



Lea County, NM (NAD 27 NME)

Magnolia 15 #709H

H&P 621

Plan #2

PROJECT DETAILS: Lea County, NM (NAD 27 NME)

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

WELL DETAILS: #709H

Ground Level: 3295.0
KB = 25' @ 3320.0ust (H&P 621)
Northing: 382619.00 Easting: 737775.00
Latitude: 32° 2' 58.802 N Longitude: 103° 33' 57.242 W

SECTION DETAILS

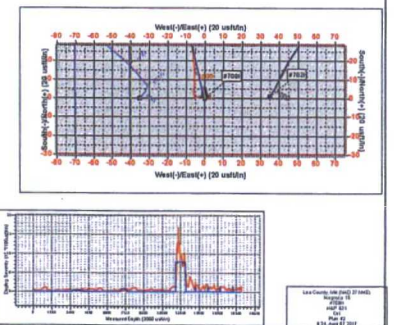
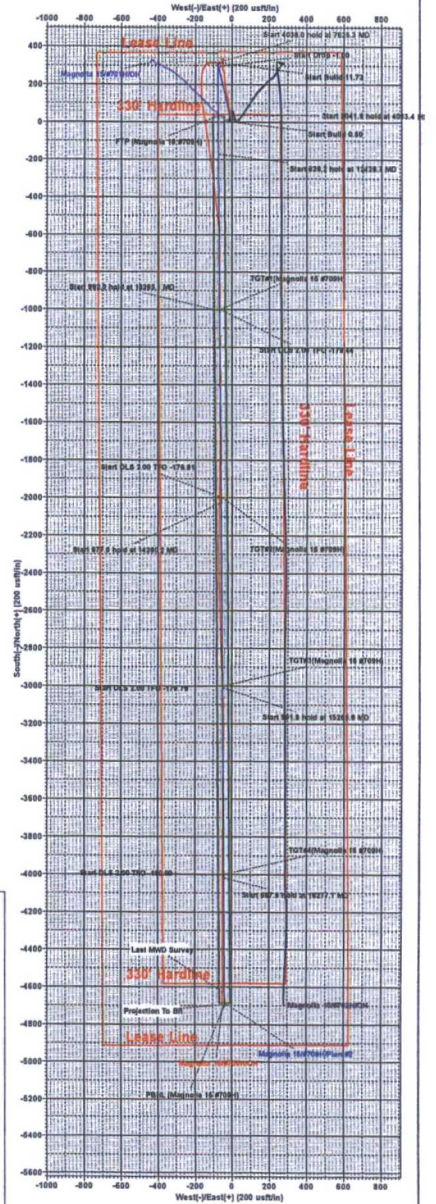
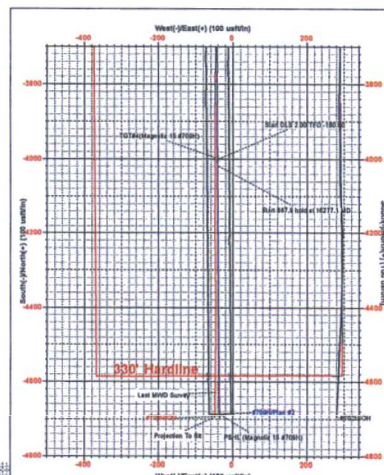
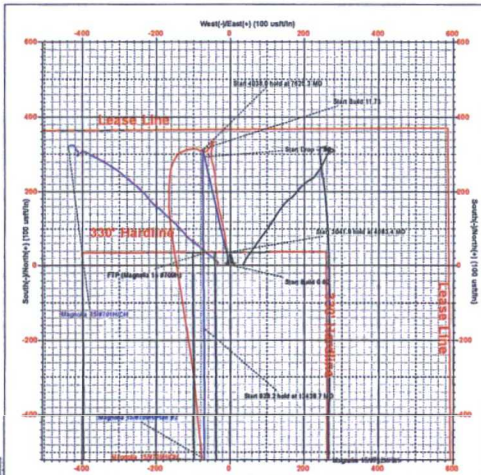
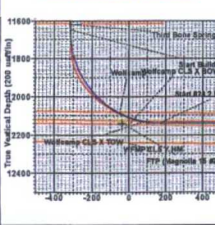
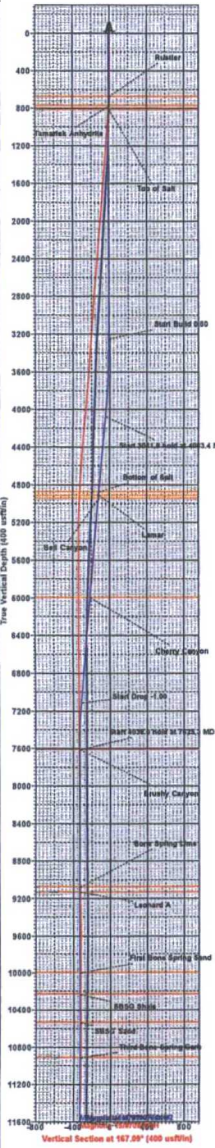
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dieg	TFace	VFace	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	3250.0	0.00	0.00	3250.0	0.0	0.0	0.00	0.00	0.0	
3	4083.4	5.00	347.09	4082.3	35.4	-9.1	0.60	347.09	-35.4	
4	7125.2	5.00	347.09	7112.6	293.9	-67.3	0.00	0.00	-293.4	
