eog resources

Lea County, NM (NAD 83 NME)

Gem 36 State Com #709H

Plan #0.1

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

Azimuths to Grid North
True North: -0.37°
Magnetic North: 6.55°

Magnetic Field
Strength: 47798.2snT
Dip Angle: 59.91°
Date: 12/6/2017
Model: IGRF2015

To convert a Magnetic Direction to a Grid Direction, Add 6.55°
To convert a Magnetic Direction to a True Direction, Add 6.92° East
To convert a True Direction to a Grid Direction, Subtract 0.37°

WELL DETAILS: #709H

KB = 25 @ 3388.0usft
3363.0

Northing	Easting	Latitude	Longitude
393767.00	758097.00	32° 4' 49.244 N	103° 38' 0.524 W

SECTION DETAILS

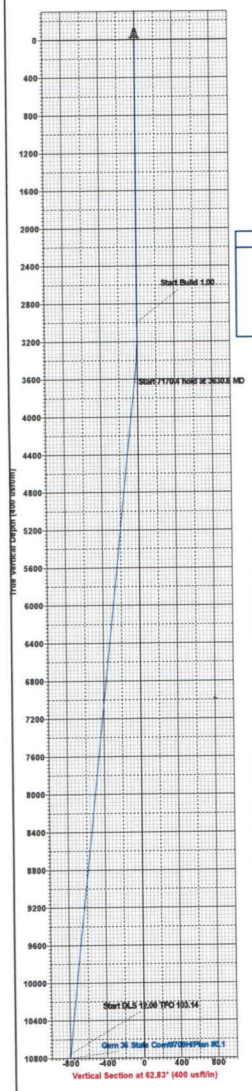
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target	Annotation
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0		
2	3000.0	0.00	0.00	3000.0	0.0	0.0	0.00	0.00	0.0		
3	3630.6	6.31	257.30	3629.3	-7.6	-33.8	1.00	257.30	-1.9		
4	10801.0	6.31	257.30	10756.4	-180.7	-802.2	0.00	0.00	-45.4		
5	11563.0	90.00	0.52	11243.0	297.1	-850.2	12.00	103.14	433.8		
6	16083.1	90.00	0.52	11243.0	4817.0	-809.0	0.00	0.00	4884.5	PBHL (Gem 36 State Com #709H)	

