

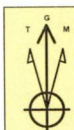
OCD - HOBBS
08/24/2018 30-025-45141
RECEIVED



Lea County, NM (NAD 83 NME)

Hearthrob 17 state #706H

Plan #0.1



Azimuths to Grid North
True North: -0.40°
Magnetic North: 6.44°

Magnetic Field
Strength: 47806.1snT
Dip Angle: 60.03°
Date: 8/23/2018
Model: IGRF2015

To convert a Magnetic Direction to a Grid Direction, Add 6.44°
To convert a Magnetic Direction to a True Direction, Add 6.83° East
To convert a True Direction to a Grid Direction, Subtract 0.40°

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: #706H

KB = 25 @ 3594.0usft 3569.0
Northing 441519.00 Easting 771170.00 Latitude 32° 12' 41.862 N Longitude 103° 35' 24.744 W

SECTION DETAILS

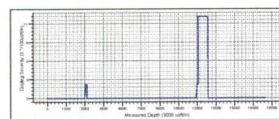
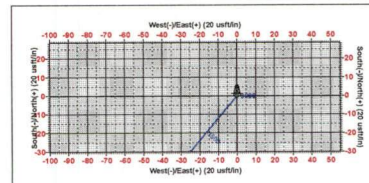
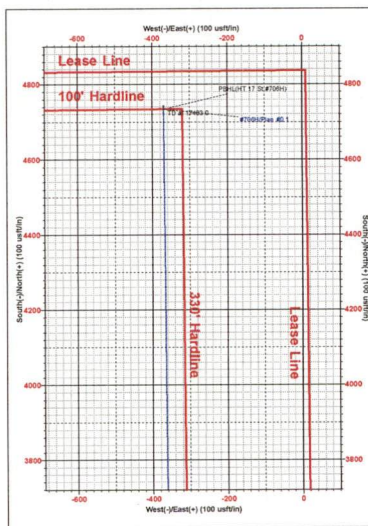
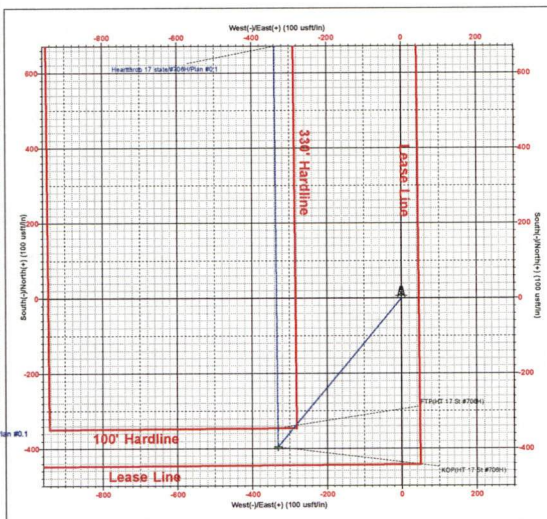
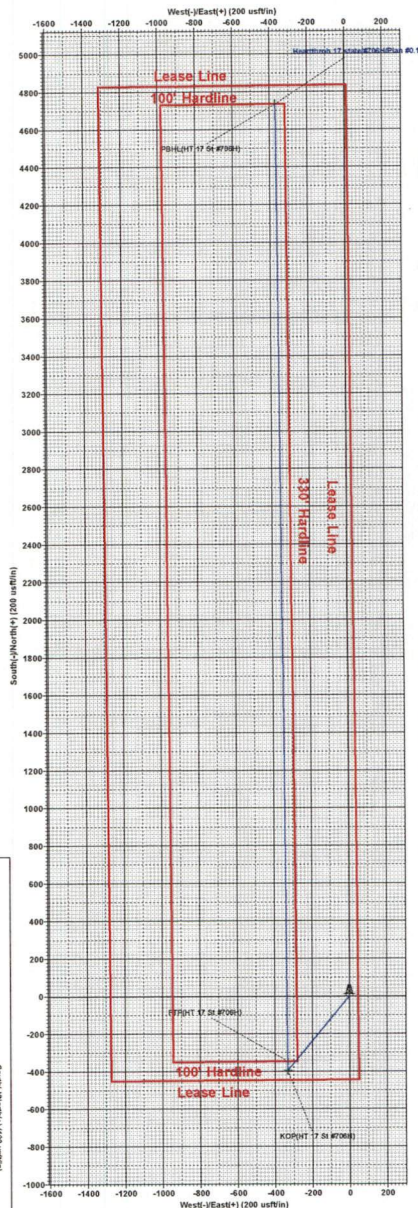
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSecl	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	3000.0	0.00	0.00	3000.0	0.0	0.0	0.00	0.00	0.0	
3	3165.7	3.31	219.96	3165.6	-3.7	-3.1	2.00	219.96	-3.4	
4	11915.6	3.31	219.96	11900.9	-391.3	-327.9	0.00	0.00	-364.7	
5	12081.3	0.00	0.00	12066.5	-395.0	-331.0	2.00	180.00	-368.1	KOP(HT 17 St #706H)
6	12831.3	90.00	359.58	12544.0	82.4	-334.5	12.00	359.58	108.2	
7	17483.0	90.00	359.58	12544.0	4734.0	-369.0	0.00	0.00	4748.4	PBHL(HT 17 St #706H)