5	7625.3	0.00	0.00	7612.0	315.1	-72.2	1.00	180.00	-314.6	
6	11663.3	0.00	0.00	11650.0	315.1	-72.2	0.00	0.00	-314.6	
7	12428.6	89.76	179.55	12138.5	-171.3	-68.4	11.73	179.55	171.8	
8	13256.9	89.76	179.55	12142.0	-999.6	-61.9	0.00	0.00	1000.0	TGT#1(Magnolia 15 #709H)
9	13264.8	89.60	179.55	12142.0	-1007.5	-61.9	2.00	-179.42	1008.0	TGT#2(Magnolia 15 #709H)
10	14257.0	89.60	179.55	12149.0	-1999.7	-54.1	0.00	0.00	2000.0	TGT#3(Magnolia 15 #709H)
11	14280.2	89.14	179.55	12149.3	-2022.9	-53.9	2.00	-179.91	2023.2	TGT#4(Magnolia 15 #709H)
12	15257.2	89.14	179.55	12164.0	-2999.7	-46.3	0.00	0.00	3000.0	PBHL (Magnolia 15 #709H)
13	15265.5	88.97	179.55	12164.1	-3008.1	-46.2	2.00	-179.79	3008.3	
14	16257.5	88.97	179.55	12182.0	-3999.8	-38.4	0.00	0.00	4000.0	
15	16277.0	88.58	179.55	12182.4	-4019.3	-38.2	2.00	-180.00	4019.5	
16	16944.9	88.58	179.55	12199.0	-4687.0	-33.0	0.00	0.00	4687.1	