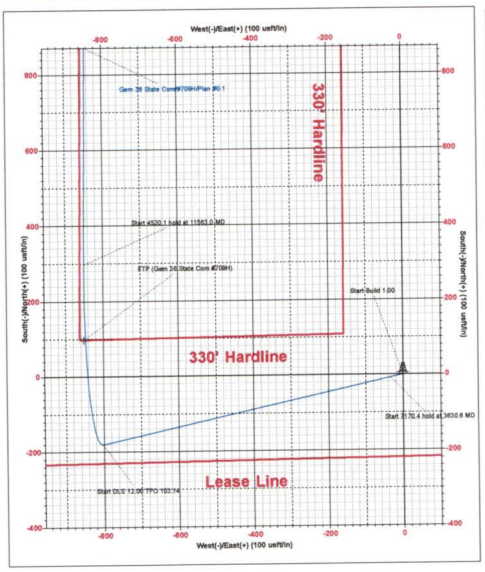
CASING DETAILS

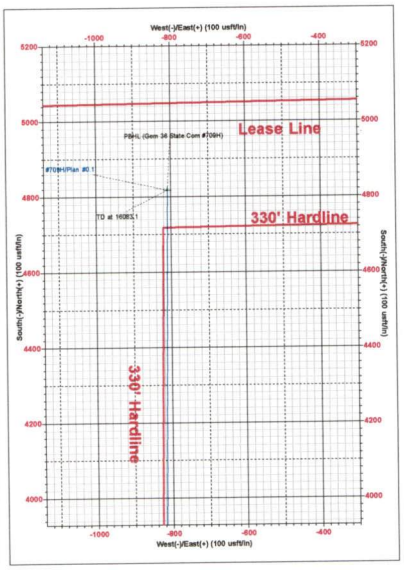
No casing data is available

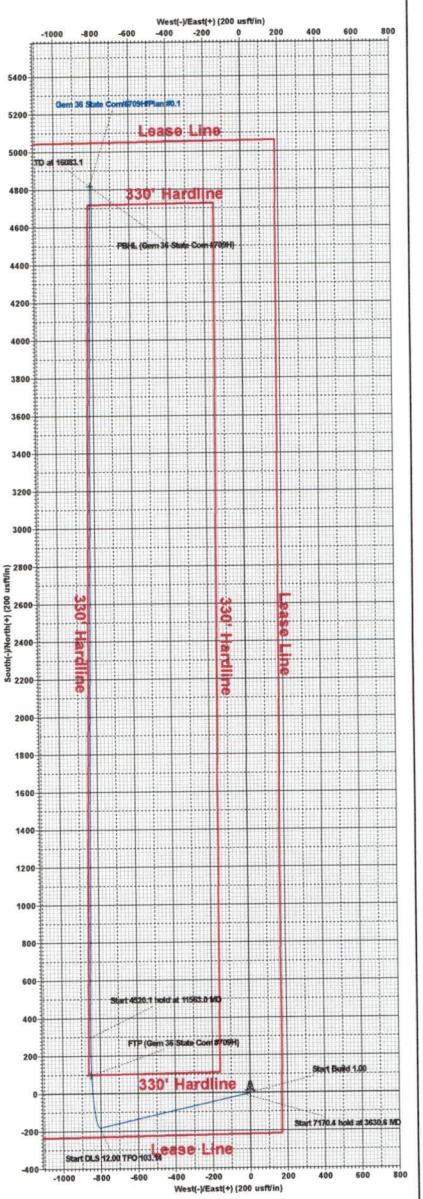
WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

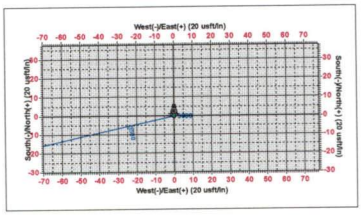
Name	TVD	+N/-S	+E/-W	Northing	Easting
PBHL (Gem 36 State Com #709H)	11243.0	4817.0	-809.0	398487.00	757288.00
FTP (Gem 36 State Com #709H)	11243.0	97.0	-852.0	393767.00	757245.00

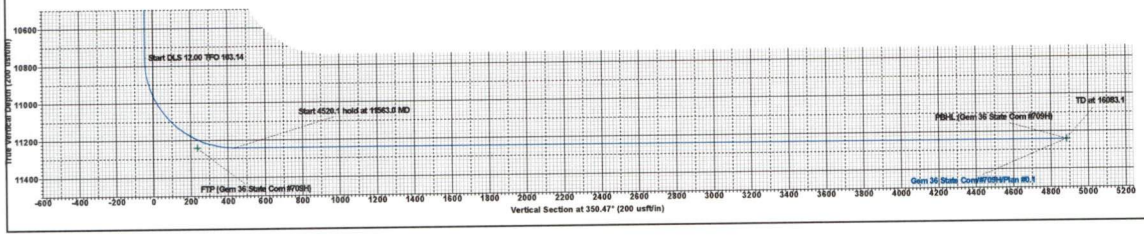


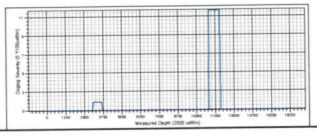












EOG Resources - Midland

Lea County, NM (NAD 83 NME)
Gem 36 State Com
#709H

OH

Plan: Plan #0.1

Standard Planning Report

06 December, 2017

Database:	EDM 5000.14	**Local Co-ordinate Reference:**	Well #709H
Company:	EOG Resources - Midland	**TVD Reference:**	KB = 25 @ 3388.0usft
Project:	Lea County, NM (NAD 83 NME)	**MD Reference:**	KB = 25 @ 3388.0usft
Site:	Gem 36 State Com	**North Reference:**	Grid
Well:	#709H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1		

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	Gem 36 State Com				
Site Position:		**Northing:**	393,686.00 usft	**Latitude:**	32° 4' 49.331 N
From:	Map	**Easting:**	759,213.00 usft	**Longitude:**	103° 37' 47.552 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.37 °

