

Permit Information:

Well Name: Gem 36 State Com No. 701H

Location:

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

BHL: 230' FSL & 330' 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'-17,063'	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
17,063'	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' – 11,721'	Oil Base	8.7-9.4	58-68	N/c - 6
11,721' – 17,063' Lateral	Oil Base	9.0-9.5	58-68	N/c - 6

SEP 14 2015

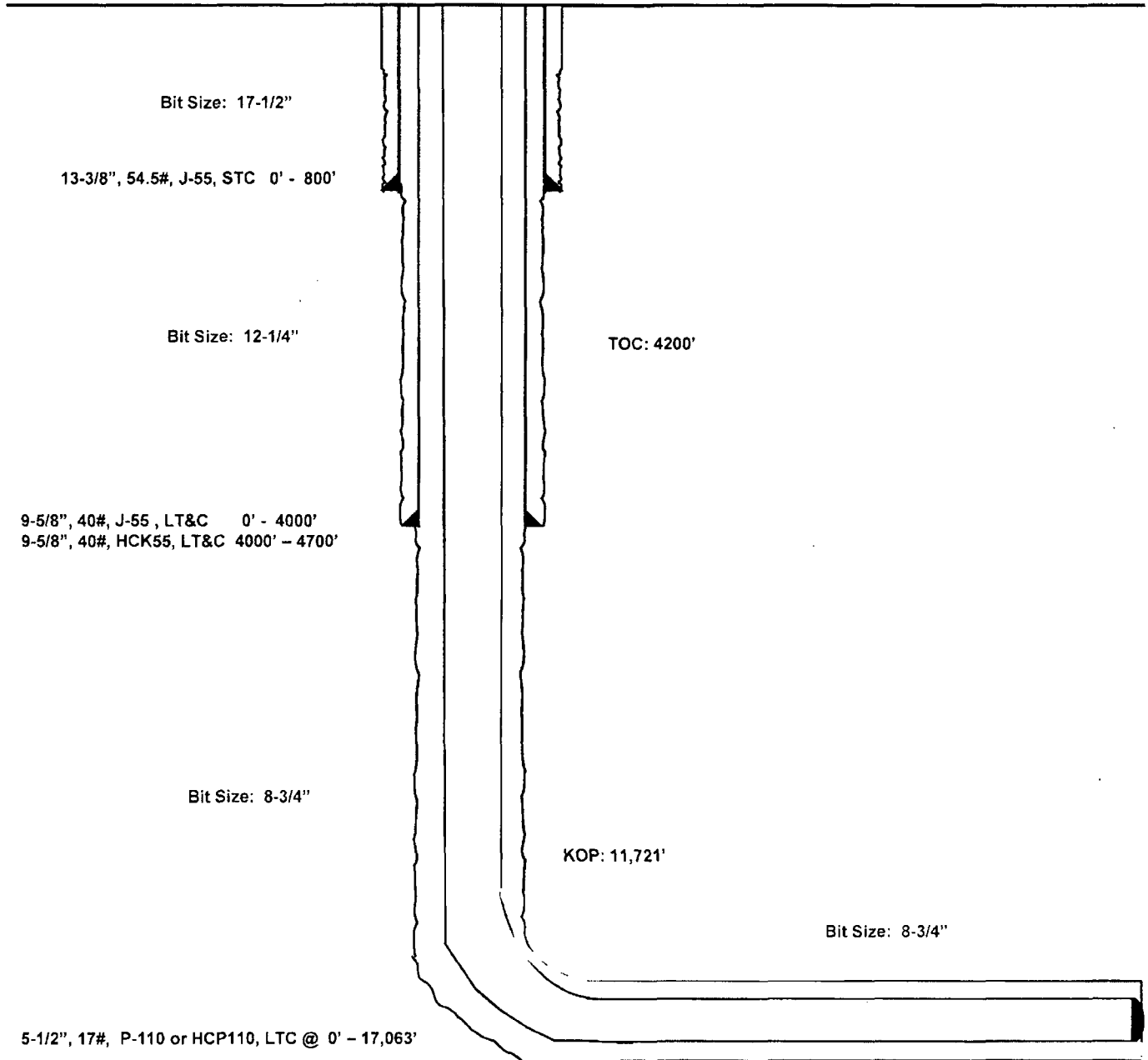
Gem 36 State Com #701H
Lea County, New Mexico

