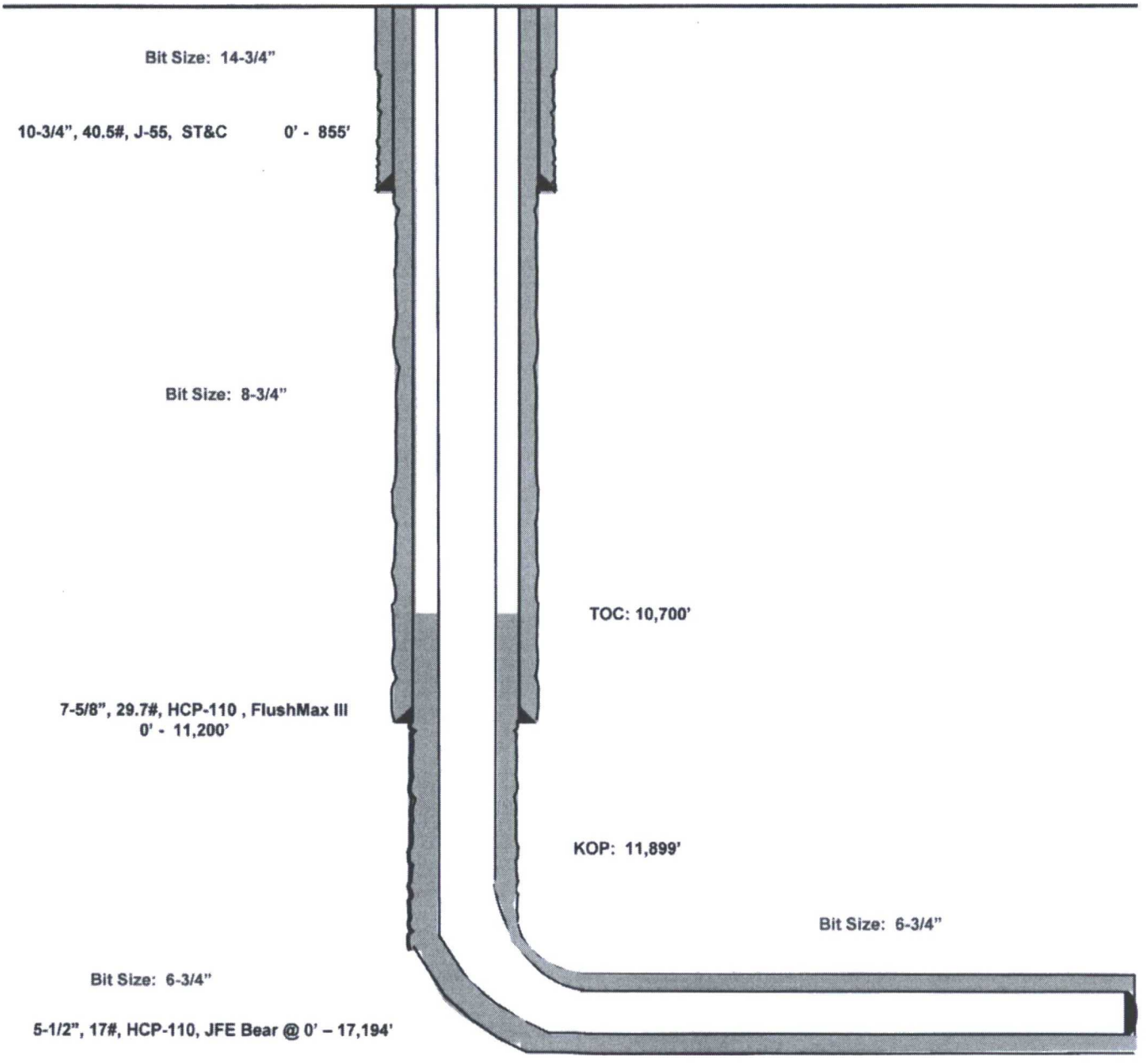
Magnolia 15 #709H

Lea County, New Mexico
Proposed Wellbore

365' FNL
728' FWL
Section 15
T-26-S, R-33-E

API: 30-025-*****

KB: 3,320'
GL: 3,295'



