

HOBBS OCD

FEB 23 2018

RECEIVED



Lea County, NM (NAD 83 NME)

Nautilus 16 State Com

#714H

Plan #2

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



Azimuths to Grid North
True North: -0.48°
Magnetic North: 6.37°

Magnetic Field
Strength: 47788.0nT
Dip Angle: 66.91°
Date: 1/10/2018
Model: IGRF2015

To convert a Magnetic Direction to a Grid Direction, Add 6.37°
To convert a Magnetic Direction to a True Direction, Add 6.83° East
To convert a True Direction to a Grid Direction, Subtract 0.48°

WELL DETAILS: #714H

KB = 25 @ 3343.0uoft
Northing 383084.00 Easting 808798.00 Latitude 32° 3' 0.858 N Longitude 103° 28' 12.244 W

SECTION DETAILS

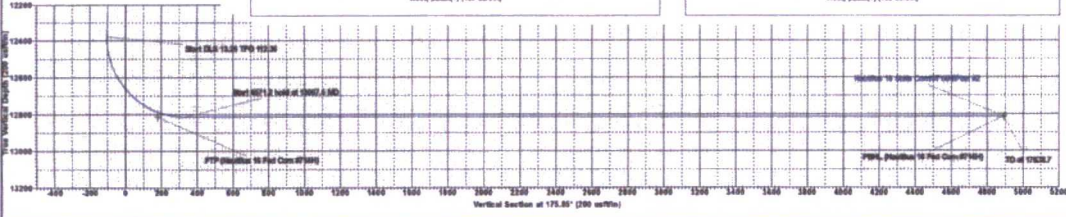
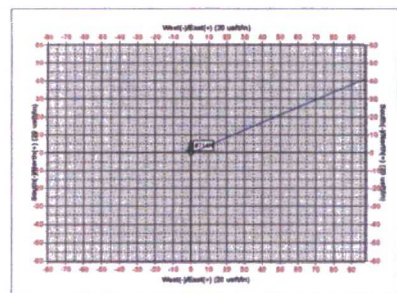
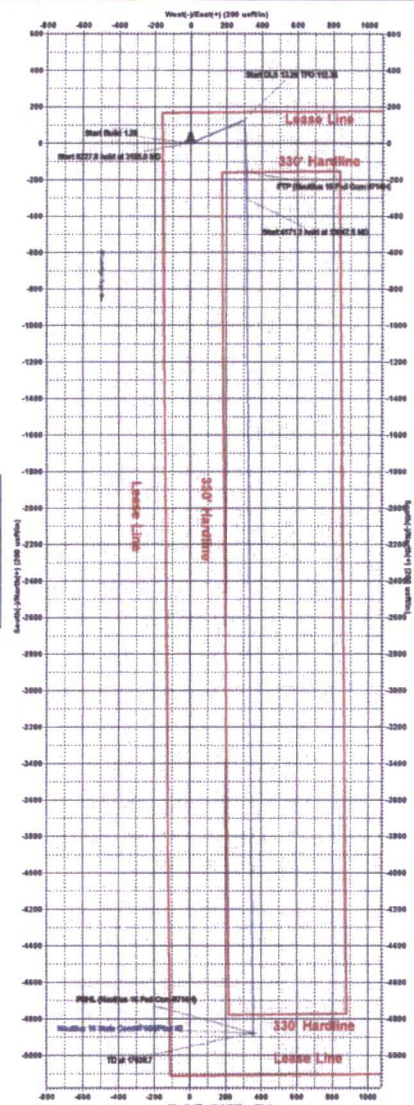
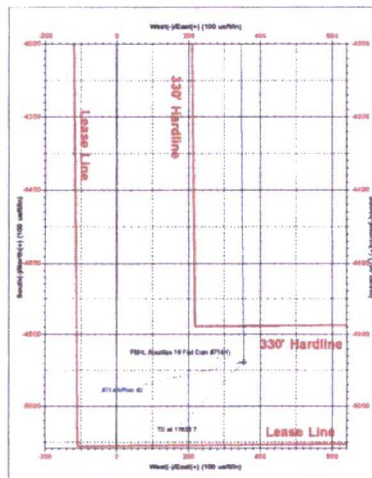
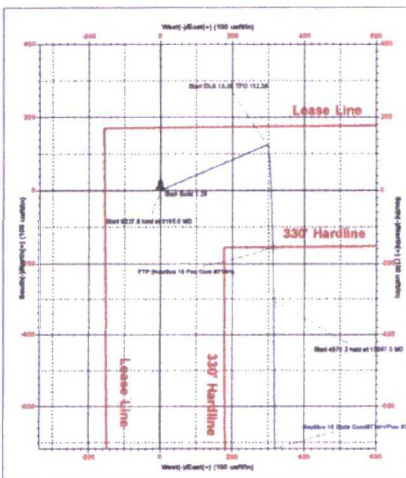
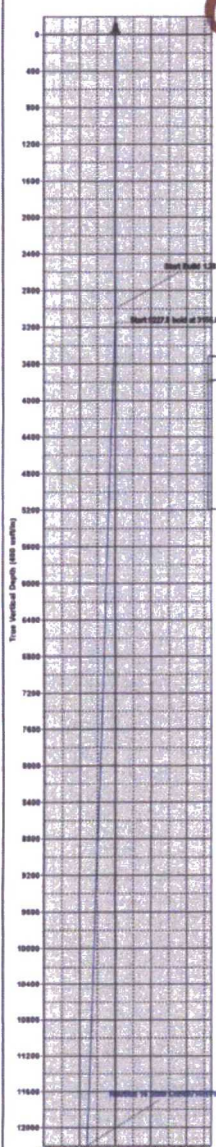
MD	Inc	Azi	TVD	+N-S	+E-W	Dlog	TFace	VSeet
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0
3000.0	0.00	0.00	3000.0	0.0	0.0	0.00	0.00	0.0
3155.0	1.98	67.13	3155.0	1.0	2.5	1.28	67.13	-0.9
12382.8	1.98	67.13	12377.3	125.1	296.5	0.00	0.00	-103.3
13067.5	90.00	179.50	12815.0	-307.0	314.3	13.26	112.36	328.9
17638.7	90.00	179.50	12815.0	-4878.0	354.0	0.00	0.00	4890.8

