



Lea County, NM (NAD 83 NME)
Neptune 10 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

WELL DETAILS: #709H

KB = 25' @ 3634.0usft 3609.0
Northing 446494.00 Easting 781279.00 Latitude 32°13'30.384 N Longitude 103°33'28.666 W

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	2000.0	0.00	0.00	2000.0	0.0	0.0	0.00	0.00	0.0	
3	2053.4	1.07	100.47	2053.4	-0.1	0.5	2.00	100.47	-0.1	
4	11817.6	1.07	100.47	11815.9	-33.1	179.4	0.00	0.00	-31.2	
5	12569.3	90.00	359.57	12295.0	444.4	184.5	12.00	-100.90	446.3	
6	22367.2	90.00	359.57	12295.0	10242.0	111.0	0.00	0.00	10242.6	BHL (Neptune 10 St Com #709H)

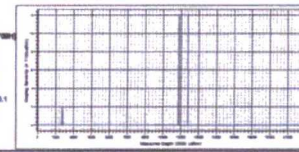
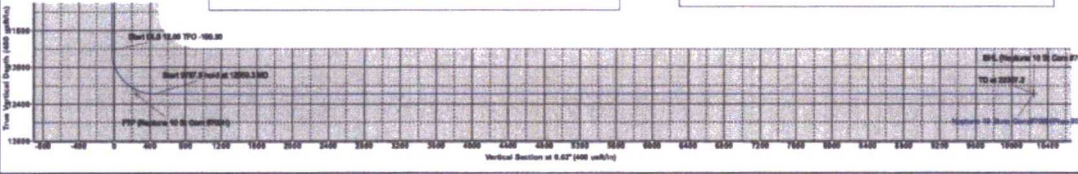
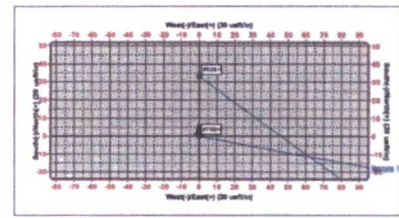
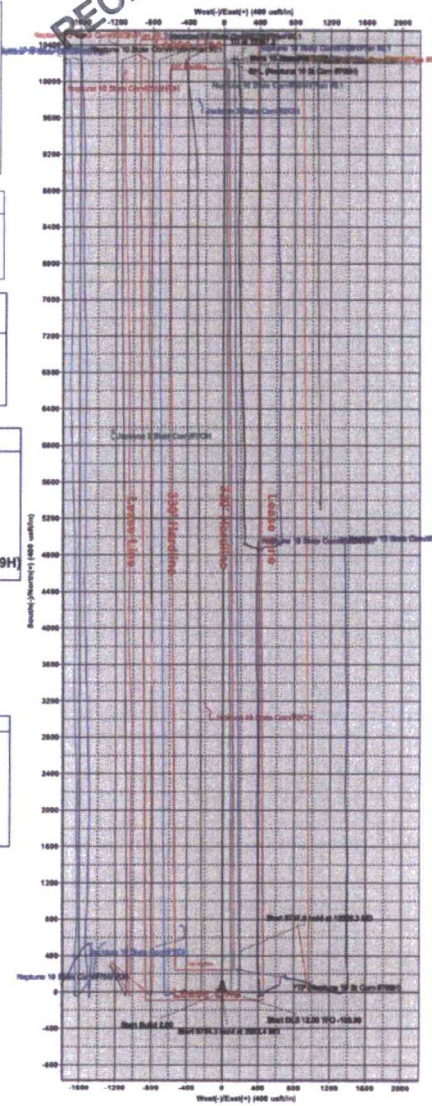
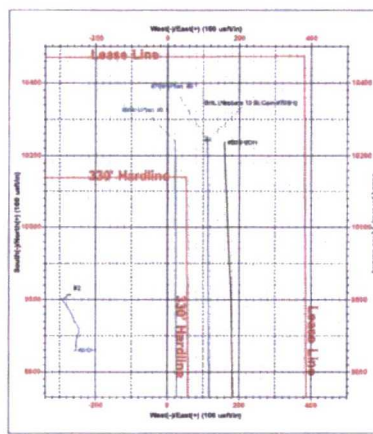
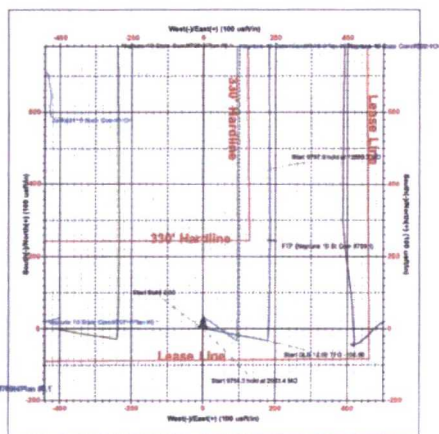
To convert a Magnetic Direction to a Grid Direction, Add 6.48°
To convert a Magnetic Direction to a True Direction, Add 6.98° East
To convert a True Direction to a Grid Direction, Subtract 0.41°

