

HOBBS OCD

MAR 07 2018

RECEIVED



Lea County, NM (NAD 83 NME)

Gem 36 State Com #601H

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

WELL DETAILS: #601H

KB = 25 @ 3366.0usft
 Northing 393766.00 Easting 757196.00
 3341.0
 Latitude 32° 4' 50.252 N Longitude 103° 38' 10.946 W

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+W-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	3307.6	3.07	126.82	3307.3	-4.9	6.6	1.00	126.82	-4.3		
4	11644.0	3.07	126.82	11633.9	-271.0	366.1	0.00	0.00	-237.9		
5	12411.2	90.00	0.33	12126.0	206.0	390.1	12.00	-126.15	239.5		
6	16921.2	90.00	0.33	12126.0	4726.0	416.0	0.00	0.00	4744.3		PBH(Gem 36 State Com #601H)

To convert a Magnetic Direction to a Grid Direction, Add 6.53°
 To convert a Magnetic Direction to a True Direction, Add 6.90° East
 To convert a True Direction to a Grid Direction, Subtract 0.37°



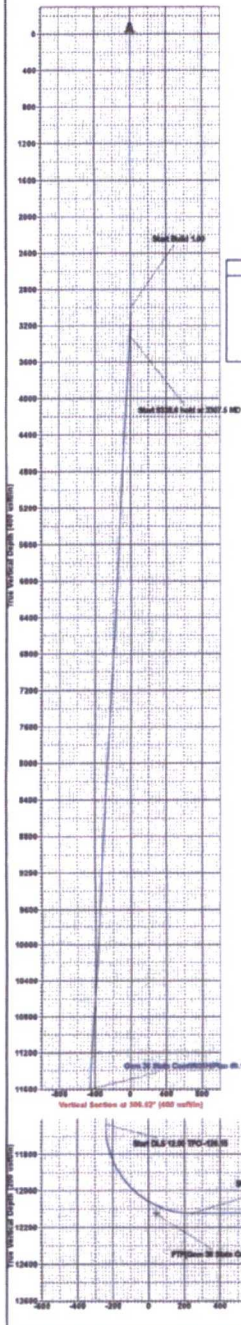
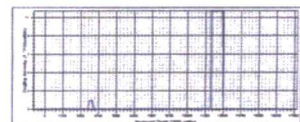
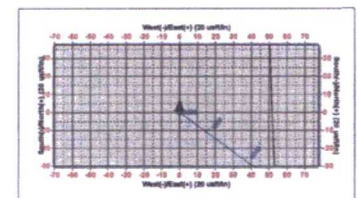
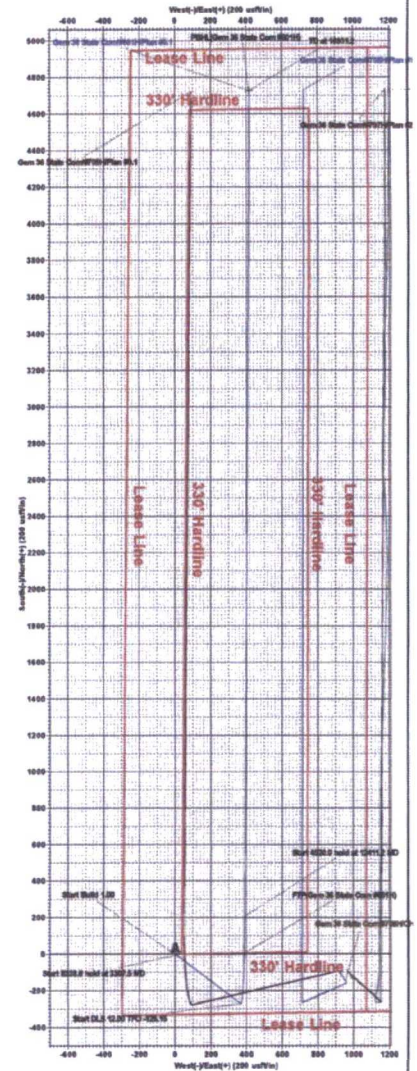
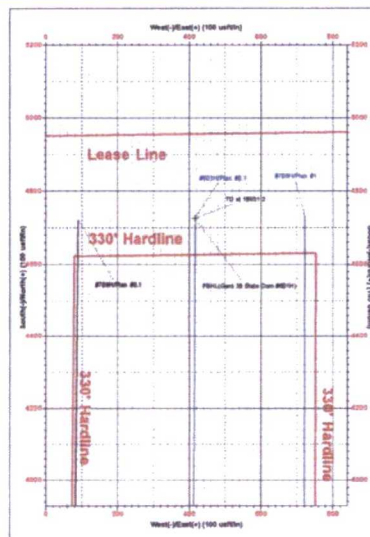
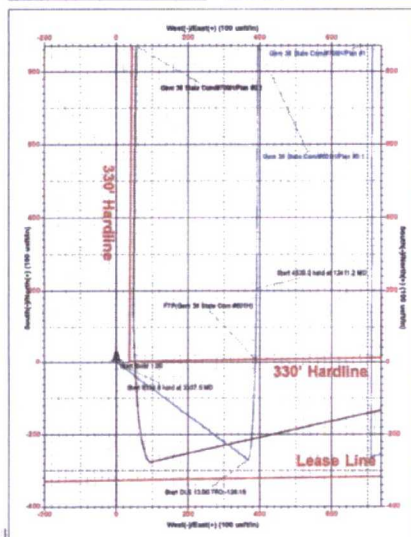
Azimuths to Grid North
 True North: -4.37°
 Magnetic North: 6.53°
 Magnetic Field
 Strength: 47773.0usT
 Dip Angle: 96.91°
 Date: 3/6/2018
 Model: IGRF2015