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting
FTP (Magnolia 15 #709H)	12138.0	35.0	-70.0	382619.00	737705.00
TGT#1(Magnolia 15 #709H)	12142.0	-999.6	-61.9	381619.40	737713.06
TGT#2(Magnolia 15 #709H)	12149.0	-1999.7	-54.1	380619.30	737720.80
TGT#3(Magnolia 15 #709H)	12164.0	-2999.7	-46.3	379619.30	737728.74
TGT#4(Magnolia 15 #709H)	12182.0	-3999.8	-38.4	378619.20	737736.60
PBHL (Magnolia 15 #709H)	12199.0	-4687.0	-33.0	377932.00	737742.00





EOG Resources - Midland

Lea County, NM (NAD 27 NME)

Magnolia 15

#709H

OH

Design: OH

PVA

07 April, 2017

HOBBS OCD
JUN 14 2017
RECEIVED



EOG Resources, Inc.

PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Magnolia 15
Well: #709H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #709H
TVD Reference: KB = 25' @ 3320.0usft (H&P 621)
MD Reference: KB = 25' @ 3320.0usft (H&P 621)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Project: Lea County, NM (NAD 27 NME)
Map System: US State Plane 1927 (Exact solution)
Geo Datum: NAD 1927 (NADCON CONUS)
Map Zone: New Mexico East 3001
System Datum: Mean Sea Level

Site: Magnolia 15
Site Position: Northing: 382,619.00 usft Latitude: 32° 2' 58.604 N
From: Map Easting: 737,740.00 usft Longitude: 103° 33' 57.649 W
Position Uncertainty: 0.0 usft Slot Radius: 13-3/16 " Grid Convergence: 0.41 °

Well: #709H
Well Position: +N/-S 0.0 usft Northing: 382,619.00 usft Latitude: 32° 2' 58.602 N
+E/-W 0.0 usft Easting: 737,775.00 usft Longitude: 103° 33' 57.242 W
Position Uncertainty: 0.0 usft Wellhead Elevation: 0.0 usft Ground Level: 3,295.0 usft

Wellbore: OH
Magnetics: Model Name Sample Date Declination (°) Dip Angle (°) Field Strength (nT)
IGRF2015 1/18/2017 6.98 59.91 47,878

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 0.0 180.40

Survey Program: Date 4/7/2017
From (usft) To (usft) Survey (Wellbore) Tool Name Description
169.0 16,985.0 Interpid MWD #1 (OH) MWD MWD - Standard



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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
169.0	0.80	266.30	169.0	-0.1	-1.2	0.47	0.47	0.00	-1.2	0.0
260.0	0.80	272.10	260.0	-0.1	-2.4	0.09	0.00	6.37	-2.4	0.2
341.0	0.60	268.40	341.0	-0.1	-3.4	0.25	-0.25	-4.57	-3.4	0.0
429.0	0.50	279.80	429.0	0.0	-4.3	0.17	-0.11	12.95	-4.2	0.8
521.0	0.40	302.90	521.0	0.2	-4.9	0.22	-0.11	25.11	-4.3	2.5
616.0	0.50	337.30	616.0	0.8	-5.4	0.30	0.11	36.21	-2.8	4.7
712.0	0.70	356.40	712.0	1.7	-5.6	0.29	0.21	19.90	-2.1	5.5
864.0	2.10	6.70	863.9	5.4	-5.3	0.93	0.92	6.78	-4.8	5.9
1,050.0	4.80	356.10	1,049.6	16.6	-5.4	1.49	1.45	-5.70	-16.9	4.3
1,236.0	4.40	352.70	1,235.0	31.4	-6.9	0.26	-0.22	-1.83	-32.0	2.8
1,424.0	4.60	353.60	1,422.4	46.1	-8.6	0.11	0.11	0.48	-46.7	3.5
1,611.0	4.70	354.80	1,608.8	61.2	-10.2	0.07	0.05	0.64	-61.8	4.6
1,798.0	4.70	352.90	1,795.1	76.4	-11.8	0.08	0.00	-1.02	-77.3	2.3
1,984.0	4.80	346.60	1,980.5	91.5	-14.6	0.29	0.05	-3.39	-92.4	-7.1
2,170.0	4.90	349.10	2,165.8	106.9	-17.9	0.13	0.05	1.34	-108.3	-2.7
2,357.0	5.20	345.90	2,352.1	123.0	-21.4	0.22	0.16	-1.71	-124.5	-9.2
2,544.0	5.20	343.60	2,538.3	139.3	-25.9	0.11	0.00	-1.23	-140.9	-14.6
2,729.0	4.80	350.90	2,722.6	155.0	-29.5	0.41	-0.22	3.95	-157.7	4.6
2,916.0	4.10	350.10	2,909.1	169.3	-31.9	0.38	-0.37	-0.43	-172.3	2.3
3,103.0	4.10	353.80	3,095.6	182.5	-33.7	0.14	0.00	1.98	-185.1	13.9
3,290.0	3.80	354.70	3,282.2	195.3	-35.0	0.16	-0.16	0.48	-197.7	16.9
3,477.0	4.50	352.70	3,468.7	208.8	-36.5	0.38	0.37	-1.07	-209.2	9.5
3,664.0	4.60	352.30	3,655.1	223.5	-38.5	0.06	0.05	-0.21	-217.9	7.4
3,852.0	5.00	1.30	3,842.4	239.2	-39.3	0.45	0.21	4.79	-220.0	40.0
4,038.0	5.00	343.10	4,027.7	255.0	-41.5	0.85	0.00	-9.78	-223.7	-32.1
4,226.0	4.90	347.20	4,215.0	270.7	-45.6	0.20	-0.05	2.18	-225.3	-15.6