CASING DETAILS

No casing data is available

WELLBONE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting
BHL (Neptune 10 St Com #709H)	12295.0	10242.0	111.0	446738.00	781360.00
FTP (Neptune 10 St Com #709H)	12295.0	344.0	180.0	446738.00	781465.00



HOBBS OCD
FEB 13 2018
RECEIVED



EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Neptune 10 State Com

#709H

OH

Plan: Plan #0.1

Standard Planning Report

12 February, 2018

Database: EDM 5000.14
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Neptune 10 State Com
Well: #709H
Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference: Well #709H
TVD Reference: KB = 25' @ 3634.0usft
MD Reference: KB = 25' @ 3634.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Project Lea County, NM (NAD 83 NME)

Map System: US State Plane 1983
Geo Datum: North American Datum 1983
Map Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level

Site Neptune 10 State Com

Site Position: Northing: 446,557.00 usft Latitude: 32° 13' 31.172 N
From: Map Easting: 778,964.00 usft Longitude: 103° 33' 53.609 W
Position Uncertainty: 0.0 usft Slot Radius: 13-3/16" Grid Convergence: 0.41°

Well #709H

Well Position +N/-S -63.0 usft Northing: 446,494.00 usft Latitude: 32° 13' 30.384 N
 +E/-W 2,315.0 usft Easting: 781,279.00 usft Longitude: 103° 33' 26.666 W
Position Uncertainty 0.0 usft **Wellhead Elevation:** Ground Level: 3,609.0 usft

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	2/9/2018	6.88	60.06	47,872.15206643

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	0.62

Plan Survey Tool Program Date 2/12/2018

Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	22,367.2 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	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,053.4	1.07	100.47	2,053.4	-0.1	0.5	2.00	2.00	0.00	100.47	
11,817.6	1.07	100.47	11,815.9	-33.1	179.4	0.00	0.00	0.00	0.00	
12,569.3	90.00	359.57	12,295.0	444.4	184.5	12.00	11.83	-13.42	-100.90	
22,367.2	90.00	359.57	12,295.0	10,242.0	111.0	0.00	0.00	0.00	0.00	BHL (Neptune 10 St C



Planning Report

Database: EDM 5000.14
 Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Neptune 10 State Com
 Well: #709H
 Wellbore: OH
 Design: Plan #0.1