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N-S	+E-W	Northing	Easting
FTP (Nautilus 16 Fed Com #714H)	12815.0	-187.0	313.0	382827.80	809111.50
PBM (Nautilus 16 Fed Com #714H)	12815.0	-4878.0	354.0	378206.00	809182.00





EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Nautilus 16 State Com

#714H

OH

Plan: Plan #2

Standard Planning Report

22 February, 2018



Planning Report

Database: EDM 5000.14
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Nautilus 16 State Com
Well: #714H
Wellbore: OH
Design: Plan #2

Local Co-ordinate Reference: Well #714H
TVD Reference: KB = 25 @ 3343.0usft
MD Reference: KB = 25 @ 3343.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

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	Nautilus 16 State Com			
Site Position:		Northing:	383,047.00 usft	Latitude: 32° 3' 0.681 N
From: Map		Easting:	806,402.00 usft	Longitude: 103° 28' 40.085 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence: 0.45 °

Well	#714H			
Well Position	+N/-S	37.0 usft	Northing:	383,084.00 usft
	+E/-W	2,396.0 usft	Easting:	808,798.00 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:		Ground Level: 3,317.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
	IGRF2015	1/10/2018	(°) 6.83	(°) 59.91	(nT) 47,787.96691852

Design	Plan #2			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(usft)	(usft)	(usft)	(°)
	0.0	0.0	0.0	175.85

Plan Survey Tool Program	Date 2/22/2018			
Depth From	Depth To	Survey (Wellbore)	Tool Name	Remarks
(usft)	(usft)			
1	0.0	17,638.7 Plan #2 (OH)	MWD	
			OWSG MWD - Standard	

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(usft)	(usft)	Rate	Rate	Rate	(°)	
(usft)			(usft)			(°/100usft)	(°/100usft)	(°/100usft)		
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	
3,155.0	1.98	67.13	3,155.0	1.0	2.5	1.28	1.28	0.00	67.13	
12,382.8	1.98	67.13	12,377.3	125.1	296.5	0.00	0.00	0.00	0.00	
13,067.5	90.00	179.50	12,815.0	-307.0	314.3	13.26	12.86	16.41	112.36	
17,638.7	90.00	179.50	12,815.0	-4,878.0	354.0	0.00	0.00	0.00	0.00	PBHL (Nautilus 16 Fe



