

HOBBS OCD
FEB 13 2018
RECEIVED



Lea County, NM (NAD 83 NME)
Neptune 10 State Com #604H
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: #604H

KB = 25' @ 3634.0usft 3609.0
Northing 448527.00 Easting 781279.00 Latitude 32° 13' 30.711 N Longitude 103° 33' 26.963 W

Asimuths to Grid North
True North: 4.41°
Magnetic North: 6.48°
Magnetic Field
Strength: 47872.5anT
Dip Angle: 60.08°
Date: 2/8/2018
Model: IGRF2015

To convert a Magnetic Direction to a Grid Direction, Add 6.48°
To convert a Magnetic Direction to a True Direction, Add 4.41°
To convert a True Direction to a Grid Direction, Subtract 4.41°

SECTION DETAILS

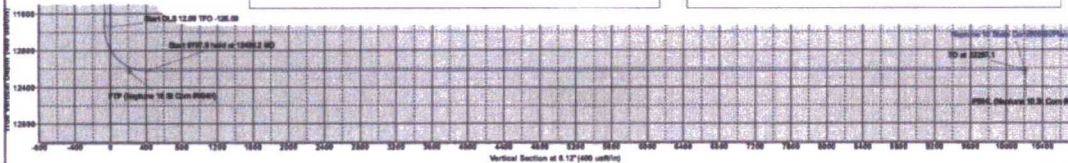
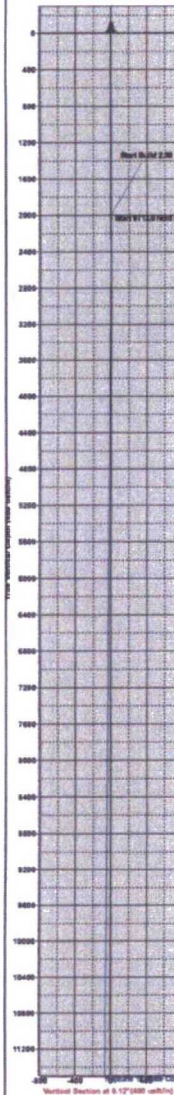
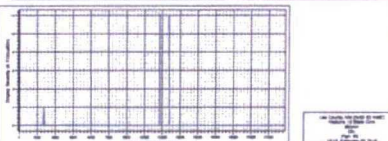
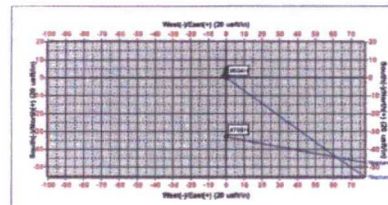
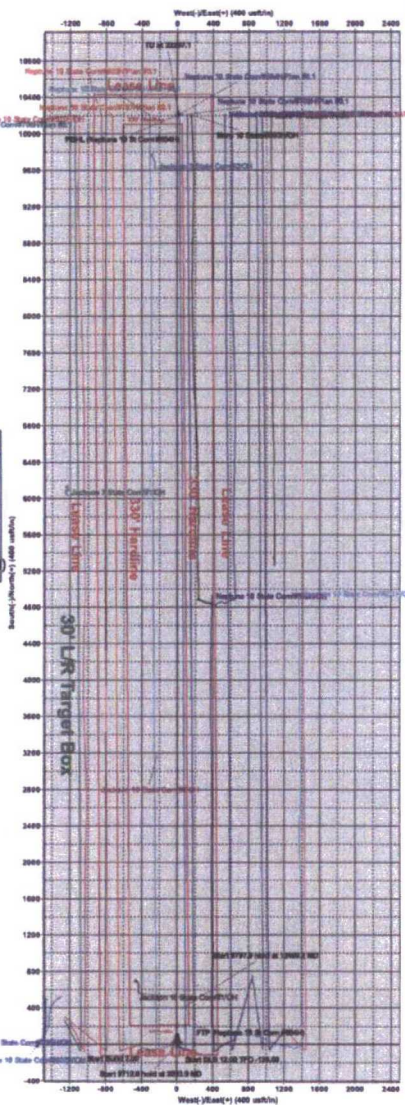
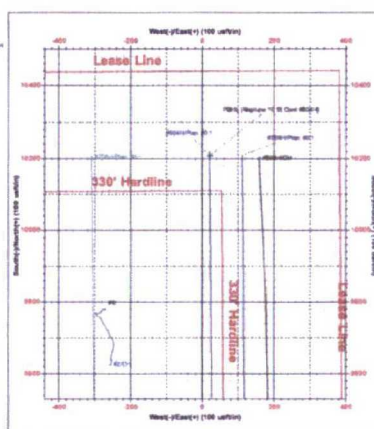
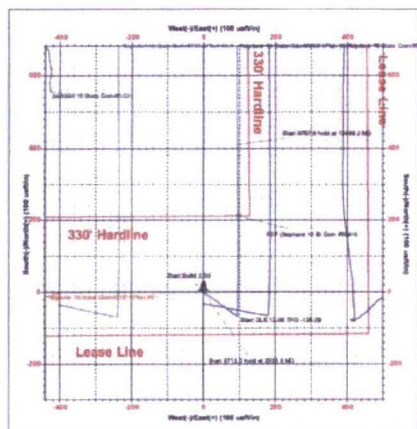
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Diag	TFace	Vsect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	2000.0	0.00	0.00	2000.0	0.0	0.0	0.00	0.00	0.0	
3	2033.9	0.68	125.66	2033.9	-0.1	0.2	2.00	125.66	-0.1	
4	11745.9	0.68	125.66	11745.2	-67.1	93.5	0.00	0.00	-66.9	
5	12499.2	90.00	359.57	12226.0	410.4	94.5	12.00	-126.09	410.6	
6	22297.1	90.00	359.57	12226.0	10208.0	21.0	0.00	0.00	10208.0	PBHL (Neptune 10 St Com #604H)