Lateral: 17,194' MD, 12,390' TVD

BH Location: 230' FSL & 661' FWL
Section 15
T-26-S, R-33-E

eog resources

Lea County, NM (NAD 27 NME)

Magnolia 15 #709H

Plan #0.1

Azimuths to Grid North
True North: -0.41°
Magnetic North: 6.58°

Magnetic Field
Strength: 47878.1snT
Dip Angle: 59.91°
Date: 1/18/2017
Model: IGRF2015

To convert a Magnetic Direction to a Grid Direction, Add 6.58°
To convert a Magnetic Direction to a True Direction, Add 6.08° East
To convert a True Direction to a Grid Direction, Subtract 0.41°

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' @ 3320.0usft

Northing	Easting	Latitude	Longitude
382619.00	737776.00	32° 2' 58.602 N	103° 33' 57.242 W

SECTION DETAILS

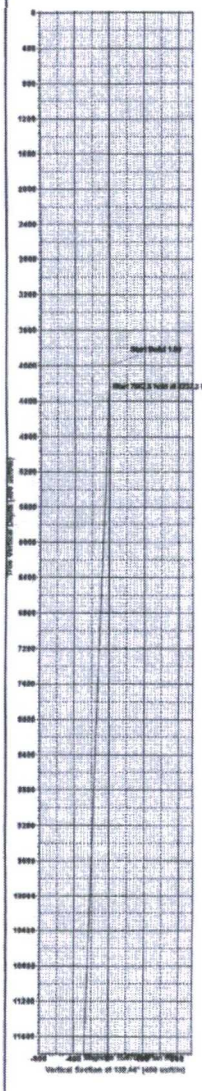
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	4000.0	0.00	0.00	4000.0	0.0	0.0	0.00	0.00	0.0	
3	4237.3	2.37	347.80	4237.3	4.8	-1.0	1.00	347.80	-4.8	
4	11899.8	2.37	347.80	11893.2	315.0	-68.1	0.00	0.00	-314.5	
5	12669.2	90.00	179.55	12390.0	-162.1	-68.5	12.00	-168.24	162.6	
6	17194.2	90.00	179.55	12390.0	-4687.0	-33.0	0.00	0.00	4687.1	PBHL (Magnolia 15 #709H)