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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)	
4,413.0	4.10	347.30	4,401.4	285.0	-48.9	0.43	-0.43	0.05	-223.7	-15.2	
4,602.0	2.90	0.90	4,590.1	296.4	-50.3	0.77	-0.63	7.20	-216.3	35.3	
4,789.0	3.80	9.50	4,776.8	307.2	-49.2	0.55	0.48	4.60	-204.4	61.6	
4,977.0	2.60	11.30	4,964.5	317.5	-47.3	0.64	-0.64	0.96	-197.9	61.5	
5,164.0	2.20	11.10	5,151.3	325.2	-45.8	0.21	-0.21	-0.11	-191.1	54.2	
5,352.0	1.40	310.80	5,339.2	330.3	-46.8	1.03	-0.43	-32.07	-132.9	-132.3	
5,540.0	0.60	114.90	5,527.2	331.3	-47.7	1.06	-0.43	87.29	82.4	151.5	
5,727.0	0.40	90.40	5,714.2	330.9	-46.1	0.15	-0.11	-13.10	6.9	155.7	
5,915.0	0.40	89.20	5,902.2	330.9	-44.8	0.00	0.00	-0.64	-1.1	139.8	
6,103.0	0.40	96.50	6,090.2	330.9	-43.5	0.03	0.00	3.88	9.9	123.4	
6,288.0	0.40	62.70	6,275.2	331.1	-42.3	0.13	0.00	-18.27	-57.6	92.1	
6,476.0	0.40	53.80	6,463.2	331.8	-41.2	0.03	0.00	-4.73	-65.9	66.9	
6,663.0	0.50	268.80	6,650.2	332.2	-41.5	0.46	0.05	-77.54	18.5	-77.1	
6,850.0	0.80	259.30	6,837.2	331.9	-43.6	0.17	0.16	-5.08	29.5	-56.8	
7,037.0	1.30	232.50	7,024.1	330.4	-46.6	0.37	0.27	-14.33	41.9	-23.2	
7,225.0	1.00	222.10	7,212.1	327.8	-49.3	0.19	-0.16	-5.53	32.8	-2.9	
7,411.0	0.80	235.20	7,398.1	325.9	-51.5	0.15	-0.11	7.04	24.6	-0.7	
7,598.0	0.60	17.10	7,585.1	326.1	-52.3	0.71	-0.11	75.88	-16.4	-15.8	
7,786.0	0.50	130.50	7,773.1	326.5	-51.4	0.49	-0.05	60.32	-8.4	22.2	
7,973.0	1.20	182.20	7,960.1	324.0	-50.8	0.52	0.37	27.65	9.7	21.0	
8,161.0	1.80	84.50	8,148.0	322.3	-48.0	1.22	0.32	-51.97	-24.8	4.9	
8,348.0	0.90	224.30	8,335.0	321.6	-46.1	1.37	-0.48	74.76	22.9	14.2	
8,535.0	0.60	286.70	8,522.0	320.8	-48.0	0.44	-0.16	33.37	21.5	-12.4	
8,723.0	1.20	241.20	8,709.9	320.1	-50.7	0.47	0.32	-24.20	21.3	6.0	
8,910.0	1.10	222.50	8,896.9	317.9	-53.6	0.21	-0.05	-10.00	14.6	11.8	
9,097.0	1.70	213.30	9,083.9	314.2	-56.4	0.34	0.32	-4.92	7.9	13.7	
9,285.0	0.80	219.10	9,271.8	310.9	-58.7	0.48	-0.48	3.09	5.2	13.1	