Local Co-ordinate Reference: Well #709H
 TVD Reference: KB = 25' @ 3634.0usft
 MD Reference: KB = 25' @ 3634.0usft
 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
2,053.4	1.07	100.47	2,053.4	-0.1	0.5	-0.1	2.00	2.00	0.00
2,100.0	1.07	100.47	2,100.0	-0.2	1.3	-0.2	0.00	0.00	0.00
2,200.0	1.07	100.47	2,200.0	-0.6	3.2	-0.6	0.00	0.00	0.00
2,300.0	1.07	100.47	2,300.0	-0.9	5.0	-0.9	0.00	0.00	0.00
2,400.0	1.07	100.47	2,399.9	-1.3	6.8	-1.2	0.00	0.00	0.00
2,500.0	1.07	100.47	2,499.9	-1.6	8.7	-1.5	0.00	0.00	0.00
2,600.0	1.07	100.47	2,599.9	-1.9	10.5	-1.8	0.00	0.00	0.00
2,700.0	1.07	100.47	2,699.9	-2.3	12.3	-2.1	0.00	0.00	0.00
2,800.0	1.07	100.47	2,799.9	-2.6	14.2	-2.5	0.00	0.00	0.00
2,900.0	1.07	100.47	2,899.8	-3.0	16.0	-2.8	0.00	0.00	0.00
3,000.0	1.07	100.47	2,999.8	-3.3	17.8	-3.1	0.00	0.00	0.00
3,100.0	1.07	100.47	3,099.8	-3.6	19.7	-3.4	0.00	0.00	0.00
3,200.0	1.07	100.47	3,199.8	-4.0	21.5	-3.7	0.00	0.00	0.00
3,300.0	1.07	100.47	3,299.8	-4.3	23.3	-4.1	0.00	0.00	0.00
3,400.0	1.07	100.47	3,399.8	-4.6	25.2	-4.4	0.00	0.00	0.00
3,500.0	1.07	100.47	3,499.7	-5.0	27.0	-4.7	0.00	0.00	0.00
3,600.0	1.07	100.47	3,599.7	-5.3	28.8	-5.0	0.00	0.00	0.00
3,700.0	1.07	100.47	3,699.7	-5.7	30.7	-5.3	0.00	0.00	0.00
3,800.0	1.07	100.47	3,799.7	-6.0	32.5	-5.6	0.00	0.00	0.00
3,900.0	1.07	100.47	3,899.7	-6.3	34.3	-6.0	0.00	0.00	0.00
4,000.0	1.07	100.47	3,999.7	-6.7	36.1	-6.3	0.00	0.00	0.00
4,100.0	1.07	100.47	4,099.6	-7.0	38.0	-6.6	0.00	0.00	0.00
4,200.0	1.07	100.47	4,199.6	-7.4	39.8	-6.9	0.00	0.00	0.00
4,300.0	1.07	100.47	4,299.6	-7.7	41.6	-7.2	0.00	0.00	0.00
4,400.0	1.07	100.47	4,399.6	-8.0	43.5	-7.6	0.00	0.00	0.00
4,500.0	1.07	100.47	4,499.6	-8.4	45.3	-7.9	0.00	0.00	0.00
4,600.0	1.07	100.47	4,599.6	-8.7	47.1	-8.2	0.00	0.00	0.00
4,700.0	1.07	100.47	4,699.5	-9.0	49.0	-8.5	0.00	0.00	0.00
4,800.0	1.07	100.47	4,799.5	-9.4	50.8	-8.8	0.00	0.00	0.00
4,900.0	1.07	100.47	4,899.5	-9.7	52.6	-9.2	0.00	0.00	0.00
5,000.0	1.07	100.47	4,999.5	-10.1	54.5	-9.5	0.00	0.00	0.00
5,100.0	1.07	100.47	5,099.5	-10.4	56.3	-9.8	0.00	0.00	0.00
5,200.0	1.07	100.47	5,199.5	-10.7	58.1	-10.1	0.00	0.00	0.00