Planning Report

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 Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Nautilus 16 State Com
 Well: #714H
 Wellbore: OH
 Design: Plan #2

Local Co-ordinate Reference: Well #714H
 TVD Reference: KB = 25 @ 3343.0usft
 MD Reference: KB = 25 @ 3343.0usft
 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	1.28	67.13	3,100.0	0.4	1.0	-0.4	1.28	1.28	0.00
3,155.0	1.98	67.13	3,155.0	1.0	2.5	-0.9	1.28	1.28	0.00
3,200.0	1.98	67.13	3,199.9	1.6	3.9	-1.4	0.00	0.00	0.00
3,300.0	1.98	67.13	3,299.9	3.0	7.1	-2.5	0.00	0.00	0.00
3,400.0	1.98	67.13	3,399.8	4.3	10.3	-3.6	0.00	0.00	0.00
3,500.0	1.98	67.13	3,499.8	5.7	13.5	-4.7	0.00	0.00	0.00
3,600.0	1.98	67.13	3,599.7	7.0	16.7	-5.8	0.00	0.00	0.00
3,700.0	1.98	67.13	3,699.6	8.4	19.8	-6.9	0.00	0.00	0.00
3,800.0	1.98	67.13	3,799.6	9.7	23.0	-8.0	0.00	0.00	0.00
3,900.0	1.98	67.13	3,899.5	11.1	26.2	-9.1	0.00	0.00	0.00
4,000.0	1.98	67.13	3,999.5	12.4	29.4	-10.2	0.00	0.00	0.00
4,100.0	1.98	67.13	4,099.4	13.7	32.6	-11.4	0.00	0.00	0.00
4,200.0	1.98	67.13	4,199.3	15.1	35.8	-12.5	0.00	0.00	0.00
4,300.0	1.98	67.13	4,299.3	16.4	39.0	-13.6	0.00	0.00	0.00
4,400.0	1.98	67.13	4,399.2	17.8	42.1	-14.7	0.00	0.00	0.00
4,500.0	1.98	67.13	4,499.2	19.1	45.3	-15.8	0.00	0.00	0.00
4,600.0	1.98	67.13	4,599.1	20.5	48.5	-16.9	0.00	0.00	0.00
4,700.0	1.98	67.13	4,699.0	21.8	51.7	-18.0	0.00	0.00	0.00
4,800.0	1.98	67.13	4,799.0	23.2	54.9	-19.1	0.00	0.00	0.00
4,900.0	1.98	67.13	4,898.9	24.5	58.1	-20.2	0.00	0.00	0.00
5,000.0	1.98	67.13	4,998.9	25.8	61.3	-21.3	0.00	0.00	0.00
5,100.0	1.98	67.13	5,098.8	27.2	64.5	-22.5	0.00	0.00	0.00
5,200.0	1.98	67.13	5,198.7	28.5	67.6	-23.6	0.00	0.00	0.00