Well	#709H				
Well Position	**+N/-S**	-16.0 usft	**Northing:**	393,670.00 usft	**Latitude:**	32° 4' 49.244 N
	+E/-W	-1,116.0 usft	**Easting:**	758,097.00 usft	**Longitude:**	103° 38' 0.524 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**		**Ground Level:**	3,363.0 usft

Wellbore	OH			
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2015	12/6/2017	6.92	59.91	47,798.23456464

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	350.47	

Plan Survey Tool Program **Date** 12/6/2017

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	16,083.1	Plan #0.1 (OH)	MWD	
				MWD - Standard	

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	
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,630.6	6.31	257.30	3,629.3	-7.6	-33.8	1.00	1.00	0.00	257.30	
10,801.0	6.31	257.30	10,756.4	-180.7	-802.2	0.00	0.00	0.00	0.00	
11,563.0	90.00	0.52	11,243.0	297.1	-850.2	12.00	10.98	13.55	103.14	
16,083.1	90.00	0.52	11,243.0	4,817.0	-809.0	0.00	0.00	0.00	0.00	PBHL (Gem 36 State

Database:	EDM 5000.14	**Local Co-ordinate Reference:**	Well #709H
Company:	EOG Resources - Midland	**TVD Reference:**	KB = 25 @ 3388.0usft
Project:	Lea County, NM (NAD 83 NME)	**MD Reference:**	KB = 25 @ 3388.0usft
Site:	Gem 36 State Com	**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	1.00	257.30	3,100.0	-0.2	-0.9	0.0	1.00	1.00	0.00
3,200.0	2.00	257.30	3,200.0	-0.8	-3.4	-0.2	1.00	1.00	0.00
3,300.0	3.00	257.30	3,299.9	-1.7	-7.7	-0.4	1.00	1.00	0.00
3,400.0	4.00	257.30	3,399.7	-3.1	-13.6	-0.8	1.00	1.00	0.00
3,500.0	5.00	257.30	3,499.4	-4.8	-21.3	-1.2	1.00	1.00	0.00
3,600.0	6.00	257.30	3,598.9	-6.9	-30.6	-1.7	1.00	1.00	0.00
3,630.6	6.31	257.30	3,629.3	-7.6	-33.8	-1.9	1.00	1.00	0.00
3,700.0	6.31	257.30	3,698.3	-9.3	-41.3	-2.3	0.00	0.00	0.00
3,800.0	6.31	257.30	3,797.7	-11.7	-52.0	-2.9	0.00	0.00	0.00
3,900.0	6.31	257.30	3,897.1	-14.1	-62.7	-3.5	0.00	0.00	0.00
4,000.0	6.31	257.30	3,996.5	-16.5	-73.4	-4.2	0.00	0.00	0.00
4,100.0	6.31	257.30	4,095.9	-19.0	-84.1	-4.8	0.00	0.00	0.00
4,200.0	6.31	257.30	4,195.3	-21.4	-94.8	-5.4	0.00	0.00	0.00
4,300.0	6.31	257.30	4,294.7	-23.8	-105.5	-6.0	0.00	0.00	0.00
4,400.0	6.31	257.30	4,394.1	-26.2	-116.3	-6.6	0.00	0.00	0.00
4,500.0	6.31	257.30	4,493.5	-28.6	-127.0	-7.2	0.00	0.00	0.00
4,600.0	6.31	257.30	4,592.9	-31.0	-137.7	-7.8	0.00	0.00	0.00
4,700.0	6.31	257.30	4,692.3	-33.4	-148.4	-8.4	0.00	0.00	0.00
4,800.0	6.31	257.30	4,791.7	-35.8	-159.1	-9.0	0.00	0.00	0.00
4,900.0	6.31	257.30	4,891.0	-38.3	-169.8	-9.6	0.00	0.00	0.00
5,000.0	6.31	257.30	4,990.4	-40.7	-180.6	-10.2	0.00	0.00	0.00
5,100.0	6.31	257.30	5,089.8	-43.1	-191.3	-10.8	0.00	0.00	0.00
5,200.0	6.31	257.30	5,189.2	-45.5	-202.0	-11.4	0.00	0.00	0.00