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting
FTP (Neptune 10 St Com #604H)	12226.0	211.0	94.5	448738.00	781375.00
PBHL (Neptune 10 St Com #604H)	12226.0	10208.0	21.0	456735.00	781309.00





EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Neptune 10 State Com

#604H

OH

Plan: Plan #0.1

Standard Planning Report

09 February, 2018



Database: EDM 5000.14
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Neptune 10 State Com
Well: #604H
Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference: Well #604H
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: #604H

Well Position: +N/-S -30.0 usft Northing: 446,527.00 usft Latitude: 32° 13' 30.711 N
+E/-W 2,315.0 usft Easting: 781,279.00 usft Longitude: 103° 33' 26.663 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	2/8/2018	6.88	60.06	47,872.48956897

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	0.12

Plan Survey Tool Program Date: 2/9/2018

Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	22,297.1 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	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,033.9	0.68	125.66	2,033.9	-0.1	0.2	2.00	2.00	0.00	125.66	
11,745.9	0.68	125.66	11,745.2	-67.1	93.5	0.00	0.00	0.00	0.00	
12,499.2	90.00	359.57	12,226.0	410.4	94.5	12.00	11.86	-16.74	-126.09	
22,297.1	90.00	359.57	12,226.0	10,208.0	21.0	0.00	0.00	0.00	0.00	PBHL (Neptune 10 St)