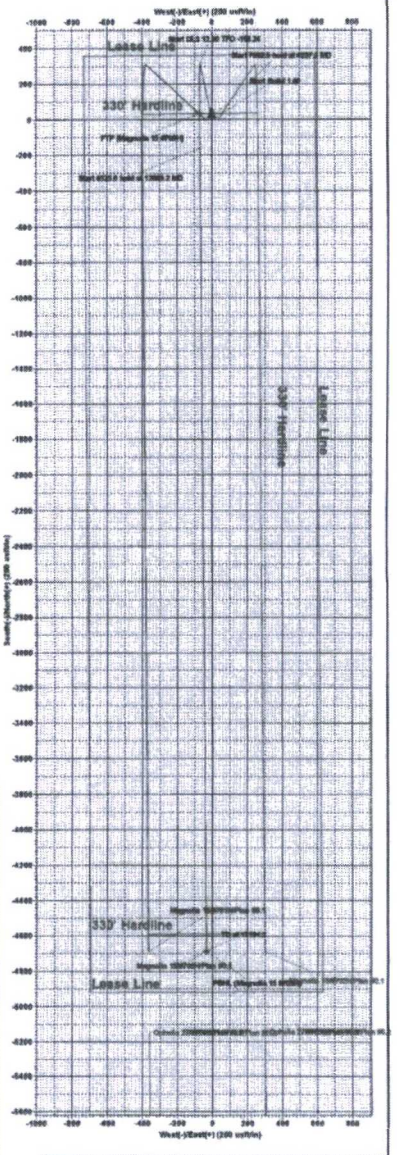
CASING DETAILS

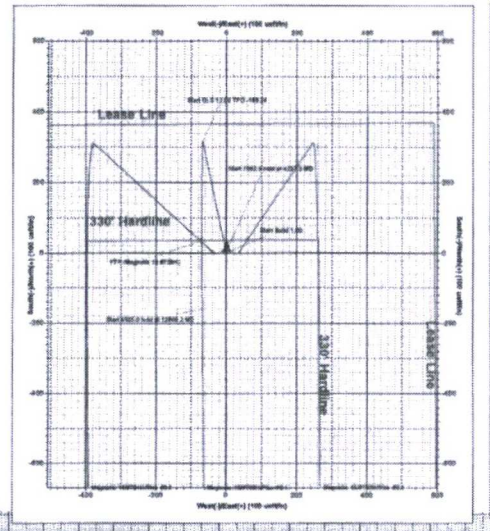
No casing data is available

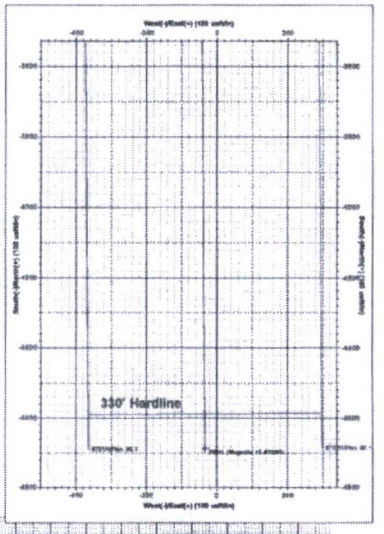
WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

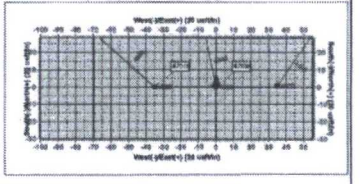
Name	TVD	+N/-S	+E/-W	Northing	Easting
FTP (Magnolia 15 #709H)	12390.0	35.0	-70.0	382654.00	737706.00
PBHL (Magnolia 15 #709H)	12390.0	-4687.0	-33.0	377932.00	737742.00

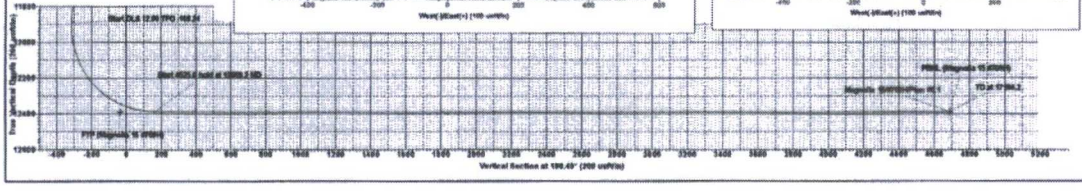


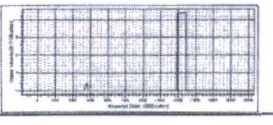












eog resources

EOG Resources - Midland

Lea County, NM (NAD 27 NME)
Magnolia 15
#709H

OH

Plan: Plan #0.1

Standard Planning Report

18 January, 2017

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well #709H
Company:	EOG Resources - Midland	**TVD Reference:**	KB = 25' @ 3320.0usft
Project:	Lea County, NM (NAD 27 NME)	**MD Reference:**	KB = 25' @ 3320.0usft
Site:	Magnolia 15	**North Reference:**	Grid
Well:	#709H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1		

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

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	35.0 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	Plan #0.1				
Audit Notes:					
Version:		**Phase:**	PLAN	**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	

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
4,237.3	2.37	347.80	4,237.3	4.8	-1.0	1.00	1.00	0.00	347.80	
11,899.8	2.37	347.80	11,893.2	315.0	-68.1	0.00	0.00	0.00	0.00	
12,669.2	90.00	179.55	12,390.0	-162.1	-68.5	12.00	11.39	-21.87	-168.24	
17,194.2	90.00	179.55	12,390.0	-4,687.0	-33.0	0.00	0.00	0.00	0.00	PBHL (Magnolia 15 #