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

Proposed Wellbore

API: 30-025-

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



Lateral: 17,063' MD, 12,305' TVD

BH Location: 230' FSL & 330' FEL
Section 36
T-25-S, R-32-E



Lea County, NM (NAD 27 NME)

Gem 36 State Com #701H

Plan #1

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

Geodetic System: US State Plane 1527 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

WELL DETAILS: #701H

Ground Level: 3432.0
KB = 612 @ 3457.0ust
Northing: 398498.00 Easting: 720849.00 Latitude: 32° 5' 38.886 N Longitude: 103° 37' 12.676 W



Azimuths to Grid North
True North: -0.38°
Magnetic North: 6.77°
Magnetic Field
Strength: 48030.3snT
Dip Angle: 59.98°
Date: 10/3/2015
Model: IGRF2015

To convert a Magnetic Direction to a Grid Direction: Add 7.15° East
To convert a True Direction to a Grid Direction: Subtract 0.38°

SECTION DETAILS

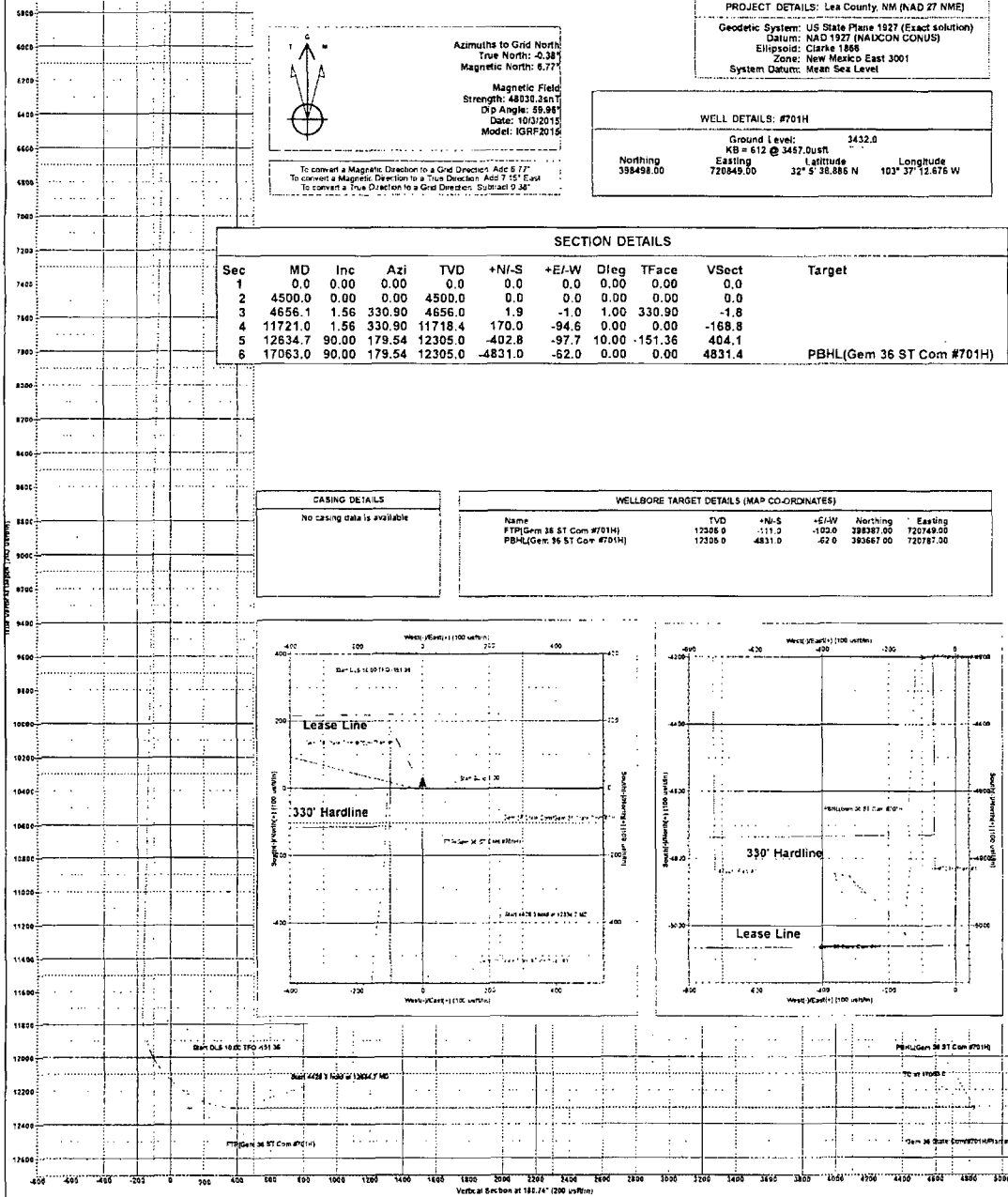
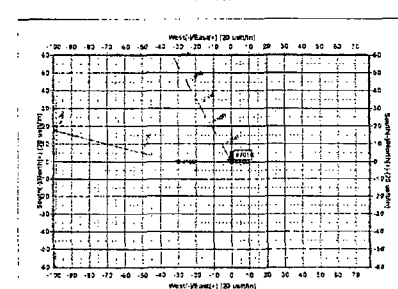
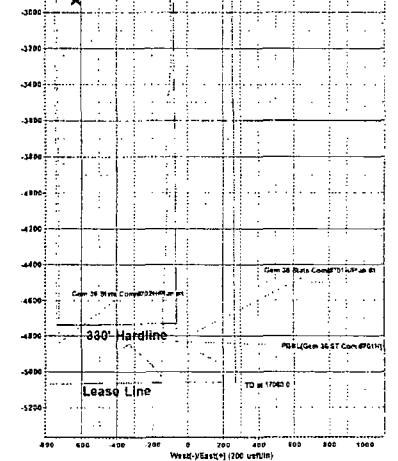
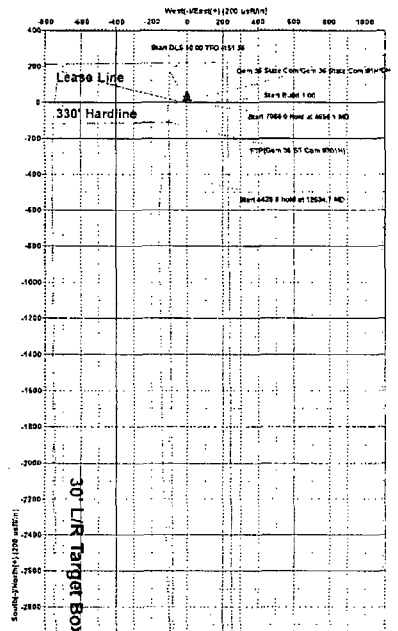
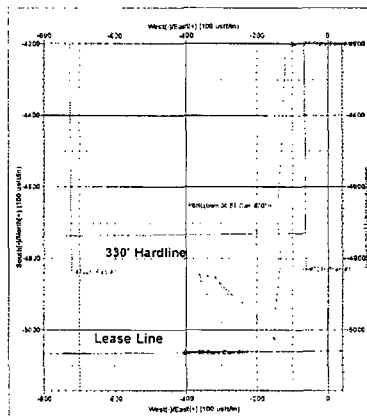
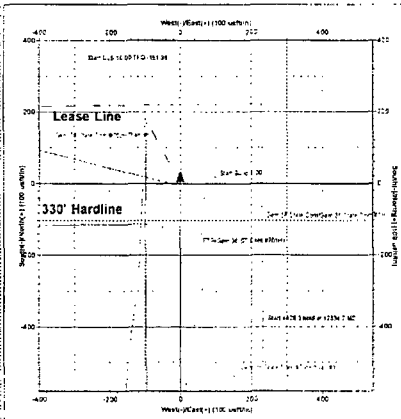
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSeet	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	4500.0	0.00	0.00	4500.0	0.0	0.0	0.00	0.00	0.0	
3	4656.1	1.56	330.90	4656.0	1.9	-1.0	1.00	330.90	-1.8	
4	11721.0	1.56	330.90	11718.4	170.0	-94.6	0.00	0.00	-168.8	
5	12634.7	90.00	179.54	12305.0	-402.8	-97.7	10.00	-151.36	404.1	
6	17063.0	90.00	179.54	12305.0	-4831.0	-62.0	0.00	0.00	4831.4	PBHL(Gem 36 ST Com #701H)

