	5.21	-0.62	-63.2	-87.3	
12,160.0	33.50	167.10	12,073.6	558.1	-419.3	4.10	4.04	-1.28	-70.9	-83.0	
12,208.0	37.90	165.60	12,112.6	530.9	-412.6	9.35	9.17	-3.12	-74.9	-77.7	
12,255.0	40.20	165.60	12,149.1	502.2	-405.3	4.89	4.89	0.00	-77.6	-69.6	
12,275.8	41.54	165.82	12,164.8	489.0	-401.9	6.50	6.46	1.08	-77.8	-65.5	
80' from 330' HL Crossing, MD:12275.8, TVD:12164.8, N/S:489.0, E/W:-401.9, INC:41.54											
12,303.0	43.30	166.10	12,184.9	471.2	-397.5	6.50	6.46	1.01	-77.1	-59.9	



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 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #713H
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 MD Reference: KB = 25' @ 3355.0usft
 North Reference: Grid
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 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)	
12,327.6	44.65	167.38	12,202.6	454.6	-393.6	6.59	5.51	5.22	-76.0	-54.2	
FTP (Magnolia 15 Fed Com #713H)											
12,350.0	45.90	168.50	12,218.3	439.0	-390.2	6.59	5.56	4.98	-74.0	-49.3	
12,397.0	51.60	171.10	12,249.3	404.3	-384.0	12.82	12.13	5.53	-68.4	-39.8	
12,444.0	57.10	173.10	12,276.7	366.5	-378.8	12.20	11.70	4.26	-61.2	-32.5	
12,492.0	62.80	175.20	12,300.7	325.1	-374.6	12.46	11.87	4.37	-52.6	-27.1	
12,539.0	67.70	177.60	12,320.4	282.6	-371.9	11.41	10.43	5.11	-43.1	-23.9	
12,587.0	72.50	179.00	12,336.7	237.5	-370.6	10.37	10.00	2.92	-32.1	-22.6	
12,634.0	75.80	179.50	12,349.6	192.3	-370.0	7.10	7.02	1.06	-20.2	-22.2	
12,682.0	77.70	178.70	12,360.6	145.5	-369.3	4.28	3.96	-1.67	-9.6	-21.6	
12,774.0	85.60	179.40	12,373.9	54.6	-367.8	8.62	8.59	0.76	2.9	-20.7	
12,870.0	88.90	178.30	12,380.2	-41.2	-365.8	1.77	1.35	-1.15	8.5	-19.6	
12,965.0	89.10	176.90	12,383.5	-136.1	-363.5	2.40	2.32	0.63	11.2	-18.0	
13,060.0	90.40	179.60	12,383.9	-231.1	-362.3	1.55	1.37	0.74	10.9	-17.5	
13,155.0	88.80	179.20	12,384.6	-326.1	-361.3	1.74	-1.68	-0.42	10.9	-17.2	
13,250.0	86.40	177.40	12,388.6	-420.9	-358.5	3.16	-2.53	-1.89	14.3	-15.2	
13,345.0	89.60	178.00	12,391.9	-515.8	-354.7	3.43	3.37	0.63	16.9	-12.1	
13,440.0	90.60	177.90	12,391.7	-610.7	-351.3	1.06	1.05	-0.11	16.1	-9.5	
13,535.0	91.60	179.10	12,389.9	-705.7	-348.8	1.84	1.05	1.26	13.6	-7.7	
13,629.0	89.40	178.10	12,389.1	-799.6	-346.5	2.57	-2.34	-1.06	12.2	-6.2	
13,724.0	91.80	178.90	12,388.0	-894.6	-344.0	2.76	2.63	0.84	10.5	-4.4	
13,819.0	89.30	177.40	12,387.0	-989.5	-340.9	3.16	-2.74	-1.58	8.8	-2.1	
13,914.0	90.80	176.50	12,386.9	-1,084.4	-337.5	1.98	1.58	1.16	8.1	0.6	
14,009.0	91.40	180.40	12,385.1	-1,179.4	-336.6	2.10	0.63	2.00	5.6	0.7	
14,104.0	89.60	179.50	12,384.3	-1,274.4	-336.5	2.12	-1.89	-0.95	4.1	0.1	
14,199.0	88.40	179.50	12,385.9	-1,369.4	-335.7	1.26	-1.26	0.00	5.1	0.1	
14,294.0	88.50	180.50	12,388.5	-1,464.4	-335.7	1.06	0.11	1.05	7.1	-0.6	