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PVA

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Project: Lea County, NM (NAD 27 NME)
Site: Magnolia 15
Well: #709H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #709H
TVD Reference: KB = 25' @ 3320.0usft (H&P 621)
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North Reference: Grid
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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)	
9,477.0	1.50	204.50	9,463.8	307.5	-60.6	0.39	0.36	-7.60	-2.1	13.7	
9,664.0	1.50	271.90	9,650.7	305.4	-64.1	0.89	0.00	36.04	8.5	9.4	
9,851.0	1.10	273.20	9,837.7	305.6	-68.3	0.21	-0.21	0.70	4.4	9.3	
10,037.0	1.10	310.70	10,023.6	306.8	-71.4	0.38	0.00	20.16	6.0	5.8	
10,224.0	1.00	339.30	10,210.6	309.5	-73.4	0.28	-0.05	15.29	4.8	3.1	
10,411.0	0.10	8.60	10,397.6	311.2	-73.9	0.49	-0.48	15.67	4.1	1.1	
10,598.0	0.70	86.10	10,584.6	311.5	-72.8	0.37	0.32	41.44	0.8	-3.6	
10,785.0	0.50	113.50	10,771.6	311.2	-70.9	0.18	-0.11	14.65	-2.8	-3.0	
10,972.0	0.60	82.00	10,958.6	311.0	-69.2	0.17	0.05	-16.84	-2.4	-4.5	
11,159.0	0.70	191.20	11,145.6	310.0	-68.4	0.57	0.05	58.40	-4.2	4.7	
11,346.0	3.30	255.70	11,332.4	307.6	-73.8	1.64	1.39	34.49	-3.5	6.9	
11,525.0	3.80	307.70	11,511.1	309.9	-83.5	1.76	0.28	29.05	-5.8	11.0	
11,646.0	4.90	277.60	11,631.8	313.1	-91.8	2.06	0.91	-24.88	-19.2	4.6	
11,677.0	5.80	268.40	11,662.7	313.2	-94.7	4.00	2.90	-29.68	-22.6	1.1	
11,715.0	8.70	263.20	11,700.4	312.8	-99.5	7.82	7.63	-13.68	-27.1	-3.6	
11,739.0	12.80	262.30	11,723.9	312.2	-103.9	17.10	17.08	-3.75	-31.1	-7.1	
11,786.0	21.70	258.70	11,768.8	309.8	-117.6	19.06	18.94	-7.66	-42.4	-19.1	
11,833.0	22.00	239.60	11,812.5	303.7	-133.8	15.08	0.64	-40.64	-43.3	-46.7	
11,864.0	23.60	220.10	11,841.1	296.0	-142.8	24.80	5.16	-62.90	-28.2	-67.5	
11,895.0	27.20	208.20	11,869.1	285.0	-150.1	20.10	11.61	-38.39	-15.6	-79.2	
11,926.0	30.60	197.90	11,896.3	271.2	-155.9	19.41	10.97	-33.23	-3.3	-86.4	
11,958.0	34.60	189.80	11,923.2	254.5	-160.0	18.48	12.50	-25.31	6.6	-90.2	
11,989.0	38.30	184.20	11,948.2	236.2	-162.2	16.04	11.94	-18.06	12.9	-91.6	
12,020.0	41.90	182.40	11,971.9	216.3	-163.3	12.20	11.61	-5.81	14.0	-92.5	
12,067.0	47.90	180.60	12,005.1	183.1	-164.2	13.05	12.77	-3.83	14.0	-93.2	
12,113.0	53.80	176.70	12,034.2	147.5	-163.3	14.41	12.83	-8.48	15.2	-92.0	
12,160.0	58.80	172.80	12,060.3	108.6	-159.6	12.68	10.64	-8.30	15.1	-88.3	