Planning Report



Database: EDM 5000.14
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Neptune 10 State Com
Well: #604H
Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference:
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
2,033.9	0.68	125.66	2,033.9	-0.1	0.2	-0.1	2.00	2.00	0.00
2,100.0	0.68	125.66	2,100.0	-0.6	0.8	-0.6	0.00	0.00	0.00
2,200.0	0.68	125.66	2,200.0	-1.3	1.8	-1.3	0.00	0.00	0.00
2,300.0	0.68	125.66	2,300.0	-2.0	2.7	-1.9	0.00	0.00	0.00
2,400.0	0.68	125.66	2,400.0	-2.6	3.7	-2.6	0.00	0.00	0.00
2,500.0	0.68	125.66	2,500.0	-3.3	4.6	-3.3	0.00	0.00	0.00
2,600.0	0.68	125.66	2,600.0	-4.0	5.6	-4.0	0.00	0.00	0.00
2,700.0	0.68	125.66	2,700.0	-4.7	6.6	-4.7	0.00	0.00	0.00
2,800.0	0.68	125.66	2,799.9	-5.4	7.5	-5.4	0.00	0.00	0.00
2,900.0	0.68	125.66	2,899.9	-6.1	8.5	-6.1	0.00	0.00	0.00
3,000.0	0.68	125.66	2,999.9	-6.8	9.4	-6.8	0.00	0.00	0.00
3,100.0	0.68	125.66	3,099.9	-7.5	10.4	-7.4	0.00	0.00	0.00
3,200.0	0.68	125.66	3,199.9	-8.2	11.4	-8.1	0.00	0.00	0.00
3,300.0	0.68	125.66	3,299.9	-8.8	12.3	-8.8	0.00	0.00	0.00
3,400.0	0.68	125.66	3,399.9	-9.5	13.3	-9.5	0.00	0.00	0.00
3,500.0	0.68	125.66	3,499.9	-10.2	14.3	-10.2	0.00	0.00	0.00
3,600.0	0.68	125.66	3,599.9	-10.9	15.2	-10.9	0.00	0.00	0.00
3,700.0	0.68	125.66	3,699.9	-11.6	16.2	-11.6	0.00	0.00	0.00
3,800.0	0.68	125.66	3,799.9	-12.3	17.1	-12.3	0.00	0.00	0.00
3,900.0	0.68	125.66	3,899.9	-13.0	18.1	-12.9	0.00	0.00	0.00
4,000.0	0.68	125.66	3,999.9	-13.7	19.1	-13.6	0.00	0.00	0.00
4,100.0	0.68	125.66	4,099.9	-14.4	20.0	-14.3	0.00	0.00	0.00
4,200.0	0.68	125.66	4,199.8	-15.1	21.0	-15.0	0.00	0.00	0.00
4,300.0	0.68	125.66	4,299.8	-15.7	21.9	-15.7	0.00	0.00	0.00
4,400.0	0.68	125.66	4,399.8	-16.4	22.9	-16.4	0.00	0.00	0.00
4,500.0	0.68	125.66	4,499.8	-17.1	23.9	-17.1	0.00	0.00	0.00
4,600.0	0.68	125.66	4,599.8	-17.8	24.8	-17.8	0.00	0.00	0.00
4,700.0	0.68	125.66	4,699.8	-18.5	25.8	-18.5	0.00	0.00	0.00
4,800.0	0.68	125.66	4,799.8	-19.2	26.8	-19.1	0.00	0.00	0.00
4,900.0	0.68	125.66	4,899.8	-19.9	27.7	-19.8	0.00	0.00	0.00
5,000.0	0.68	125.66	4,999.8	-20.6	28.7	-20.5	0.00	0.00	0.00
5,100.0	0.68	125.66	5,099.8	-21.3	29.6	-21.2	0.00	0.00	0.00
5,200.0	0.68	125.66	5,199.8	-22.0	30.6	-21.9	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: #604H
Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference: Well #604H
