Form 3160-5
(June 2015)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Carlsbad Field Office
OCD Hobbs

FORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on page 2

5. Lease Serial No.
NMNM02965A

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.
THOR 21 FED COM 707H

2. Name of Operator
EOG RESOURCES INCORPORATED

Contact: STAN WAGNER
E-Mail: stan_wagner@eogresources.com

9. API Well No.
30-025-43684-00-X1

3a. Address
MIDLAND, TX 79702

3b. Phone No. (include area code)
Ph: 432-686-3689

10. Field and Pool or Exploratory Area
WC025G09S263327G-UP WOLFCAMP

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 21 T26S R33E SWSE 370FSL 1639FEL

11. County or Parish, State
LEA COUNTY, NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other Change to Original APD
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

EOG Resources requests an amendment to our approved APD for this well to reflect a change in TVD.

Changed TVD from 12415' to 12265'. New directional plan attached.

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #372895 verified by the BLM Well Information System
For EOG RESOURCES INCORPORATED, sent to the Hobbs
Committed to AFMSS for processing by DEBORAH MCKINNEY on 04/18/2017 (17DLM0867SE)

Name *(Printed/Typed)* STAN WAGNER — Title REGULATORY ANALYST

Signature (Electronic Submission) — Date 04/13/2017

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By CHARLES NIMMER — Title PETROLEUM ENGINEER — Date 04/18/2017

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office Hobbs

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

eog resources

Lea County, NM (NAD 27 NME)

Thor 21 Fed Com #707H

Plan #0.3

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: -0.40°
Magnetic North: 6.61°

Magnetic Field
Strength: 47892.1snT
Dip Angle: 59.89°
Date: 10/1/2016
Model: IGRF2015

To convert a Magnetic Direction to a Grid Direction, Add 6.61°
To convert a Magnetic Direction to a True Direction, Add 7.02° East
To convert a True Direction to a Grid Direction, Subtract 0.40°

WELL DETAILS: #707H

Ground Level: 3252.0
KB @ 3277.0usft

Northing	Easting	Latitude	Longitude
372781.00	735478.00	32° 1' 21.407 N	103° 34' 24.734 W

SECTION DETAILS

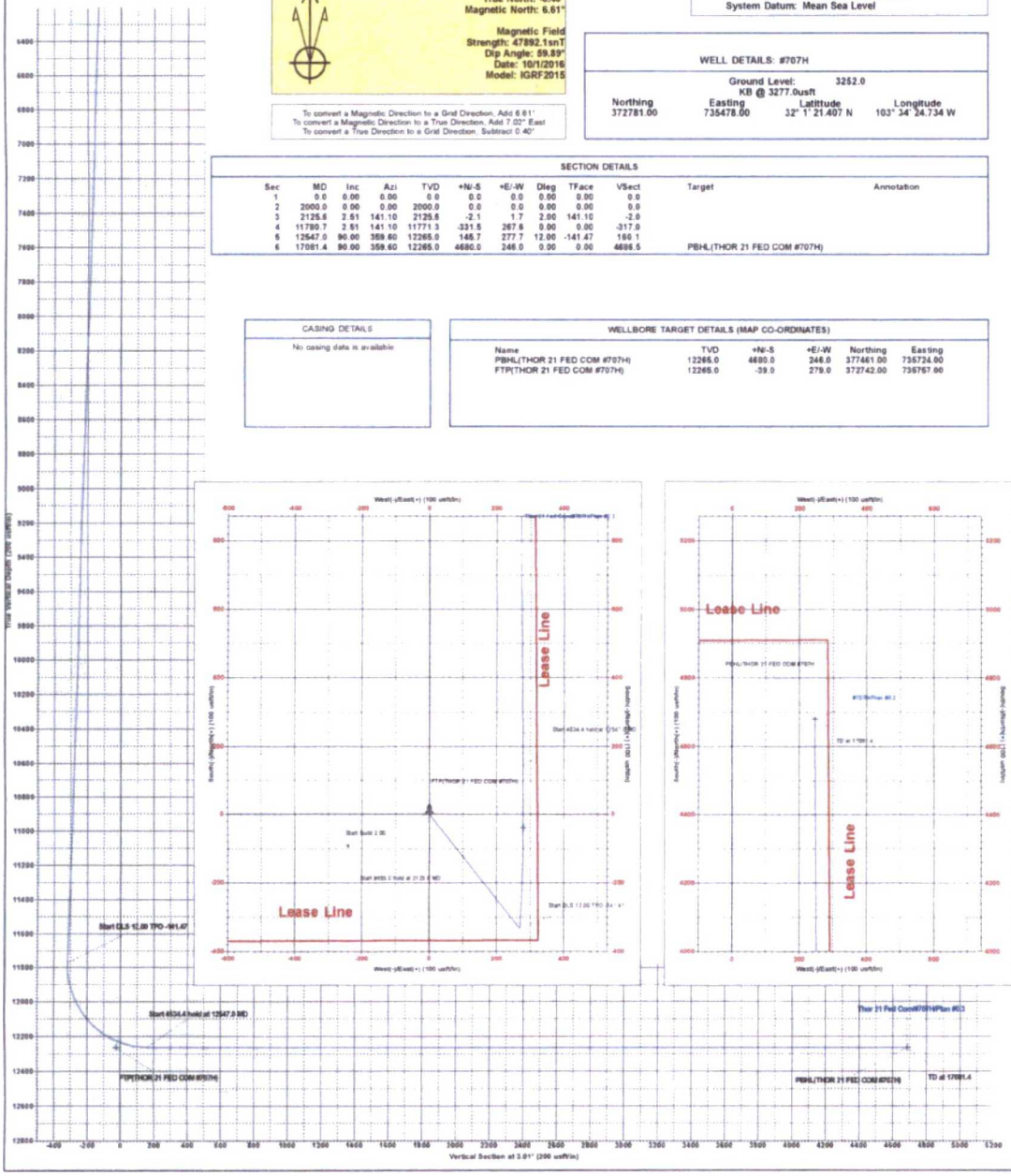
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target	Annotation
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0		
2	2000.0	0.00	0.00	2000.0	0.0	0.0	0.00	0.00	0.0		
3	2125.6	2.51	141.10	2125.5	-2.1	1.7	2.00	141.10	-2.0		
4	11780.7	2.51	141.10	11771.3	-331.5	267.6	0.00	0.00	-317.0		
5	12547.0	90.00	359.60	12265.0	148.7	277.7	12.00	-141.47	166.1		
6	17081.4	90.00	359.60	12265.0	4680.0	246.0	0.00	0.00	4686.5	PBHL(THOR 21 FED COM #707H)	