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well #709H
Company:	EOG Resources - Midland	**TVD Reference:**	KB = 25' @ 3320.0usft
Project:	Lea County, NM (NAD 27 NME)	**MD Reference:**	KB = 25' @ 3320.0usft
Site:	Magnolia 15	**North Reference:**	Grid
Well:	#709H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	1.00	347.80	4,100.0	0.9	-0.2	-0.9	1.00	1.00	0.00
4,200.0	2.00	347.80	4,200.0	3.4	-0.7	-3.4	1.00	1.00	0.00
4,237.3	2.37	347.80	4,237.3	4.8	-1.0	-4.8	1.00	1.00	0.00
4,300.0	2.37	347.80	4,299.9	7.3	-1.6	-7.3	0.00	0.00	0.00
4,400.0	2.37	347.80	4,399.8	11.4	-2.5	-11.4	0.00	0.00	0.00
4,500.0	2.37	347.80	4,499.7	15.4	-3.3	-15.4	0.00	0.00	0.00
4,600.0	2.37	347.80	4,599.6	19.5	-4.2	-19.5	0.00	0.00	0.00
4,700.0	2.37	347.80	4,699.5	23.5	-5.1	-23.5	0.00	0.00	0.00
4,800.0	2.37	347.80	4,799.4	27.6	-6.0	-27.5	0.00	0.00	0.00
4,900.0	2.37	347.80	4,899.4	31.6	-6.8	-31.6	0.00	0.00	0.00
5,000.0	2.37	347.80	4,999.3	35.7	-7.7	-35.6	0.00	0.00	0.00
5,100.0	2.37	347.80	5,099.2	39.7	-8.6	-39.7	0.00	0.00	0.00
5,200.0	2.37	347.80	5,199.1	43.8	-9.5	-43.7	0.00	0.00	0.00

