Permit Information:

Well Name: Gem 36 State Com No. 702H

Location:
SL: 220' FNL & 260' FEL, Section 36, T-25-S, R-32-E, Lea Co., N.M.
BHL: 230' FSL & 990' FEL, Section 36, T-25-S, R-32-E, Lea Co., N.M.

Casing Program:

Hole Size	Interval	Csg OD	Weight	Grade	Conn	DF_{min} Collapse	DF_{min} Burst	DF_{min} Tension
17.5"	0 – 800'	13.375"	54.5#	J55	STC	1.125	1.25	1.60
12.25"	0-4000'	9.625"	40#	J55	LTC	1.125	1.25	1.60
12.25"	4000' – 4700'	9.625"	40#	HCK-55	LTC	1.125	1.25	1.60
8.75"	0'-17,103'	5.5"	17#	HCP-110	LTC	1.125	1.25	1.60

Cement Program:

Depth	No. Sacks	Wt. ppg	Yld Ft^3/ft	Slurry Description
800'	400	13.5	1.73	Class C + 4.0% Bentonite + 0.6% CD-32 + 0.5% $CaCl_2$ + 0.25 lb/sk Cello-Flake (TOC @ Surface)
	200	14.8	1.34	Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate
4,700'	800	12.7	2.22	Class 'C' + 1.50% R-3 + 0.25 lb/sk Cello-Flake + 2.0% Sodium Metasilicate + 10% Salt + 0.005 lb/sk Static Free (TOC @ Surface)
	200	14.8	1.32	Tail: Class 'C' + 0.25 lb/sk Cello Flake + 0.005 lb/sk Static Free
17,103'	375	10.8	3.67	60:40:0 Class C + 15.0 pps BA-90 + 4% MPA-5 + 3.0% SMS + 5.0% A-10 + 1.0% BA-10A + 0.80% ASA-301 + 2.55% R-21 + 8.0 pps LCM-1 (TOC @ 4200')
	400	11.8	2.38	50:50:10 Class H + 0.80% FL-52 + 0.30% ASA-301 + 0.40% SMS + 2.0% Salt + 0.30% R-21 + 3.0 pps LCM-1 + 0.25 pps Celloflake
	1400	14.2	1.28	50:50:2 Class H + 0.65% FL-52 + 0.45% CD-32 + 0.10% SMS + 2.0% Salt

Mud Program:

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 – 800'	Fresh - Gel	8.6-8.8	28-34	N/c
800' – 4,700'	Oil Base	8.7-9.4	58-68	N/c - 6
4,700' – 11,754'	Oil Base	8.7-9.4	58-68	N/c - 6
11,754' – 17,103' Lateral	Oil Base	9.0-9.5	58-68	N/c - 6