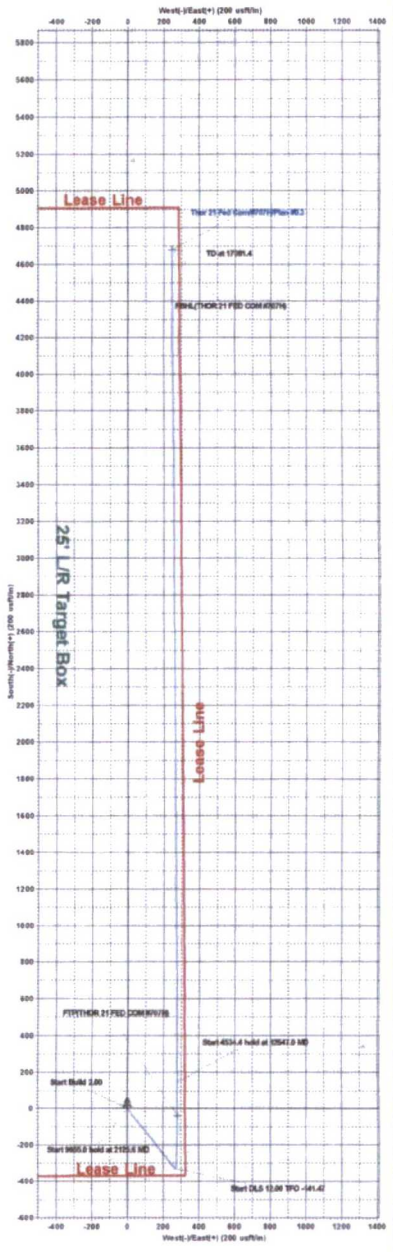
CASING DETAILS

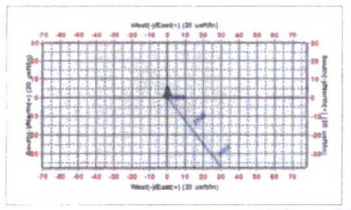
No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting
PBHL(THOR 21 FED COM #707H)	12265.0	4680.0	246.0	377461.00	735724.00
FTP(THOR 21 FED COM #707H)	12265.0	-39.0	279.0	372742.00	736767.00







Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well #707H
Company:	EOG Resources - Midland	**TVD Reference:**	KB @ 3277.0usft
Project:	Lea County, NM (NAD 27 NME)	**MD Reference:**	KB @ 3277.0usft
Site:	Thor 21 Fed Com	**North Reference:**	Grid
Well:	#707H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.3		