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Site:	Magnolia 15	**North Reference:**	Grid
Well:	#709H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,300.0	2.37	347.80	5,299.0	47.8	-10.3	-47.7	0.00	0.00	0.00
5,400.0	2.37	347.80	5,398.9	51.9	-11.2	-51.8	0.00	0.00	0.00
5,500.0	2.37	347.80	5,498.8	55.9	-12.1	-55.8	0.00	0.00	0.00
5,600.0	2.37	347.80	5,598.8	60.0	-13.0	-59.9	0.00	0.00	0.00
5,700.0	2.37	347.80	5,698.7	64.0	-13.8	-63.9	0.00	0.00	0.00
5,800.0	2.37	347.80	5,798.6	68.1	-14.7	-67.9	0.00	0.00	0.00
5,900.0	2.37	347.80	5,898.5	72.1	-15.6	-72.0	0.00	0.00	0.00
6,000.0	2.37	347.80	5,998.4	76.1	-16.5	-76.0	0.00	0.00	0.00
6,100.0	2.37	347.80	6,098.3	80.2	-17.3	-80.1	0.00	0.00	0.00
6,200.0	2.37	347.80	6,198.2	84.2	-18.2	-84.1	0.00	0.00	0.00
6,300.0	2.37	347.80	6,298.2	88.3	-19.1	-88.2	0.00	0.00	0.00
6,400.0	2.37	347.80	6,398.1	92.3	-20.0	-92.2	0.00	0.00	0.00
6,500.0	2.37	347.80	6,498.0	96.4	-20.8	-96.2	0.00	0.00	0.00
6,600.0	2.37	347.80	6,597.9	100.4	-21.7	-100.3	0.00	0.00	0.00
6,700.0	2.37	347.80	6,697.8	104.5	-22.6	-104.3	0.00	0.00	0.00
6,800.0	2.37	347.80	6,797.7	108.5	-23.5	-108.4	0.00	0.00	0.00
6,900.0	2.37	347.80	6,897.6	112.6	-24.3	-112.4	0.00	0.00	0.00
7,000.0	2.37	347.80	6,997.6	116.6	-25.2	-116.4	0.00	0.00	0.00
7,100.0	2.37	347.80	7,097.5	120.7	-26.1	-120.5	0.00	0.00	0.00
7,200.0	2.37	347.80	7,197.4	124.7	-27.0	-124.5	0.00	0.00	0.00
7,300.0	2.37	347.80	7,297.3	128.8	-27.8	-128.6	0.00	0.00	0.00
7,400.0	2.37	347.80	7,397.2	132.8	-28.7	-132.6	0.00	0.00	0.00
7,500.0	2.37	347.80	7,497.1	136.9	-29.6	-136.7	0.00	0.00	0.00
7,600.0	2.37	347.80	7,597.0	140.9	-30.5	-140.7	0.00	0.00	0.00
7,700.0	2.37	347.80	7,697.0	145.0	-31.3	-144.7	0.00	0.00	0.00
7,800.0	2.37	347.80	7,796.9	149.0	-32.2	-148.8	0.00	0.00	0.00
7,900.0	2.37	347.80	7,896.8	153.1	-33.1	-152.8	0.00	0.00	0.00
8,000.0	2.37	347.80	7,996.7	157.1	-34.0	-156.9	0.00	0.00	0.00
8,100.0	2.37	347.80	8,096.6	161.1	-34.8	-160.9	0.00	0.00	0.00
8,200.0	2.37	347.80	8,196.5	165.2	-35.7	-164.9	0.00	0.00	0.00
8,300.0	2.37	347.80	8,296.4	169.2	-36.6	-169.0	0.00	0.00	0.00
8,400.0	2.37	347.80	8,396.4	173.3	-37.5	-173.0	0.00	0.00	0.00
8,500.0	2.37	347.80	8,496.3	177.3	-38.3	-177.1	0.00	0.00	0.00
8,600.0	2.37	347.80	8,596.2	181.4	-39.2	-181.1	0.00	0.00	0.00
8,700.0	2.37	347.80	8,696.1	185.4	-40.1	-185.1	0.00	0.00	0.00
8,800.0	2.37	347.80	8,796.0	189.5	-41.0	-189.2	0.00	0.00	0.00
8,900.0	2.37	347.80	8,895.9	193.5	-41.8	-193.2	0.00	0.00	0.00
9,000.0	2.37	347.80	8,995.8	197.6	-42.7	-197.3	0.00	0.00	0.00
9,100.0	2.37	347.80	9,095.8	201.6	-43.6	-201.3	0.00	0.00	0.00
9,200.0	2.37	347.80	9,195.7	205.7	-44.5	-205.4	0.00	0.00	0.00
9,300.0	2.37	347.80	9,295.6	209.7	-45.3	-209.4	0.00	0.00	0.00
9,400.0	2.37	347.80	9,395.5	213.8	-46.2	-213.4	0.00	0.00	0.00