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14,389.0	88.70	180.50	12,390.0	-1,559.3	-336.5	1.26	1.26	0.00	7.9	-2.2	
14,484.0	92.00	181.70	12,388.6	-1,654.3	-338.4	2.73	2.42	1.26	5.8	-4.7	
14,578.0	90.90	181.30	12,388.2	-1,749.2	-340.8	1.23	-1.16	-0.42	2.8	-8.0	
14,674.0	90.30	181.70	12,385.2	-1,844.2	-343.3	0.76	-0.63	0.42	1.2	-11.2	
14,769.0	88.10	181.20	12,386.5	-1,939.2	-345.7	2.37	-2.32	-0.53	1.8	-14.4	
14,817.7	88.45	180.79	12,388.0	-1,987.8	-346.6	1.11	0.73	-0.83	3.0	-15.6	
TOT 1 (Magnolia 15 Fed Com #713H)											
14,865.0	88.80	180.40	12,389.1	-2,035.1	-347.1	1.11	0.73	-0.83	3.7	-16.4	
14,959.0	91.00	178.40	12,389.3	-2,129.1	-346.1	3.16	2.34	-2.13	3.2	-16.2	
15,055.0	89.30	176.20	12,388.0	-2,225.0	-341.6	2.80	-1.77	-2.29	2.2	-12.4	
15,150.0	89.50	176.80	12,390.0	-2,319.8	-335.8	0.67	0.21	0.63	2.5	-7.4	
15,245.0	87.70	176.50	12,392.3	-2,414.6	-330.2	1.92	-1.89	-0.32	4.1	-2.6	
15,340.0	89.00	176.00	12,395.1	-2,509.4	-324.0	1.47	1.37	-0.53	6.2	2.9	
15,435.0	90.20	176.20	12,395.7	-2,604.1	-317.5	1.28	1.26	0.21	6.1	8.6	
15,530.0	89.50	175.70	12,396.0	-2,698.9	-310.8	0.91	-0.74	-0.53	5.6	14.6	
15,625.0	92.20	178.20	12,394.6	-2,793.7	-305.8	3.87	2.84	2.63	3.5	18.9	
15,720.0	90.80	179.60	12,392.1	-2,888.7	-304.0	2.08	-1.47	1.47	0.3	20.0	
15,815.0	89.20	179.70	12,392.1	-2,983.7	-303.4	1.69	-1.68	0.11	-0.4	19.8	
15,910.0	86.00	179.00	12,398.0	-3,078.6	-302.3	3.45	-3.37	-0.74	2.9	20.1	
16,005.0	85.30	179.00	12,403.3	-3,173.3	-300.7	0.74	-0.74	0.00	9.3	21.1	
16,100.0	88.50	178.30	12,408.4	-3,268.1	-298.4	3.45	3.37	-0.74	13.8	22.5	
16,195.0	87.30	178.70	12,411.9	-3,363.0	-295.9	1.33	-1.26	0.42	16.6	24.3	
16,290.0	89.80	179.00	12,414.3	-3,457.9	-294.0	2.65	2.63	0.32	18.3	25.4	
16,322.0	90.90	180.10	12,414.1	-3,489.9	-293.8	4.86	3.44	3.44	17.8	25.4	
16,385.0	88.40	178.30	12,414.5	-3,552.9	-292.9	4.89	-3.97	-2.86	17.7	25.8	
16,480.0	92.90	180.80	12,413.4	-3,647.9	-292.1	5.42	4.74	2.63	15.9	25.8	
16,575.0	94.20	182.20	12,407.5	-3,742.7	-294.6	2.01	1.37	1.47	9.3	22.6	