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	Thor 21 Fed Com				
Site Position:		**Northing:**	372,581.00 usft	**Latitude:**	32° 1' 19.428 N
From:	Map	**Easting:**	735,478.00 usft	**Longitude:**	103° 34' 24.750 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.40 °

Well	#707H					
Well Position	**+N/-S**	200.0 usft	**Northing:**	372,781.00 usft	**Latitude:**	32° 1' 21.407 N
	+E/-W	0.0 usft	**Easting:**	735,478.00 usft	**Longitude:**	103° 34' 24.734 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	0.0 usft	**Ground Level:**	3,252.0 usft

Wellbore	OH			
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2015	10/1/2016	7.02	59.89	47,892

Design	Plan #0.3				
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	3.01	

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	
2,125.6	2.51	141.10	2,125.6	-2.1	1.7	2.00	2.00	0.00	141.10	
11,780.7	2.51	141.10	11,771.3	-331.5	267.6	0.00	0.00	0.00	0.00	
12,547.0	90.00	359.60	12,265.0	145.7	277.7	12.00	11.42	-18.46	-141.47	
17,081.4	90.00	359.60	12,265.0	4,680.0	246.0	0.00	0.00	0.00	0.00	PBHL(THOR 21 FED

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well #707H
Company:	EOG Resources - Midland	**TVD Reference:**	KB @ 3277.0usft
Project:	Lea County, NM (NAD 27 NME)	**MD Reference:**	KB @ 3277.0usft
Site:	Thor 21 Fed Com	**North Reference:**	Grid
Well:	#707H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.3		