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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	6.31	257.30	5,288.6	-47.9	-212.7	-12.0	0.00	0.00	0.00
5,400.0	6.31	257.30	5,388.0	-50.3	-223.4	-12.6	0.00	0.00	0.00
5,500.0	6.31	257.30	5,487.4	-52.7	-234.1	-13.2	0.00	0.00	0.00
5,600.0	6.31	257.30	5,586.8	-55.2	-244.9	-13.8	0.00	0.00	0.00
5,700.0	6.31	257.30	5,686.2	-57.6	-255.6	-14.5	0.00	0.00	0.00
5,800.0	6.31	257.30	5,785.6	-60.0	-266.3	-15.1	0.00	0.00	0.00
5,900.0	6.31	257.30	5,885.0	-62.4	-277.0	-15.7	0.00	0.00	0.00
6,000.0	6.31	257.30	5,984.4	-64.8	-287.7	-16.3	0.00	0.00	0.00
6,100.0	6.31	257.30	6,083.8	-67.2	-298.4	-16.9	0.00	0.00	0.00
6,200.0	6.31	257.30	6,183.2	-69.6	-309.1	-17.5	0.00	0.00	0.00
6,300.0	6.31	257.30	6,282.6	-72.1	-319.9	-18.1	0.00	0.00	0.00
6,400.0	6.31	257.30	6,382.0	-74.5	-330.6	-18.7	0.00	0.00	0.00
6,500.0	6.31	257.30	6,481.4	-76.9	-341.3	-19.3	0.00	0.00	0.00
6,600.0	6.31	257.30	6,580.8	-79.3	-352.0	-19.9	0.00	0.00	0.00
6,700.0	6.31	257.30	6,680.2	-81.7	-362.7	-20.5	0.00	0.00	0.00
6,800.0	6.31	257.30	6,779.5	-84.1	-373.4	-21.1	0.00	0.00	0.00
6,900.0	6.31	257.30	6,878.9	-86.5	-384.2	-21.7	0.00	0.00	0.00
7,000.0	6.31	257.30	6,978.3	-89.0	-394.9	-22.3	0.00	0.00	0.00
7,100.0	6.31	257.30	7,077.7	-91.4	-405.6	-22.9	0.00	0.00	0.00
7,200.0	6.31	257.30	7,177.1	-93.8	-416.3	-23.5	0.00	0.00	0.00
7,300.0	6.31	257.30	7,276.5	-96.2	-427.0	-24.1	0.00	0.00	0.00
7,400.0	6.31	257.30	7,375.9	-98.6	-437.7	-24.8	0.00	0.00	0.00
7,500.0	6.31	257.30	7,475.3	-101.0	-448.4	-25.4	0.00	0.00	0.00
7,600.0	6.31	257.30	7,574.7	-103.4	-459.2	-26.0	0.00	0.00	0.00
7,700.0	6.31	257.30	7,674.1	-105.9	-469.9	-26.6	0.00	0.00	0.00
7,800.0	6.31	257.30	7,773.5	-108.3	-480.6	-27.2	0.00	0.00	0.00
7,900.0	6.31	257.30	7,872.9	-110.7	-491.3	-27.8	0.00	0.00	0.00
8,000.0	6.31	257.30	7,972.3	-113.1	-502.0	-28.4	0.00	0.00	0.00
8,100.0	6.31	257.30	8,071.7	-115.5	-512.7	-29.0	0.00	0.00	0.00
8,200.0	6.31	257.30	8,171.1	-117.9	-523.5	-29.6	0.00	0.00	0.00
8,300.0	6.31	257.30	8,270.5	-120.3	-534.2	-30.2	0.00	0.00	0.00
8,400.0	6.31	257.30	8,369.9	-122.8	-544.9	-30.8	0.00	0.00	0.00
8,500.0	6.31	257.30	8,469.3	-125.2	-555.6	-31.4	0.00	0.00	0.00
8,600.0	6.31	257.30	8,568.7	-127.6	-566.3	-32.0	0.00	0.00	0.00
8,700.0	6.31	257.30	8,668.1	-130.0	-577.0	-32.6	0.00	0.00	0.00
8,800.0	6.31	257.30	8,767.4	-132.4	-587.8	-33.2	0.00	0.00	0.00
8,900.0	6.31	257.30	8,866.8	-134.8	-598.5	-33.8	0.00	0.00	0.00
9,000.0	6.31	257.30	8,966.2	-137.2	-609.2	-34.4	0.00	0.00	0.00
9,100.0	6.31	257.30	9,065.6	-139.7	-619.9	-35.1	0.00	0.00	0.00
9,200.0	6.31	257.30	9,165.0	-142.1	-630.6	-35.7	0.00	0.00	0.00
9,300.0	6.31	257.30	9,264.4	-144.5	-641.3	-36.3	0.00	0.00	0.00
9,400.0	6.31	257.30	9,363.8	-146.9	-652.0	-36.9	0.00	0.00	0.00
9,500.0	6.31	257.30	9,463.2	-149.3	-662.8	-37.5	0.00	0.00	0.00
9,600.0	6.31	257.30	9,562.6	-151.7	-673.5	-38.1	0.00	0.00	0.00
9,700.0	6.31	257.30	9,662.0	-154.1	-684.2	-38.7	0.00	0.00	0.00
9,800.0	6.31	257.30	9,761.4	-156.6	-694.9	-39.3	0.00	0.00	0.00
9,900.0	6.31	257.30	9,860.8	-159.0	-705.6	-39.9	0.00	0.00	0.00
10,000.0	6.31	257.30	9,960.2	-161.4	-716.3	-40.5	0.00	0.00	0.00
10,100.0	6.31	257.30	10,059.6	-163.8	-727.1	-41.1	0.00	0.00	0.00
10,200.0	6.31	257.30	10,159.0	-166.2	-737.8	-41.7	0.00	0.00	0.00
10,300.0	6.31	257.30	10,258.4	-168.6	-748.5	-42.3	0.00	0.00	0.00
10,400.0	6.31	257.30	10,357.8	-171.0	-759.2	-42.9	0.00	0.00	0.00
10,500.0	6.31	257.30	10,457.2	-173.5	-769.9	-43.5	0.00	0.00	0.00
10,600.0	6.31	257.30	10,556.6	-175.9	-780.6	-44.1	0.00	0.00	0.00