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting
KOP(HT 17 St #706H)	12066.5	-395.0	-331.0	441124.00	770839.00
FTP(HT 17 St #706H)	12544.0	-345.0	-331.0	441174.00	770839.00
PBHL(HT 17 St #706H)	12544.0	4734.0	-369.0	446253.00	770801.00



Lea County, NM (NAD 83 NME)
Hearthrob 17 state #706H
Plan #0.1
8/23/2018



EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Heartthrob 17 state

#706H

OH

Plan: Plan #0.1

Standard Planning Report

23 August, 2018

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #706H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25 @ 3594.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25 @ 3594.0usft
Site:	Heartthrob 17 state	North Reference:	Grid
Well:	#706H	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	Heartthrob 17 state				
Site Position:		Northing:	441,886.00 usft	Latitude:	32° 12' 45.730 N
From:	Map	Easting:	767,698.00 usft	Longitude:	103° 36' 5.126 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.39 °

Well	#706H					
Well Position	+N/-S	-367.0 usft	Northing:	441,519.00 usft	Latitude:	32° 12' 41.862 N
	+E/-W	3,472.0 usft	Easting:	771,170.00 usft	Longitude:	103° 35' 24.744 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	3,569.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	8/23/2018	6.83	60.03	47,806.07192692

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	355.54

Plan Survey Tool Program	Date 8/23/2018			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	17,483.0 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	
3,165.7	3.31	219.96	3,165.6	-3.7	-3.1	2.00	2.00	0.00	219.96	
11,915.6	3.31	219.96	11,900.9	-391.3	-327.9	0.00	0.00	0.00	0.00	
12,081.3	0.00	0.01	12,066.5	-395.0	-331.0	2.00	-2.00	0.00	180.00	KOP(HT 17 St #706H
12,831.3	90.00	359.58	12,544.0	82.4	-334.5	12.00	12.00	-0.06	359.58	
17,483.0	90.00	359.58	12,544.0	4,734.0	-369.0	0.00	0.00	0.00	0.00	PBHL(HT 17 St #706H