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	0.68	125.66	5,299.8	-22.6	31.6	-22.6	0.00	0.00	0.00
5,400.0	0.68	125.66	5,399.8	-23.3	32.5	-23.3	0.00	0.00	0.00
5,500.0	0.68	125.66	5,499.8	-24.0	33.5	-24.0	0.00	0.00	0.00
5,600.0	0.68	125.66	5,599.7	-24.7	34.4	-24.6	0.00	0.00	0.00
5,700.0	0.68	125.66	5,699.7	-25.4	35.4	-25.3	0.00	0.00	0.00
5,800.0	0.68	125.66	5,799.7	-26.1	36.4	-26.0	0.00	0.00	0.00
5,900.0	0.68	125.66	5,899.7	-26.8	37.3	-26.7	0.00	0.00	0.00
6,000.0	0.68	125.66	5,999.7	-27.5	38.3	-27.4	0.00	0.00	0.00
6,100.0	0.68	125.66	6,099.7	-28.2	39.2	-28.1	0.00	0.00	0.00
6,200.0	0.68	125.66	6,199.7	-28.8	40.2	-28.8	0.00	0.00	0.00
6,300.0	0.68	125.66	6,299.7	-29.5	41.2	-29.5	0.00	0.00	0.00
6,400.0	0.68	125.66	6,399.7	-30.2	42.1	-30.1	0.00	0.00	0.00
6,500.0	0.68	125.66	6,499.7	-30.9	43.1	-30.8	0.00	0.00	0.00
6,600.0	0.68	125.66	6,599.7	-31.6	44.1	-31.5	0.00	0.00	0.00
6,700.0	0.68	125.66	6,699.7	-32.3	45.0	-32.2	0.00	0.00	0.00
6,800.0	0.68	125.66	6,799.7	-33.0	46.0	-32.9	0.00	0.00	0.00
6,900.0	0.68	125.66	6,899.7	-33.7	46.9	-33.6	0.00	0.00	0.00
7,000.0	0.68	125.66	6,999.7	-34.4	47.9	-34.3	0.00	0.00	0.00
7,100.0	0.68	125.66	7,099.6	-35.1	48.9	-35.0	0.00	0.00	0.00
7,200.0	0.68	125.66	7,199.6	-35.7	49.8	-35.6	0.00	0.00	0.00
7,300.0	0.68	125.66	7,299.6	-36.4	50.8	-36.3	0.00	0.00	0.00
7,400.0	0.68	125.66	7,399.6	-37.1	51.7	-37.0	0.00	0.00	0.00
7,500.0	0.68	125.66	7,499.6	-37.8	52.7	-37.7	0.00	0.00	0.00
7,600.0	0.68	125.66	7,599.6	-38.5	53.7	-38.4	0.00	0.00	0.00
7,700.0	0.68	125.66	7,699.6	-39.2	54.6	-39.1	0.00	0.00	0.00
7,800.0	0.68	125.66	7,799.6	-39.9	55.6	-39.8	0.00	0.00	0.00
7,900.0	0.68	125.66	7,899.6	-40.6	56.6	-40.5	0.00	0.00	0.00
8,000.0	0.68	125.66	7,999.6	-41.3	57.5	-41.1	0.00	0.00	0.00
8,100.0	0.68	125.66	8,099.6	-42.0	58.5	-41.8	0.00	0.00	0.00
8,200.0	0.68	125.66	8,199.6	-42.6	59.4	-42.5	0.00	0.00	0.00
8,300.0	0.68	125.66	8,299.6	-43.3	60.4	-43.2	0.00	0.00	0.00
8,400.0	0.68	125.66	8,399.6	-44.0	61.4	-43.9	0.00	0.00	0.00
8,500.0	0.68	125.66	8,499.5	-44.7	62.3	-44.6	0.00	0.00	0.00
8,600.0	0.68	125.66	8,599.5	-45.4	63.3	-45.3	0.00	0.00	0.00
8,700.0	0.68	125.66	8,699.5	-46.1	64.2	-46.0	0.00	0.00	0.00
8,800.0	0.68	125.66	8,799.5	-46.8	65.2	-46.6	0.00	0.00	0.00
8,900.0	0.68	125.66	8,899.5	-47.5	66.2	-47.3	0.00	0.00	0.00
9,000.0	0.68	125.66	8,999.5	-48.2	67.1	-48.0	0.00	0.00	0.00