Planning Report

Database: EDM 5000.14
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Neptune 10 State Com
Well: #709H
Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference: Well #709H
TVD Reference: KB = 25' @ 3634.0usft
MD Reference: KB = 25' @ 3634.0usft
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	1.07	100.47	5,299.4	-11.1	60.0	-10.4	0.00	0.00	0.00
5,400.0	1.07	100.47	5,399.4	-11.4	61.8	-10.7	0.00	0.00	0.00
5,500.0	1.07	100.47	5,499.4	-11.8	63.6	-11.1	0.00	0.00	0.00
5,600.0	1.07	100.47	5,599.4	-12.1	65.5	-11.4	0.00	0.00	0.00
5,700.0	1.07	100.47	5,699.4	-12.4	67.3	-11.7	0.00	0.00	0.00
5,800.0	1.07	100.47	5,799.3	-12.8	69.1	-12.0	0.00	0.00	0.00
5,900.0	1.07	100.47	5,899.3	-13.1	71.0	-12.3	0.00	0.00	0.00
6,000.0	1.07	100.47	5,999.3	-13.4	72.8	-12.7	0.00	0.00	0.00
6,100.0	1.07	100.47	6,099.3	-13.8	74.6	-13.0	0.00	0.00	0.00
6,200.0	1.07	100.47	6,199.3	-14.1	76.4	-13.3	0.00	0.00	0.00
6,300.0	1.07	100.47	6,299.3	-14.5	78.3	-13.6	0.00	0.00	0.00
6,400.0	1.07	100.47	6,399.2	-14.8	80.1	-13.9	0.00	0.00	0.00
6,500.0	1.07	100.47	6,499.2	-15.1	81.9	-14.3	0.00	0.00	0.00
6,600.0	1.07	100.47	6,599.2	-15.5	83.8	-14.6	0.00	0.00	0.00
6,700.0	1.07	100.47	6,699.2	-15.8	85.6	-14.9	0.00	0.00	0.00
6,800.0	1.07	100.47	6,799.2	-16.2	87.4	-15.2	0.00	0.00	0.00
6,900.0	1.07	100.47	6,899.2	-16.5	89.3	-15.5	0.00	0.00	0.00
7,000.0	1.07	100.47	6,999.1	-16.8	91.1	-15.8	0.00	0.00	0.00
7,100.0	1.07	100.47	7,099.1	-17.2	92.9	-16.2	0.00	0.00	0.00
7,200.0	1.07	100.47	7,199.1	-17.5	94.8	-16.5	0.00	0.00	0.00
7,300.0	1.07	100.47	7,299.1	-17.8	96.6	-16.8	0.00	0.00	0.00
7,400.0	1.07	100.47	7,399.1	-18.2	98.4	-17.1	0.00	0.00	0.00
7,500.0	1.07	100.47	7,499.1	-18.5	100.3	-17.4	0.00	0.00	0.00
7,600.0	1.07	100.47	7,599.0	-18.9	102.1	-17.8	0.00	0.00	0.00
7,700.0	1.07	100.47	7,699.0	-19.2	103.9	-18.1	0.00	0.00	0.00
7,800.0	1.07	100.47	7,799.0	-19.5	105.8	-18.4	0.00	0.00	0.00
7,900.0	1.07	100.47	7,899.0	-19.9	107.6	-18.7	0.00	0.00	0.00
8,000.0	1.07	100.47	7,999.0	-20.2	109.4	-19.0	0.00	0.00	0.00
8,100.0	1.07	100.47	8,098.9	-20.6	111.3	-19.3	0.00	0.00	0.00
8,200.0	1.07	100.47	8,198.9	-20.9	113.1	-19.7	0.00	0.00	0.00
8,300.0	1.07	100.47	8,298.9	-21.2	114.9	-20.0	0.00	0.00	0.00
8,400.0	1.07	100.47	8,398.9	-21.6	116.7	-20.3	0.00	0.00	0.00
8,500.0	1.07	100.47	8,498.9	-21.9	118.6	-20.6	0.00	0.00	0.00
8,600.0	1.07	100.47	8,598.9	-22.2	120.4	-20.9	0.00	0.00	0.00
8,700.0	1.07	100.47	8,698.8	-22.6	122.2	-21.3	0.00	0.00	0.00
8,800.0	1.07	100.47	8,798.8	-22.9	124.1	-21.6	0.00	0.00	0.00
8,900.0	1.07	100.47	8,898.8	-23.3	125.9	-21.9	0.00	0.00	0.00
9,000.0	1.07	100.47	8,998.8	-23.6	127.7	-22.2	0.00	0.00	0.00
9,100.0	1.07	100.47	9,098.8	-23.9	129.6	-22.5	0.00	0.00	0.00
9,200.0	1.07	100.47	9,198.8	-24.3	131.4	-22.9	0.00	0.00	0.00
9,300.0	1.07	100.47	9,298.7	-24.6	133.2	-23.2	0.00	0.00	0.00
9,400.0	1.07	100.47	9,398.7	-25.0	135.1	-23.5	0.00	0.00	0.00
9,500.0	1.07	100.47	9,498.7	-25.3	136.9	-23.8	0.00	0.00	0.00
9,600.0	1.07	100.47	9,598.7	-25.6	138.7	-24.1	0.00	0.00	0.00
9,700.0	1.07	100.47	9,698.7	-26.0	140.6	-24.4	0.00	0.00	0.00
9,800.0	1.07	100.47	9,798.7	-26.3	142.4	-24.8	0.00	0.00	0.00
9,900.0	1.07	100.47	9,898.6	-26.6	144.2	-25.1	0.00	0.00	0.00
10,000.0	1.07	100.47	9,998.6	-27.0	146.1	-25.4	0.00	0.00	0.00
10,100.0	1.07	100.47	10,098.6	-27.3	147.9	-25.7	0.00	0.00	0.00
10,200.0	1.07	100.47	10,198.6	-27.7	149.7	-26.0	0.00	0.00	0.00
10,300.0	1.07	100.47	10,298.6	-28.0	151.6	-26.4	0.00	0.00	0.00
10,400.0	1.07	100.47	10,398.5	-28.3	153.4	-26.7	0.00	0.00	0.00
10,500.0	1.07	100.47	10,498.5	-28.7	155.2	-27.0	0.00	0.00	0.00
10,600.0	1.07	100.47	10,598.5	-29.0	157.0	-27.3	0.00	0.00	0.00