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+W-S	+E-W	Northing	Easting
PBH(Gem 36 State Com #601H)	12126.0	4726.0	416.0	399482.00	757614.00
FTP(Gem 36 State Com #601H)	12126.0	6.0	389.0	393772.00	757587.00





EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Gem 36 State Com

#601H

OH

Plan: Plan #0.1

Standard Planning Report

06 March, 2018



Planning Report

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #601H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25 @ 3366.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25 @ 3366.0usft
Site:	Gem 36 State Com	North Reference:	Grid
Well:	#601H	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	#601H					
Well Position	+N/-S	80.0 usft	Northing:	393,766.00 usft	Latitude:	32° 4' 50.252 N
	+E/-W	-2,015.0 usft	Easting:	757,198.00 usft	Longitude:	103° 38' 10.966 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	3,341.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	3/6/2018	6.90	59.91	47,772.96445991

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	5.03

Plan Survey Tool Program	Date 3/6/2018			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	16,931.2 Plan #0.1 (OH)	MWD	
			OWSG 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	
3,307.5	3.07	126.52	3,307.3	-4.9	6.6	1.00	1.00	0.00	126.52	
11,646.0	3.07	126.52	11,633.9	-271.0	366.1	0.00	0.00	0.00	0.00	
12,411.2	90.00	0.33	12,126.0	206.0	390.1	12.00	11.36	-16.49	-126.15	
16,931.2	90.00	0.33	12,126.0	4,726.0	416.0	0.00	0.00	0.00	0.00	PBHL(Gem 36 State (



Planning Report

Database: EDM 5000.14
 Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Gem 36 State Com
 Well: #601H
 Wellbore: OH
 Design: Plan #0.1