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP COORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting
FTPI(Gem 36 ST Com #701H)	12305.0	-111.0	-105.0	398387.00	720749.00
PBHL(Gem 36 ST Com #701H)	12305.0	-4831.0	-62.0	398667.00	720787.00





EOG Resources - Midland

Lea County, NM (NAD 27 NME)

Gem 36 State Com

#701H

OH

Plan: Plan #1

Standard Planning Report

10 September, 2015



EOG Resources, Inc.

Planning Report

Database: EDM 5000.1 Single User Db
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Gem 36 State Corn
Well: #701H
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference: Well #701H
TVD Reference: KB = 612 @ 3457.0usft
MD Reference: KB = 612 @ 3457.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

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 Corn			
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	#701H			
Well Position	+N/-S	4,844.0 usft	Northing:	398,498.00 usft
	+E/-W	363.0 usft	Easting:	720,849.00 usft
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	10/3/2015	7.15	59.96	48,030

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	180.74

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	
4,656.1	1.56	330.90	4,656.0	1.9	-1.0	1.00	1.00	0.00	330.90	
11,721.0	1.56	330.90	11,718.4	170.0	-94.6	0.00	0.00	0.00	0.00	
12,634.7	90.00	179.54	12,305.0	-402.8	-97.7	10.00	9.68	-16.57	-151.36	
17,063.0	90.00	179.54	12,305.0	-4,831.0	-62.0	0.00	0.00	0.00	0.00	PBHL(Gem 36 ST Co



EOG Resources, Inc.

Planning Report

Database: EDM 5000.1 Single User Db
 Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 27 NME)
 Site: Gem 36 State Com
 Well: #701H
 Wellbore: OH
 Design: Plan #1

Local Co-ordinate Reference: Well #701H
 TVD Reference: KB = 612 @ 3457.0usft
 MD Reference: KB = 612 @ 3457.0usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

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	330.90	4,600.0	0.8	-0.4	-0.8	1.00	1.00	0.00
4,656.1	1.56	330.90	4,656.0	1.9	-1.0	-1.8	1.00	1.00	0.00
4,700.0	1.56	330.90	4,700.0	2.9	-1.6	-2.9	0.00	0.00	0.00
4,800.0	1.56	330.90	4,799.9	5.3	-2.9	-5.2	0.00	0.00	0.00
4,900.0	1.56	330.90	4,899.9	7.7	-4.3	-7.6	0.00	0.00	0.00
5,000.0	1.56	330.90	4,999.9	10.0	-5.6	-10.0	0.00	0.00	0.00
5,100.0	1.56	330.90	5,099.8	12.4	-6.9	-12.3	0.00	0.00	0.00
5,200.0	1.56	330.90	5,199.8	14.8	-8.2	-14.7	0.00	0.00	0.00



EOG Resources, Inc.

Planning Report

Database: EDM 5000.1 Single User Db
 Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 27 NME)
 Site: Gem 36 State Corn
 Well: #701H
 Wellbore: OH
 Design: Plan #1

Local Co-ordinate Reference: Well #701H
 TVD Reference: KB = 612 @ 3457.0usft
 MD Reference: KB = 612 @ 3457.0usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