Final PVA Report

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #713H
Project:	Lee County, NM (NAD 83 NME)	TVD Reference:	KB = 25' @ 3355.0usft
Site:	Magnolia 15 Fed Com	MD Reference:	KB = 25' @ 3355.0usft
Well:	#713H	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)	NIS (usft)	EW (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
16,871.0	94.00	182.40	12,400.6	-3,838.3	-298.5	0.29	-0.21	0.21	1.7	18.0	
16,705.0	91.90	182.10	12,398.9	-3,872.3	-289.8	6.24	-6.18	-0.88	-0.2	16.4	
16,766.0	91.40	182.30	12,397.1	-3,933.2	-302.1	0.88	-0.82	0.33	-2.5	13.6	
16,813.0	90.10	182.40	12,398.5	-3,980.2	-304.1	2.77	-2.77	0.21	-3.4	11.3	
16,823.7	90.19	182.47	12,398.5	-3,990.8	-304.5	1.08	0.85	0.64	-3.5	10.7	
TGT 2 (Magnolia 15 Fed Com #713H)											
16,860.0	90.50	182.70	12,398.3	-4,027.1	-306.2	1.08	0.85	0.64	-4.0	8.8	
16,956.0	85.50	180.50	12,399.6	-4,123.0	-308.8	5.69	-5.21	-2.29	-1.4	5.4	
17,051.0	86.70	180.50	12,406.1	-4,217.7	-309.7	1.26	1.26	0.00	4.4	3.8	
17,146.0	88.50	179.40	12,411.7	-4,312.6	-309.6	1.17	-0.21	-1.16	9.3	3.2	
17,241.0	90.50	178.30	12,414.2	-4,407.5	-307.7	4.37	4.21	-1.16	11.1	4.3	
17,336.0	91.30	178.60	12,412.7	-4,502.5	-305.1	0.90	0.84	0.32	8.9	6.1	
17,431.0	90.90	177.60	12,410.9	-4,597.4	-302.0	1.13	-0.42	-1.05	6.3	8.5	
17,526.0	91.40	177.80	12,409.0	-4,692.3	-298.2	0.57	0.53	0.21	3.7	11.6	
17,621.0	88.50	176.30	12,409.1	-4,787.2	-293.3	3.44	-3.05	-1.58	3.1	15.8	
17,716.0	91.40	179.30	12,409.1	-4,882.1	-289.6	4.39	3.05	3.16	2.5	18.7	
17,811.0	90.20	178.80	12,407.8	-4,977.0	-288.0	1.37	-1.26	-0.53	0.4	19.5	
17,906.0	91.50	179.30	12,406.4	-5,072.0	-286.5	1.47	1.37	0.53	-1.7	20.3	
18,001.0	88.20	177.40	12,406.7	-5,167.0	-283.7	4.01	-3.47	-2.00	-2.2	22.3	
18,096.0	89.50	177.60	12,408.6	-5,261.8	-279.6	1.38	1.37	0.21	-1.0	25.7	
18,191.0	90.30	180.20	12,408.7	-5,356.6	-277.8	2.86	0.64	2.74	-1.5	26.8	
18,285.0	89.50	179.70	12,408.9	-5,450.6	-277.7	1.00	-0.85	-0.53	-2.0	26.1	
18,380.0	88.70	179.70	12,410.4	-5,545.6	-277.2	0.84	-0.84	0.00	-1.3	25.9	
18,475.0	91.20	183.50	12,410.5	-5,640.7	-279.8	4.79	2.63	4.00	-1.9	22.5	
18,570.0	90.60	183.30	12,409.0	-5,735.6	-285.5	0.67	-0.63	-0.21	-4.1	16.1	
18,665.0	87.60	182.00	12,410.5	-5,830.4	-289.9	3.44	-3.16	-1.37	-3.3	11.0	
18,760.0	89.00	181.80	12,413.3	-5,925.3	-293.0	1.49	1.47	-0.21	-1.2	7.1	



Final PVA Report

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #713H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25' @ 3355.0usft
Site:	Magnolia 15 Fed Com	MD Reference:	KB = 25' @ 3355.0usft
Well:	#713H	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)	Bulld (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
18,827.6	89.64	181.59	12,414.1	-5,992.9	-295.0	1.00	0.95	-0.32	-0.9	4.5
TGT 3 (Magnolia 15 Fed Com #713H)										
18,855.0	89.90	181.50	12,414.2	-6,020.3	-295.7	1.00	0.95	-0.32	-1.0	3.6
18,950.0	90.80	181.90	12,413.6	-6,115.2	-288.6	1.04	0.95	0.42	-2.5	0.0
19,045.0	90.10	181.60	12,412.9	-6,210.2	-301.5	0.80	-0.74	-0.32	-4.1	-3.6
19,140.0	89.90	182.40	12,412.9	-6,305.1	-304.8	0.87	-0.21	0.84	-5.0	-7.7
19,235.0	89.10	182.80	12,413.7	-6,400.0	-309.1	0.94	-0.84	0.42	-5.1	-12.7
19,330.0	89.10	184.10	12,415.2	-6,494.9	-314.8	1.37	0.00	1.37	-4.5	-19.2
19,425.0	90.20	183.40	12,415.8	-6,589.6	-321.0	1.37	1.16	-0.74	-4.7	-26.1
19,520.0	88.80	182.40	12,416.6	-6,684.5	-325.8	1.81	-1.47	-1.05	-4.8	-31.7
19,615.0	91.90	180.40	12,416.0	-6,779.5	-328.1	3.88	3.28	-2.11	-6.2	-34.8
19,710.0	91.50	180.60	12,413.2	-6,874.4	-329.0	0.47	-0.42	0.21	-9.9	-36.3
19,805.0	92.10	181.20	12,410.2	-6,969.4	-330.5	0.89	0.63	0.63	-13.7	-38.6
19,841.0	91.30	180.50	12,409.2	-7,005.3	-331.0	2.95	-2.22	-1.94	-15.2	-39.4
Final MWD Survey (MD=19841.0')										
19,907.0	91.30	180.50	12,407.7	-7,071.3	-331.6	0.00	0.00	0.00	-17.3	-40.5
Final Projection to Bit (MD=19907.0') - PBHL (Magnolia 15 Fed Com #713H)										