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12,208.0	63.40	171.30	12,083.4	67.0	-153.8	9.97	9.58	-3.12	12.8	-82.9
12,255.0	68.00	171.60	12,102.8	24.7	-147.5	9.80	9.79	0.64	9.9	-77.1
12,301.0	72.80	171.60	12,118.2	-18.2	-141.1	10.43	10.43	0.00	7.8	-71.3
12,348.0	79.80	170.80	12,129.3	-63.3	-134.1	14.99	14.89	-1.70	5.1	-64.8
12,395.0	85.40	170.80	12,135.4	-109.3	-126.7	11.91	11.91	0.00	1.7	-57.8
12,437.0	89.30	170.30	12,137.3	-150.7	-119.8	9.36	9.29	-1.19	-0.7	-51.2
12,467.0	90.90	170.80	12,137.3	-180.3	-114.9	5.59	5.33	1.67	-1.6	-46.5
12,591.0	90.90	173.10	12,135.3	-303.0	-97.5	1.85	0.00	1.85	-4.0	-30.1
12,685.0	90.90	174.60	12,133.9	-396.5	-87.5	1.60	0.00	1.60	-5.8	-20.8
12,779.0	86.20	172.00	12,136.2	-489.8	-76.5	5.71	-5.00	-2.77	-3.7	-10.6
12,872.0	85.90	176.70	12,142.6	-582.1	-67.4	5.05	-0.32	5.05	2.3	-2.2
12,966.0	88.10	179.40	12,147.6	-675.9	-64.2	3.70	2.34	2.87	6.9	0.3
13,060.0	89.90	179.50	12,149.2	-769.8	-63.3	1.92	1.91	0.11	8.1	0.5
13,153.0	90.50	179.70	12,148.9	-862.8	-62.6	0.68	0.65	0.22	7.4	0.4
13,247.0	87.50	179.50	12,150.5	-956.8	-62.0	3.20	-3.19	-0.21	8.7	0.3
13,340.0	89.50	179.70	12,153.0	-1,049.8	-61.3	2.16	2.15	0.22	10.6	0.2
13,433.0	91.70	179.60	12,152.0	-1,142.8	-60.7	2.37	2.37	-0.11	9.0	0.1
13,527.0	91.40	179.40	12,149.4	-1,236.7	-59.9	0.38	-0.32	-0.21	5.8	0.2
13,620.0	91.60	179.40	12,147.0	-1,329.7	-59.0	0.22	0.22	0.00	2.7	0.4
13,714.0	92.30	179.70	12,143.8	-1,423.6	-58.2	0.81	0.74	0.32	-1.2	0.4
13,809.0	92.90	180.80	12,139.5	-1,518.5	-58.6	1.32	0.63	1.16	-6.1	-0.8
13,905.0	90.80	180.70	12,136.4	-1,614.5	-59.9	2.19	-2.19	-0.10	-9.9	-2.8
13,997.0	91.30	180.80	12,134.7	-1,706.4	-61.1	0.55	0.54	0.11	-12.2	-4.7
14,092.0	88.90	180.30	12,134.5	-1,801.4	-62.0	2.58	-2.53	-0.53	-13.1	-6.3
14,185.0	86.50	181.10	12,138.3	-1,894.3	-63.1	2.72	-2.58	0.86	-10.0	-8.2
14,279.0	88.30	181.00	12,142.5	-1,988.2	-64.9	1.92	1.91	-0.11	-6.4	-10.7
14,373.0	88.90	180.60	12,144.8	-2,082.2	-66.2	0.77	0.64	-0.43	-5.3	-12.7



EOG Resources, Inc.

PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Magnolia 15
Well: #709H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #709H
TVD Reference: KB = 25' @ 3320.0usft (H&P 621)
MD Reference: KB = 25' @ 3320.0usft (H&P 621)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