Database:	EDM 5000.14	**Local Co-ordinate Reference:**	Well #709H
Company:	EOG Resources - Midland	**TVD Reference:**	KB = 25 @ 3388.0usft
Project:	Lea County, NM (NAD 83 NME)	**MD Reference:**	KB = 25 @ 3388.0usft
Site:	Gem 36 State Com	**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	6.31	257.30	10,656.0	-178.3	-791.3	-44.8	0.00	0.00	0.00
10,801.0	6.31	257.30	10,756.4	-180.7	-802.2	-45.4	0.00	0.00	0.00
10,825.0	6.31	283.74	10,780.2	-180.7	-804.7	-44.9	12.00	0.00	110.21
10,850.0	7.57	306.50	10,805.0	-179.4	-807.4	-43.2	12.00	5.06	91.01
10,875.0	9.64	321.20	10,829.7	-176.8	-810.0	-40.2	12.00	8.25	58.81
10,900.0	12.09	330.38	10,854.3	-172.9	-812.6	-35.9	12.00	9.84	36.74
10,925.0	14.75	336.41	10,878.6	-167.7	-815.2	-30.3	12.00	10.63	24.09
10,950.0	17.52	340.60	10,902.6	-161.2	-817.7	-23.5	12.00	11.07	16.75
10,975.0	20.35	343.66	10,926.3	-153.5	-820.2	-15.5	12.00	11.33	12.26
11,000.0	23.22	346.00	10,949.5	-144.5	-822.6	-6.3	12.00	11.49	9.36
11,025.0	26.12	347.85	10,972.2	-134.4	-825.0	4.1	12.00	11.60	7.39
11,050.0	29.04	349.35	10,994.4	-123.0	-827.3	15.7	12.00	11.67	6.00
11,075.0	31.97	350.60	11,015.9	-110.5	-829.5	28.4	12.00	11.73	4.99
11,100.0	34.92	351.66	11,036.7	-96.9	-831.6	42.2	12.00	11.77	4.23
11,125.0	37.87	352.57	11,056.9	-82.2	-833.6	57.0	12.00	11.80	3.65
11,150.0	40.82	353.37	11,076.2	-66.5	-835.5	72.8	12.00	11.83	3.20
11,175.0	43.79	354.08	11,094.7	-49.8	-837.4	89.6	12.00	11.85	2.84
11,200.0	46.75	354.71	11,112.3	-32.1	-839.1	107.3	12.00	11.86	2.55
11,225.0	49.72	355.29	11,128.9	-13.5	-840.7	125.9	12.00	11.88	2.31
11,250.0	52.69	355.82	11,144.6	5.9	-842.2	145.3	12.00	11.89	2.11
11,275.0	55.67	356.31	11,159.2	26.1	-843.6	165.5	12.00	11.90	1.95
11,300.0	58.64	356.76	11,172.8	47.1	-844.9	186.4	12.00	11.90	1.82
11,325.0	61.62	357.19	11,185.2	68.7	-846.0	207.9	12.00	11.91	1.71
11,350.0	64.60	357.59	11,196.5	91.0	-847.1	230.0	12.00	11.91	1.61
11,375.0	67.58	357.98	11,206.7	113.8	-847.9	252.7	12.00	11.92	1.54