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	1.56	330.90	5,299.7	17.2	-9.6	-17.1	0.00	0.00	0.00
5,400.0	1.56	330.90	5,399.7	19.6	-10.9	-19.4	0.00	0.00	0.00
5,500.0	1.56	330.90	5,499.7	21.9	-12.2	-21.8	0.00	0.00	0.00
5,600.0	1.56	330.90	5,599.6	24.3	-13.5	-24.1	0.00	0.00	0.00
5,700.0	1.56	330.90	5,699.6	26.7	-14.9	-26.5	0.00	0.00	0.00
5,800.0	1.56	330.90	5,799.6	29.1	-16.2	-28.9	0.00	0.00	0.00
5,900.0	1.56	330.90	5,899.5	31.5	-17.5	-31.2	0.00	0.00	0.00
6,000.0	1.56	330.90	5,999.5	33.8	-18.8	-33.6	0.00	0.00	0.00
6,100.0	1.56	330.90	6,099.4	36.2	-20.2	-36.0	0.00	0.00	0.00
6,200.0	1.56	330.90	6,199.4	38.6	-21.5	-38.3	0.00	0.00	0.00
6,300.0	1.56	330.90	6,299.4	41.0	-22.8	-40.7	0.00	0.00	0.00
6,400.0	1.56	330.90	6,399.3	43.4	-24.1	-43.0	0.00	0.00	0.00
6,500.0	1.56	330.90	6,499.3	45.7	-25.5	-45.4	0.00	0.00	0.00
6,600.0	1.56	330.90	6,599.3	48.1	-26.8	-47.8	0.00	0.00	0.00
6,700.0	1.56	330.90	6,699.2	50.5	-28.1	-50.1	0.00	0.00	0.00
6,800.0	1.56	330.90	6,799.2	52.9	-29.4	-52.5	0.00	0.00	0.00
6,900.0	1.56	330.90	6,899.1	55.3	-30.8	-54.9	0.00	0.00	0.00
7,000.0	1.56	330.90	6,999.1	57.6	-32.1	-57.2	0.00	0.00	0.00
7,100.0	1.56	330.90	7,099.1	60.0	-33.4	-59.6	0.00	0.00	0.00
7,200.0	1.56	330.90	7,199.0	62.4	-34.7	-61.9	0.00	0.00	0.00
7,300.0	1.56	330.90	7,299.0	64.8	-36.1	-64.3	0.00	0.00	0.00
7,400.0	1.56	330.90	7,399.0	67.2	-37.4	-66.7	0.00	0.00	0.00
7,500.0	1.56	330.90	7,498.9	69.5	-38.7	-69.0	0.00	0.00	0.00
7,600.0	1.56	330.90	7,598.9	71.9	-40.0	-71.4	0.00	0.00	0.00
7,700.0	1.56	330.90	7,698.9	74.3	-41.3	-73.8	0.00	0.00	0.00
7,800.0	1.56	330.90	7,798.8	76.7	-42.7	-76.1	0.00	0.00	0.00
7,900.0	1.56	330.90	7,898.8	79.1	-44.0	-78.5	0.00	0.00	0.00
8,000.0	1.56	330.90	7,998.7	81.4	-45.3	-80.8	0.00	0.00	0.00
8,100.0	1.56	330.90	8,098.7	83.8	-46.6	-83.2	0.00	0.00	0.00
8,200.0	1.56	330.90	8,198.7	86.2	-48.0	-85.6	0.00	0.00	0.00
8,300.0	1.56	330.90	8,298.6	88.6	-49.3	-87.9	0.00	0.00	0.00
8,400.0	1.56	330.90	8,398.6	91.0	-50.6	-90.3	0.00	0.00	0.00
8,500.0	1.56	330.90	8,498.6	93.3	-51.9	-92.7	0.00	0.00	0.00
8,600.0	1.56	330.90	8,598.5	95.7	-53.3	-95.0	0.00	0.00	0.00
8,700.0	1.56	330.90	8,698.5	98.1	-54.6	-97.4	0.00	0.00	0.00
8,800.0	1.56	330.90	8,798.4	100.5	-55.9	-99.8	0.00	0.00	0.00
8,900.0	1.56	330.90	8,898.4	102.9	-57.2	-102.1	0.00	0.00	0.00
9,000.0	1.56	330.90	8,998.4	105.2	-58.6	-104.5	0.00	0.00	0.00
9,100.0	1.56	330.90	9,098.3	107.6	-59.9	-106.8	0.00	0.00	0.00
9,200.0	1.56	330.90	9,198.3	110.0	-61.2	-109.2	0.00	0.00	0.00
9,300.0	1.56	330.90	9,298.3	112.4	-62.5	-111.6	0.00	0.00	0.00
9,400.0	1.56	330.90	9,398.2	114.8	-63.9	-113.9	0.00	0.00	0.00
9,500.0	1.56	330.90	9,498.2	117.1	-65.2	-116.3	0.00	0.00	0.00
9,600.0	1.56	330.90	9,598.1	119.5	-66.5	-118.7	0.00	0.00	0.00
9,700.0	1.56	330.90	9,698.1	121.9	-67.8	-121.0	0.00	0.00	0.00
9,800.0	1.56	330.90	9,798.1	124.3	-69.2	-123.4	0.00	0.00	0.00
9,900.0	1.56	330.90	9,898.0	126.7	-70.5	-125.7	0.00	0.00	0.00
10,000.0	1.56	330.90	9,998.0	129.0	-71.8	-128.1	0.00	0.00	0.00
10,100.0	1.56	330.90	10,098.0	131.4	-73.1	-130.5	0.00	0.00	0.00
10,200.0	1.56	330.90	10,197.9	133.8	-74.5	-132.8	0.00	0.00	0.00
10,300.0	1.56	330.90	10,297.9	136.2	-75.8	-135.2	0.00	0.00	0.00
10,400.0	1.56	330.90	10,397.8	138.6	-77.1	-137.6	0.00	0.00	0.00
10,500.0	1.56	330.90	10,497.8	140.9	-78.4	-139.9	0.00	0.00	0.00
10,600.0	1.56	330.90	10,597.8	143.3	-79.8	-142.3	0.00	0.00	0.00