Local Co-ordinate Reference:
 TVD Reference: KB = 25 @ 3366.0usft
 MD Reference: KB = 25 @ 3366.0usft
 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	1.00	126.52	3,100.0	-0.5	0.7	-0.5	1.00	1.00	0.00
3,200.0	2.00	126.52	3,200.0	-2.1	2.8	-1.8	1.00	1.00	0.00
3,307.5	3.07	126.52	3,307.3	-4.9	6.6	-4.3	1.00	1.00	0.00
3,400.0	3.07	126.52	3,399.7	-7.9	10.6	-6.9	0.00	0.00	0.00
3,500.0	3.07	126.52	3,499.6	-11.1	14.9	-9.7	0.00	0.00	0.00
3,600.0	3.07	126.52	3,599.4	-14.2	19.2	-12.5	0.00	0.00	0.00
3,700.0	3.07	126.52	3,699.3	-17.4	23.5	-15.3	0.00	0.00	0.00
3,800.0	3.07	126.52	3,799.1	-20.6	27.9	-18.1	0.00	0.00	0.00
3,900.0	3.07	126.52	3,899.0	-23.8	32.2	-20.9	0.00	0.00	0.00
4,000.0	3.07	126.52	3,998.9	-27.0	36.5	-23.7	0.00	0.00	0.00
4,100.0	3.07	126.52	4,098.7	-30.2	40.8	-26.5	0.00	0.00	0.00
4,200.0	3.07	126.52	4,198.6	-33.4	45.1	-29.3	0.00	0.00	0.00
4,300.0	3.07	126.52	4,298.4	-36.6	49.4	-32.1	0.00	0.00	0.00
4,400.0	3.07	126.52	4,398.3	-39.8	53.7	-34.9	0.00	0.00	0.00
4,500.0	3.07	126.52	4,498.1	-43.0	58.0	-37.7	0.00	0.00	0.00
4,600.0	3.07	126.52	4,598.0	-46.2	62.3	-40.5	0.00	0.00	0.00
4,700.0	3.07	126.52	4,697.8	-49.4	66.7	-43.3	0.00	0.00	0.00
4,800.0	3.07	126.52	4,797.7	-52.5	71.0	-46.1	0.00	0.00	0.00
4,900.0	3.07	126.52	4,897.6	-55.7	75.3	-48.9	0.00	0.00	0.00
5,000.0	3.07	126.52	4,997.4	-58.9	79.6	-51.7	0.00	0.00	0.00
5,100.0	3.07	126.52	5,097.3	-62.1	83.9	-54.5	0.00	0.00	0.00
5,200.0	3.07	126.52	5,197.1	-65.3	88.2	-57.3	0.00	0.00	0.00
5,300.0	3.07	126.52	5,297.0	-68.5	92.5	-60.1	0.00	0.00	0.00



Planning Report

Database: EDM 5000.14
 Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Gem 36 State Com
 Well: #601H
 Wellbore: OH
 Design: Plan #0.1