Database: EDM 5000.14
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Heartthrob 17 state
Well: #706H
Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Well #706H
KB = 25 @ 3594.0usft
KB = 25 @ 3594.0usft
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)
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	2.00	219.96	3,100.0	-1.3	-1.1	-1.2	2.00	2.00	0.00
3,165.7	3.31	219.96	3,165.6	-3.7	-3.1	-3.4	2.00	2.00	0.00
3,200.0	3.31	219.96	3,199.9	-5.2	-4.4	-4.8	0.00	0.00	0.00
3,300.0	3.31	219.96	3,299.7	-9.6	-8.1	-9.0	0.00	0.00	0.00
3,400.0	3.31	219.96	3,399.5	-14.1	-11.8	-13.1	0.00	0.00	0.00
3,500.0	3.31	219.96	3,499.3	-18.5	-15.5	-17.2	0.00	0.00	0.00
3,600.0	3.31	219.96	3,599.2	-22.9	-19.2	-21.4	0.00	0.00	0.00
3,700.0	3.31	219.96	3,699.0	-27.3	-22.9	-25.5	0.00	0.00	0.00
3,800.0	3.31	219.96	3,798.8	-31.8	-26.6	-29.6	0.00	0.00	0.00
3,900.0	3.31	219.96	3,898.7	-36.2	-30.3	-33.7	0.00	0.00	0.00
4,000.0	3.31	219.96	3,998.5	-40.6	-34.1	-37.9	0.00	0.00	0.00
4,100.0	3.31	219.96	4,098.3	-45.1	-37.8	-42.0	0.00	0.00	0.00
4,200.0	3.31	219.96	4,198.2	-49.5	-41.5	-46.1	0.00	0.00	0.00
4,300.0	3.31	219.96	4,298.0	-53.9	-45.2	-50.3	0.00	0.00	0.00
4,400.0	3.31	219.96	4,397.8	-58.4	-48.9	-54.4	0.00	0.00	0.00
4,500.0	3.31	219.96	4,497.7	-62.8	-52.6	-58.5	0.00	0.00	0.00
4,600.0	3.31	219.96	4,597.5	-67.2	-56.3	-62.6	0.00	0.00	0.00
4,700.0	3.31	219.96	4,697.3	-71.6	-60.0	-66.8	0.00	0.00	0.00
4,800.0	3.31	219.96	4,797.2	-76.1	-63.8	-70.9	0.00	0.00	0.00
4,900.0	3.31	219.96	4,897.0	-80.5	-67.5	-75.0	0.00	0.00	0.00
5,000.0	3.31	219.96	4,996.8	-84.9	-71.2	-79.2	0.00	0.00	0.00
5,100.0	3.31	219.96	5,096.7	-89.4	-74.9	-83.3	0.00	0.00	0.00
5,200.0	3.31	219.96	5,196.5	-93.8	-78.6	-87.4	0.00	0.00	0.00