EOG Resources, Inc.

Planning Report

Database: EDM 5000.1 Single User Db
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Gem 36 State Com
Well: #701H
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference: Well #701H
TVD Reference: KB = 612 @ 3457.0usft
MD Reference: KB = 612 @ 3457.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

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	1.56	330.90	10,697.7	145.7	-81.1	-144.6	0.00	0.00	0.00
10,800.0	1.56	330.90	10,797.7	148.1	-82.4	-147.0	0.00	0.00	0.00
10,900.0	1.56	330.90	10,897.7	150.5	-83.7	-149.4	0.00	0.00	0.00
11,000.0	1.56	330.90	10,997.6	152.8	-85.1	-151.7	0.00	0.00	0.00
11,100.0	1.56	330.90	11,097.6	155.2	-86.4	-154.1	0.00	0.00	0.00
11,200.0	1.56	330.90	11,197.6	157.6	-87.7	-156.5	0.00	0.00	0.00
11,300.0	1.56	330.90	11,297.5	160.0	-89.0	-158.8	0.00	0.00	0.00
11,400.0	1.56	330.90	11,397.5	162.4	-90.4	-161.2	0.00	0.00	0.00
11,500.0	1.56	330.90	11,497.4	164.7	-91.7	-163.5	0.00	0.00	0.00
11,600.0	1.56	330.90	11,597.4	167.1	-93.0	-165.9	0.00	0.00	0.00
11,700.0	1.56	330.90	11,697.4	169.5	-94.3	-168.3	0.00	0.00	0.00
11,721.0	1.56	330.90	11,718.4	170.0	-94.6	-168.8	0.00	0.00	0.00
11,750.0	1.70	205.64	11,747.4	170.0	-95.0	-168.7	10.00	0.48	-432.49
11,800.0	6.57	186.05	11,797.2	166.4	-95.6	-165.2	10.00	9.74	-39.18
11,850.0	11.55	183.20	11,846.6	158.6	-96.2	-157.3	10.00	9.96	-5.69
11,900.0	16.54	182.06	11,895.1	146.5	-96.7	-145.2	10.00	9.99	-2.29
11,950.0	21.54	181.43	11,942.3	130.2	-97.2	-128.9	10.00	9.99	-1.25
12,000.0	26.54	181.04	11,988.0	109.8	-97.6	-108.6	10.00	9.99	-0.79
12,050.0	31.53	180.76	12,031.7	85.6	-98.0	-84.3	10.00	10.00	-0.56
12,100.0	36.53	180.55	12,073.1	57.6	-98.3	-56.3	10.00	10.00	-0.42
12,150.0	41.53	180.38	12,111.9	26.1	-98.6	-24.8	10.00	10.00	-0.33
12,200.0	46.53	180.25	12,147.8	-8.6	-98.8	9.9	10.00	10.00	-0.27
12,250.0	51.53	180.13	12,180.6	-46.4	-98.9	47.6	10.00	10.00	-0.23
12,300.0	56.53	180.03	12,210.0	-86.8	-99.0	88.1	10.00	10.00	-0.20