Planning Report

Database: EDM 5000.14
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Neptune 10 State Com
Well: #709H
Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference: Well #709H
TVD Reference: KB = 25' @ 3634.0usft
MD Reference: KB = 25' @ 3634.0usft
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	1.07	100.47	10,698.5	-29.4	158.9	-27.6	0.00	0.00	0.00
10,800.0	1.07	100.47	10,798.5	-29.7	160.7	-28.0	0.00	0.00	0.00
10,900.0	1.07	100.47	10,898.5	-30.0	162.5	-28.3	0.00	0.00	0.00
11,000.0	1.07	100.47	10,998.4	-30.4	164.4	-28.6	0.00	0.00	0.00
11,100.0	1.07	100.47	11,098.4	-30.7	166.2	-28.9	0.00	0.00	0.00
11,200.0	1.07	100.47	11,198.4	-31.0	168.0	-29.2	0.00	0.00	0.00
11,300.0	1.07	100.47	11,298.4	-31.4	169.9	-29.5	0.00	0.00	0.00
11,400.0	1.07	100.47	11,398.4	-31.7	171.7	-29.9	0.00	0.00	0.00
11,500.0	1.07	100.47	11,498.4	-32.1	173.5	-30.2	0.00	0.00	0.00
11,600.0	1.07	100.47	11,598.3	-32.4	175.4	-30.5	0.00	0.00	0.00
11,700.0	1.07	100.47	11,698.3	-32.7	177.2	-30.8	0.00	0.00	0.00
11,800.0	1.07	100.47	11,798.3	-33.1	179.0	-31.1	0.00	0.00	0.00
11,817.6	1.07	100.47	11,815.9	-33.1	179.4	-31.2	0.00	0.00	0.00
11,825.0	1.25	56.50	11,823.3	-33.1	179.5	-31.2	12.00	2.49	-596.71
11,850.0	3.83	15.44	11,848.3	-32.2	179.9	-30.2	12.00	10.31	-164.25
11,875.0	6.76	8.44	11,873.2	-29.9	180.4	-27.9	12.00	11.74	-27.97
11,900.0	9.74	5.69	11,897.9	-26.3	180.8	-24.4	12.00	11.90	-11.02
11,925.0	12.72	4.22	11,922.4	-21.5	181.2	-19.5	12.00	11.95	-5.89
11,950.0	15.72	3.30	11,946.7	-15.3	181.6	-13.4	12.00	11.97	-3.68
11,975.0	18.71	2.67	11,970.5	-8.0	182.0	-6.0	12.00	11.98	-2.52
12,000.0	21.71	2.20	11,994.0	0.7	182.4	2.6	12.00	11.98	-1.85
12,025.0	24.70	1.85	12,017.0	10.5	182.7	12.5	12.00	11.99	-1.42
12,050.0	27.70	1.57	12,039.4	21.5	183.0	23.5	12.00	11.99	-1.13
12,075.0	30.70	1.34	12,061.2	33.7	183.3	35.7	12.00	11.99	-0.92
12,100.0	33.70	1.14	12,082.4	47.0	183.6	49.0	12.00	11.99	-0.77
12,125.0	36.70	0.98	12,102.8	61.5	183.9	63.4	12.00	11.99	-0.66
12,150.0	39.69	0.83	12,122.4	76.9	184.1	78.9	12.00	11.99	-0.57
12,175.0	42.69	0.71	12,141.3	93.4	184.4	95.4	12.00	12.00	-0.51
12,200.0	45.69	0.59	12,159.2	110.8	184.6	112.8	12.00	12.00	-0.45
12,225.0	48.69	0.49	12,176.2	129.1	184.7	131.1	12.00	12.00	-0.41
12,250.0	51.69	0.40	12,192.2	148.3	184.9	150.3	12.00	12.00	-0.37
12,275.0	54.69	0.31	12,207.1	168.3	185.0	170.3	12.00	12.00	-0.34
12,300.0	57.69	0.23	12,221.1	189.1	185.1	191.1	12.00	12.00	-0.32
12,325.0	60.69	0.16	12,233.9	210.6	185.2	212.6	12.00	12.00	-0.30
12,350.0	63.69	0.09	12,245.5	232.7	185.2	234.7	12.00	12.00	-0.28
12,375.0	66.69	0.02	12,256.0	255.4	185.2	257.4	12.00	12.00	-0.27
12,400.0	69.69	359.96	12,265.3	278.6	185.2	280.6	12.00	12.00	-0.25
12,425.0	72.69	359.90	12,273.4	302.3	185.2	304.2	12.00	12.00	-0.25
12,450.0	75.68	359.84	12,280.2	326.3	185.1	328.3	12.00	12.00	-0.24
12,475.0	78.68	359.78	12,285.7	350.7	185.1	352.7	12.00	12.00	-0.23
12,500.0	81.68	359.72	12,290.0	375.3	185.0	377.3	12.00	12.00	-0.23
12,525.0	84.68	359.67	12,292.9	400.1	184.8	402.1	12.00	12.00	-0.22
12,550.0	87.68	359.61	12,294.6	425.1	184.7	427.0	12.00	12.00	-0.22
12,569.3	90.00	359.57	12,295.0	444.4	184.5	446.3	12.00	12.00	-0.22
12,600.0	90.00	359.57	12,295.0	475.1	184.3	477.0	0.00	0.00	0.00
12,700.0	90.00	359.57	12,295.0	575.1	183.6	577.0	0.00	0.00	0.00
12,800.0	90.00	359.57	12,295.0	675.1	182.8	677.0	0.00	0.00	0.00
12,900.0	90.00	359.57	12,295.0	775.1	182.0	777.0	0.00	0.00	0.00
13,000.0	90.00	359.57	12,295.0	875.1	181.3	877.0	0.00	0.00	0.00
13,100.0	90.00	359.57	12,295.0	975.0	180.5	976.9	0.00	0.00	0.00
13,200.0	90.00	359.57	12,295.0	1,075.0	179.8	1,076.9	0.00	0.00	0.00
13,300.0	90.00	359.57	12,295.0	1,175.0	179.0	1,176.9	0.00	0.00	0.00
13,400.0	90.00	359.57	12,295.0	1,275.0	178.3	1,276.9	0.00	0.00	0.00
13,500.0	90.00	359.57	12,295.0	1,375.0	177.5	1,376.9	0.00	0.00	0.00