SEP

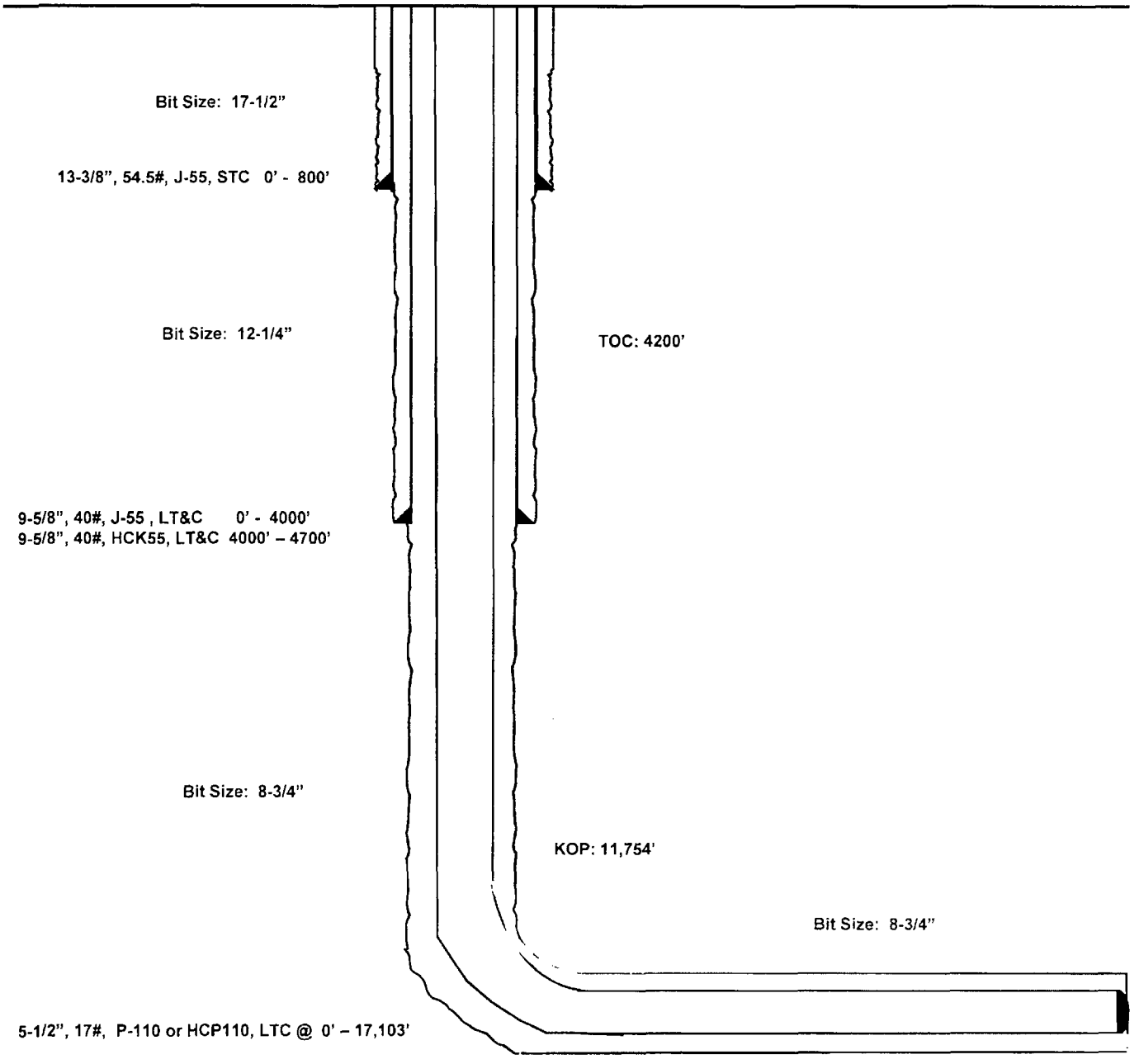
Gem 36 State Com #702H
Lea County, New Mexico

220' FNL
260' FEL
Section 36
T-25-S, R-32-E

Proposed Wellbore

API: 30-025-

KB: 3,457'
GL: 3,432'



Lateral: 17,103' MD, 12,305' TVD

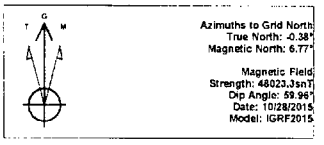
BH Location: 230' FSL & 990' FEL
Section 36
T-25-S, R-32-E

eog resources

Lea County, NM (NAD 27 NME)

Gem 36 State Com #702H

Plan #1



Azimuths to Grid North
True North: -0.38°
Magnetic North: 6.77°

Magnetic Field
Strength: 48023.3snT
Dip Angle: 59.96°
Date: 10/28/2015
Model: IGRF2015

To convert a Magnetic Direction to a Grid Direction, Add 6.76°
To convert a Magnetic Direction to a True Direction, Add 7.14° East
To convert a True Direction to a Grid Direction, Subtract 0.38°

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: #702H

Ground Level: 3432.0
KB = 25 @ 3457.0usft

Northing	Easting	Latitude	Longitude
398458.00	720819.00	32° 5' 36.888 N	103° 37' 13.025 W