9,500.0	2.37	347.80	9,495.4	217.8	-47.1	-217.5	0.00	0.00	0.00
9,600.0	2.37	347.80	9,595.3	221.9	-48.0	-221.5	0.00	0.00	0.00
9,700.0	2.37	347.80	9,695.2	225.9	-48.8	-225.6	0.00	0.00	0.00
9,800.0	2.37	347.80	9,795.2	230.0	-49.7	-229.6	0.00	0.00	0.00
9,900.0	2.37	347.80	9,895.1	234.0	-50.6	-233.6	0.00	0.00	0.00
10,000.0	2.37	347.80	9,995.0	238.1	-51.5	-237.7	0.00	0.00	0.00
10,100.0	2.37	347.80	10,094.9	242.1	-52.3	-241.7	0.00	0.00	0.00
10,200.0	2.37	347.80	10,194.8	246.1	-53.2	-245.8	0.00	0.00	0.00
10,300.0	2.37	347.80	10,294.7	250.2	-54.1	-249.8	0.00	0.00	0.00
10,400.0	2.37	347.80	10,394.6	254.2	-55.0	-253.9	0.00	0.00	0.00
10,500.0	2.37	347.80	10,494.6	258.3	-55.8	-257.9	0.00	0.00	0.00
10,600.0	2.37	347.80	10,594.5	262.3	-56.7	-261.9	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well #709H
Company:	EOG Resources - Midland	**TVD Reference:**	KB = 25' @ 3320.0usft
Project:	Lea County, NM (NAD 27 NME)	**MD Reference:**	KB = 25' @ 3320.0usft
Site:	Magnolia 15	**North Reference:**	Grid
Well:	#709H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,700.0	2.37	347.80	10,694.4	266.4	-57.6	-266.0	0.00	0.00	0.00
10,800.0	2.37	347.80	10,794.3	270.4	-58.5	-270.0	0.00	0.00	0.00
10,900.0	2.37	347.80	10,894.2	274.5	-59.3	-274.1	0.00	0.00	0.00
11,000.0	2.37	347.80	10,994.1	278.5	-60.2	-278.1	0.00	0.00	0.00
11,100.0	2.37	347.80	11,094.0	282.6	-61.1	-282.1	0.00	0.00	0.00
11,200.0	2.37	347.80	11,194.0	286.6	-62.0	-286.2	0.00	0.00	0.00
11,300.0	2.37	347.80	11,293.9	290.7	-62.8	-290.2	0.00	0.00	0.00
11,400.0	2.37	347.80	11,393.8	294.7	-63.7	-294.3	0.00	0.00	0.00
11,500.0	2.37	347.80	11,493.7	298.8	-64.6	-298.3	0.00	0.00	0.00
11,600.0	2.37	347.80	11,593.6	302.8	-65.5	-302.3	0.00	0.00	0.00
11,700.0	2.37	347.80	11,693.5	306.9	-66.3	-306.4	0.00	0.00	0.00
11,800.0	2.37	347.80	11,793.4	310.9	-67.2	-310.4	0.00	0.00	0.00
11,899.8	2.37	347.80	11,893.2	315.0	-68.1	-314.5	0.00	0.00	0.00
11,925.0	0.85	214.33	11,918.4	315.3	-68.3	-314.8	12.00	-6.06	-530.38
11,950.0	3.73	186.99	11,943.3	314.3	-68.5	-313.9	12.00	11.52	-109.36
11,975.0	6.71	183.66	11,968.2	312.1	-68.7	-311.6	12.00	11.94	-13.33
12,000.0	9.71	182.38	11,993.0	308.5	-68.9	-308.0	12.00	11.98	-5.14
12,025.0	12.71	181.70	12,017.5	303.7	-69.1	-303.2	12.00	11.99	-2.73
12,050.0	15.70	181.27	12,041.7	297.5	-69.2	-297.0	12.00	11.99	-1.70
12,075.0	18.70	180.98	12,065.6	290.1	-69.4	-289.6	12.00	12.00	-1.17
12,100.0	21.70	180.77	12,089.1	281.5	-69.5	-281.0	12.00	12.00	-0.85
12,125.0	24.70	180.60	12,112.0	271.7	-69.6	-271.2	12.00	12.00	-0.66
12,150.0	27.70	180.47	12,134.5	260.6	-69.7	-260.1	12.00	12.00	-0.52
12,175.0	30.70	180.36	12,156.3	248.4	-69.8	-247.9	12.00	12.00	-0.43
12,200.0	33.70	180.28	12,177.4	235.1	-69.9	-234.6	12.00	12.00	-0.36
12,225.0	36.70	180.20	12,197.9	220.7	-69.9	-220.2	12.00	12.00	-0.31