9,100.0	0.68	125.66	9,099.5	-48.9	68.1	-48.7	0.00	0.00	0.00
9,200.0	0.68	125.66	9,199.5	-49.5	69.0	-49.4	0.00	0.00	0.00
9,300.0	0.68	125.66	9,299.5	-50.2	70.0	-50.1	0.00	0.00	0.00
9,400.0	0.68	125.66	9,399.5	-50.9	71.0	-50.8	0.00	0.00	0.00
9,500.0	0.68	125.66	9,499.5	-51.6	71.9	-51.5	0.00	0.00	0.00
9,600.0	0.68	125.66	9,599.5	-52.3	72.9	-52.1	0.00	0.00	0.00
9,700.0	0.68	125.66	9,699.5	-53.0	73.9	-52.8	0.00	0.00	0.00
9,800.0	0.68	125.66	9,799.5	-53.7	74.8	-53.5	0.00	0.00	0.00
9,900.0	0.68	125.66	9,899.4	-54.4	75.8	-54.2	0.00	0.00	0.00
10,000.0	0.68	125.66	9,999.4	-55.1	76.7	-54.9	0.00	0.00	0.00
10,100.0	0.68	125.66	10,099.4	-55.7	77.7	-55.6	0.00	0.00	0.00
10,200.0	0.68	125.66	10,199.4	-56.4	78.7	-56.3	0.00	0.00	0.00
10,300.0	0.68	125.66	10,299.4	-57.1	79.6	-57.0	0.00	0.00	0.00
10,400.0	0.68	125.66	10,399.4	-57.8	80.6	-57.7	0.00	0.00	0.00
10,500.0	0.68	125.66	10,499.4	-58.5	81.5	-58.3	0.00	0.00	0.00
10,600.0	0.68	125.66	10,599.4	-59.2	82.5	-59.0	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 Corn
Well: #604H
Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Well #604H
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)
10,700.0	0.68	125.66	10,699.4	-59.9	83.5	-59.7	0.00	0.00	0.00
10,800.0	0.68	125.66	10,799.4	-60.6	84.4	-60.4	0.00	0.00	0.00
10,900.0	0.68	125.66	10,899.4	-61.3	85.4	-61.1	0.00	0.00	0.00
11,000.0	0.68	125.66	10,999.4	-62.0	86.3	-61.8	0.00	0.00	0.00
11,100.0	0.68	125.66	11,099.4	-62.6	87.3	-62.5	0.00	0.00	0.00
11,200.0	0.68	125.66	11,199.4	-63.3	88.3	-63.2	0.00	0.00	0.00
11,300.0	0.68	125.66	11,299.4	-64.0	89.2	-63.8	0.00	0.00	0.00
11,400.0	0.68	125.66	11,399.3	-64.7	90.2	-64.5	0.00	0.00	0.00
11,500.0	0.68	125.66	11,499.3	-65.4	91.2	-65.2	0.00	0.00	0.00
11,600.0	0.68	125.66	11,599.3	-66.1	92.1	-65.9	0.00	0.00	0.00
11,700.0	0.68	125.66	11,699.3	-66.8	93.1	-66.6	0.00	0.00	0.00
11,745.9	0.68	125.66	11,745.2	-67.1	93.5	-66.9	0.00	0.00	0.00
11,750.0	0.56	80.09	11,749.3	-67.1	93.6	-66.9	12.00	-2.99	-1,114.27
11,775.0	3.14	9.61	11,774.3	-66.4	93.8	-66.2	12.00	10.34	-281.92
11,800.0	6.12	4.69	11,799.2	-64.4	94.0	-64.2	12.00	11.91	-19.68
11,825.0	9.11	2.99	11,824.0	-61.1	94.2	-60.9	12.00	11.97	-6.80
11,850.0	12.10	2.13	11,848.6	-56.5	94.4	-56.3	12.00	11.98	-3.46
11,875.0	15.10	1.60	11,872.9	-50.6	94.6	-50.4	12.00	11.99	-2.10
11,900.0	18.10	1.25	11,896.8	-43.5	94.8	-43.3	12.00	11.99	-1.42