SECTION DETAILS

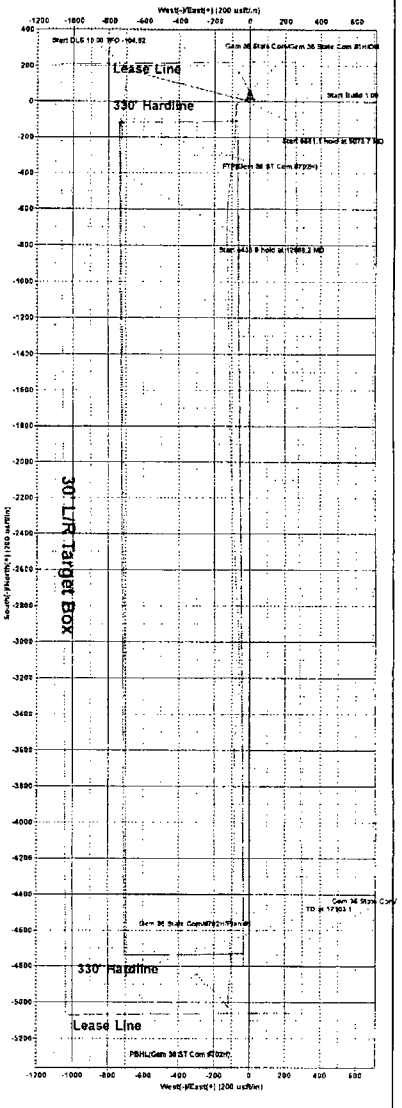
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	4500.0	0.00	0.00	4500.0	0.0	0.0	0.00	0.00	0.0	
3	5073.7	5.74	284.12	5072.7	7.0	-27.8	1.00	284.12	-3.0	
4	11754.8	5.74	284.12	11720.4	170.0	-675.5	0.00	0.00	-72.6	
5	12669.2	90.00	179.54	12305.0	-403.2	-727.7	10.00	-104.52	502.2	
6	17103.1	90.00	179.54	12305.0	-4837.0	-692.0	0.00	0.00	4886.2	PBHL(Gem 36 ST Com #702H)

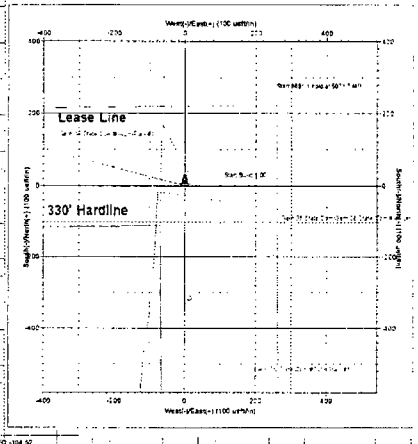
CASING DETAILS

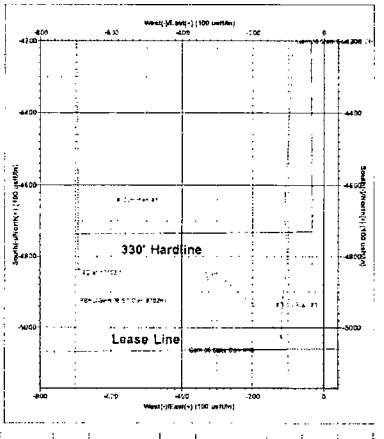
No casing data is available

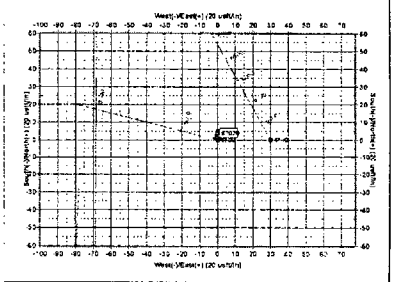
WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

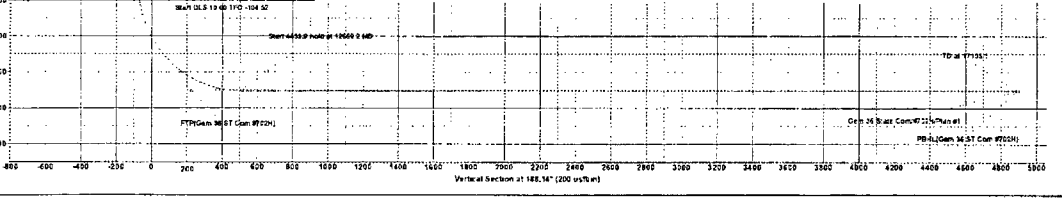
Name	TVD	+N/-S	+E/-W	Northing	Easting
FTP(Gem 36 ST Com #702H)	12305.0	-120.0	-730.0	398378.00	720089.00
PBHL(Gem 36 ST Com #702H)	12305.0	-4837.0	-692.0	393661.00	720127.00