Local Co-ordinate Reference:
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 MD Reference: KB = 25 @ 3366.0usft
 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)
5,400.0	3.07	126.52	5,396.8	-71.7	96.8	-62.9	0.00	0.00	0.00
5,500.0	3.07	126.52	5,496.7	-74.9	101.1	-65.7	0.00	0.00	0.00
5,600.0	3.07	126.52	5,596.6	-78.1	105.5	-68.5	0.00	0.00	0.00
5,700.0	3.07	126.52	5,696.4	-81.3	109.8	-71.3	0.00	0.00	0.00
5,800.0	3.07	126.52	5,796.3	-84.5	114.1	-74.1	0.00	0.00	0.00
5,900.0	3.07	126.52	5,896.1	-87.7	118.4	-76.9	0.00	0.00	0.00
6,000.0	3.07	126.52	5,996.0	-90.8	122.7	-79.7	0.00	0.00	0.00
6,100.0	3.07	126.52	6,095.8	-94.0	127.0	-82.5	0.00	0.00	0.00
6,200.0	3.07	126.52	6,195.7	-97.2	131.3	-85.3	0.00	0.00	0.00
6,300.0	3.07	126.52	6,295.5	-100.4	135.6	-88.1	0.00	0.00	0.00
6,400.0	3.07	126.52	6,395.4	-103.6	139.9	-90.9	0.00	0.00	0.00
6,500.0	3.07	126.52	6,495.3	-106.8	144.2	-93.7	0.00	0.00	0.00
6,600.0	3.07	126.52	6,595.1	-110.0	148.6	-96.5	0.00	0.00	0.00
6,700.0	3.07	126.52	6,695.0	-113.2	152.9	-99.3	0.00	0.00	0.00
6,800.0	3.07	126.52	6,794.8	-116.4	157.2	-102.1	0.00	0.00	0.00
6,900.0	3.07	126.52	6,894.7	-119.6	161.5	-104.9	0.00	0.00	0.00
7,000.0	3.07	126.52	6,994.5	-122.8	165.8	-107.8	0.00	0.00	0.00
7,100.0	3.07	126.52	7,094.4	-126.0	170.1	-110.6	0.00	0.00	0.00
7,200.0	3.07	126.52	7,194.2	-129.1	174.4	-113.4	0.00	0.00	0.00
7,300.0	3.07	126.52	7,294.1	-132.3	178.7	-116.2	0.00	0.00	0.00
7,400.0	3.07	126.52	7,394.0	-135.5	183.0	-119.0	0.00	0.00	0.00
7,500.0	3.07	126.52	7,493.8	-138.7	187.4	-121.8	0.00	0.00	0.00
7,600.0	3.07	126.52	7,593.7	-141.9	191.7	-124.6	0.00	0.00	0.00
7,700.0	3.07	126.52	7,693.5	-145.1	196.0	-127.4	0.00	0.00	0.00
7,800.0	3.07	126.52	7,793.4	-148.3	200.3	-130.2	0.00	0.00	0.00
7,900.0	3.07	126.52	7,893.2	-151.5	204.6	-133.0	0.00	0.00	0.00