11,925.0	21.10	0.99	11,920.4	-35.1	95.0	-34.9	12.00	12.00	-1.03
11,950.0	24.10	0.79	11,943.4	-25.5	95.1	-25.3	12.00	12.00	-0.78
11,975.0	27.10	0.64	11,966.0	-14.7	95.2	-14.5	12.00	12.00	-0.62
12,000.0	30.10	0.52	11,987.9	-2.7	95.4	-2.5	12.00	12.00	-0.50
12,025.0	33.10	0.41	12,009.2	10.4	95.5	10.5	12.00	12.00	-0.42
12,050.0	36.10	0.32	12,029.8	24.5	95.6	24.7	12.00	12.00	-0.36
12,075.0	39.09	0.24	12,049.6	39.8	95.6	40.0	12.00	12.00	-0.31
12,100.0	42.09	0.18	12,068.6	56.1	95.7	56.3	12.00	12.00	-0.27
12,125.0	45.09	0.12	12,086.7	73.3	95.7	73.5	12.00	12.00	-0.24
12,150.0	48.09	0.06	12,103.9	91.5	95.8	91.7	12.00	12.00	-0.22
12,175.0	51.09	0.01	12,120.1	110.5	95.8	110.7	12.00	12.00	-0.20
12,200.0	54.09	359.97	12,135.3	130.3	95.8	130.5	12.00	12.00	-0.18
12,225.0	57.09	359.92	12,149.4	151.0	95.7	151.2	12.00	12.00	-0.17
12,250.0	60.09	359.89	12,162.4	172.3	95.7	172.5	12.00	12.00	-0.16
12,275.0	63.09	359.85	12,174.3	194.3	95.7	194.5	12.00	12.00	-0.15
12,300.0	66.09	359.81	12,185.0	216.9	95.6	217.1	12.00	12.00	-0.14
12,325.0	69.09	359.78	12,194.6	240.0	95.5	240.2	12.00	12.00	-0.13
12,350.0	72.09	359.75	12,202.9	263.6	95.4	263.8	12.00	12.00	-0.13
12,375.0	75.09	359.72	12,209.9	287.5	95.3	287.7	12.00	12.00	-0.12
12,400.0	78.09	359.69	12,215.7	311.9	95.2	312.0	12.00	12.00	-0.12
12,425.0	81.09	359.66	12,220.2	336.4	95.0	336.6	12.00	12.00	-0.12
12,450.0	84.09	359.63	12,223.5	361.2	94.9	361.4	12.00	12.00	-0.12
12,475.0	87.09	359.60	12,225.4	386.1	94.7	386.3	12.00	12.00	-0.12
12,499.2	90.00	359.57	12,226.0	410.4	94.5	410.6	12.00	12.00	-0.11
12,600.0	90.00	359.57	12,226.0	511.1	93.8	511.3	0.00	0.00	0.00
12,700.0	90.00	359.57	12,226.0	611.1	93.0	611.3	0.00	0.00	0.00
12,800.0	90.00	359.57	12,226.0	711.1	92.3	711.3	0.00	0.00	0.00
12,900.0	90.00	359.57	12,226.0	811.1	91.5	811.3	0.00	0.00	0.00
13,000.0	90.00	359.57	12,226.0	911.1	90.8	911.3	0.00	0.00	0.00
13,100.0	90.00	359.57	12,226.0	1,011.1	90.0	1,011.3	0.00	0.00	0.00
13,200.0	90.00	359.57	12,226.0	1,111.1	89.3	1,111.3	0.00	0.00	0.00
13,300.0	90.00	359.57	12,226.0	1,211.1	88.5	1,211.3	0.00	0.00	0.00
13,400.0	90.00	359.57	12,226.0	1,311.1	87.8	1,311.3	0.00	0.00	0.00
13,500.0	90.00	359.57	12,226.0	1,411.1	87.0	1,411.3	0.00	0.00	0.00
13,600.0	90.00	359.57	12,226.0	1,511.1	86.3	1,511.3	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: #604H
Wellbore: OH
Design: Plan #0.1