EOG Resources - Midland

Lea County, NM (NAD 27 NME)
Gem 36 State Com
#702H

OH

Plan: Plan #1

Standard Planning Report

10 September, 2015

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well #702H
Company:	EOG Resources - Midland	**TVD Reference:**	KB = 25 @ 3457.0usft
Project:	Lea County, NM (NAD 27 NME)	**MD Reference:**	KB = 25 @ 3457.0usft
Site:	Gem 36 State Com	**North Reference:**	Grid
Well:	#702H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #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	Gem 36 State Com				
Site Position:		**Northing:**	393,654.00 usft	**Latitude:**	32° 4' 48.974 N
From:	Map	**Easting:**	720,486.00 usft	**Longitude:**	103° 37' 17.267 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.38 °

Well	#702H					
Well Position	**+N/-S**	4,844.0 usft	**Northing:**	398,498.00 usft	**Latitude:**	32° 5' 36.888 N
	+E/-W	333.0 usft	**Easting:**	720,819.00 usft	**Longitude:**	103° 37' 13.025 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	0.0 usft	**Ground Level:**	3,432.0 usft

Wellbore	OH				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2015	10/28/2015	7.14	59.96	48,023

Design	Plan #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	188.14	

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	
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.00	0.00	0.00	0.00	
5,073.7	5.74	284.12	5,072.7	7.0	-27.8	1.00	1.00	0.00	284.12	
11,754.8	5.74	284.12	11,720.4	170.0	-675.5	0.00	0.00	0.00	0.00	
12,669.2	90.00	179.54	12,305.0	-403.2	-727.7	10.00	9.21	-11.44	-104.52	
17,103.1	90.00	179.54	12,305.0	-4,837.0	-692.0	0.00	0.00	0.00	0.00	PBHL(Gem 36 ST Co