Database: EDM 5000.14
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Heartthrob 17 state
Well: #706H
Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Well #706H
KB = 25 @ 3594.0usft
KB = 25 @ 3594.0usft
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)
5,300.0	3.31	219.96	5,296.3	-98.2	-82.3	-91.5	0.00	0.00	0.00
5,400.0	3.31	219.96	5,396.2	-102.7	-86.0	-95.7	0.00	0.00	0.00
5,500.0	3.31	219.96	5,496.0	-107.1	-89.7	-99.8	0.00	0.00	0.00
5,600.0	3.31	219.96	5,595.8	-111.5	-93.5	-103.9	0.00	0.00	0.00
5,700.0	3.31	219.96	5,695.7	-116.0	-97.2	-108.1	0.00	0.00	0.00
5,800.0	3.31	219.96	5,795.5	-120.4	-100.9	-112.2	0.00	0.00	0.00
5,900.0	3.31	219.96	5,895.3	-124.8	-104.6	-116.3	0.00	0.00	0.00
6,000.0	3.31	219.96	5,995.2	-129.2	-108.3	-120.4	0.00	0.00	0.00
6,100.0	3.31	219.96	6,095.0	-133.7	-112.0	-124.6	0.00	0.00	0.00
6,200.0	3.31	219.96	6,194.8	-138.1	-115.7	-128.7	0.00	0.00	0.00
6,300.0	3.31	219.96	6,294.7	-142.5	-119.4	-132.8	0.00	0.00	0.00
6,400.0	3.31	219.96	6,394.5	-147.0	-123.2	-136.9	0.00	0.00	0.00
6,500.0	3.31	219.96	6,494.3	-151.4	-126.9	-141.1	0.00	0.00	0.00
6,600.0	3.31	219.96	6,594.2	-155.8	-130.6	-145.2	0.00	0.00	0.00
6,700.0	3.31	219.96	6,694.0	-160.3	-134.3	-149.3	0.00	0.00	0.00
6,800.0	3.31	219.96	6,793.8	-164.7	-138.0	-153.5	0.00	0.00	0.00
6,900.0	3.31	219.96	6,893.7	-169.1	-141.7	-157.6	0.00	0.00	0.00
7,000.0	3.31	219.96	6,993.5	-173.5	-145.4	-161.7	0.00	0.00	0.00
7,100.0	3.31	219.96	7,093.3	-178.0	-149.1	-165.8	0.00	0.00	0.00
7,200.0	3.31	219.96	7,193.2	-182.4	-152.9	-170.0	0.00	0.00	0.00
7,300.0	3.31	219.96	7,293.0	-186.8	-156.6	-174.1	0.00	0.00	0.00
7,400.0	3.31	219.96	7,392.8	-191.3	-160.3	-178.2	0.00	0.00	0.00
7,500.0	3.31	219.96	7,492.7	-195.7	-164.0	-182.4	0.00	0.00	0.00
7,600.0	3.31	219.96	7,592.5	-200.1	-167.7	-186.5	0.00	0.00	0.00
7,700.0	3.31	219.96	7,692.3	-204.6	-171.4	-190.6	0.00	0.00	0.00
7,800.0	3.31	219.96	7,792.2	-209.0	-175.1	-194.7	0.00	0.00	0.00