Planning Report

Database: EDM 5000.14
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Neptune 10 State Com
Well: #709H
Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference: Well #709H
TVD Reference: KB = 25' @ 3634.0usft
MD Reference: KB = 25' @ 3634.0usft
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)
13,600.0	90.00	359.57	12,295.0	1,475.0	176.8	1,476.9	0.00	0.00	0.00
13,700.0	90.00	359.57	12,295.0	1,575.0	176.0	1,576.8	0.00	0.00	0.00
13,800.0	90.00	359.57	12,295.0	1,675.0	175.3	1,676.8	0.00	0.00	0.00
13,900.0	90.00	359.57	12,295.0	1,775.0	174.5	1,776.8	0.00	0.00	0.00
14,000.0	90.00	359.57	12,295.0	1,875.0	173.8	1,876.8	0.00	0.00	0.00
14,100.0	90.00	359.57	12,295.0	1,975.0	173.0	1,976.8	0.00	0.00	0.00
14,200.0	90.00	359.57	12,295.0	2,075.0	172.3	2,076.8	0.00	0.00	0.00
14,300.0	90.00	359.57	12,295.0	2,175.0	171.5	2,176.7	0.00	0.00	0.00
14,400.0	90.00	359.57	12,295.0	2,275.0	170.8	2,276.7	0.00	0.00	0.00
14,500.0	90.00	359.57	12,295.0	2,375.0	170.0	2,376.7	0.00	0.00	0.00
14,600.0	90.00	359.57	12,295.0	2,475.0	169.3	2,476.7	0.00	0.00	0.00
14,700.0	90.00	359.57	12,295.0	2,575.0	168.5	2,576.7	0.00	0.00	0.00
14,800.0	90.00	359.57	12,295.0	2,675.0	167.8	2,676.7	0.00	0.00	0.00
14,900.0	90.00	359.57	12,295.0	2,775.0	167.0	2,776.6	0.00	0.00	0.00
15,000.0	90.00	359.57	12,295.0	2,875.0	166.3	2,876.6	0.00	0.00	0.00
15,100.0	90.00	359.57	12,295.0	2,975.0	165.5	2,976.6	0.00	0.00	0.00
15,200.0	90.00	359.57	12,295.0	3,075.0	164.8	3,076.6	0.00	0.00	0.00
15,300.0	90.00	359.57	12,295.0	3,175.0	164.0	3,176.6	0.00	0.00	0.00
15,400.0	90.00	359.57	12,295.0	3,275.0	163.3	3,276.6	0.00	0.00	0.00
15,500.0	90.00	359.57	12,295.0	3,375.0	162.5	3,376.5	0.00	0.00	0.00
15,600.0	90.00	359.57	12,295.0	3,475.0	161.8	3,476.5	0.00	0.00	0.00
15,700.0	90.00	359.57	12,295.0	3,575.0	161.0	3,576.5	0.00	0.00	0.00
15,800.0	90.00	359.57	12,295.0	3,675.0	160.3	3,676.5	0.00	0.00	0.00
15,900.0	90.00	359.57	12,295.0	3,775.0	159.5	3,776.5	0.00	0.00	0.00
16,000.0	90.00	359.57	12,295.0	3,875.0	158.8	3,876.5	0.00	0.00	0.00
16,100.0	90.00	359.57	12,295.0	3,975.0	158.0	3,976.4	0.00	0.00	0.00