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well #702H
Company:	EOG Resources - Midland	**TVD Reference:**	KB = 25 @ 3457.0usft
Project:	Lea County, NM (NAD 27 NME)	**MD Reference:**	KB = 25 @ 3457.0usft
Site:	Gem 36 State Com	**North Reference:**	Grid
Well:	#702H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #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	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	1.00	284.12	4,600.0	0.2	-0.8	-0.1	1.00	1.00	0.00
4,700.0	2.00	284.12	4,700.0	0.9	-3.4	-0.4	1.00	1.00	0.00
4,800.0	3.00	284.12	4,799.9	1.9	-7.6	-0.8	1.00	1.00	0.00
4,900.0	4.00	284.12	4,899.7	3.4	-13.5	-1.5	1.00	1.00	0.00
5,000.0	5.00	284.12	4,999.4	5.3	-21.1	-2.3	1.00	1.00	0.00
5,073.7	5.74	284.12	5,072.7	7.0	-27.8	-3.0	1.00	1.00	0.00
5,100.0	5.74	284.12	5,098.9	7.6	-30.4	-3.3	0.00	0.00	0.00
5,200.0	5.74	284.12	5,198.4	10.1	-40.1	-4.3	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well #702H
Company:	EOG Resources - Midland	**TVD Reference:**	KB = 25 @ 3457.0usft
Project:	Lea County, NM (NAD 27 NME)	**MD Reference:**	KB = 25 @ 3457.0usft
Site:	Gem 36 State Com	**North Reference:**	Grid
Well:	#702H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #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	5.74	284.12	5,297.9	12.5	-49.8	-5.3	0.00	0.00	0.00
5,400.0	5.74	284.12	5,397.4	15.0	-59.5	-6.4	0.00	0.00	0.00
5,500.0	5.74	284.12	5,496.9	17.4	-69.2	-7.4	0.00	0.00	0.00
5,600.0	5.74	284.12	5,596.4	19.8	-78.8	-8.5	0.00	0.00	0.00
5,700.0	5.74	284.12	5,695.9	22.3	-88.5	-9.5	0.00	0.00	0.00
5,800.0	5.74	284.12	5,795.4	24.7	-98.2	-10.6	0.00	0.00	0.00
5,900.0	5.74	284.12	5,894.9	27.2	-107.9	-11.6	0.00	0.00	0.00
6,000.0	5.74	284.12	5,994.4	29.6	-117.6	-12.6	0.00	0.00	0.00
6,100.0	5.74	284.12	6,093.9	32.0	-127.3	-13.7	0.00	0.00	0.00
6,200.0	5.74	284.12	6,193.4	34.5	-137.0	-14.7	0.00	0.00	0.00
6,300.0	5.74	284.12	6,292.9	36.9	-146.7	-15.8	0.00	0.00	0.00
6,400.0	5.74	284.12	6,392.4	39.4	-156.4	-16.8	0.00	0.00	0.00
6,500.0	5.74	284.12	6,491.9	41.8	-166.1	-17.8	0.00	0.00	0.00
6,600.0	5.74	284.12	6,591.4	44.2	-175.8	-18.9	0.00	0.00	0.00
6,700.0	5.74	284.12	6,690.9	46.7	-185.5	-19.9	0.00	0.00	0.00
6,800.0	5.74	284.12	6,790.4	49.1	-195.2	-21.0	0.00	0.00	0.00
6,900.0	5.74	284.12	6,889.9	51.6	-204.9	-22.0	0.00	0.00	0.00
7,000.0	5.74	284.12	6,989.4	54.0	-214.6	-23.1	0.00	0.00	0.00
7,100.0	5.74	284.12	7,088.9	56.4	-224.3	-24.1	0.00	0.00	0.00
7,200.0	5.74	284.12	7,188.4	58.9	-234.0	-25.1	0.00	0.00	0.00
7,300.0	5.74	284.12	7,287.9	61.3	-243.6	-26.2	0.00	0.00	0.00
7,400.0	5.74	284.12	7,387.4	63.7	-253.3	-27.2	0.00	0.00	0.00
7,500.0	5.74	284.12	7,486.9	66.2	-263.0	-28.3	0.00	0.00	0.00
7,600.0	5.74	284.12	7,586.4	68.6	-272.7	-29.3	0.00	0.00	0.00
7,700.0	5.74	284.12	7,685.9	71.1	-282.4	-30.4	0.00	0.00	0.00