7,900.0	3.31	219.96	7,892.0	-213.4	-178.8	-198.9	0.00	0.00	0.00
8,000.0	3.31	219.96	7,991.8	-217.9	-182.6	-203.0	0.00	0.00	0.00
8,100.0	3.31	219.96	8,091.7	-222.3	-186.3	-207.1	0.00	0.00	0.00
8,200.0	3.31	219.96	8,191.5	-226.7	-190.0	-211.3	0.00	0.00	0.00
8,300.0	3.31	219.96	8,291.3	-231.1	-193.7	-215.4	0.00	0.00	0.00
8,400.0	3.31	219.96	8,391.2	-235.6	-197.4	-219.5	0.00	0.00	0.00
8,500.0	3.31	219.96	8,491.0	-240.0	-201.1	-223.6	0.00	0.00	0.00
8,600.0	3.31	219.96	8,590.8	-244.4	-204.8	-227.8	0.00	0.00	0.00
8,700.0	3.31	219.96	8,690.7	-248.9	-208.5	-231.9	0.00	0.00	0.00
8,800.0	3.31	219.96	8,790.5	-253.3	-212.3	-236.0	0.00	0.00	0.00
8,900.0	3.31	219.96	8,890.3	-257.7	-216.0	-240.2	0.00	0.00	0.00
9,000.0	3.31	219.96	8,990.2	-262.2	-219.7	-244.3	0.00	0.00	0.00
9,100.0	3.31	219.96	9,090.0	-266.6	-223.4	-248.4	0.00	0.00	0.00
9,200.0	3.31	219.96	9,189.8	-271.0	-227.1	-252.5	0.00	0.00	0.00
9,300.0	3.31	219.96	9,289.7	-275.4	-230.8	-256.7	0.00	0.00	0.00
9,400.0	3.31	219.96	9,389.5	-279.9	-234.5	-260.8	0.00	0.00	0.00
9,500.0	3.31	219.96	9,489.3	-284.3	-238.2	-264.9	0.00	0.00	0.00
9,600.0	3.31	219.96	9,589.1	-288.7	-242.0	-269.1	0.00	0.00	0.00
9,700.0	3.31	219.96	9,689.0	-293.2	-245.7	-273.2	0.00	0.00	0.00
9,800.0	3.31	219.96	9,788.8	-297.6	-249.4	-277.3	0.00	0.00	0.00
9,900.0	3.31	219.96	9,888.6	-302.0	-253.1	-281.4	0.00	0.00	0.00
10,000.0	3.31	219.96	9,988.5	-306.5	-256.8	-285.6	0.00	0.00	0.00
10,100.0	3.31	219.96	10,088.3	-310.9	-260.5	-289.7	0.00	0.00	0.00
10,200.0	3.31	219.96	10,188.1	-315.3	-264.2	-293.8	0.00	0.00	0.00
10,300.0	3.31	219.96	10,288.0	-319.7	-267.9	-298.0	0.00	0.00	0.00
10,400.0	3.31	219.96	10,387.8	-324.2	-271.7	-302.1	0.00	0.00	0.00
10,500.0	3.31	219.96	10,487.6	-328.6	-275.4	-306.2	0.00	0.00	0.00
10,600.0	3.31	219.96	10,587.5	-333.0	-279.1	-310.3	0.00	0.00	0.00

Database: EDM 5000.14
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Heartthrob 17 state
Well: #706H
Wellbore: OH
Design: Plan #0.1