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

Well #604H
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)
13,700.0	90.00	359.57	12,226.0	1,611.1	85.5	1,611.3	0.00	0.00	0.00
13,800.0	90.00	359.57	12,226.0	1,711.1	84.8	1,711.3	0.00	0.00	0.00
13,900.0	90.00	359.57	12,226.0	1,811.1	84.0	1,811.3	0.00	0.00	0.00
14,000.0	90.00	359.57	12,226.0	1,911.1	83.3	1,911.3	0.00	0.00	0.00
14,100.0	90.00	359.57	12,226.0	2,011.1	82.5	2,011.3	0.00	0.00	0.00
14,200.0	90.00	359.57	12,226.0	2,111.1	81.8	2,111.3	0.00	0.00	0.00
14,300.0	90.00	359.57	12,226.0	2,211.1	81.0	2,211.2	0.00	0.00	0.00
14,400.0	90.00	359.57	12,226.0	2,311.1	80.3	2,311.2	0.00	0.00	0.00
14,500.0	90.00	359.57	12,226.0	2,411.1	79.5	2,411.2	0.00	0.00	0.00
14,600.0	90.00	359.57	12,226.0	2,511.1	78.8	2,511.2	0.00	0.00	0.00
14,700.0	90.00	359.57	12,226.0	2,611.1	78.0	2,611.2	0.00	0.00	0.00
14,800.0	90.00	359.57	12,226.0	2,711.1	77.3	2,711.2	0.00	0.00	0.00
14,900.0	90.00	359.57	12,226.0	2,811.1	76.5	2,811.2	0.00	0.00	0.00
15,000.0	90.00	359.57	12,226.0	2,911.1	75.8	2,911.2	0.00	0.00	0.00
15,100.0	90.00	359.57	12,226.0	3,011.1	75.0	3,011.2	0.00	0.00	0.00
15,200.0	90.00	359.57	12,226.0	3,111.1	74.3	3,111.2	0.00	0.00	0.00
15,300.0	90.00	359.57	12,226.0	3,211.1	73.5	3,211.2	0.00	0.00	0.00
15,400.0	90.00	359.57	12,226.0	3,311.1	72.8	3,311.2	0.00	0.00	0.00
15,500.0	90.00	359.57	12,226.0	3,411.1	72.0	3,411.2	0.00	0.00	0.00
15,600.0	90.00	359.57	12,226.0	3,511.1	71.3	3,511.2	0.00	0.00	0.00
15,700.0	90.00	359.57	12,226.0	3,611.0	70.5	3,611.2	0.00	0.00	0.00
15,800.0	90.00	359.57	12,226.0	3,711.0	69.8	3,711.2	0.00	0.00	0.00
15,900.0	90.00	359.57	12,226.0	3,811.0	69.0	3,811.2	0.00	0.00	0.00
16,000.0	90.00	359.57	12,226.0	3,911.0	68.3	3,911.2	0.00	0.00	0.00
16,100.0	90.00	359.57	12,226.0	4,011.0	67.5	4,011.2	0.00	0.00	0.00
16,200.0	90.00	359.57	12,226.0	4,111.0	66.8	4,111.2	0.00	0.00	0.00
16,300.0	90.00	359.57	12,226.0	4,211.0	66.0	4,211.2	0.00	0.00	0.00
16,400.0	90.00	359.57	12,226.0	4,311.0	65.3	4,311.2	0.00	0.00	0.00
16,500.0	90.00	359.57	12,226.0	4,411.0	64.5	4,411.1	0.00	0.00	0.00
16,600.0	90.00	359.57	12,226.0	4,511.0	63.8	4,511.1	0.00	0.00	0.00
16,700.0	90.00	359.57	12,226.0	4,611.0	63.0	4,611.1	0.00	0.00	0.00
16,800.0	90.00	359.57	12,226.0	4,711.0	62.3	4,711.1	0.00	0.00	0.00
16,900.0	90.00	359.57	12,226.0	4,811.0	61.5	4,811.1	0.00	0.00	0.00
17,000.0	90.00	359.57	12,226.0	4,911.0	60.8	4,911.1	0.00	0.00	0.00
17,100.0	90.00	359.57	12,226.0	5,011.0	60.0	5,011.1	0.00	0.00	0.00
17,200.0	90.00	359.57	12,226.0	5,111.0	59.3	5,111.1	0.00	0.00	0.00
17,300.0	90.00	359.57	12,226.0	5,211.0	58.5	5,211.1	0.00	0.00	0.00
17,400.0	90.00	359.57	12,226.0	5,311.0	57.8	5,311.1	0.00	0.00	0.00
17,500.0	90.00	359.57	12,226.0	5,411.0	57.0	5,411.1	0.00	0.00	0.00
17,600.0	90.00	359.57	12,226.0	5,511.0	56.3	5,511.1	0.00	0.00	0.00
17,700.0	90.00	359.57	12,226.0	5,611.0	55.5	5,611.1	0.00	0.00	0.00
17,800.0	90.00	359.57	12,226.0	5,711.0	54.8	5,711.1	0.00	0.00	0.00
17,900.0	90.00	359.57	12,226.0	5,811.0	54.0	5,811.1	0.00	0.00	0.00
18,000.0	90.00	359.57	12,226.0	5,911.0	53.2	5,911.1	0.00	0.00	0.00
18,100.0	90.00	359.57	12,226.0	6,011.0	52.5	6,011.1	0.00	0.00	0.00
18,200.0	90.00	359.57	12,226.0	6,111.0	51.7	6,111.1	0.00	0.00	0.00
18,300.0	90.00	359.57	12,226.0	6,211.0	51.0	6,211.1	0.00	0.00	0.00