12,250.0	39.70	180.13	12,217.5	205.2	-70.0	-204.7	12.00	12.00	-0.27
12,275.0	42.70	180.07	12,236.3	188.8	-70.0	-188.3	12.00	12.00	-0.23
12,300.0	45.70	180.02	12,254.2	171.4	-70.0	-170.9	12.00	12.00	-0.21
12,325.0	48.70	179.97	12,271.2	153.0	-70.0	-152.5	12.00	12.00	-0.19
12,350.0	51.70	179.93	12,287.2	133.8	-70.0	-133.3	12.00	12.00	-0.17
12,375.0	54.70	179.89	12,302.2	113.8	-70.0	-113.3	12.00	12.00	-0.16
12,400.0	57.70	179.86	12,316.1	93.0	-69.9	-92.5	12.00	12.00	-0.15
12,425.0	60.70	179.82	12,328.9	71.5	-69.9	-71.1	12.00	12.00	-0.14
12,450.0	63.70	179.79	12,340.6	49.4	-69.8	-48.9	12.00	12.00	-0.13
12,475.0	66.70	179.76	12,351.0	26.7	-69.7	-26.3	12.00	12.00	-0.12
12,481.8	67.51	179.75	12,353.7	20.5	-69.7	-20.0	12.00	12.00	-0.12
FTP (Magnolia 15 #709H)									
12,500.0	69.70	179.73	12,360.3	3.5	-69.6	-3.0	12.00	12.00	-0.12
12,525.0	72.70	179.70	12,368.4	-20.1	-69.5	20.6	12.00	12.00	-0.11
12,550.0	75.70	179.67	12,375.2	-44.2	-69.3	44.7	12.00	12.00	-0.11
12,575.0	78.70	179.65	12,380.7	-68.6	-69.2	69.0	12.00	12.00	-0.11
12,600.0	81.70	179.62	12,385.0	-93.2	-69.0	93.7	12.00	12.00	-0.10
12,625.0	84.70	179.59	12,388.0	-118.0	-68.9	118.5	12.00	12.00	-0.10
12,650.0	87.70	179.57	12,389.6	-142.9	-68.7	143.4	12.00	12.00	-0.10
12,669.2	90.00	179.55	12,390.0	-162.1	-68.5	162.6	12.00	12.00	-0.10
12,700.0	90.00	179.55	12,390.0	-192.9	-68.3	193.4	0.00	0.00	0.00
12,800.0	90.00	179.55	12,390.0	-292.9	-67.5	293.4	0.00	0.00	0.00
12,900.0	90.00	179.55	12,390.0	-392.9	-66.7	393.4	0.00	0.00	0.00
13,000.0	90.00	179.55	12,390.0	-492.9	-65.9	493.4	0.00	0.00	0.00
13,100.0	90.00	179.55	12,390.0	-592.9	-65.2	593.4	0.00	0.00	0.00
13,200.0	90.00	179.55	12,390.0	-692.9	-64.4	693.4	0.00	0.00	0.00
13,300.0	90.00	179.55	12,390.0	-792.9	-63.6	793.3	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well #709H
Company:	EOG Resources - Midland	**TVD Reference:**	KB = 25' @ 3320.0usft
Project:	Lea County, NM (NAD 27 NME)	**MD Reference:**	KB = 25' @ 3320.0usft
Site:	Magnolia 15	**North Reference:**	Grid
Well:	#709H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
13,400.0	90.00	179.55	12,390.0	-892.9	-62.8	893.3	0.00	0.00	0.00
13,500.0	90.00	179.55	12,390.0	-992.9	-62.0	993.3	0.00	0.00	0.00
13,600.0	90.00	179.55	12,390.0	-1,092.9	-61.2	1,093.3	0.00	0.00	0.00
13,700.0	90.00	179.55	12,390.0	-1,192.9	-60.4	1,193.3	0.00	0.00	0.00
13,800.0	90.00	179.55	12,390.0	-1,292.9	-59.7	1,293.3	0.00	0.00	0.00
13,900.0	90.00	179.55	12,390.0	-1,392.9	-58.9	1,393.3	0.00	0.00	0.00
14,000.0	90.00	179.55	12,390.0	-1,492.9	-58.1	1,493.3	0.00	0.00	0.00
14,100.0	90.00	179.55	12,390.0	-1,592.9	-57.3	1,593.3	0.00	0.00	0.00
14,200.0	90.00	179.55	12,390.0	-1,692.9	-56.5	1,693.2	0.00	0.00	0.00
14,300.0	90.00	179.55	12,390.0	-1,792.9	-55.7	1,793.2	0.00	0.00	0.00