7,800.0	5.74	284.12	7,785.4	73.5	-292.1	-31.4	0.00	0.00	0.00
7,900.0	5.74	284.12	7,884.9	75.9	-301.8	-32.4	0.00	0.00	0.00
8,000.0	5.74	284.12	7,984.4	78.4	-311.5	-33.5	0.00	0.00	0.00
8,100.0	5.74	284.12	8,083.9	80.8	-321.2	-34.5	0.00	0.00	0.00
8,200.0	5.74	284.12	8,183.4	83.3	-330.9	-35.6	0.00	0.00	0.00
8,300.0	5.74	284.12	8,282.9	85.7	-340.6	-36.6	0.00	0.00	0.00
8,400.0	5.74	284.12	8,382.4	88.1	-350.3	-37.6	0.00	0.00	0.00
8,500.0	5.74	284.12	8,481.9	90.6	-360.0	-38.7	0.00	0.00	0.00
8,600.0	5.74	284.12	8,581.4	93.0	-369.7	-39.7	0.00	0.00	0.00
8,700.0	5.74	284.12	8,680.9	95.5	-379.4	-40.8	0.00	0.00	0.00
8,800.0	5.74	284.12	8,780.4	97.9	-389.1	-41.8	0.00	0.00	0.00
8,900.0	5.74	284.12	8,879.9	100.3	-398.8	-42.9	0.00	0.00	0.00
9,000.0	5.74	284.12	8,979.4	102.8	-408.4	-43.9	0.00	0.00	0.00
9,100.0	5.74	284.12	9,078.9	105.2	-418.1	-44.9	0.00	0.00	0.00
9,200.0	5.74	284.12	9,178.4	107.7	-427.8	-46.0	0.00	0.00	0.00
9,300.0	5.74	284.12	9,277.9	110.1	-437.5	-47.0	0.00	0.00	0.00
9,400.0	5.74	284.12	9,377.4	112.5	-447.2	-48.1	0.00	0.00	0.00
9,500.0	5.74	284.12	9,476.9	115.0	-456.9	-49.1	0.00	0.00	0.00
9,600.0	5.74	284.12	9,576.4	117.4	-466.6	-50.1	0.00	0.00	0.00
9,700.0	5.74	284.12	9,675.9	119.8	-476.3	-51.2	0.00	0.00	0.00
9,800.0	5.74	284.12	9,775.4	122.3	-486.0	-52.2	0.00	0.00	0.00
9,900.0	5.74	284.12	9,874.9	124.7	-495.7	-53.3	0.00	0.00	0.00
10,000.0	5.74	284.12	9,974.4	127.2	-505.4	-54.3	0.00	0.00	0.00
10,100.0	5.74	284.12	10,073.9	129.6	-515.1	-55.4	0.00	0.00	0.00
10,200.0	5.74	284.12	10,173.4	132.0	-524.8	-56.4	0.00	0.00	0.00
10,300.0	5.74	284.12	10,272.9	134.5	-534.5	-57.4	0.00	0.00	0.00
10,400.0	5.74	284.12	10,372.4	136.9	-544.2	-58.5	0.00	0.00	0.00
10,500.0	5.74	284.12	10,471.9	139.4	-553.9	-59.5	0.00	0.00	0.00
10,600.0	5.74	284.12	10,571.4	141.8	-563.5	-60.6	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well #702H
Company:	EOG Resources - Midland	**TVD Reference:**	KB = 25 @ 3457.0usft
Project:	Lea County, NM (NAD 27 NME)	**MD Reference:**	KB = 25 @ 3457.0usft
Site:	Gem 36 State Com	**North Reference:**	Grid
Well:	#702H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #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	5.74	284.12	10,670.9	144.2	-573.2	-61.6	0.00	0.00	0.00
10,800.0	5.74	284.12	10,770.4	146.7	-582.9	-62.6	0.00	0.00	0.00
10,900.0	5.74	284.12	10,869.9	149.1	-592.6	-63.7	0.00	0.00	0.00
11,000.0	5.74	284.12	10,969.4	151.6	-602.3	-64.7	0.00	0.00	0.00
11,100.0	5.74	284.12	11,068.9	154.0	-612.0	-65.8	0.00	0.00	0.00
11,200.0	5.74	284.12	11,168.4	156.4	-621.7	-66.8	0.00	0.00	0.00
11,300.0	5.74	284.12	11,267.9	158.9	-631.4	-67.9	0.00	0.00	0.00
11,400.0	5.74	284.12	11,367.4	161.3	-641.1	-68.9	0.00	0.00	0.00
11,500.0	5.74	284.12	11,466.9	163.8	-650.8	-69.9	0.00	0.00	0.00