Planning Report

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 Design: Plan #2

Local Co-ordinate Reference: Well #714H
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 MD Reference: KB = 25 @ 3343.0usft
 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	1.98	67.13	5,298.7	29.9	70.8	-24.7	0.00	0.00	0.00
5,400.0	1.98	67.13	5,398.6	31.2	74.0	-25.8	0.00	0.00	0.00
5,500.0	1.98	67.13	5,498.6	32.6	77.2	-26.9	0.00	0.00	0.00
5,600.0	1.98	67.13	5,598.5	33.9	80.4	-28.0	0.00	0.00	0.00
5,700.0	1.98	67.13	5,698.4	35.3	83.6	-29.1	0.00	0.00	0.00
5,800.0	1.98	67.13	5,798.4	36.6	86.8	-30.2	0.00	0.00	0.00
5,900.0	1.98	67.13	5,898.3	37.9	89.9	-31.3	0.00	0.00	0.00
6,000.0	1.98	67.13	5,998.3	39.3	93.1	-32.4	0.00	0.00	0.00
6,100.0	1.98	67.13	6,098.2	40.6	96.3	-33.6	0.00	0.00	0.00
6,200.0	1.98	67.13	6,198.1	42.0	99.5	-34.7	0.00	0.00	0.00
6,300.0	1.98	67.13	6,298.1	43.3	102.7	-35.8	0.00	0.00	0.00
6,400.0	1.98	67.13	6,398.0	44.7	105.9	-36.9	0.00	0.00	0.00
6,500.0	1.98	67.13	6,498.0	46.0	109.1	-38.0	0.00	0.00	0.00
6,600.0	1.98	67.13	6,597.9	47.4	112.3	-39.1	0.00	0.00	0.00
6,700.0	1.98	67.13	6,697.8	48.7	115.4	-40.2	0.00	0.00	0.00
6,800.0	1.98	67.13	6,797.8	50.0	118.6	-41.3	0.00	0.00	0.00
6,900.0	1.98	67.13	6,897.7	51.4	121.8	-42.4	0.00	0.00	0.00
7,000.0	1.98	67.13	6,997.7	52.7	125.0	-43.5	0.00	0.00	0.00
7,100.0	1.98	67.13	7,097.6	54.1	128.2	-44.7	0.00	0.00	0.00
7,200.0	1.98	67.13	7,197.5	55.4	131.4	-45.8	0.00	0.00	0.00
7,300.0	1.98	67.13	7,297.5	56.8	134.6	-46.9	0.00	0.00	0.00
7,400.0	1.98	67.13	7,397.4	58.1	137.7	-48.0	0.00	0.00	0.00
7,500.0	1.98	67.13	7,497.4	59.5	140.9	-49.1	0.00	0.00	0.00
7,600.0	1.98	67.13	7,597.3	60.8	144.1	-50.2	0.00	0.00	0.00
7,700.0	1.98	67.13	7,697.2	62.1	147.3	-51.3	0.00	0.00	0.00
7,800.0	1.98	67.13	7,797.2	63.5	150.5	-52.4	0.00	0.00	0.00
7,900.0	1.98	67.13	7,897.1	64.8	153.7	-53.5	0.00	0.00	0.00
8,000.0	1.98	67.13	7,997.1	66.2	156.9	-54.6	0.00	0.00	0.00
8,100.0	1.98	67.13	8,097.0	67.5	160.1	-55.8	0.00	0.00	0.00
8,200.0	1.98	67.13	8,197.0	68.9	163.2	-56.9	0.00	0.00	0.00
8,300.0	1.98	67.13	8,296.9	70.2	166.4	-58.0	0.00	0.00	0.00
8,400.0	1.98	67.13	8,396.8	71.6	169.6	-59.1	0.00	0.00	0.00
8,500.0	1.98	67.13	8,496.8	72.9	172.8	-60.2	0.00	0.00	0.00
8,600.0	1.98	67.13	8,596.7	74.2	176.0	-61.3	0.00	0.00	0.00
8,700.0	1.98	67.13	8,696.7	75.6	179.2	-62.4	0.00	0.00	0.00
8,800.0	1.98	67.13	8,796.6	76.9	182.4	-63.5	0.00	0.00	0.00
8,900.0	1.98	67.13	8,896.5	78.3	185.6	-64.6	0.00	0.00	0.00
9,000.0	1.98	67.13	8,996.5	79.6	188.7	-65.7	0.00	0.00	0.00
9,100.0	1.98	67.13	9,096.4	81.0	191.9	-66.9	0.00	0.00	0.00
9,200.0	1.98	67.13	9,196.4	82.3	195.1	-68.0	0.00	0.00	0.00
9,300.0	1.98	67.13	9,296.3	83.7	198.3	-69.1	0.00	0.00	0.00
9,400.0	1.98	67.13	9,396.2	85.0	201.5	-70.2	0.00	0.00	0.00
9,500.0	1.98	67.13	9,496.2	86.3	204.7	-71.3	0.00	0.00	0.00
9,600.0	1.98	67.13	9,596.1	87.7	207.9	-72.4	0.00	0.00	0.00
9,700.0	1.98	67.13	9,696.1	89.0	211.0	-73.5	0.00	0.00	0.00
9,800.0	1.98	67.13	9,796.0	90.4	214.2	-74.6	0.00	0.00	0.00
9,900.0	1.98	67.13	9,895.9	91.7	217.4	-75.7	0.00	0.00	0.00
10,000.0	1.98	67.13	9,995.9	93.1	220.6	-76.8	0.00	0.00	0.00
10,100.0	1.98	67.13	10,095.8	94.4	223.8	-78.0	0.00	0.00	0.00
10,200.0	1.98	67.13	10,195.8	95.8	227.0	-79.1	0.00	0.00	0.00
10,300.0	1.98	67.13	10,295.7	97.1	230.2	-80.2	0.00	0.00	0.00
10,400.0	1.98	67.13	10,395.6	98.4	233.4	-81.3	0.00	0.00	0.00
10,500.0	1.98	67.13	10,495.6	99.8	236.5	-82.4	0.00	0.00	0.00
10,600.0	1.98	67.13	10,595.5	101.1	239.7	-83.5	0.00	0.00	0.00