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

Well #706H
KB = 25 @ 3594.0usft
KB = 25 @ 3594.0usft
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	3.31	219.96	10,687.3	-337.5	-282.8	-314.5	0.00	0.00	0.00
10,800.0	3.31	219.96	10,787.1	-341.9	-286.5	-318.6	0.00	0.00	0.00
10,900.0	3.31	219.96	10,887.0	-346.3	-290.2	-322.7	0.00	0.00	0.00
11,000.0	3.31	219.96	10,986.8	-350.8	-293.9	-326.9	0.00	0.00	0.00
11,100.0	3.31	219.96	11,086.6	-355.2	-297.6	-331.0	0.00	0.00	0.00
11,200.0	3.31	219.96	11,186.5	-359.6	-301.4	-335.1	0.00	0.00	0.00
11,300.0	3.31	219.96	11,286.3	-364.1	-305.1	-339.2	0.00	0.00	0.00
11,400.0	3.31	219.96	11,386.1	-368.5	-308.8	-343.4	0.00	0.00	0.00
11,500.0	3.31	219.96	11,486.0	-372.9	-312.5	-347.5	0.00	0.00	0.00
11,600.0	3.31	219.96	11,585.8	-377.3	-316.2	-351.6	0.00	0.00	0.00
11,700.0	3.31	219.96	11,685.6	-381.8	-319.9	-355.8	0.00	0.00	0.00
11,800.0	3.31	219.96	11,785.5	-386.2	-323.6	-359.9	0.00	0.00	0.00
11,900.0	3.31	219.96	11,885.3	-390.6	-327.3	-364.0	0.00	0.00	0.00
11,915.6	3.31	219.96	11,900.9	-391.3	-327.9	-364.7	0.00	0.00	0.00
12,000.0	1.63	219.96	11,985.2	-394.1	-330.3	-367.3	2.00	-2.00	0.00
12,081.3	0.00	0.01	12,066.5	-395.0	-331.0	-368.1	2.00	-2.00	0.00
KOP(HT 17 St #706H)									
12,100.0	2.24	359.58	12,085.2	-394.6	-331.0	-367.7	12.00	12.00	0.00
12,125.0	5.24	359.58	12,110.1	-393.0	-331.0	-366.1	12.00	12.00	0.00
12,150.0	8.24	359.58	12,134.9	-390.1	-331.0	-363.2	12.00	12.00	0.00
12,175.0	11.24	359.58	12,159.6	-385.8	-331.1	-358.9	12.00	12.00	0.00
12,200.0	14.24	359.58	12,184.0	-380.3	-331.1	-353.4	12.00	12.00	0.00
12,225.0	17.24	359.58	12,208.0	-373.5	-331.2	-346.7	12.00	12.00	0.00
12,250.0	20.24	359.58	12,231.7	-365.5	-331.2	-338.7	12.00	12.00	0.00
12,275.0	23.24	359.58	12,254.9	-356.3	-331.3	-329.4	12.00	12.00	0.00
12,300.0	26.24	359.58	12,277.6	-345.8	-331.4	-319.0	12.00	12.00	0.00
12,325.0	29.24	359.58	12,299.7	-334.2	-331.5	-307.4	12.00	12.00	0.00
12,350.0	32.24	359.58	12,321.2	-321.4	-331.5	-294.6	12.00	12.00	0.00
12,375.0	35.24	359.58	12,342.0	-307.5	-331.6	-280.8	12.00	12.00	0.00
12,400.0	38.24	359.58	12,362.0	-292.5	-331.8	-265.9	12.00	12.00	0.00
12,425.0	41.24	359.58	12,381.3	-276.6	-331.9	-249.9	12.00	12.00	0.00
12,450.0	44.24	359.58	12,399.6	-259.6	-332.0	-233.0	12.00	12.00	0.00
12,475.0	47.24	359.58	12,417.1	-241.7	-332.1	-215.1	12.00	12.00	0.00
12,481.0	47.97	359.58	12,421.1	-237.2	-332.2	-210.7	12.00	12.00	0.00
FTP(HT 17 St #706H)									
12,500.0	50.24	359.58	12,433.6	-222.9	-332.3	-196.4	12.00	12.00	0.00
12,525.0	53.24	359.58	12,449.0	-203.3	-332.4	-176.8	12.00	12.00	0.00
12,550.0	56.24	359.58	12,463.5	-182.9	-332.6	-156.5	12.00	12.00	0.00
12,575.0	59.24	359.58	12,476.8	-161.7	-332.7	-135.4	12.00	12.00	0.00
12,600.0	62.24	359.58	12,489.0	-139.9	-332.9	-113.6	12.00	12.00	0.00
12,625.0	65.24	359.58	12,500.1	-117.5	-333.1	-91.3	12.00	12.00	0.00
12,650.0	68.24	359.58	12,509.9	-94.5	-333.2	-68.4	12.00	12.00	0.00
12,675.0	71.24	359.58	12,518.6	-71.1	-333.4	-45.0	12.00	12.00	0.00
12,700.0	74.24	359.58	12,526.0	-47.2	-333.6	-21.1	12.00	12.00	0.00
12,725.0	77.24	359.58	12,532.2	-23.0	-333.8	3.0	12.00	12.00	0.00
12,750.0	80.24	359.58	12,537.1	1.5	-333.9	27.5	12.00	12.00	0.00
12,775.0	83.24	359.58	12,540.6	26.3	-334.1	52.2	12.00	12.00	0.00
12,800.0	86.24	359.58	12,542.9	51.2	-334.3	77.0	12.00	12.00	0.00
12,825.0	89.24	359.58	12,543.9	76.1	-334.5	101.9	12.00	12.00	0.00
12,831.3	90.00	359.58	12,544.0	82.4	-334.5	108.2	12.00	12.00	0.00
12,900.0	90.00	359.58	12,544.0	151.1	-335.0	176.7	0.00	0.00	0.00
13,000.0	90.00	359.58	12,544.0	251.1	-335.8	276.5	0.00	0.00	0.00
13,100.0	90.00	359.58	12,544.0	351.1	-336.5	376.2	0.00	0.00	0.00
13,200.0	90.00	359.58	12,544.0	451.1	-337.3	476.0	0.00	0.00	0.00