16,200.0	90.00	359.57	12,295.0	4,075.0	157.3	4,076.4	0.00	0.00	0.00
16,300.0	90.00	359.57	12,295.0	4,175.0	156.5	4,176.4	0.00	0.00	0.00
16,400.0	90.00	359.57	12,295.0	4,275.0	155.8	4,276.4	0.00	0.00	0.00
16,500.0	90.00	359.57	12,295.0	4,375.0	155.0	4,376.4	0.00	0.00	0.00
16,600.0	90.00	359.57	12,295.0	4,474.9	154.3	4,476.4	0.00	0.00	0.00
16,700.0	90.00	359.57	12,295.0	4,574.9	153.5	4,576.3	0.00	0.00	0.00
16,800.0	90.00	359.57	12,295.0	4,674.9	152.8	4,676.3	0.00	0.00	0.00
16,900.0	90.00	359.57	12,295.0	4,774.9	152.0	4,776.3	0.00	0.00	0.00
17,000.0	90.00	359.57	12,295.0	4,874.9	151.3	4,876.3	0.00	0.00	0.00
17,100.0	90.00	359.57	12,295.0	4,974.9	150.5	4,976.3	0.00	0.00	0.00
17,200.0	90.00	359.57	12,295.0	5,074.9	149.8	5,076.3	0.00	0.00	0.00
17,300.0	90.00	359.57	12,295.0	5,174.9	149.0	5,176.2	0.00	0.00	0.00
17,400.0	90.00	359.57	12,295.0	5,274.9	148.3	5,276.2	0.00	0.00	0.00
17,500.0	90.00	359.57	12,295.0	5,374.9	147.5	5,376.2	0.00	0.00	0.00
17,600.0	90.00	359.57	12,295.0	5,474.9	146.8	5,476.2	0.00	0.00	0.00
17,700.0	90.00	359.57	12,295.0	5,574.9	146.0	5,576.2	0.00	0.00	0.00
17,800.0	90.00	359.57	12,295.0	5,674.9	145.3	5,676.2	0.00	0.00	0.00
17,900.0	90.00	359.57	12,295.0	5,774.9	144.5	5,776.1	0.00	0.00	0.00
18,000.0	90.00	359.57	12,295.0	5,874.9	143.8	5,876.1	0.00	0.00	0.00
18,100.0	90.00	359.57	12,295.0	5,974.9	143.0	5,976.1	0.00	0.00	0.00
18,200.0	90.00	359.57	12,295.0	6,074.9	142.3	6,076.1	0.00	0.00	0.00
18,300.0	90.00	359.57	12,295.0	6,174.9	141.5	6,176.1	0.00	0.00	0.00
18,400.0	90.00	359.57	12,295.0	6,274.9	140.8	6,276.1	0.00	0.00	0.00
18,500.0	90.00	359.57	12,295.0	6,374.9	140.0	6,376.0	0.00	0.00	0.00
18,600.0	90.00	359.57	12,295.0	6,474.9	139.3	6,476.0	0.00	0.00	0.00
18,700.0	90.00	359.57	12,295.0	6,574.9	138.5	6,576.0	0.00	0.00	0.00
18,800.0	90.00	359.57	12,295.0	6,674.9	137.8	6,676.0	0.00	0.00	0.00
18,900.0	90.00	359.57	12,295.0	6,774.9	137.0	6,776.0	0.00	0.00	0.00



Planning Report

Database: EDM 5000.14
 Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Neptune 10 State Cor
 Well: #709H
 Wellbore: OH
 Design: Plan #0.1