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/S (usft)	+E/W (usft)	
11,993.3	11,928.2	637.2	-437.1	100' HL Crossing, MD:11993.3', TVD:11928.2', N/S:637.2', E/W:-437.1', INC:22.4
12,275.8	12,164.8	489.0	-401.9	50' from 330' HL Crossing, MD:12275.8', TVD:12164.8', N/S:489.0', E/W:-401.9',
19,841.0	12,409.2	-7,005.3	-331.0	Final MWD Survey (MD=19841.0')
19,907.0	12,407.7	-7,071.3	-331.6	Final Projection to Bit (MD=19907.0')

Checked By: _____ Approved By: _____ Date: _____



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

Lea County, NM (NAD 83 NME)

Magnolia 15 Fed Com #713H

Plan #1

WELL DETAILS: #713H

+N-S	+E-W	Northings	KB = 25' @ 3353' Aull	Longitude	Stat
0.0	0.0	362324.00	762877.00 32° 2' 55.209 N	103° 37' 13.471 W	

SECTION DETAILS

MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	Vsect	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
3000.0	0.00	0.00	3000.0	0.0	0.0	0.00	0.00	0.0	
3525.2	10.50	332.90	3522.2	42.7	-21.9	2.00	332.90	-41.8	
7237.9	10.50	332.90	7172.8	645.3	-330.1	0.00	0.00	-631.1	
7763.1	0.00	0.00	7695.0	688.0	-352.0	2.00	180.00	-672.9	
11980.6	0.00	0.00	11892.5	688.0	-352.0	0.00	0.00	-672.9	KOP (Magnolia 15 Fed Com #713H)
12707.3	89.61	179.55	12370.0	213.8	-348.3	12.00	179.55	-199.3	
14909.4	89.61	179.55	12385.0	-1988.1	-331.0	0.00	0.00	2000.0	TGT 1 (Magnolia 15 Fed Com #713H)
14911.2	89.57	179.55	12385.0	-1990.0	-331.0	2.00	-180.00	2001.9	
16911.8	89.57	179.55	12400.0	-3990.4	-315.3	0.00	0.00	4000.0	TGT 2 (Magnolia 15 Fed Com #713H)
18914.3	89.57	179.55	12415.0	-5992.8	-299.6	0.00	0.00	6000.0	TGT 3 (Magnolia 15 Fed Com #713H)
18919.8	89.47	179.55	12415.0	-5997.8	-299.5	2.00	180.00	6005.1	
19994.6	89.47	179.55	12425.0	-7073.0	-291.1	0.00	0.00	7079.0	PBHL (Magnolia 15 Fed Com #713H)

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N-S	+E-W	Northings	Easting	Shape
KOP (Magnolia 15 Fed Com #713H)	11892.5	688.0	-352.0	362324.00	762877.00	Rectangle (Sides: L80.0 W100.0)
TGT 1 (Magnolia 15 Fed Com #713H)	12370.0	213.8	-348.3	362324.00	762877.00	Point
TGT 2 (Magnolia 15 Fed Com #713H)	12400.0	-3990.4	-315.3	362324.00	762877.00	Point
TGT 3 (Magnolia 15 Fed Com #713H)	12415.0	-5992.8	-299.6	362324.00	762877.00	Point
PBHL (Magnolia 15 Fed Com #713H)	12425.0	-7073.0	-291.1	362324.00	762877.00	Rectangle (Sides: L80.0 W60.0)