12,350.0	61.53	179.94	12,235.7	-129.7	-98.9	130.9	10.00	10.00	-0.18
12,363.5	62.88	179.92	12,242.0	-141.7	-98.9	142.9	10.00	10.00	-0.17
FTP(Gem 36 ST Com #701H)									
12,400.0	66.53	179.86	12,257.6	-174.6	-98.9	175.9	10.00	10.00	-0.16
12,450.0	71.53	179.79	12,275.5	-221.3	-98.7	222.5	10.00	10.00	-0.15
12,500.0	76.53	179.72	12,289.2	-269.4	-98.5	270.6	10.00	10.00	-0.14
12,550.0	81.53	179.65	12,298.7	-318.4	-98.2	319.7	10.00	10.00	-0.14
12,600.0	86.53	179.58	12,303.9	-368.1	-97.9	369.4	10.00	10.00	-0.13
12,634.7	90.00	179.54	12,305.0	-402.8	-97.7	404.1	10.00	10.00	-0.13
12,700.0	90.00	179.54	12,305.0	-468.1	-97.1	469.3	0.00	0.00	0.00
12,800.0	90.00	179.54	12,305.0	-568.1	-96.3	569.3	0.00	0.00	0.00
12,900.0	90.00	179.54	12,305.0	-668.1	-95.5	669.3	0.00	0.00	0.00
13,000.0	90.00	179.54	12,305.0	-768.1	-94.7	769.3	0.00	0.00	0.00
13,100.0	90.00	179.54	12,305.0	-868.1	-93.9	869.2	0.00	0.00	0.00
13,200.0	90.00	179.54	12,305.0	-968.1	-93.1	969.2	0.00	0.00	0.00
13,300.0	90.00	179.54	12,305.0	-1,068.1	-92.3	1,069.2	0.00	0.00	0.00
13,400.0	90.00	179.54	12,305.0	-1,168.1	-91.5	1,169.2	0.00	0.00	0.00
13,500.0	90.00	179.54	12,305.0	-1,268.1	-90.7	1,269.1	0.00	0.00	0.00
13,600.0	90.00	179.54	12,305.0	-1,368.1	-89.9	1,369.1	0.00	0.00	0.00
13,700.0	90.00	179.54	12,305.0	-1,468.1	-89.1	1,469.1	0.00	0.00	0.00
13,800.0	90.00	179.54	12,305.0	-1,568.1	-88.3	1,569.1	0.00	0.00	0.00
13,900.0	90.00	179.54	12,305.0	-1,668.1	-87.5	1,669.1	0.00	0.00	0.00
14,000.0	90.00	179.54	12,305.0	-1,768.1	-86.7	1,769.0	0.00	0.00	0.00
14,100.0	90.00	179.54	12,305.0	-1,868.1	-85.9	1,869.0	0.00	0.00	0.00
14,200.0	90.00	179.54	12,305.0	-1,968.1	-85.0	1,969.0	0.00	0.00	0.00
14,300.0	90.00	179.54	12,305.0	-2,068.1	-84.2	2,069.0	0.00	0.00	0.00
14,400.0	90.00	179.54	12,305.0	-2,168.1	-83.4	2,168.9	0.00	0.00	0.00
14,500.0	90.00	179.54	12,305.0	-2,268.0	-82.6	2,268.9	0.00	0.00	0.00
14,600.0	90.00	179.54	12,305.0	-2,368.0	-81.8	2,368.9	0.00	0.00	0.00



EOG Resources, Inc.