11,400.0	70.56	358.35	11,215.6	137.2	-848.7	275.8	12.00	11.92	1.47
11,425.0	73.54	358.70	11,223.3	160.9	-849.3	299.4	12.00	11.92	1.42
11,450.0	76.52	359.04	11,229.8	185.1	-849.8	323.3	12.00	11.93	1.38
11,475.0	79.50	359.38	11,235.0	209.5	-850.1	347.4	12.00	11.93	1.34
11,500.0	82.48	359.71	11,238.9	234.2	-850.3	371.8	12.00	11.93	1.32
11,525.0	85.47	0.03	11,241.5	259.1	-850.4	396.4	12.00	11.93	1.30
11,550.0	88.45	0.35	11,242.8	284.0	-850.3	421.0	12.00	11.93	1.29
11,563.0	90.00	0.52	11,243.0	297.1	-850.2	433.8	12.00	11.93	1.28
11,600.0	90.00	0.52	11,243.0	334.0	-849.8	470.2	0.00	0.00	0.00
11,700.0	90.00	0.52	11,243.0	434.0	-848.9	568.7	0.00	0.00	0.00
11,800.0	90.00	0.52	11,243.0	534.0	-848.0	667.1	0.00	0.00	0.00
11,900.0	90.00	0.52	11,243.0	634.0	-847.1	765.6	0.00	0.00	0.00
12,000.0	90.00	0.52	11,243.0	734.0	-846.2	864.0	0.00	0.00	0.00
12,100.0	90.00	0.52	11,243.0	834.0	-845.3	962.5	0.00	0.00	0.00
12,200.0	90.00	0.52	11,243.0	934.0	-844.4	1,061.0	0.00	0.00	0.00
12,300.0	90.00	0.52	11,243.0	1,034.0	-843.5	1,159.4	0.00	0.00	0.00
12,400.0	90.00	0.52	11,243.0	1,134.0	-842.6	1,257.9	0.00	0.00	0.00
12,500.0	90.00	0.52	11,243.0	1,234.0	-841.6	1,356.4	0.00	0.00	0.00
12,600.0	90.00	0.52	11,243.0	1,334.0	-840.7	1,454.8	0.00	0.00	0.00
12,700.0	90.00	0.52	11,243.0	1,434.0	-839.8	1,553.3	0.00	0.00	0.00
12,800.0	90.00	0.52	11,243.0	1,534.0	-838.9	1,651.8	0.00	0.00	0.00
12,900.0	90.00	0.52	11,243.0	1,634.0	-838.0	1,750.2	0.00	0.00	0.00
13,000.0	90.00	0.52	11,243.0	1,734.0	-837.1	1,848.7	0.00	0.00	0.00
13,100.0	90.00	0.52	11,243.0	1,834.0	-836.2	1,947.1	0.00	0.00	0.00
13,200.0	90.00	0.52	11,243.0	1,934.0	-835.3	2,045.6	0.00	0.00	0.00
13,300.0	90.00	0.52	11,243.0	2,034.0	-834.4	2,144.1	0.00	0.00	0.00
13,400.0	90.00	0.52	11,243.0	2,134.0	-833.4	2,242.5	0.00	0.00	0.00
13,500.0	90.00	0.52	11,243.0	2,234.0	-832.5	2,341.0	0.00	0.00	0.00
13,600.0	90.00	0.52	11,243.0	2,334.0	-831.6	2,439.5	0.00	0.00	0.00