Database: EDM 5000.14
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Heartthrob 17 state
Well: #706H
Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Well #706H
KB = 25 @ 3594.0usft
KB = 25 @ 3594.0usft
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)
13,300.0	90.00	359.58	12,544.0	551.1	-338.0	575.7	0.00	0.00	0.00
13,400.0	90.00	359.58	12,544.0	651.1	-338.8	675.5	0.00	0.00	0.00
13,500.0	90.00	359.58	12,544.0	751.1	-339.5	775.2	0.00	0.00	0.00
13,600.0	90.00	359.58	12,544.0	851.1	-340.2	875.0	0.00	0.00	0.00
13,700.0	90.00	359.58	12,544.0	951.1	-341.0	974.7	0.00	0.00	0.00
13,800.0	90.00	359.58	12,544.0	1,051.1	-341.7	1,074.5	0.00	0.00	0.00
13,900.0	90.00	359.58	12,544.0	1,151.1	-342.5	1,174.2	0.00	0.00	0.00
14,000.0	90.00	359.58	12,544.0	1,251.1	-343.2	1,274.0	0.00	0.00	0.00
14,100.0	90.00	359.58	12,544.0	1,351.1	-343.9	1,373.7	0.00	0.00	0.00
14,200.0	90.00	359.58	12,544.0	1,451.1	-344.7	1,473.5	0.00	0.00	0.00
14,300.0	90.00	359.58	12,544.0	1,551.1	-345.4	1,573.2	0.00	0.00	0.00
14,400.0	90.00	359.58	12,544.0	1,651.1	-346.2	1,673.0	0.00	0.00	0.00
14,500.0	90.00	359.58	12,544.0	1,751.1	-346.9	1,772.8	0.00	0.00	0.00
14,600.0	90.00	359.58	12,544.0	1,851.1	-347.6	1,872.5	0.00	0.00	0.00
14,700.0	90.00	359.58	12,544.0	1,951.1	-348.4	1,972.3	0.00	0.00	0.00
14,800.0	90.00	359.58	12,544.0	2,051.1	-349.1	2,072.0	0.00	0.00	0.00
14,900.0	90.00	359.58	12,544.0	2,151.1	-349.9	2,171.8	0.00	0.00	0.00
15,000.0	90.00	359.58	12,544.0	2,251.1	-350.6	2,271.5	0.00	0.00	0.00
15,100.0	90.00	359.58	12,544.0	2,351.1	-351.3	2,371.3	0.00	0.00	0.00
15,200.0	90.00	359.58	12,544.0	2,451.1	-352.1	2,471.0	0.00	0.00	0.00
15,300.0	90.00	359.58	12,544.0	2,551.1	-352.8	2,570.8	0.00	0.00	0.00
15,400.0	90.00	359.58	12,544.0	2,651.1	-353.6	2,670.5	0.00	0.00	0.00
15,500.0	90.00	359.58	12,544.0	2,751.1	-354.3	2,770.3	0.00	0.00	0.00
15,600.0	90.00	359.58	12,544.0	2,851.1	-355.0	2,870.0	0.00	0.00	0.00
15,700.0	90.00	359.58	12,544.0	2,951.1	-355.8	2,969.8	0.00	0.00	0.00
15,800.0	90.00	359.58	12,544.0	3,051.1	-356.5	3,069.5	0.00	0.00	0.00
15,900.0	90.00	359.58	12,544.0	3,151.1	-357.3	3,169.3	0.00	0.00	0.00
16,000.0	90.00	359.58	12,544.0	3,251.1	-358.0	3,269.0	0.00	0.00	0.00
16,100.0	90.00	359.58	12,544.0	3,351.0	-358.8	3,368.8	0.00	0.00	0.00
16,200.0	90.00	359.58	12,544.0	3,451.0	-359.5	3,468.5	0.00	0.00	0.00
16,300.0	90.00	359.58	12,544.0	3,551.0	-360.2	3,568.3	0.00	0.00	0.00
16,400.0	90.00	359.58	12,544.0	3,651.0	-361.0	3,668.1	0.00	0.00	0.00
16,500.0	90.00	359.58	12,544.0	3,751.0	-361.7	3,767.8	0.00	0.00	0.00
16,600.0	90.00	359.58	12,544.0	3,851.0	-362.5	3,867.6	0.00	0.00	0.00
16,700.0	90.00	359.58	12,544.0	3,951.0	-363.2	3,967.3	0.00	0.00	0.00
16,800.0	90.00	359.58	12,544.0	4,051.0	-363.9	4,067.1	0.00	0.00	0.00
16,900.0	90.00	359.58	12,544.0	4,151.0	-364.7	4,166.8	0.00	0.00	0.00
17,000.0	90.00	359.58	12,544.0	4,251.0	-365.4	4,266.6	0.00	0.00	0.00
17,100.0	90.00	359.58	12,544.0	4,351.0	-366.2	4,366.3	0.00	0.00	0.00
17,200.0	90.00	359.58	12,544.0	4,451.0	-366.9	4,466.1	0.00	0.00	0.00
17,300.0	90.00	359.58	12,544.0	4,551.0	-367.6	4,565.8	0.00	0.00	0.00
17,400.0	90.00	359.58	12,544.0	4,651.0	-368.4	4,665.6	0.00	0.00	0.00
17,483.0	90.00	359.58	12,544.0	4,734.0	-369.0	4,748.4	0.00	0.00	0.00

PBHL(HT 17 St #706H)

Database: EDM 5000.14
 Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Heartthrob 17 state
 Well: #706H
 Wellbore: OH
 Design: Plan #0.1

Local Co-ordinate Reference:
 TVD Reference: KB = 25 @ 3594.0usft
 MD Reference: KB = 25 @ 3594.0usft
 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
KOP(HT 17 St #706H) - plan hits target center - Point	0.00	0.01	12,066.5	-395.0	-331.0	441,124.00	770,839.00	32° 12' 37.976 N	103° 35' 28.629 W
FTP(HT 17 St #706H) - plan misses target center by 163.4usft at 12481.0usft MD (12421.1 TVD, -237.2 N, -332.2 E) - Point	0.00	0.01	12,544.0	-345.0	-331.0	441,174.00	770,839.00	32° 12' 38.471 N	103° 35' 28.624 W
PBHL(HT 17 St #706H) - plan hits target center - Point	0.00	0.01	12,544.0	4,734.0	-369.0	446,253.00	770,801.00	32° 13' 28.732 N	103° 35' 28.659 W