14,400.0	90.00	179.55	12,390.0	-1,892.9	-54.9	1,893.2	0.00	0.00	0.00
14,500.0	90.00	179.55	12,390.0	-1,992.9	-54.2	1,993.2	0.00	0.00	0.00
14,600.0	90.00	179.55	12,390.0	-2,092.9	-53.4	2,093.2	0.00	0.00	0.00
14,700.0	90.00	179.55	12,390.0	-2,192.9	-52.6	2,193.2	0.00	0.00	0.00
14,800.0	90.00	179.55	12,390.0	-2,292.9	-51.8	2,293.2	0.00	0.00	0.00
14,900.0	90.00	179.55	12,390.0	-2,392.9	-51.0	2,393.2	0.00	0.00	0.00
15,000.0	90.00	179.55	12,390.0	-2,492.9	-50.2	2,493.2	0.00	0.00	0.00
15,100.0	90.00	179.55	12,390.0	-2,592.9	-49.4	2,593.1	0.00	0.00	0.00
15,200.0	90.00	179.55	12,390.0	-2,692.9	-48.7	2,693.1	0.00	0.00	0.00
15,300.0	90.00	179.55	12,390.0	-2,792.9	-47.9	2,793.1	0.00	0.00	0.00
15,400.0	90.00	179.55	12,390.0	-2,892.9	-47.1	2,893.1	0.00	0.00	0.00
15,500.0	90.00	179.55	12,390.0	-2,992.9	-46.3	2,993.1	0.00	0.00	0.00
15,600.0	90.00	179.55	12,390.0	-3,092.9	-45.5	3,093.1	0.00	0.00	0.00
15,700.0	90.00	179.55	12,390.0	-3,192.8	-44.7	3,193.1	0.00	0.00	0.00
15,800.0	90.00	179.55	12,390.0	-3,292.8	-43.9	3,293.1	0.00	0.00	0.00
15,900.0	90.00	179.55	12,390.0	-3,392.8	-43.2	3,393.1	0.00	0.00	0.00
16,000.0	90.00	179.55	12,390.0	-3,492.8	-42.4	3,493.0	0.00	0.00	0.00
16,100.0	90.00	179.55	12,390.0	-3,592.8	-41.6	3,593.0	0.00	0.00	0.00
16,200.0	90.00	179.55	12,390.0	-3,692.8	-40.8	3,693.0	0.00	0.00	0.00
16,300.0	90.00	179.55	12,390.0	-3,792.8	-40.0	3,793.0	0.00	0.00	0.00
16,400.0	90.00	179.55	12,390.0	-3,892.8	-39.2	3,893.0	0.00	0.00	0.00
16,500.0	90.00	179.55	12,390.0	-3,992.8	-38.5	3,993.0	0.00	0.00	0.00
16,600.0	90.00	179.55	12,390.0	-4,092.8	-37.7	4,093.0	0.00	0.00	0.00
16,700.0	90.00	179.55	12,390.0	-4,192.8	-36.9	4,193.0	0.00	0.00	0.00
16,800.0	90.00	179.55	12,390.0	-4,292.8	-36.1	4,293.0	0.00	0.00	0.00
16,900.0	90.00	179.55	12,390.0	-4,392.8	-35.3	4,392.9	0.00	0.00	0.00
17,000.0	90.00	179.55	12,390.0	-4,492.8	-34.5	4,492.9	0.00	0.00	0.00
17,100.0	90.00	179.55	12,390.0	-4,592.8	-33.7	4,592.9	0.00	0.00	0.00
17,194.2	90.00	179.55	12,390.0	-4,687.0	-33.0	4,687.1	0.00	0.00	0.00
PBHL (Magnolia 15 #709H)									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
FTP (Magnolia 15 #709H - plan misses target center by 39.1usft at 12481.8usft MD (12353.7 TVD, 20.5 N, -69.7 E) - Point	0.00	0.00	12,390.0	35.0	-70.0	382,654.00	737,705.00	32° 2' 58.953 N	103° 33' 58.053 W
PBHL (Magnolia 15 #709 - plan hits target center - Point	0.00	0.00	12,390.0	-4,687.0	-33.0	377,932.00	737,742.00	32° 2' 12.222 N	103° 33' 58.013 W

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well #709H
Company:	EOG Resources - Midland	**TVD Reference:**	KB = 25' @ 3320.0usft
Project:	Lea County, NM (NAD 27 NME)	**MD Reference:**	KB = 25' @ 3320.0usft
Site:	Magnolia 15	**North Reference:**	Grid
Well:	#709H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1		