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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	1.98	67.13	10,695.5	102.5	242.9	-84.6	0.00	0.00	0.00
10,800.0	1.98	67.13	10,795.4	103.8	246.1	-85.7	0.00	0.00	0.00
10,900.0	1.98	67.13	10,895.3	105.2	249.3	-86.8	0.00	0.00	0.00
11,000.0	1.98	67.13	10,995.3	106.5	252.5	-88.0	0.00	0.00	0.00
11,100.0	1.98	67.13	11,095.2	107.8	255.7	-89.1	0.00	0.00	0.00
11,200.0	1.98	67.13	11,195.2	109.2	258.8	-90.2	0.00	0.00	0.00
11,300.0	1.98	67.13	11,295.1	110.5	262.0	-91.3	0.00	0.00	0.00
11,400.0	1.98	67.13	11,395.0	111.9	265.2	-92.4	0.00	0.00	0.00
11,500.0	1.98	67.13	11,495.0	113.2	268.4	-93.5	0.00	0.00	0.00
11,600.0	1.98	67.13	11,594.9	114.6	271.6	-94.6	0.00	0.00	0.00
11,700.0	1.98	67.13	11,694.9	115.9	274.8	-95.7	0.00	0.00	0.00
11,800.0	1.98	67.13	11,794.8	117.3	278.0	-96.8	0.00	0.00	0.00
11,900.0	1.98	67.13	11,894.7	118.6	281.2	-97.9	0.00	0.00	0.00
12,000.0	1.98	67.13	11,994.7	119.9	284.3	-99.1	0.00	0.00	0.00
12,100.0	1.98	67.13	12,094.6	121.3	287.5	-100.2	0.00	0.00	0.00
12,200.0	1.98	67.13	12,194.6	122.6	290.7	-101.3	0.00	0.00	0.00
12,300.0	1.98	67.13	12,294.5	124.0	293.9	-102.4	0.00	0.00	0.00
12,382.8	1.98	67.13	12,377.3	125.1	296.5	-103.3	0.00	0.00	0.00
12,400.0	2.38	129.18	12,394.4	125.0	297.1	-103.2	13.26	2.32	361.66
12,425.0	5.17	158.78	12,419.4	123.6	297.9	-101.7	13.26	11.15	118.42
12,450.0	8.35	166.91	12,444.2	120.8	298.7	-98.8	13.26	12.72	32.50
12,475.0	11.61	170.54	12,468.8	116.5	299.5	-94.6	13.26	13.02	14.52
12,500.0	14.89	172.59	12,493.2	110.9	300.4	-88.8	13.26	13.12	8.20
12,525.0	18.18	173.91	12,517.1	103.8	301.2	-81.7	13.26	13.17	5.29
12,550.0	21.48	174.84	12,540.6	95.4	302.0	-73.3	13.26	13.20	3.71
12,575.0	24.78	175.53	12,563.6	85.6	302.8	-63.4	13.26	13.21	2.76
12,600.0	28.09	176.06	12,586.0	74.5	303.7	-52.3	13.26	13.22	2.15
12,625.0	31.39	176.50	12,607.7	62.1	304.5	-39.9	13.26	13.23	1.73
12,650.0	34.70	176.85	12,628.7	48.5	305.3	-26.3	13.26	13.23	1.43
12,675.0	38.01	177.16	12,648.8	33.7	306.0	-11.5	13.26	13.24	1.21
12,700.0	41.32	177.42	12,668.0	17.8	306.8	4.5	13.26	13.24	1.04
12,725.0	44.63	177.64	12,686.3	0.7	307.5	21.5	13.26	13.24	0.91
12,750.0	47.94	177.85	12,703.6	-17.3	308.2	39.6	13.26	13.24	0.81
12,775.0	51.25	178.03	12,719.8	-36.3	308.9	58.6	13.26	13.24	0.73
12,800.0	54.56	178.20	12,734.9	-56.3	309.6	78.5	13.26	13.24	0.67
12,825.0	57.87	178.35	12,748.8	-77.0	310.2	99.3	13.26	13.25	0.61
12,850.0	61.19	178.49	12,761.5	-98.6	310.8	120.8	13.26	13.25	0.57
12,875.0	64.50	178.63	12,772.9	-120.8	311.3	143.0	13.26	13.25	0.54
12,900.0	67.81	178.75	12,783.0	-143.6	311.9	165.8	13.26	13.25	0.51
12,923.8	70.96	178.87	12,791.3	-165.9	312.3	188.1	13.26	13.25	0.48
FTP (Nautilus 16 Fed Com #714H)									
12,925.0	71.12	178.88	12,791.7	-167.1	312.3	189.2	13.26	13.25	0.47
12,950.0	74.43	178.99	12,799.1	-190.9	312.8	213.1	13.26	13.25	0.46
12,975.0	77.75	179.10	12,805.1	-215.2	313.2	237.3	13.26	13.25	0.45
13,000.0	81.06	179.21	12,809.7	-239.8	313.6	261.8	13.26	13.25	0.44
13,025.0	84.37	179.32	12,812.9	-264.5	313.9	286.6	13.26	13.25	0.43
13,050.0	87.68	179.43	12,814.6	-289.5	314.1	311.5	13.26	13.25	0.43
13,067.5	90.00	179.50	12,815.0	-307.0	314.3	328.9	13.26	13.25	0.42
13,100.0	90.00	179.50	12,815.0	-339.5	314.6	361.4	0.00	0.00	0.00
13,200.0	90.00	179.50	12,815.0	-439.5	315.5	461.1	0.00	0.00	0.00
13,300.0	90.00	179.50	12,815.0	-539.5	316.3	560.9	0.00	0.00	0.00
13,400.0	90.00	179.50	12,815.0	-639.5	317.2	660.7	0.00	0.00	0.00
13,500.0	90.00	179.50	12,815.0	-739.5	318.1	760.5	0.00	0.00	0.00