8,000.0	3.07	126.52	7,993.1	-154.7	208.9	-135.8	0.00	0.00	0.00
8,100.0	3.07	126.52	8,093.0	-157.9	213.2	-138.6	0.00	0.00	0.00
8,200.0	3.07	126.52	8,192.8	-161.1	217.5	-141.4	0.00	0.00	0.00
8,300.0	3.07	126.52	8,292.7	-164.3	221.8	-144.2	0.00	0.00	0.00
8,400.0	3.07	126.52	8,392.5	-167.4	226.2	-147.0	0.00	0.00	0.00
8,500.0	3.07	126.52	8,492.4	-170.6	230.5	-149.8	0.00	0.00	0.00
8,600.0	3.07	126.52	8,592.2	-173.8	234.8	-152.6	0.00	0.00	0.00
8,700.0	3.07	126.52	8,692.1	-177.0	239.1	-155.4	0.00	0.00	0.00
8,800.0	3.07	126.52	8,791.9	-180.2	243.4	-158.2	0.00	0.00	0.00
8,900.0	3.07	126.52	8,891.8	-183.4	247.7	-161.0	0.00	0.00	0.00
9,000.0	3.07	126.52	8,991.7	-186.6	252.0	-163.8	0.00	0.00	0.00
9,100.0	3.07	126.52	9,091.5	-189.8	256.3	-166.6	0.00	0.00	0.00
9,200.0	3.07	126.52	9,191.4	-193.0	260.6	-169.4	0.00	0.00	0.00
9,300.0	3.07	126.52	9,291.2	-196.2	264.9	-172.2	0.00	0.00	0.00
9,400.0	3.07	126.52	9,391.1	-199.4	269.3	-175.0	0.00	0.00	0.00
9,500.0	3.07	126.52	9,490.9	-202.6	273.6	-177.8	0.00	0.00	0.00
9,600.0	3.07	126.52	9,590.8	-205.7	277.9	-180.6	0.00	0.00	0.00
9,700.0	3.07	126.52	9,690.7	-208.9	282.2	-183.4	0.00	0.00	0.00
9,800.0	3.07	126.52	9,790.5	-212.1	286.5	-186.2	0.00	0.00	0.00
9,900.0	3.07	126.52	9,890.4	-215.3	290.8	-189.0	0.00	0.00	0.00
10,000.0	3.07	126.52	9,990.2	-218.5	295.1	-191.8	0.00	0.00	0.00
10,100.0	3.07	126.52	10,090.1	-221.7	299.4	-194.6	0.00	0.00	0.00
10,200.0	3.07	126.52	10,189.9	-224.9	303.7	-197.4	0.00	0.00	0.00
10,300.0	3.07	126.52	10,289.8	-228.1	308.1	-200.2	0.00	0.00	0.00
10,400.0	3.07	126.52	10,389.6	-231.3	312.4	-203.0	0.00	0.00	0.00
10,500.0	3.07	126.52	10,489.5	-234.5	316.7	-205.8	0.00	0.00	0.00
10,600.0	3.07	126.52	10,589.4	-237.7	321.0	-208.6	0.00	0.00	0.00
10,700.0	3.07	126.52	10,689.2	-240.9	325.3	-211.4	0.00	0.00	0.00