Database:	EDM 5000.14	**Local Co-ordinate Reference:**	Well #709H
Company:	EOG Resources - Midland	**TVD Reference:**	KB = 25 @ 3388.0usft
Project:	Lea County, NM (NAD 83 NME)	**MD Reference:**	KB = 25 @ 3388.0usft
Site:	Gem 36 State Com	**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)
13,700.0	90.00	0.52	11,243.0	2,434.0	-830.7	2,537.9	0.00	0.00	0.00
13,800.0	90.00	0.52	11,243.0	2,534.0	-829.8	2,636.4	0.00	0.00	0.00
13,900.0	90.00	0.52	11,243.0	2,633.9	-828.9	2,734.9	0.00	0.00	0.00
14,000.0	90.00	0.52	11,243.0	2,733.9	-828.0	2,833.3	0.00	0.00	0.00
14,100.0	90.00	0.52	11,243.0	2,833.9	-827.1	2,931.8	0.00	0.00	0.00
14,200.0	90.00	0.52	11,243.0	2,933.9	-826.2	3,030.2	0.00	0.00	0.00
14,300.0	90.00	0.52	11,243.0	3,033.9	-825.2	3,128.7	0.00	0.00	0.00
14,400.0	90.00	0.52	11,243.0	3,133.9	-824.3	3,227.2	0.00	0.00	0.00
14,500.0	90.00	0.52	11,243.0	3,233.9	-823.4	3,325.6	0.00	0.00	0.00
14,600.0	90.00	0.52	11,243.0	3,333.9	-822.5	3,424.1	0.00	0.00	0.00
14,700.0	90.00	0.52	11,243.0	3,433.9	-821.6	3,522.6	0.00	0.00	0.00
14,800.0	90.00	0.52	11,243.0	3,533.9	-820.7	3,621.0	0.00	0.00	0.00
14,900.0	90.00	0.52	11,243.0	3,633.9	-819.8	3,719.5	0.00	0.00	0.00
15,000.0	90.00	0.52	11,243.0	3,733.9	-818.9	3,818.0	0.00	0.00	0.00
15,100.0	90.00	0.52	11,243.0	3,833.9	-818.0	3,916.4	0.00	0.00	0.00
15,200.0	90.00	0.52	11,243.0	3,933.9	-817.0	4,014.9	0.00	0.00	0.00
15,300.0	90.00	0.52	11,243.0	4,033.9	-816.1	4,113.4	0.00	0.00	0.00
15,400.0	90.00	0.52	11,243.0	4,133.9	-815.2	4,211.8	0.00	0.00	0.00
15,500.0	90.00	0.52	11,243.0	4,233.9	-814.3	4,310.3	0.00	0.00	0.00
15,600.0	90.00	0.52	11,243.0	4,333.9	-813.4	4,408.7	0.00	0.00	0.00
15,700.0	90.00	0.52	11,243.0	4,433.9	-812.5	4,507.2	0.00	0.00	0.00
15,800.0	90.00	0.52	11,243.0	4,533.9	-811.6	4,605.7	0.00	0.00	0.00
15,900.0	90.00	0.52	11,243.0	4,633.9	-810.7	4,704.1	0.00	0.00	0.00
16,000.0	90.00	0.52	11,243.0	4,733.9	-809.8	4,802.6	0.00	0.00	0.00
16,083.1	90.00	0.52	11,243.0	4,817.0	-809.0	4,884.5	0.00	0.00	0.00

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
PBHL (Gem 36 State Co - plan hits target center - Point	0.00	0.00	11,243.0	4,817.0	-809.0	398,487.00	757,288.00	32° 5' 36.963 N	103° 38' 9.565 W
FTP (Gem 36 State Com - plan misses target center by 40.2usft at 11374.5usft MD (11206.5 TVD, 113.4 N, -847.9 E) - Point	0.00	0.00	11,243.0	97.0	-852.0	393,767.00	757,245.00	32° 4' 50.259 N	103° 38' 10.419 W