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)
14,466.0	90.50	180.60	12,145.3	-2,175.2	-67.1	1.72	1.72	0.00	-6.2	-14.4
14,560.0	89.80	180.10	12,145.1	-2,269.2	-67.7	0.92	-0.74	-0.53	-7.9	-15.7
14,653.0	89.30	178.90	12,145.8	-2,362.2	-66.9	1.40	-0.54	-1.29	-8.6	-15.6
14,747.0	87.10	178.40	12,148.8	-2,456.1	-64.7	2.40	-2.34	-0.53	-7.0	-14.2
14,840.0	87.90	178.40	12,152.8	-2,549.0	-62.1	0.86	0.86	0.00	-4.4	-12.3
14,934.0	88.20	178.10	12,156.0	-2,642.9	-59.2	0.45	0.32	-0.32	-2.6	-10.2
15,027.0	88.90	178.60	12,158.4	-2,735.8	-56.6	0.92	0.75	0.54	-1.6	-8.2
15,121.0	90.10	178.10	12,159.2	-2,829.7	-53.8	1.38	1.28	-0.53	-2.2	-6.3
15,215.0	90.30	178.10	12,158.9	-2,923.7	-50.7	0.21	0.21	0.00	-4.0	-3.9
15,305.0	89.80	177.20	12,158.8	-3,013.6	-47.0	1.14	-0.56	-1.00	-5.5	-0.9
15,402.0	90.60	178.80	12,158.4	-3,110.5	-43.7	1.84	0.82	1.65	-7.5	1.7
15,495.0	89.60	179.80	12,158.3	-3,203.5	-42.5	1.52	-1.08	1.08	-9.4	2.1
15,589.0	87.90	180.30	12,160.3	-3,297.5	-42.6	1.89	-1.81	0.53	-9.0	1.3
15,683.0	88.40	180.30	12,163.4	-3,391.5	-43.1	0.53	0.53	0.00	-7.7	0.1
15,777.0	89.10	180.30	12,165.4	-3,485.4	-43.6	0.74	0.74	0.00	-7.3	-1.1
15,871.0	89.50	180.10	12,166.6	-3,579.4	-43.9	0.48	0.43	-0.21	-7.9	-2.2
15,964.0	88.40	180.60	12,168.3	-3,672.4	-44.5	1.30	-1.18	0.54	-7.8	-3.5
16,058.0	88.80	180.40	12,170.6	-3,766.4	-45.3	0.48	0.43	-0.21	-7.2	-5.1
16,151.0	89.50	180.50	12,171.9	-3,859.4	-46.0	0.76	0.75	0.11	-7.5	-6.5
16,245.0	89.30	179.60	12,172.9	-3,953.4	-46.1	0.98	-0.21	-0.96	-8.2	-7.3
16,338.0	88.80	180.20	12,174.5	-4,046.3	-45.9	0.84	-0.54	0.65	-8.6	-7.9
16,432.0	88.50	179.60	12,176.7	-4,140.3	-45.8	0.71	-0.32	-0.64	-8.7	-8.5
16,526.0	89.00	179.50	12,178.7	-4,234.3	-45.0	0.54	0.53	-0.11	-9.0	-8.5
16,620.0	89.70	179.70	12,179.8	-4,328.3	-44.4	0.77	0.74	0.21	-10.3	-8.6
16,713.0	88.30	180.10	12,181.4	-4,421.3	-44.2	1.57	-1.51	0.43	-11.0	-9.1
16,807.0	88.60	180.50	12,184.0	-4,515.2	-44.7	0.53	0.32	0.43	-10.8	-10.4
16,901.0	89.70	180.30	12,185.4	-4,609.2	-45.4	1.19	1.17	-0.21	-11.7	-11.8



EOG Resources, Inc.

PVA

Company: EOG Resources - Midland
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Site: Magnolia 15
Well: #709H
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Design: OH

Local Co-ordinate Reference: Well #709H
TVD Reference: KB = 25' @ 3320.0usft (H&P 621)
MD Reference: KB = 25' @ 3320.0usft (H&P 621)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

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)
16,920.0	90.00	180.50	12,185.4	-4,628.2	-45.5	1.90	1.58	1.05	-12.1	-12.0
Last MWD Survey										
16,985.0	90.00	180.50	12,185.4	-4,693.2	-46.1	0.00	0.00	0.00	-14.3	-13.7
Projection To Bit										

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
16,920.0	12,185.4	-4,628.2	-45.5	Last MWD Survey
16,985.0	12,185.4	-4,693.2	-46.1	Projection To Bit

Checked By: _____ Approved By: _____ Date: _____