Planning Report

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Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Gem 36 State Com
Well: #601H
Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:

Well #601H
KB = 25 @ 3366.0usft
KB = 25 @ 3366.0usft
Grid
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)
10,800.0	3.07	126.52	10,789.1	-244.0	329.6	-214.2	0.00	0.00	0.00
10,900.0	3.07	126.52	10,888.9	-247.2	333.9	-217.0	0.00	0.00	0.00
11,000.0	3.07	126.52	10,988.8	-250.4	338.2	-219.8	0.00	0.00	0.00
11,100.0	3.07	126.52	11,088.6	-253.6	342.5	-222.6	0.00	0.00	0.00
11,200.0	3.07	126.52	11,188.5	-256.8	346.9	-225.4	0.00	0.00	0.00
11,300.0	3.07	126.52	11,288.3	-260.0	351.2	-228.2	0.00	0.00	0.00
11,400.0	3.07	126.52	11,388.2	-263.2	355.5	-231.0	0.00	0.00	0.00
11,500.0	3.07	126.52	11,488.1	-266.4	359.8	-233.8	0.00	0.00	0.00
11,600.0	3.07	126.52	11,587.9	-269.6	364.1	-236.6	0.00	0.00	0.00
11,646.0	3.07	126.52	11,633.9	-271.0	366.1	-237.9	0.00	0.00	0.00
11,650.0	2.82	118.67	11,637.8	-271.2	366.3	-238.0	12.00	-6.41	-197.58
11,675.0	2.99	56.51	11,662.8	-271.1	367.3	-237.8	12.00	0.67	-248.63
11,700.0	5.28	28.30	11,687.8	-269.7	368.4	-236.4	12.00	9.17	-112.83
11,725.0	8.05	18.17	11,712.6	-267.0	369.5	-233.6	12.00	11.09	-40.51
11,750.0	10.94	13.28	11,737.2	-263.1	370.6	-229.6	12.00	11.57	-19.56
11,775.0	13.88	10.43	11,761.7	-257.8	371.7	-224.2	12.00	11.75	-11.41
11,800.0	16.84	8.56	11,785.8	-251.3	372.8	-217.6	12.00	11.84	-7.48
11,825.0	19.81	7.24	11,809.5	-243.5	373.9	-209.8	12.00	11.88	-5.29
11,850.0	22.79	6.25	11,832.8	-234.5	374.9	-200.7	12.00	11.91	-3.96
11,875.0	25.77	5.48	11,855.6	-224.2	376.0	-190.4	12.00	11.93	-3.08
11,900.0	28.76	4.86	11,877.8	-212.8	377.0	-179.0	12.00	11.95	-2.48
11,925.0	31.75	4.35	11,899.4	-200.3	378.0	-166.4	12.00	11.96	-2.05
11,950.0	34.74	3.91	11,920.3	-186.6	379.0	-152.7	12.00	11.96	-1.73
11,975.0	37.73	3.54	11,940.4	-171.9	379.9	-137.9	12.00	11.97	-1.49
12,000.0	40.72	3.21	11,959.8	-156.1	380.9	-122.1	12.00	11.97	-1.30
12,025.0	43.72	2.93	11,978.3	-139.3	381.8	-105.3	12.00	11.98	-1.15
12,050.0	46.71	2.67	11,995.9	-121.6	382.6	-87.6	12.00	11.98	-1.03
12,075.0	49.71	2.43	12,012.6	-103.0	383.5	-69.0	12.00	11.98	-0.94
12,100.0	52.70	2.22	12,028.2	-83.5	384.3	-49.5	12.00	11.98	-0.86
12,125.0	55.70	2.02	12,042.9	-63.3	385.0	-29.3	12.00	11.98	-0.79
12,150.0	58.69	1.84	12,056.4	-42.3	385.7	-8.3	12.00	11.98	-0.74
12,175.0	61.69	1.67	12,068.8	-20.6	386.4	13.4	12.00	11.99	-0.69
12,200.0	64.69	1.50	12,080.1	1.7	387.0	35.7	12.00	11.99	-0.65
12,222.5	67.38	1.36	12,089.2	22.3	387.5	56.2	12.00	11.99	-0.62
FTP(Gem 36 State Com #601H)									
12,225.0	67.68	1.35	12,090.2	24.6	387.6	58.5	12.00	11.99	-0.61
12,250.0	70.68	1.20	12,099.1	47.9	388.1	81.8	12.00	11.99	-0.60
12,275.0	73.68	1.06	12,106.7	71.7	388.5	105.5	12.00	11.99	-0.57
12,300.0	76.67	0.92	12,113.1	95.9	389.0	129.6	12.00	11.99	-0.56
12,325.0	79.67	0.78	12,118.3	120.4	389.3	154.0	12.00	11.99	-0.54
12,350.0	82.67	0.65	12,122.1	145.1	389.6	178.7	12.00	11.99	-0.53
12,375.0	85.67	0.52	12,124.6	169.9	389.9	203.5	12.00	11.99	-0.53
12,400.0	88.66	0.39	12,125.9	194.9	390.1	228.3	12.00	11.99	-0.52
12,411.2	90.00	0.33	12,126.0	206.0	390.1	239.5	12.00	11.99	-0.52
12,500.0	90.00	0.33	12,126.0	294.9	390.7	328.0	0.00	0.00	0.00
12,600.0	90.00	0.33	12,126.0	394.9	391.2	427.7	0.00	0.00	0.00
12,700.0	90.00	0.33	12,126.0	494.9	391.8	527.3	0.00	0.00	0.00
12,800.0	90.00	0.33	12,126.0	594.9	392.4	627.0	0.00	0.00	0.00
12,900.0	90.00	0.33	12,126.0	694.9	392.9	726.7	0.00	0.00	0.00
13,000.0	90.00	0.33	12,126.0	794.9	393.5	826.3	0.00	0.00	0.00
13,100.0	90.00	0.33	12,126.0	894.9	394.1	926.0	0.00	0.00	0.00
13,200.0	90.00	0.33	12,126.0	994.9	394.7	1,025.7	0.00	0.00	0.00
13,300.0	90.00	0.33	12,126.0	1,094.9	395.2	1,125.3	0.00	0.00	0.00