11,600.0	5.74	284.12	11,566.4	166.2	-660.5	-71.0	0.00	0.00	0.00
11,700.0	5.74	284.12	11,665.9	168.6	-670.2	-72.0	0.00	0.00	0.00
11,754.8	5.74	284.12	11,720.4	170.0	-675.5	-72.6	0.00	0.00	0.00
11,800.0	6.35	240.48	11,765.3	169.3	-679.9	-71.3	10.00	1.35	-96.55
11,850.0	9.79	213.83	11,814.9	164.4	-684.6	-65.8	10.00	6.89	-53.31
11,900.0	14.19	202.15	11,863.8	155.2	-689.3	-56.0	10.00	8.79	-23.34
11,950.0	18.88	196.05	11,911.7	141.7	-693.9	-42.0	10.00	9.39	-12.21
12,000.0	23.70	192.33	11,958.3	124.1	-698.3	-24.0	10.00	9.63	-7.43
12,050.0	28.58	189.82	12,003.1	102.5	-702.4	-2.0	10.00	9.75	-5.03
12,100.0	33.49	187.99	12,046.0	77.0	-706.4	23.8	10.00	9.82	-3.66
12,150.0	38.42	186.58	12,086.4	47.9	-710.1	53.1	10.00	9.86	-2.82
12,200.0	43.36	185.45	12,124.2	15.4	-713.5	85.8	10.00	9.89	-2.27
12,250.0	48.32	184.50	12,159.0	-20.3	-716.6	121.6	10.00	9.91	-1.88
12,300.0	53.28	183.70	12,190.6	-59.0	-719.4	160.3	10.00	9.92	-1.61
12,350.0	58.25	182.99	12,218.8	-100.2	-721.8	201.4	10.00	9.93	-1.42
12,400.0	63.21	182.35	12,243.2	-143.8	-723.8	244.8	10.00	9.94	-1.27
12,404.0	63.61	182.30	12,245.0	-147.3	-723.9	248.4	10.00	9.94	-1.21
FTP(Gem 36 ST Com #702H)									
12,450.0	68.19	181.77	12,263.8	-189.3	-725.4	290.1	10.00	9.94	-1.16
12,500.0	73.16	181.22	12,280.3	-236.5	-726.7	337.0	10.00	9.95	-1.09
12,550.0	78.13	180.71	12,292.7	-284.9	-727.5	385.0	10.00	9.95	-1.03
12,600.0	83.11	180.21	12,300.8	-334.2	-727.9	433.9	10.00	9.95	-0.99
12,650.0	88.09	179.72	12,304.7	-384.0	-727.8	483.2	10.00	9.95	-0.97
12,669.2	90.00	179.54	12,305.0	-403.2	-727.7	502.2	10.00	9.95	-0.97
12,700.0	90.00	179.54	12,305.0	-434.0	-727.5	532.7	0.00	0.00	0.00
12,800.0	90.00	179.54	12,305.0	-534.0	-726.7	631.5	0.00	0.00	0.00
12,900.0	90.00	179.54	12,305.0	-634.0	-725.9	730.4	0.00	0.00	0.00
13,000.0	90.00	179.54	12,305.0	-734.0	-725.1	829.3	0.00	0.00	0.00
13,100.0	90.00	179.54	12,305.0	-834.0	-724.2	928.2	0.00	0.00	0.00
13,200.0	90.00	179.54	12,305.0	-934.0	-723.4	1,027.0	0.00	0.00	0.00
13,300.0	90.00	179.54	12,305.0	-1,034.0	-722.6	1,125.9	0.00	0.00	0.00
13,400.0	90.00	179.54	12,305.0	-1,134.0	-721.8	1,224.8	0.00	0.00	0.00
13,500.0	90.00	179.54	12,305.0	-1,234.0	-721.0	1,323.7	0.00	0.00	0.00
13,600.0	90.00	179.54	12,305.0	-1,334.0	-720.2	1,422.5	0.00	0.00	0.00
13,700.0	90.00	179.54	12,305.0	-1,434.0	-719.4	1,521.4	0.00	0.00	0.00
13,800.0	90.00	179.54	12,305.0	-1,534.0	-718.6	1,620.3	0.00	0.00	0.00
13,900.0	90.00	179.54	12,305.0	-1,634.0	-717.8	1,719.2	0.00	0.00	0.00
14,000.0	90.00	179.54	12,305.0	-1,734.0	-717.0	1,818.0	0.00	0.00	0.00
14,100.0	90.00	179.54	12,305.0	-1,834.0	-716.2	1,916.9	0.00	0.00	0.00
14,200.0	90.00	179.54	12,305.0	-1,934.0	-715.4	2,015.8	0.00	0.00	0.00
14,300.0	90.00	179.54	12,305.0	-2,034.0	-714.6	2,114.7	0.00	0.00	0.00
14,400.0	90.00	179.54	12,305.0	-2,134.0	-713.8	2,213.5	0.00	0.00	0.00