Planning Report

Database: EDM 5000.1 Single User Db
 Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 27 NME)
 Site: Gem 36 State Com
 Well: #701H
 Wellbore: OH
 Design: Plan #1

Local Co-ordinate Reference: Well #701H
 TVD Reference: KB = 612 @ 3457.0usft
 MD Reference: KB = 612 @ 3457.0usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

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	-2,468.0	-81.0	2,468.9	0.00	0.00	0.00
14,800.0	90.00	179.54	12,305.0	-2,568.0	-80.2	2,568.9	0.00	0.00	0.00
14,900.0	90.00	179.54	12,305.0	-2,668.0	-79.4	2,668.8	0.00	0.00	0.00
15,000.0	90.00	179.54	12,305.0	-2,768.0	-78.6	2,768.8	0.00	0.00	0.00
15,100.0	90.00	179.54	12,305.0	-2,868.0	-77.8	2,868.8	0.00	0.00	0.00
15,200.0	90.00	179.54	12,305.0	-2,968.0	-77.0	2,968.8	0.00	0.00	0.00
15,300.0	90.00	179.54	12,305.0	-3,068.0	-76.2	3,068.7	0.00	0.00	0.00
15,400.0	90.00	179.54	12,305.0	-3,168.0	-75.4	3,168.7	0.00	0.00	0.00
15,500.0	90.00	179.54	12,305.0	-3,268.0	-74.6	3,268.7	0.00	0.00	0.00
15,600.0	90.00	179.54	12,305.0	-3,368.0	-73.8	3,368.7	0.00	0.00	0.00
15,700.0	90.00	179.54	12,305.0	-3,468.0	-73.0	3,468.7	0.00	0.00	0.00
15,800.0	90.00	179.54	12,305.0	-3,568.0	-72.2	3,568.6	0.00	0.00	0.00
15,900.0	90.00	179.54	12,305.0	-3,668.0	-71.4	3,668.6	0.00	0.00	0.00
16,000.0	90.00	179.54	12,305.0	-3,768.0	-70.6	3,768.6	0.00	0.00	0.00
16,100.0	90.00	179.54	12,305.0	-3,868.0	-69.8	3,868.6	0.00	0.00	0.00
16,200.0	90.00	179.54	12,305.0	-3,968.0	-68.9	3,968.6	0.00	0.00	0.00
16,300.0	90.00	179.54	12,305.0	-4,068.0	-68.1	4,068.5	0.00	0.00	0.00
16,400.0	90.00	179.54	12,305.0	-4,168.0	-67.3	4,168.5	0.00	0.00	0.00
16,500.0	90.00	179.54	12,305.0	-4,268.0	-66.5	4,268.5	0.00	0.00	0.00
16,600.0	90.00	179.54	12,305.0	-4,368.0	-65.7	4,368.5	0.00	0.00	0.00
16,700.0	90.00	179.54	12,305.0	-4,468.0	-64.9	4,468.4	0.00	0.00	0.00
16,800.0	90.00	179.54	12,305.0	-4,568.0	-64.1	4,568.4	0.00	0.00	0.00
16,900.0	90.00	179.54	12,305.0	-4,668.0	-63.3	4,668.4	0.00	0.00	0.00
17,000.0	90.00	179.54	12,305.0	-4,768.0	-62.5	4,768.4	0.00	0.00	0.00
17,063.0	90.00	179.54	12,305.0	-4,831.0	-62.0	4,831.4	0.00	0.00	0.00

PBHL(Gem 36 ST Com #701H)

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PBHL(Gem 36 ST Com : - hit/miss target - Shape - Point	0.00	0.00	12,305.0	-4,831.0	-62.0	393,667.00	720,787.00	32° 4' 49.083 N	103° 37' 13.768 W
FTP(Gem 36 ST Com #: - plan misses target center by 70.1usft at 12363.5usft MD (12242.0 TVD, -141.7 N, -98.9 E) - Point	0.00	0.00	12,305.0	-111.0	-100.0	398,387.00	720,749.00	32° 5' 35.794 N	103° 37' 13.847 W