Planning Report

Database: EDM 5000.14
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Gem 36 State Com
Well: #601H
Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference: Well #601H
TVD Reference: KB = 25 @ 3366.0usft
MD Reference: KB = 25 @ 3366.0usft
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)
13,400.0	90.00	0.33	12,126.0	1,194.9	395.8	1,225.0	0.00	0.00	0.00
13,500.0	90.00	0.33	12,126.0	1,294.9	396.4	1,324.6	0.00	0.00	0.00
13,600.0	90.00	0.33	12,126.0	1,394.9	396.9	1,424.3	0.00	0.00	0.00
13,700.0	90.00	0.33	12,126.0	1,494.9	397.5	1,524.0	0.00	0.00	0.00
13,800.0	90.00	0.33	12,126.0	1,594.9	398.1	1,623.6	0.00	0.00	0.00
13,900.0	90.00	0.33	12,126.0	1,694.9	398.7	1,723.3	0.00	0.00	0.00
14,000.0	90.00	0.33	12,126.0	1,794.9	399.2	1,823.0	0.00	0.00	0.00
14,100.0	90.00	0.33	12,126.0	1,894.9	399.8	1,922.6	0.00	0.00	0.00
14,200.0	90.00	0.33	12,126.0	1,994.9	400.4	2,022.3	0.00	0.00	0.00
14,300.0	90.00	0.33	12,126.0	2,094.9	400.9	2,122.0	0.00	0.00	0.00
14,400.0	90.00	0.33	12,126.0	2,194.9	401.5	2,221.6	0.00	0.00	0.00
14,500.0	90.00	0.33	12,126.0	2,294.9	402.1	2,321.3	0.00	0.00	0.00
14,600.0	90.00	0.33	12,126.0	2,394.9	402.7	2,420.9	0.00	0.00	0.00
14,700.0	90.00	0.33	12,126.0	2,494.9	403.2	2,520.6	0.00	0.00	0.00
14,800.0	90.00	0.33	12,126.0	2,594.9	403.8	2,620.3	0.00	0.00	0.00
14,900.0	90.00	0.33	12,126.0	2,694.9	404.4	2,719.9	0.00	0.00	0.00
15,000.0	90.00	0.33	12,126.0	2,794.9	405.0	2,819.6	0.00	0.00	0.00
15,100.0	90.00	0.33	12,126.0	2,894.9	405.5	2,919.3	0.00	0.00	0.00
15,200.0	90.00	0.33	12,126.0	2,994.8	406.1	3,018.9	0.00	0.00	0.00
15,300.0	90.00	0.33	12,126.0	3,094.8	406.7	3,118.6	0.00	0.00	0.00
15,400.0	90.00	0.33	12,126.0	3,194.8	407.2	3,218.2	0.00	0.00	0.00
15,500.0	90.00	0.33	12,126.0	3,294.8	407.8	3,317.9	0.00	0.00	0.00
15,600.0	90.00	0.33	12,126.0	3,394.8	408.4	3,417.6	0.00	0.00	0.00
15,700.0	90.00	0.33	12,126.0	3,494.8	409.0	3,517.2	0.00	0.00	0.00
15,800.0	90.00	0.33	12,126.0	3,594.8	409.5	3,616.9	0.00	0.00	0.00
15,900.0	90.00	0.33	12,126.0	3,694.8	410.1	3,716.6	0.00	0.00	0.00
16,000.0	90.00	0.33	12,126.0	3,794.8	410.7	3,816.2	0.00	0.00	0.00
16,100.0	90.00	0.33	12,126.0	3,894.8	411.2	3,915.9	0.00	0.00	0.00
16,200.0	90.00	0.33	12,126.0	3,994.8	411.8	4,015.6	0.00	0.00	0.00
16,300.0	90.00	0.33	12,126.0	4,094.8	412.4	4,115.2	0.00	0.00	0.00
16,400.0	90.00	0.33	12,126.0	4,194.8	413.0	4,214.9	0.00	0.00	0.00
16,500.0	90.00	0.33	12,126.0	4,294.8	413.5	4,314.5	0.00	0.00	0.00
16,600.0	90.00	0.33	12,126.0	4,394.8	414.1	4,414.2	0.00	0.00	0.00
16,700.0	90.00	0.33	12,126.0	4,494.8	414.7	4,513.9	0.00	0.00	0.00
16,800.0	90.00	0.33	12,126.0	4,594.8	415.2	4,613.5	0.00	0.00	0.00
16,900.0	90.00	0.33	12,126.0	4,694.8	415.8	4,713.2	0.00	0.00	0.00
16,931.2	90.00	0.33	12,126.0	4,726.0	416.0	4,744.3	0.00	0.00	0.00

PBHL(Gem 36 State Com #601H)

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 Com) - plan hits target center - Point	0.00	0.00	12,126.0	4,726.0	416.0	398,492.00	757,614.00	32° 5' 36.991 N	103° 38' 5.775 W
FTP(Gem 36 State Com) - plan misses target center by 40.2usft at 12222.5usft MD (12089.2 TVD, 22.3 N, 387.5 E) - Point	0.00	0.00	12,126.0	6.0	389.0	393,772.00	757,587.00	32° 4' 50.286 N	103° 38' 6.444 W



Planning Report

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Site: Gem 36 State Com
Well: #601H
Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference: Well #601H
TVD Reference: KB = 25 @ 3366.0usft
MD Reference: KB = 25 @ 3366.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature