Beowulf 33 State Com #601H

30-025-43531

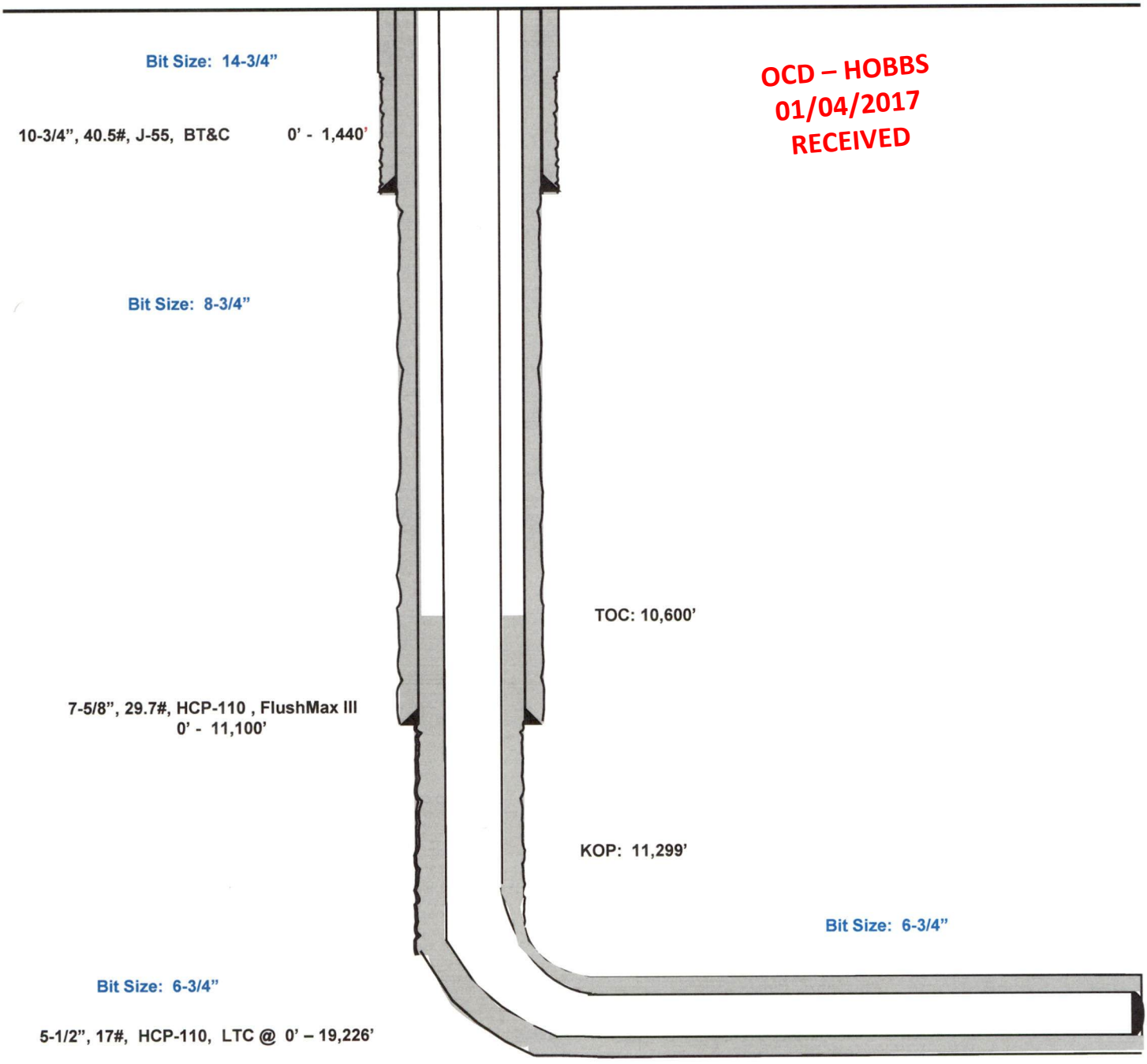
Lea County, New Mexico

Proposed Wellbore

300' FSL
1540' FWL
Section 33
T-23-S, R-35-E

API: 30-025-*****

KB: 3,429'
GL: 3,404'



OCD – HOBBS
01/04/2017
RECEIVED

Lateral: 19,226' MD, 11,598' TVD

BH Location: 2411' FSL & 1540' FWL
Section 28
T-23-S, R-35-E

eog resources

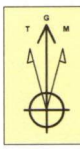
Lea County, NM (NAD 27 NME)

Beowulf 33 State Com #601H

H&P 621

Plan #0.1

PROJECT DETAILS: Lea County, NM (NAD 27 NME)	
Geodetic System:	US State Plane 1927 (Exact solution)
Datum:	NAD 1927 (NADCON CONUS)
Ellipsoid:	Clarke 1866
Zone:	New Mexico East 3001
System Datum:	Mean Sea Level



Azimuths to Grid North
True North: -0.51°
Magnetic North: 6.40°

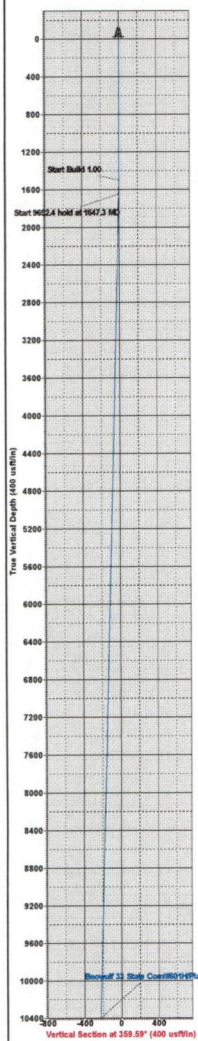
Magnetic Field
Strength: 48017.5snT
Dip Angle: 60.13°
Date: 1/25/2017
Model: IGRF2015

To convert a Magnetic Direction to a Grid Direction, Add 6.40°
To convert a Magnetic Direction to a True Direction, Add 6.91° East
To convert a True Direction to a Grid Direction, Subtract 0.51°

WELL DETAILS: #601H				
Ground Level:		3404.0		
KB = 25 @ 3429.0usft (H&P 621)				
Northing	Easting	Latitude	Longitude	
457637.00	796072.00	32° 15' 16.310 N	103° 22' 32.197 W	

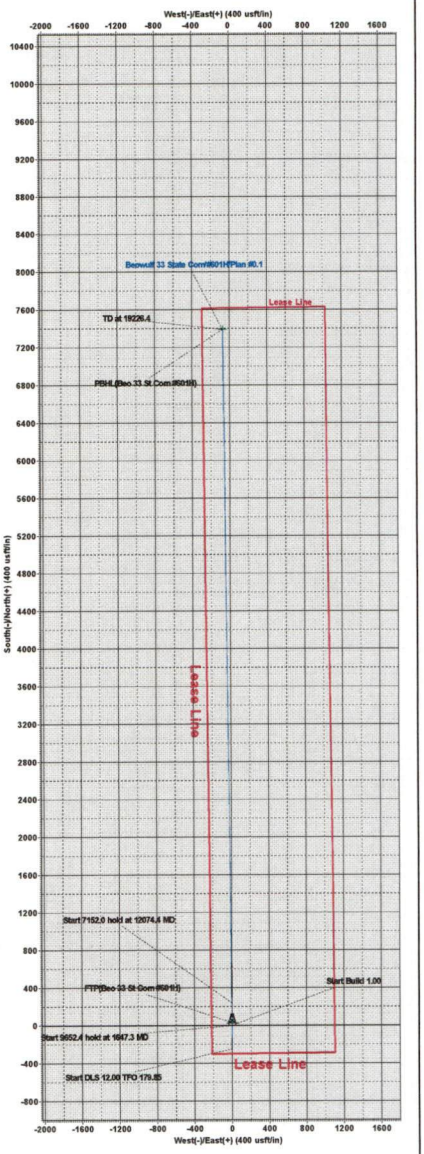
SECTION DETAILS

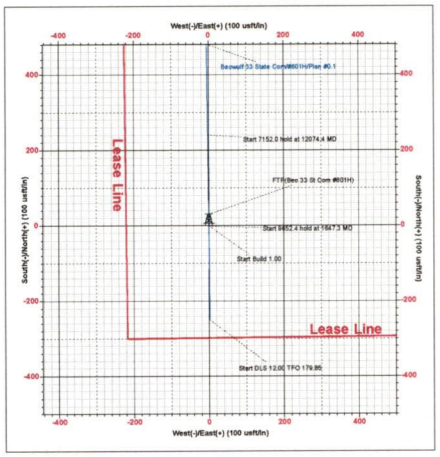
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1500.0	0.00	0.00	1500.0	0.0	0.0	0.00	0.00	0.0	
3	1647.3	1.47	179.59	1647.3	-1.9	0.0	1.00	179.59	-1.9	
4	11299.6	1.47	179.59	11296.4	-250.0	1.8	0.00	0.00	-250.0	
5	12074.4	91.50	359.44	11786.0	239.8	-3.1	12.00	179.85	239.8	
6	19226.4	91.50	359.44	11598.8	7389.0	-73.0	0.00	0.00	7389.4	PBHL(Beo 33 St Com #601H)

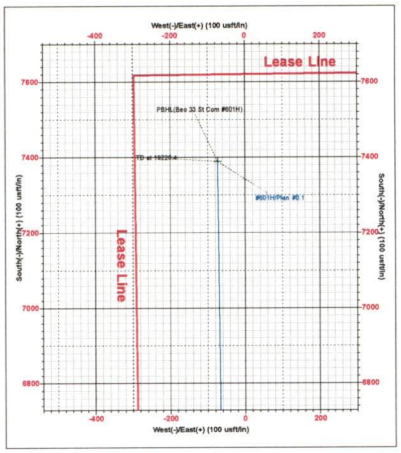


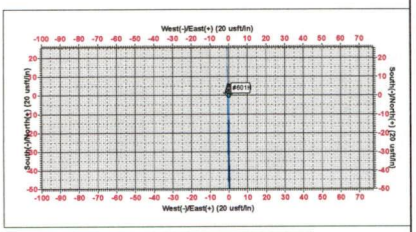
CASING DETAILS
No casing data is available

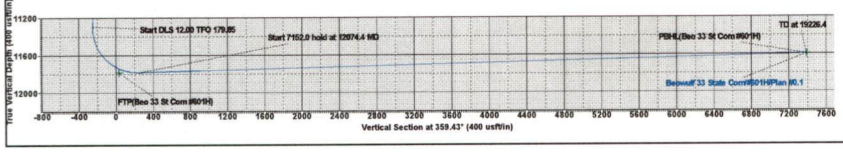
WELLBORE TARGET DETAILS (MAP CO-ORDINATES)					
Name	TVD	+N/-S	+E/-W	Northing	Easting
PBHL(Beo 33 St Com #601H)	11598.8	7389.0	-73.0	465026.00	795999.00
FTP(Beo 33 St Com #601H)	11786.0	30.0	-1.0	457667.00	796071.00

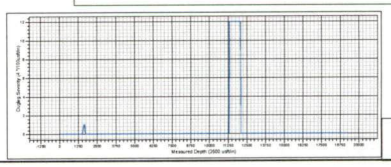












Lea County, NM (NAD 27 NME)
Beowulf 33 State Com
#601H
H&P 621
Plan #0.1
11:35, January 04 2017

EOG Resources - Midland

Lea County, NM (NAD 27 NME)
Beowulf 33 State Com
#601H

OH

Plan: Plan #0.1

Standard Planning Report

04 January, 2017

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well #601H
Company:	EOG Resources - Midland	**TVD Reference:**	KB = 25 @ 3429.0usft (H&P 621)
Project:	Lea County, NM (NAD 27 NME)	**MD Reference:**	KB = 25 @ 3429.0usft (H&P 621)
Site:	Beowulf 33 State Com	**North Reference:**	Grid
Well:	#601H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1		

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	Beowulf 33 State Com				
Site Position:		**Northing:**	457,637.00 usft	**Latitude:**	32° 15' 16.310 N
From:	Map	**Easting:**	796,072.00 usft	**Longitude:**	103° 22' 32.197 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.51 °

Well	#601H					
Well Position	**+N/-S**	0.0 usft	**Northing:**	457,637.00 usft	**Latitude:**	32° 15' 16.310 N
	+E/-W	0.0 usft	**Easting:**	796,072.00 usft	**Longitude:**	103° 22' 32.197 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	0.0 usft	**Ground Level:**	3,404.0 usft

Wellbore	OH			
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2015	1/25/2017	6.91	60.13	48,017

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	359.43

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	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,647.3	1.47	179.59	1,647.3	-1.9	0.0	1.00	1.00	0.00	179.59	
11,299.6	1.47	179.59	11,296.4	-250.0	1.8	0.00	0.00	0.00	0.00	
12,074.4	91.50	359.44	11,786.0	239.8	-3.1	12.00	11.62	23.21	179.85	
19,226.4	91.50	359.44	11,598.8	7,389.0	-73.0	0.00	0.00	0.00	0.00	PBHL(Beo 33 St Com

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well #601H
Company:	EOG Resources - Midland	**TVD Reference:**	KB = 25 @ 3429.0usft (H&P 621)
Project:	Lea County, NM (NAD 27 NME)	**MD Reference:**	KB = 25 @ 3429.0usft (H&P 621)
Site:	Beowulf 33 State Com	**North Reference:**	Grid
Well:	#601H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1		

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	1.00	179.59	1,600.0	-0.9	0.0	-0.9	1.00	1.00	0.00
1,647.3	1.47	179.59	1,647.3	-1.9	0.0	-1.9	1.00	1.00	0.00
1,700.0	1.47	179.59	1,700.0	-3.2	0.0	-3.2	0.00	0.00	0.00
1,800.0	1.47	179.59	1,799.9	-5.8	0.0	-5.8	0.00	0.00	0.00
1,900.0	1.47	179.59	1,899.9	-8.4	0.1	-8.4	0.00	0.00	0.00
2,000.0	1.47	179.59	1,999.9	-11.0	0.1	-11.0	0.00	0.00	0.00
2,100.0	1.47	179.59	2,099.8	-13.5	0.1	-13.5	0.00	0.00	0.00
2,200.0	1.47	179.59	2,199.8	-16.1	0.1	-16.1	0.00	0.00	0.00
2,300.0	1.47	179.59	2,299.8	-18.7	0.1	-18.7	0.00	0.00	0.00
2,400.0	1.47	179.59	2,399.7	-21.2	0.2	-21.2	0.00	0.00	0.00
2,500.0	1.47	179.59	2,499.7	-23.8	0.2	-23.8	0.00	0.00	0.00
2,600.0	1.47	179.59	2,599.7	-26.4	0.2	-26.4	0.00	0.00	0.00
2,700.0	1.47	179.59	2,699.6	-29.0	0.2	-29.0	0.00	0.00	0.00
2,800.0	1.47	179.59	2,799.6	-31.5	0.2	-31.5	0.00	0.00	0.00
2,900.0	1.47	179.59	2,899.6	-34.1	0.2	-34.1	0.00	0.00	0.00
3,000.0	1.47	179.59	2,999.5	-36.7	0.3	-36.7	0.00	0.00	0.00
3,100.0	1.47	179.59	3,099.5	-39.2	0.3	-39.2	0.00	0.00	0.00
3,200.0	1.47	179.59	3,199.5	-41.8	0.3	-41.8	0.00	0.00	0.00
3,300.0	1.47	179.59	3,299.4	-44.4	0.3	-44.4	0.00	0.00	0.00
3,400.0	1.47	179.59	3,399.4	-46.9	0.3	-46.9	0.00	0.00	0.00
3,500.0	1.47	179.59	3,499.4	-49.5	0.4	-49.5	0.00	0.00	0.00
3,600.0	1.47	179.59	3,599.3	-52.1	0.4	-52.1	0.00	0.00	0.00
3,700.0	1.47	179.59	3,699.3	-54.7	0.4	-54.7	0.00	0.00	0.00
3,800.0	1.47	179.59	3,799.3	-57.2	0.4	-57.2	0.00	0.00	0.00
3,900.0	1.47	179.59	3,899.2	-59.8	0.4	-59.8	0.00	0.00	0.00
4,000.0	1.47	179.59	3,999.2	-62.4	0.4	-62.4	0.00	0.00	0.00
4,100.0	1.47	179.59	4,099.2	-64.9	0.5	-64.9	0.00	0.00	0.00
4,200.0	1.47	179.59	4,199.1	-67.5	0.5	-67.5	0.00	0.00	0.00
4,300.0	1.47	179.59	4,299.1	-70.1	0.5	-70.1	0.00	0.00	0.00
4,400.0	1.47	179.59	4,399.1	-72.6	0.5	-72.6	0.00	0.00	0.00
4,500.0	1.47	179.59	4,499.0	-75.2	0.5	-75.2	0.00	0.00	0.00
4,600.0	1.47	179.59	4,599.0	-77.8	0.6	-77.8	0.00	0.00	0.00
4,700.0	1.47	179.59	4,699.0	-80.4	0.6	-80.4	0.00	0.00	0.00
4,800.0	1.47	179.59	4,798.9	-82.9	0.6	-82.9	0.00	0.00	0.00
4,900.0	1.47	179.59	4,898.9	-85.5	0.6	-85.5	0.00	0.00	0.00
5,000.0	1.47	179.59	4,998.9	-88.1	0.6	-88.1	0.00	0.00	0.00
5,100.0	1.47	179.59	5,098.8	-90.6	0.6	-90.6	0.00	0.00	0.00
5,200.0	1.47	179.59	5,198.8	-93.2	0.7	-93.2	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well #601H
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Site:	Beowulf 33 State Com	**North Reference:**	Grid
Well:	#601H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1		

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	1.47	179.59	5,298.8	-95.8	0.7	-95.8	0.00	0.00	0.00
5,400.0	1.47	179.59	5,398.7	-98.3	0.7	-98.4	0.00	0.00	0.00
5,500.0	1.47	179.59	5,498.7	-100.9	0.7	-100.9	0.00	0.00	0.00
5,600.0	1.47	179.59	5,598.7	-103.5	0.7	-103.5	0.00	0.00	0.00
5,700.0	1.47	179.59	5,698.6	-106.1	0.8	-106.1	0.00	0.00	0.00
5,800.0	1.47	179.59	5,798.6	-108.6	0.8	-108.6	0.00	0.00	0.00
5,900.0	1.47	179.59	5,898.6	-111.2	0.8	-111.2	0.00	0.00	0.00
6,000.0	1.47	179.59	5,998.5	-113.8	0.8	-113.8	0.00	0.00	0.00
6,100.0	1.47	179.59	6,098.5	-116.3	0.8	-116.3	0.00	0.00	0.00
6,200.0	1.47	179.59	6,198.5	-118.9	0.8	-118.9	0.00	0.00	0.00
6,300.0	1.47	179.59	6,298.4	-121.5	0.9	-121.5	0.00	0.00	0.00
6,400.0	1.47	179.59	6,398.4	-124.1	0.9	-124.1	0.00	0.00	0.00
6,500.0	1.47	179.59	6,498.4	-126.6	0.9	-126.6	0.00	0.00	0.00
6,600.0	1.47	179.59	6,598.3	-129.2	0.9	-129.2	0.00	0.00	0.00
6,700.0	1.47	179.59	6,698.3	-131.8	0.9	-131.8	0.00	0.00	0.00
6,800.0	1.47	179.59	6,798.3	-134.3	1.0	-134.3	0.00	0.00	0.00
6,900.0	1.47	179.59	6,898.2	-136.9	1.0	-136.9	0.00	0.00	0.00
7,000.0	1.47	179.59	6,998.2	-139.5	1.0	-139.5	0.00	0.00	0.00
7,100.0	1.47	179.59	7,098.2	-142.0	1.0	-142.0	0.00	0.00	0.00
7,200.0	1.47	179.59	7,198.1	-144.6	1.0	-144.6	0.00	0.00	0.00
7,300.0	1.47	179.59	7,298.1	-147.2	1.0	-147.2	0.00	0.00	0.00
7,400.0	1.47	179.59	7,398.1	-149.8	1.1	-149.8	0.00	0.00	0.00
7,500.0	1.47	179.59	7,498.0	-152.3	1.1	-152.3	0.00	0.00	0.00
7,600.0	1.47	179.59	7,598.0	-154.9	1.1	-154.9	0.00	0.00	0.00
7,700.0	1.47	179.59	7,698.0	-157.5	1.1	-157.5	0.00	0.00	0.00
7,800.0	1.47	179.59	7,798.0	-160.0	1.1	-160.0	0.00	0.00	0.00
7,900.0	1.47	179.59	7,897.9	-162.6	1.2	-162.6	0.00	0.00	0.00
8,000.0	1.47	179.59	7,997.9	-165.2	1.2	-165.2	0.00	0.00	0.00
8,100.0	1.47	179.59	8,097.9	-167.7	1.2	-167.8	0.00	0.00	0.00
8,200.0	1.47	179.59	8,197.8	-170.3	1.2	-170.3	0.00	0.00	0.00
8,300.0	1.47	179.59	8,297.8	-172.9	1.2	-172.9	0.00	0.00	0.00
8,400.0	1.47	179.59	8,397.8	-175.5	1.2	-175.5	0.00	0.00	0.00
8,500.0	1.47	179.59	8,497.7	-178.0	1.3	-178.0	0.00	0.00	0.00
8,600.0	1.47	179.59	8,597.7	-180.6	1.3	-180.6	0.00	0.00	0.00
8,700.0	1.47	179.59	8,697.7	-183.2	1.3	-183.2	0.00	0.00	0.00
8,800.0	1.47	179.59	8,797.6	-185.7	1.3	-185.7	0.00	0.00	0.00
8,900.0	1.47	179.59	8,897.6	-188.3	1.3	-188.3	0.00	0.00	0.00
9,000.0	1.47	179.59	8,997.6	-190.9	1.4	-190.9	0.00	0.00	0.00
9,100.0	1.47	179.59	9,097.5	-193.5	1.4	-193.5	0.00	0.00	0.00
9,200.0	1.47	179.59	9,197.5	-196.0	1.4	-196.0	0.00	0.00	0.00
9,300.0	1.47	179.59	9,297.5	-198.6	1.4	-198.6	0.00	0.00	0.00
9,400.0	1.47	179.59	9,397.4	-201.2	1.4	-201.2	0.00	0.00	0.00
9,500.0	1.47	179.59	9,497.4	-203.7	1.4	-203.7	0.00	0.00	0.00
9,600.0	1.47	179.59	9,597.4	-206.3	1.5	-206.3	0.00	0.00	0.00
9,700.0	1.47	179.59	9,697.3	-208.9	1.5	-208.9	0.00	0.00	0.00
9,800.0	1.47	179.59	9,797.3	-211.4	1.5	-211.4	0.00	0.00	0.00
9,900.0	1.47	179.59	9,897.3	-214.0	1.5	-214.0	0.00	0.00	0.00
10,000.0	1.47	179.59	9,997.2	-216.6	1.5	-216.6	0.00	0.00	0.00
10,100.0	1.47	179.59	10,097.2	-219.2	1.6	-219.2	0.00	0.00	0.00
10,200.0	1.47	179.59	10,197.2	-221.7	1.6	-221.7	0.00	0.00	0.00
10,300.0	1.47	179.59	10,297.1	-224.3	1.6	-224.3	0.00	0.00	0.00
10,400.0	1.47	179.59	10,397.1	-226.9	1.6	-226.9	0.00	0.00	0.00
10,500.0	1.47	179.59	10,497.1	-229.4	1.6	-229.4	0.00	0.00	0.00
10,600.0	1.47	179.59	10,597.0	-232.0	1.6	-232.0	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well #601H
Company:	EOG Resources - Midland	**TVD Reference:**	KB = 25 @ 3429.0usft (H&P 621)
Project:	Lea County, NM (NAD 27 NME)	**MD Reference:**	KB = 25 @ 3429.0usft (H&P 621)
Site:	Beowulf 33 State Com	**North Reference:**	Grid
Well:	#601H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1		

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	1.47	179.59	10,697.0	-234.6	1.7	-234.6	0.00	0.00	0.00
10,800.0	1.47	179.59	10,797.0	-237.1	1.7	-237.2	0.00	0.00	0.00
10,900.0	1.47	179.59	10,896.9	-239.7	1.7	-239.7	0.00	0.00	0.00
11,000.0	1.47	179.59	10,996.9	-242.3	1.7	-242.3	0.00	0.00	0.00
11,100.0	1.47	179.59	11,096.9	-244.9	1.7	-244.9	0.00	0.00	0.00
11,200.0	1.47	179.59	11,196.8	-247.4	1.8	-247.4	0.00	0.00	0.00
11,299.6	1.47	179.59	11,296.4	-250.0	1.8	-250.0	0.00	0.00	0.00
11,325.0	1.57	359.29	11,321.8	-250.0	1.8	-250.0	12.00	0.38	708.86
11,350.0	4.57	359.39	11,346.8	-248.6	1.8	-248.6	12.00	12.00	0.38
11,375.0	7.57	359.41	11,371.6	-246.0	1.7	-246.0	12.00	12.00	0.08
11,400.0	10.57	359.42	11,396.3	-242.0	1.7	-242.1	12.00	12.00	0.03
11,425.0	13.57	359.42	11,420.7	-236.8	1.6	-236.8	12.00	12.00	0.02
11,450.0	16.57	359.43	11,444.9	-230.3	1.6	-230.3	12.00	12.00	0.01
11,475.0	19.57	359.43	11,468.6	-222.6	1.5	-222.6	12.00	12.00	0.01
11,500.0	22.57	359.43	11,492.0	-213.6	1.4	-213.6	12.00	12.00	0.01
11,525.0	25.57	359.43	11,514.8	-203.4	1.3	-203.4	12.00	12.00	0.01
11,550.0	28.57	359.43	11,537.0	-192.0	1.2	-192.0	12.00	12.00	0.00
11,575.0	31.57	359.43	11,558.7	-179.5	1.1	-179.5	12.00	12.00	0.00
11,600.0	34.57	359.43	11,579.6	-165.9	0.9	-165.9	12.00	12.00	0.00
11,625.0	37.57	359.43	11,599.8	-151.1	0.8	-151.1	12.00	12.00	0.00
11,650.0	40.57	359.43	11,619.2	-135.4	0.6	-135.4	12.00	12.00	0.00
11,675.0	43.57	359.44	11,637.8	-118.6	0.5	-118.6	12.00	12.00	0.00
11,700.0	46.57	359.44	11,655.5	-100.9	0.3	-100.9	12.00	12.00	0.00
11,725.0	49.57	359.44	11,672.2	-82.3	0.1	-82.3	12.00	12.00	0.00
11,750.0	52.57	359.44	11,687.9	-62.9	-0.1	-62.9	12.00	12.00	0.00
11,775.0	55.57	359.44	11,702.5	-42.7	-0.3	-42.7	12.00	12.00	0.00
11,800.0	58.57	359.44	11,716.1	-21.7	-0.5	-21.7	12.00	12.00	0.00
11,825.0	61.57	359.44	11,728.6	0.0	-0.7	0.0	12.00	12.00	0.00
11,850.0	64.57	359.44	11,739.9	22.3	-0.9	22.3	12.00	12.00	0.00
11,875.0	67.57	359.44	11,750.1	45.1	-1.1	45.1	12.00	12.00	0.00
FTP(Beo 33 St Com #601H)									
11,900.0	70.57	359.44	11,759.0	68.5	-1.4	68.5	12.00	12.00	0.00
11,925.0	73.57	359.44	11,766.7	92.2	-1.6	92.3	12.00	12.00	0.00
11,950.0	76.57	359.44	11,773.1	116.4	-1.8	116.4	12.00	12.00	0.00
11,975.0	79.57	359.44	11,778.3	140.9	-2.1	140.9	12.00	12.00	0.00
12,000.0	82.57	359.44	11,782.2	165.5	-2.3	165.6	12.00	12.00	0.00
12,025.0	85.57	359.44	11,784.8	190.4	-2.6	190.4	12.00	12.00	0.00
12,050.0	88.57	359.44	11,786.0	215.4	-2.8	215.4	12.00	12.00	0.00
12,074.4	91.50	359.44	11,786.0	239.8	-3.1	239.8	12.00	12.00	0.00
12,100.0	91.50	359.44	11,785.3	265.4	-3.3	265.4	0.00	0.00	0.00
12,200.0	91.50	359.44	11,782.7	365.3	-4.3	365.3	0.00	0.00	0.00
12,300.0	91.50	359.44	11,780.1	465.3	-5.3	465.3	0.00	0.00	0.00
12,400.0	91.50	359.44	11,777.5	565.2	-6.2	565.3	0.00	0.00	0.00
12,500.0	91.50	359.44	11,774.9	665.2	-7.2	665.2	0.00	0.00	0.00
12,600.0	91.50	359.44	11,772.3	765.2	-8.2	765.2	0.00	0.00	0.00
12,700.0	91.50	359.44	11,769.6	865.1	-9.2	865.2	0.00	0.00	0.00
12,800.0	91.50	359.44	11,767.0	965.1	-10.1	965.1	0.00	0.00	0.00
12,900.0	91.50	359.44	11,764.4	1,065.0	-11.1	1,065.1	0.00	0.00	0.00
13,000.0	91.50	359.44	11,761.8	1,165.0	-12.1	1,165.1	0.00	0.00	0.00
13,100.0	91.50	359.44	11,759.2	1,265.0	-13.1	1,265.0	0.00	0.00	0.00
13,200.0	91.50	359.44	11,756.6	1,364.9	-14.1	1,365.0	0.00	0.00	0.00
13,300.0	91.50	359.44	11,753.9	1,464.9	-15.0	1,465.0	0.00	0.00	0.00
13,400.0	91.50	359.44	11,751.3	1,564.9	-16.0	1,564.9	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well #601H
Company:	EOG Resources - Midland	**TVD Reference:**	KB = 25 @ 3429.0usft (H&P 621)
Project:	Lea County, NM (NAD 27 NME)	**MD Reference:**	KB = 25 @ 3429.0usft (H&P 621)
Site:	Beowulf 33 State Com	**North Reference:**	Grid
Well:	#601H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1		

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)
13,500.0	91.50	359.44	11,748.7	1,664.8	-17.0	1,664.9	0.00	0.00	0.00
13,600.0	91.50	359.44	11,746.1	1,764.8	-18.0	1,764.9	0.00	0.00	0.00
13,700.0	91.50	359.44	11,743.5	1,864.7	-19.0	1,864.8	0.00	0.00	0.00
13,800.0	91.50	359.44	11,740.8	1,964.7	-19.9	1,964.8	0.00	0.00	0.00
13,900.0	91.50	359.44	11,738.2	2,064.7	-20.9	2,064.8	0.00	0.00	0.00
14,000.0	91.50	359.44	11,735.6	2,164.6	-21.9	2,164.7	0.00	0.00	0.00
14,100.0	91.50	359.44	11,733.0	2,264.6	-22.9	2,264.7	0.00	0.00	0.00
14,200.0	91.50	359.44	11,730.4	2,364.5	-23.8	2,364.7	0.00	0.00	0.00
14,300.0	91.50	359.44	11,727.8	2,464.5	-24.8	2,464.6	0.00	0.00	0.00
14,400.0	91.50	359.44	11,725.1	2,564.5	-25.8	2,564.6	0.00	0.00	0.00
14,500.0	91.50	359.44	11,722.5	2,664.4	-26.8	2,664.6	0.00	0.00	0.00
14,600.0	91.50	359.44	11,719.9	2,764.4	-27.8	2,764.5	0.00	0.00	0.00
14,700.0	91.50	359.44	11,717.3	2,864.3	-28.7	2,864.5	0.00	0.00	0.00
14,800.0	91.50	359.44	11,714.7	2,964.3	-29.7	2,964.5	0.00	0.00	0.00
14,900.0	91.50	359.44	11,712.1	3,064.3	-30.7	3,064.4	0.00	0.00	0.00
15,000.0	91.50	359.44	11,709.4	3,164.2	-31.7	3,164.4	0.00	0.00	0.00
15,100.0	91.50	359.44	11,706.8	3,264.2	-32.6	3,264.4	0.00	0.00	0.00
15,200.0	91.50	359.44	11,704.2	3,364.1	-33.6	3,364.3	0.00	0.00	0.00
15,300.0	91.50	359.44	11,701.6	3,464.1	-34.6	3,464.3	0.00	0.00	0.00
15,400.0	91.50	359.44	11,699.0	3,564.1	-35.6	3,564.2	0.00	0.00	0.00
15,500.0	91.50	359.44	11,696.3	3,664.0	-36.6	3,664.2	0.00	0.00	0.00
15,600.0	91.50	359.44	11,693.7	3,764.0	-37.5	3,764.2	0.00	0.00	0.00
15,700.0	91.50	359.44	11,691.1	3,864.0	-38.5	3,864.1	0.00	0.00	0.00
15,800.0	91.50	359.44	11,688.5	3,963.9	-39.5	3,964.1	0.00	0.00	0.00
15,900.0	91.50	359.44	11,685.9	4,063.9	-40.5	4,064.1	0.00	0.00	0.00
16,000.0	91.50	359.44	11,683.3	4,163.8	-41.4	4,164.0	0.00	0.00	0.00
16,100.0	91.50	359.44	11,680.6	4,263.8	-42.4	4,264.0	0.00	0.00	0.00
16,200.0	91.50	359.44	11,678.0	4,363.8	-43.4	4,364.0	0.00	0.00	0.00
16,300.0	91.50	359.44	11,675.4	4,463.7	-44.4	4,463.9	0.00	0.00	0.00
16,400.0	91.50	359.44	11,672.8	4,563.7	-45.4	4,563.9	0.00	0.00	0.00
16,500.0	91.50	359.44	11,670.2	4,663.6	-46.3	4,663.9	0.00	0.00	0.00
16,600.0	91.50	359.44	11,667.6	4,763.6	-47.3	4,763.8	0.00	0.00	0.00
16,700.0	91.50	359.44	11,664.9	4,863.6	-48.3	4,863.8	0.00	0.00	0.00
16,800.0	91.50	359.44	11,662.3	4,963.5	-49.3	4,963.8	0.00	0.00	0.00
16,900.0	91.50	359.44	11,659.7	5,063.5	-50.2	5,063.7	0.00	0.00	0.00
17,000.0	91.50	359.44	11,657.1	5,163.4	-51.2	5,163.7	0.00	0.00	0.00
17,100.0	91.50	359.44	11,654.5	5,263.4	-52.2	5,263.7	0.00	0.00	0.00
17,200.0	91.50	359.44	11,651.8	5,363.4	-53.2	5,363.6	0.00	0.00	0.00
17,300.0	91.50	359.44	11,649.2	5,463.3	-54.2	5,463.6	0.00	0.00	0.00
17,400.0	91.50	359.44	11,646.6	5,563.3	-55.1	5,563.6	0.00	0.00	0.00
17,500.0	91.50	359.44	11,644.0	5,663.3	-56.1	5,663.5	0.00	0.00	0.00
17,600.0	91.50	359.44	11,641.4	5,763.2	-57.1	5,763.5	0.00	0.00	0.00
17,700.0	91.50	359.44	11,638.8	5,863.2	-58.1	5,863.5	0.00	0.00	0.00
17,800.0	91.50	359.44	11,636.1	5,963.1	-59.0	5,963.4	0.00	0.00	0.00
17,900.0	91.50	359.44	11,633.5	6,063.1	-60.0	6,063.4	0.00	0.00	0.00
18,000.0	91.50	359.44	11,630.9	6,163.1	-61.0	6,163.4	0.00	0.00	0.00
18,100.0	91.50	359.44	11,628.3	6,263.0	-62.0	6,263.3	0.00	0.00	0.00
18,200.0	91.50	359.44	11,625.7	6,363.0	-63.0	6,363.3	0.00	0.00	0.00
18,300.0	91.50	359.44	11,623.1	6,462.9	-63.9	6,463.3	0.00	0.00	0.00
18,400.0	91.50	359.44	11,620.4	6,562.9	-64.9	6,563.2	0.00	0.00	0.00
18,500.0	91.50	359.44	11,617.8	6,662.9	-65.9	6,663.2	0.00	0.00	0.00
18,600.0	91.50	359.44	11,615.2	6,762.8	-66.9	6,763.2	0.00	0.00	0.00
18,700.0	91.50	359.44	11,612.6	6,862.8	-67.9	6,863.1	0.00	0.00	0.00
18,800.0	91.50	359.44	11,610.0	6,962.7	-68.8	6,963.1	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well #601H
Company:	EOG Resources - Midland	**TVD Reference:**	KB = 25 @ 3429.0usft (H&P 621)
Project:	Lea County, NM (NAD 27 NME)	**MD Reference:**	KB = 25 @ 3429.0usft (H&P 621)
Site:	Beowulf 33 State Com	**North Reference:**	Grid
Well:	#601H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1		

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)
18,900.0	91.50	359.44	11,607.3	7,062.7	-69.8	7,063.0	0.00	0.00	0.00
19,000.0	91.50	359.44	11,604.7	7,162.7	-70.8	7,163.0	0.00	0.00	0.00
19,100.0	91.50	359.44	11,602.1	7,262.6	-71.8	7,263.0	0.00	0.00	0.00
19,200.0	91.50	359.44	11,599.5	7,362.6	-72.7	7,362.9	0.00	0.00	0.00
19,226.4	91.50	359.44	11,598.8	7,389.0	-73.0	7,389.4	0.00	0.00	0.00
PBHL(Beo 33 St 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(Beo 33 St Com #6 - plan hits target center - Point	0.00	0.00	11,598.8	7,389.0	-73.0	465,026.00	795,999.00	32° 16' 29.430 N	103° 22' 32.279 W
FTP(Beo 33 St Com #6C - plan misses target center by 39.0usft at 11875.0usft MD (11750.1 TVD, 45.1 N, -1.1 E) - Point	0.00	0.00	11,786.0	30.0	-1.0	457,667.00	796,071.00	32° 15' 16.607 N	103° 22' 32.205 W