18,400.0	90.00	359.57	12,226.0	6,311.0	50.2	6,311.1	0.00	0.00	0.00
18,500.0	90.00	359.57	12,226.0	6,411.0	49.5	6,411.1	0.00	0.00	0.00
18,600.0	90.00	359.57	12,226.0	6,511.0	48.7	6,511.1	0.00	0.00	0.00
18,700.0	90.00	359.57	12,226.0	6,611.0	48.0	6,611.0	0.00	0.00	0.00
18,800.0	90.00	359.57	12,226.0	6,711.0	47.2	6,711.0	0.00	0.00	0.00
18,900.0	90.00	359.57	12,226.0	6,811.0	46.5	6,811.0	0.00	0.00	0.00
19,000.0	90.00	359.57	12,226.0	6,911.0	45.7	6,911.0	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 Com
Well: #604H
Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference: Well #604H
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)
19,100.0	90.00	359.57	12,226.0	7,011.0	45.0	7,011.0	0.00	0.00	0.00
19,200.0	90.00	359.57	12,226.0	7,110.9	44.2	7,111.0	0.00	0.00	0.00
19,300.0	90.00	359.57	12,226.0	7,210.9	43.5	7,211.0	0.00	0.00	0.00
19,400.0	90.00	359.57	12,226.0	7,310.9	42.7	7,311.0	0.00	0.00	0.00
19,500.0	90.00	359.57	12,226.0	7,410.9	42.0	7,411.0	0.00	0.00	0.00
19,600.0	90.00	359.57	12,226.0	7,510.9	41.2	7,511.0	0.00	0.00	0.00
19,700.0	90.00	359.57	12,226.0	7,610.9	40.5	7,611.0	0.00	0.00	0.00
19,800.0	90.00	359.57	12,226.0	7,710.9	39.7	7,711.0	0.00	0.00	0.00
19,900.0	90.00	359.57	12,226.0	7,810.9	39.0	7,811.0	0.00	0.00	0.00
20,000.0	90.00	359.57	12,226.0	7,910.9	38.2	7,911.0	0.00	0.00	0.00
20,100.0	90.00	359.57	12,226.0	8,010.9	37.5	8,011.0	0.00	0.00	0.00
20,200.0	90.00	359.57	12,226.0	8,110.9	36.7	8,111.0	0.00	0.00	0.00
20,300.0	90.00	359.57	12,226.0	8,210.9	36.0	8,211.0	0.00	0.00	0.00
20,400.0	90.00	359.57	12,226.0	8,310.9	35.2	8,311.0	0.00	0.00	0.00
20,500.0	90.00	359.57	12,226.0	8,410.9	34.5	8,411.0	0.00	0.00	0.00
20,600.0	90.00	359.57	12,226.0	8,510.9	33.7	8,511.0	0.00	0.00	0.00
20,700.0	90.00	359.57	12,226.0	8,610.9	33.0	8,611.0	0.00	0.00	0.00
20,800.0	90.00	359.57	12,226.0	8,710.9	32.2	8,711.0	0.00	0.00	0.00
20,900.0	90.00	359.57	12,226.0	8,810.9	31.5	8,810.9	0.00	0.00	0.00
21,000.0	90.00	359.57	12,226.0	8,910.9	30.7	8,910.9	0.00	0.00	0.00
21,100.0	90.00	359.57	12,226.0	9,010.9	30.0	9,010.9	0.00	0.00	0.00
21,200.0	90.00	359.57	12,226.0	9,110.9	29.2	9,110.9	0.00	0.00	0.00
21,300.0	90.00	359.57	12,226.0	9,210.9	28.5	9,210.9	0.00	0.00	0.00
21,400.0	90.00	359.57	12,226.0	9,310.9	27.7	9,310.9	0.00	0.00	0.00
21,500.0	90.00	359.57	12,226.0	9,410.9	27.0	9,410.9	0.00	0.00	0.00
21,600.0	90.00	359.57	12,226.0	9,510.9	26.2	9,510.9	0.00	0.00	0.00
21,700.0	90.00	359.57	12,226.0	9,610.9	25.5	9,610.9	0.00	0.00	0.00
21,800.0	90.00	359.57	12,226.0	9,710.9	24.7	9,710.9	0.00	0.00	0.00
21,900.0	90.00	359.57	12,226.0	9,810.9	24.0	9,810.9	0.00	0.00	0.00
22,000.0	90.00	359.57	12,226.0	9,910.9	23.2	9,910.9	0.00	0.00	0.00
22,100.0	90.00	359.57	12,226.0	10,010.9	22.5	10,010.9	0.00	0.00	0.00
22,200.0	90.00	359.57	12,226.0	10,110.9	21.7	10,110.9	0.00	0.00	0.00
22,297.1	90.00	359.57	12,226.0	10,208.0	21.0	10,208.0	0.00	0.00	0.00

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
PBHL (Neptune 10 St Cr - plan hits target center - Point	0.00	0.00	12,226.0	10,208.0	21.0	456,735.00	781,300.00	32° 15' 11.718 N	103° 33' 25.560 W
FTP (Neptune 10 St Cor - plan misses target center by 40.0usft at 12310.2usft MD (12189.1 TVD, 226.2 N, 95.6 E) - Point	0.00	0.00	12,226.0	211.0	96.0	446,738.00	781,375.00	32° 13' 32.792 N	103° 33' 25.528 W