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

Well #709H
 KB = 25' @ 3634.0usft
 KB = 25' @ 3634.0usft
 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)
19,000.0	90.00	359.57	12,295.0	6,874.9	136.3	6,876.0	0.00	0.00	0.00
19,100.0	90.00	359.57	12,295.0	6,974.9	135.5	6,975.9	0.00	0.00	0.00
19,200.0	90.00	359.57	12,295.0	7,074.9	134.8	7,075.9	0.00	0.00	0.00
19,300.0	90.00	359.57	12,295.0	7,174.9	134.0	7,175.9	0.00	0.00	0.00
19,400.0	90.00	359.57	12,295.0	7,274.9	133.3	7,275.9	0.00	0.00	0.00
19,500.0	90.00	359.57	12,295.0	7,374.9	132.5	7,375.9	0.00	0.00	0.00
19,600.0	90.00	359.57	12,295.0	7,474.9	131.8	7,475.9	0.00	0.00	0.00
19,700.0	90.00	359.57	12,295.0	7,574.9	131.0	7,575.8	0.00	0.00	0.00
19,800.0	90.00	359.57	12,295.0	7,674.9	130.3	7,675.8	0.00	0.00	0.00
19,900.0	90.00	359.57	12,295.0	7,774.9	129.5	7,775.8	0.00	0.00	0.00
20,000.0	90.00	359.57	12,295.0	7,874.9	128.8	7,875.8	0.00	0.00	0.00
20,100.0	90.00	359.57	12,295.0	7,974.9	128.0	7,975.8	0.00	0.00	0.00
20,200.0	90.00	359.57	12,295.0	8,074.8	127.3	8,075.8	0.00	0.00	0.00
20,300.0	90.00	359.57	12,295.0	8,174.8	126.5	8,175.7	0.00	0.00	0.00
20,400.0	90.00	359.57	12,295.0	8,274.8	125.8	8,275.7	0.00	0.00	0.00
20,500.0	90.00	359.57	12,295.0	8,374.8	125.0	8,375.7	0.00	0.00	0.00
20,600.0	90.00	359.57	12,295.0	8,474.8	124.3	8,475.7	0.00	0.00	0.00
20,700.0	90.00	359.57	12,295.0	8,574.8	123.5	8,575.7	0.00	0.00	0.00
20,800.0	90.00	359.57	12,295.0	8,674.8	122.8	8,675.7	0.00	0.00	0.00
20,900.0	90.00	359.57	12,295.0	8,774.8	122.0	8,775.6	0.00	0.00	0.00
21,000.0	90.00	359.57	12,295.0	8,874.8	121.3	8,875.6	0.00	0.00	0.00
21,100.0	90.00	359.57	12,295.0	8,974.8	120.5	8,975.6	0.00	0.00	0.00
21,200.0	90.00	359.57	12,295.0	9,074.8	119.8	9,075.6	0.00	0.00	0.00
21,300.0	90.00	359.57	12,295.0	9,174.8	119.0	9,175.6	0.00	0.00	0.00
21,400.0	90.00	359.57	12,295.0	9,274.8	118.3	9,275.6	0.00	0.00	0.00
21,500.0	90.00	359.57	12,295.0	9,374.8	117.5	9,375.5	0.00	0.00	0.00
21,600.0	90.00	359.57	12,295.0	9,474.8	116.8	9,475.5	0.00	0.00	0.00
21,700.0	90.00	359.57	12,295.0	9,574.8	116.0	9,575.5	0.00	0.00	0.00
21,800.0	90.00	359.57	12,295.0	9,674.8	115.3	9,675.5	0.00	0.00	0.00
21,900.0	90.00	359.57	12,295.0	9,774.8	114.5	9,775.5	0.00	0.00	0.00
22,000.0	90.00	359.57	12,295.0	9,874.8	113.8	9,875.5	0.00	0.00	0.00
22,100.0	90.00	359.57	12,295.0	9,974.8	113.0	9,975.4	0.00	0.00	0.00
22,200.0	90.00	359.57	12,295.0	10,074.8	112.3	10,075.4	0.00	0.00	0.00
22,300.0	90.00	359.57	12,295.0	10,174.8	111.5	10,175.4	0.00	0.00	0.00
22,367.2	90.00	359.57	12,295.0	10,242.0	111.0	10,242.6	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
BHL (Neptune 10 St Cor - plan hits target center - Point	0.00	0.00	12,295.0	10,242.0	111.0	456,736.00	781,390.00	32° 15' 11.722 N	103° 33' 24.512 W
FTP (Neptune 10 St Cor - plan misses target center by 40.3usft at 12378.9usft MD (12257.5 TVD, 259.0 N, 185.2 E) - Point	0.00	0.00	12,295.0	244.0	186.0	446,738.00	781,465.00	32° 13' 32.785 N	103° 33' 24.480 W