14,500.0	90.00	179.54	12,305.0	-2,234.0	-713.0	2,312.4	0.00	0.00	0.00
14,600.0	90.00	179.54	12,305.0	-2,334.0	-712.2	2,411.3	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well #702H
Company:	EOG Resources - Midland	**TVD Reference:**	KB = 25 @ 3457.0usft
Project:	Lea County, NM (NAD 27 NME)	**MD Reference:**	KB = 25 @ 3457.0usft
Site:	Gem 36 State Com	**North Reference:**	Grid
Well:	#702H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #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)
14,700.0	90.00	179.54	12,305.0	-2,434.0	-711.4	2,510.2	0.00	0.00	0.00
14,800.0	90.00	179.54	12,305.0	-2,534.0	-710.6	2,609.0	0.00	0.00	0.00
14,900.0	90.00	179.54	12,305.0	-2,633.9	-709.7	2,707.9	0.00	0.00	0.00
15,000.0	90.00	179.54	12,305.0	-2,733.9	-708.9	2,806.8	0.00	0.00	0.00
15,100.0	90.00	179.54	12,305.0	-2,833.9	-708.1	2,905.7	0.00	0.00	0.00
15,200.0	90.00	179.54	12,305.0	-2,933.9	-707.3	3,004.5	0.00	0.00	0.00
15,300.0	90.00	179.54	12,305.0	-3,033.9	-706.5	3,103.4	0.00	0.00	0.00
15,400.0	90.00	179.54	12,305.0	-3,133.9	-705.7	3,202.3	0.00	0.00	0.00
15,500.0	90.00	179.54	12,305.0	-3,233.9	-704.9	3,301.2	0.00	0.00	0.00
15,600.0	90.00	179.54	12,305.0	-3,333.9	-704.1	3,400.0	0.00	0.00	0.00
15,700.0	90.00	179.54	12,305.0	-3,433.9	-703.3	3,498.9	0.00	0.00	0.00
15,800.0	90.00	179.54	12,305.0	-3,533.9	-702.5	3,597.8	0.00	0.00	0.00
15,900.0	90.00	179.54	12,305.0	-3,633.9	-701.7	3,696.7	0.00	0.00	0.00
16,000.0	90.00	179.54	12,305.0	-3,733.9	-700.9	3,795.5	0.00	0.00	0.00
16,100.0	90.00	179.54	12,305.0	-3,833.9	-700.1	3,894.4	0.00	0.00	0.00
16,200.0	90.00	179.54	12,305.0	-3,933.9	-699.3	3,993.3	0.00	0.00	0.00
16,300.0	90.00	179.54	12,305.0	-4,033.9	-698.5	4,092.2	0.00	0.00	0.00
16,400.0	90.00	179.54	12,305.0	-4,133.9	-697.7	4,191.0	0.00	0.00	0.00
16,500.0	90.00	179.54	12,305.0	-4,233.9	-696.9	4,289.9	0.00	0.00	0.00
16,600.0	90.00	179.54	12,305.0	-4,333.9	-696.1	4,388.8	0.00	0.00	0.00
16,700.0	90.00	179.54	12,305.0	-4,433.9	-695.2	4,487.7	0.00	0.00	0.00
16,800.0	90.00	179.54	12,305.0	-4,533.9	-694.4	4,586.5	0.00	0.00	0.00
16,900.0	90.00	179.54	12,305.0	-4,633.9	-693.6	4,685.4	0.00	0.00	0.00
17,000.0	90.00	179.54	12,305.0	-4,733.9	-692.8	4,784.3	0.00	0.00	0.00
17,103.1	90.00	179.54	12,305.0	-4,837.0	-692.0	4,886.2	0.00	0.00	0.00
PBHL(Gem 36 ST Com #702H)									

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(Gem 36 ST Com #;	0.00	0.00	12,305.0	-120.0	-730.0	398,378.00	720,089.00	32° 5' 35.748 N	103° 37' 21.520 W
- plan misses target center by 66.2usft at 12404.0usft MD (12245.0 TVD, -147.3 N, -723.9 E)									
- Point									
PBHL(Gem 36 ST Com	0.00	0.00	12,305.0	-4,837.0	-692.0	393,661.00	720,127.00	32° 4' 49.067 N	103° 37' 21.439 W
- plan hits target center									
- Point									