Planning Report

Database: EDM 5000.14
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Nautilus 16 State Com
Well: #714H
Wellbore: OH
Design: Plan #2

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

Well #714H
KB = 25 @ 3343.0usft
KB = 25 @ 3343.0usft
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)
13,600.0	90.00	179.50	12,815.0	-839.5	318.9	860.3	0.00	0.00	0.00
13,700.0	90.00	179.50	12,815.0	-939.4	319.8	960.1	0.00	0.00	0.00
13,800.0	90.00	179.50	12,815.0	-1,039.4	320.7	1,059.9	0.00	0.00	0.00
13,900.0	90.00	179.50	12,815.0	-1,139.4	321.5	1,159.7	0.00	0.00	0.00
14,000.0	90.00	179.50	12,815.0	-1,239.4	322.4	1,259.5	0.00	0.00	0.00
14,100.0	90.00	179.50	12,815.0	-1,339.4	323.3	1,359.3	0.00	0.00	0.00
14,200.0	90.00	179.50	12,815.0	-1,439.4	324.1	1,459.1	0.00	0.00	0.00
14,300.0	90.00	179.50	12,815.0	-1,539.4	325.0	1,558.9	0.00	0.00	0.00
14,400.0	90.00	179.50	12,815.0	-1,639.4	325.9	1,658.7	0.00	0.00	0.00
14,500.0	90.00	179.50	12,815.0	-1,739.4	326.7	1,758.5	0.00	0.00	0.00
14,600.0	90.00	179.50	12,815.0	-1,839.4	327.6	1,858.3	0.00	0.00	0.00
14,700.0	90.00	179.50	12,815.0	-1,939.4	328.5	1,958.1	0.00	0.00	0.00
14,800.0	90.00	179.50	12,815.0	-2,039.4	329.3	2,057.9	0.00	0.00	0.00
14,900.0	90.00	179.50	12,815.0	-2,139.4	330.2	2,157.7	0.00	0.00	0.00
15,000.0	90.00	179.50	12,815.0	-2,239.4	331.1	2,257.5	0.00	0.00	0.00
15,100.0	90.00	179.50	12,815.0	-2,339.4	332.0	2,357.3	0.00	0.00	0.00
15,200.0	90.00	179.50	12,815.0	-2,439.4	332.8	2,457.1	0.00	0.00	0.00
15,300.0	90.00	179.50	12,815.0	-2,539.4	333.7	2,556.9	0.00	0.00	0.00
15,400.0	90.00	179.50	12,815.0	-2,639.4	334.6	2,656.7	0.00	0.00	0.00
15,500.0	90.00	179.50	12,815.0	-2,739.4	335.4	2,756.5	0.00	0.00	0.00
15,600.0	90.00	179.50	12,815.0	-2,839.4	336.3	2,856.3	0.00	0.00	0.00
15,700.0	90.00	179.50	12,815.0	-2,939.4	337.2	2,956.1	0.00	0.00	0.00
15,800.0	90.00	179.50	12,815.0	-3,039.4	338.0	3,055.9	0.00	0.00	0.00
15,900.0	90.00	179.50	12,815.0	-3,139.4	338.9	3,155.7	0.00	0.00	0.00
16,000.0	90.00	179.50	12,815.0	-3,239.4	339.8	3,255.5	0.00	0.00	0.00
16,100.0	90.00	179.50	12,815.0	-3,339.4	340.6	3,355.3	0.00	0.00	0.00
16,200.0	90.00	179.50	12,815.0	-3,439.4	341.5	3,455.1	0.00	0.00	0.00
16,300.0	90.00	179.50	12,815.0	-3,539.4	342.4	3,554.8	0.00	0.00	0.00
16,400.0	90.00	179.50	12,815.0	-3,639.3	343.2	3,654.6	0.00	0.00	0.00
16,500.0	90.00	179.50	12,815.0	-3,739.3	344.1	3,754.4	0.00	0.00	0.00
16,600.0	90.00	179.50	12,815.0	-3,839.3	345.0	3,854.2	0.00	0.00	0.00
16,700.0	90.00	179.50	12,815.0	-3,939.3	345.8	3,954.0	0.00	0.00	0.00
16,800.0	90.00	179.50	12,815.0	-4,039.3	346.7	4,053.8	0.00	0.00	0.00
16,900.0	90.00	179.50	12,815.0	-4,139.3	347.6	4,153.6	0.00	0.00	0.00
17,000.0	90.00	179.50	12,815.0	-4,239.3	348.5	4,253.4	0.00	0.00	0.00
17,100.0	90.00	179.50	12,815.0	-4,339.3	349.3	4,353.2	0.00	0.00	0.00
17,200.0	90.00	179.50	12,815.0	-4,439.3	350.2	4,453.0	0.00	0.00	0.00
17,300.0	90.00	179.50	12,815.0	-4,539.3	351.1	4,552.8	0.00	0.00	0.00
17,400.0	90.00	179.50	12,815.0	-4,639.3	351.9	4,652.6	0.00	0.00	0.00
17,500.0	90.00	179.50	12,815.0	-4,739.3	352.8	4,752.4	0.00	0.00	0.00
17,600.0	90.00	179.50	12,815.0	-4,839.3	353.7	4,852.2	0.00	0.00	0.00
17,638.7	90.00	179.50	12,815.0	-4,878.0	354.0	4,890.8	0.00	0.00	0.00

PBHL (Nautilus 16 Fed Com #714H)



Planning Report

Database: EDM 5000.14
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Nautilus 16 State Com
Well: #714H
Wellbore: OH
Design: Plan #2

Local Co-ordinate Reference: Well #714H
TVD Reference: KB = 25 @ 3343.0usft
MD Reference: KB = 25 @ 3343.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

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 (Nautilus 16 Fed C - plan hits target center - Point	0.00	0.00	12,815.0	-4,878.0	354.0	378,206.00	809,152.00	32° 2' 12.561 N	103° 28' 8.584 W
FTP (Nautilus 16 Fed Cc - plan misses target center by 25.3usft at 12923.8usft MD (12791.3 TVD, -165.9 N, 312.3 E) - Point	0.00	0.00	12,815.0	-157.0	313.0	382,927.00	809,111.00	32° 2' 59.280 N	103° 28' 8.622 W