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	2.51	141.10	5,296.9	-110.4	89.1	-105.6	0.00	0.00	0.00
5,400.0	2.51	141.10	5,396.8	-113.9	91.9	-108.9	0.00	0.00	0.00
5,500.0	2.51	141.10	5,496.7	-117.3	94.6	-112.1	0.00	0.00	0.00
5,600.0	2.51	141.10	5,596.6	-120.7	97.4	-115.4	0.00	0.00	0.00
5,700.0	2.51	141.10	5,696.5	-124.1	100.1	-118.7	0.00	0.00	0.00
5,800.0	2.51	141.10	5,796.4	-127.5	102.9	-121.9	0.00	0.00	0.00
5,900.0	2.51	141.10	5,896.3	-130.9	105.6	-125.2	0.00	0.00	0.00
6,000.0	2.51	141.10	5,996.2	-134.3	108.4	-128.4	0.00	0.00	0.00
6,100.0	2.51	141.10	6,096.1	-137.7	111.2	-131.7	0.00	0.00	0.00
6,200.0	2.51	141.10	6,196.0	-141.1	113.9	-135.0	0.00	0.00	0.00
6,300.0	2.51	141.10	6,295.9	-144.6	116.7	-138.2	0.00	0.00	0.00
6,400.0	2.51	141.10	6,395.9	-148.0	119.4	-141.5	0.00	0.00	0.00
6,500.0	2.51	141.10	6,495.8	-151.4	122.2	-144.8	0.00	0.00	0.00
6,600.0	2.51	141.10	6,595.7	-154.8	124.9	-148.0	0.00	0.00	0.00
6,700.0	2.51	141.10	6,695.6	-158.2	127.7	-151.3	0.00	0.00	0.00
6,800.0	2.51	141.10	6,795.5	-161.6	130.4	-154.5	0.00	0.00	0.00
6,900.0	2.51	141.10	6,895.4	-165.0	133.2	-157.8	0.00	0.00	0.00
7,000.0	2.51	141.10	6,995.3	-168.4	135.9	-161.1	0.00	0.00	0.00
7,100.0	2.51	141.10	7,095.2	-171.9	138.7	-164.3	0.00	0.00	0.00
7,200.0	2.51	141.10	7,195.1	-175.3	141.4	-167.6	0.00	0.00	0.00
7,300.0	2.51	141.10	7,295.0	-178.7	144.2	-170.9	0.00	0.00	0.00
7,400.0	2.51	141.10	7,394.9	-182.1	146.9	-174.1	0.00	0.00	0.00
7,500.0	2.51	141.10	7,494.8	-185.5	149.7	-177.4	0.00	0.00	0.00
7,600.0	2.51	141.10	7,594.7	-188.9	152.5	-180.6	0.00	0.00	0.00
7,700.0	2.51	141.10	7,694.6	-192.3	155.2	-183.9	0.00	0.00	0.00
7,800.0	2.51	141.10	7,794.5	-195.7	158.0	-187.2	0.00	0.00	0.00
7,900.0	2.51	141.10	7,894.4	-199.1	160.7	-190.4	0.00	0.00	0.00
8,000.0	2.51	141.10	7,994.3	-202.6	163.5	-193.7	0.00	0.00	0.00
8,100.0	2.51	141.10	8,094.2	-206.0	166.2	-197.0	0.00	0.00	0.00
8,200.0	2.51	141.10	8,194.1	-209.4	169.0	-200.2	0.00	0.00	0.00
8,300.0	2.51	141.10	8,294.0	-212.8	171.7	-203.5	0.00	0.00	0.00
8,400.0	2.51	141.10	8,393.9	-216.2	174.5	-206.7	0.00	0.00	0.00
8,500.0	2.51	141.10	8,493.8	-219.6	177.2	-210.0	0.00	0.00	0.00
8,600.0	2.51	141.10	8,593.7	-223.0	180.0	-213.3	0.00	0.00	0.00
8,700.0	2.51	141.10	8,693.6	-226.4	182.7	-216.5	0.00	0.00	0.00
8,800.0	2.51	141.10	8,793.5	-229.8	185.5	-219.8	0.00	0.00	0.00
8,900.0	2.51	141.10	8,893.4	-233.3	188.2	-223.1	0.00	0.00	0.00
9,000.0	2.51	141.10	8,993.4	-236.7	191.0	-226.3	0.00	0.00	0.00
9,100.0	2.51	141.10	9,093.3	-240.1	193.8	-229.6	0.00	0.00	0.00
9,200.0	2.51	141.10	9,193.2	-243.5	196.5	-232.8	0.00	0.00	0.00
9,300.0	2.51	141.10	9,293.1	-246.9	199.3	-236.1	0.00	0.00	0.00
9,400.0	2.51	141.10	9,393.0	-250.3	202.0	-239.4	0.00	0.00	0.00
9,500.0	2.51	141.10	9,492.9	-253.7	204.8	-242.6	0.00	0.00	0.00
9,600.0	2.51	141.10	9,592.8	-257.1	207.5	-245.9	0.00	0.00	0.00
9,700.0	2.51	141.10	9,692.7	-260.6	210.3	-249.2	0.00	0.00	0.00
9,800.0	2.51	141.10	9,792.6	-264.0	213.0	-252.4	0.00	0.00	0.00
9,900.0	2.51	141.10	9,892.5	-267.4	215.8	-255.7	0.00	0.00	0.00
10,000.0	2.51	141.10	9,992.4	-270.8	218.5	-258.9	0.00	0.00	0.00
10,100.0	2.51	141.10	10,092.3	-274.2	221.3	-262.2	0.00	0.00	0.00
10,200.0	2.51	141.10	10,192.2	-277.6	224.0	-265.5	0.00	0.00	0.00
10,300.0	2.51	141.10	10,292.1	-281.0	226.8	-268.7	0.00	0.00	0.00
10,400.0	2.51	141.10	10,392.0	-284.4	229.5	-272.0	0.00	0.00	0.00
10,500.0	2.51	141.10	10,491.9	-287.8	232.3	-275.3	0.00	0.00	0.00
10,600.0	2.51	141.10	10,591.8	-291.3	235.1	-278.5	0.00	0.00	0.00

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Project:	Lea County, NM (NAD 27 NME)	**MD Reference:**	KB @ 3277.0usft
Site:	Thor 21 Fed Com	**North Reference:**	Grid
Well:	#707H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.3		

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	359.60	12,265.0	1,298.7	269.6	1,311.0	0.00	0.00	0.00
13,800.0	90.00	359.60	12,265.0	1,398.7	268.9	1,410.8	0.00	0.00	0.00
13,900.0	90.00	359.60	12,265.0	1,498.7	268.2	1,510.7	0.00	0.00	0.00
14,000.0	90.00	359.60	12,265.0	1,598.6	267.5	1,610.5	0.00	0.00	0.00
14,100.0	90.00	359.60	12,265.0	1,698.6	266.8	1,710.3	0.00	0.00	0.00
14,200.0	90.00	359.60	12,265.0	1,798.6	266.1	1,810.1	0.00	0.00	0.00
14,300.0	90.00	359.60	12,265.0	1,898.6	265.5	1,910.0	0.00	0.00	0.00
14,400.0	90.00	359.60	12,265.0	1,998.6	264.8	2,009.8	0.00	0.00	0.00
14,500.0	90.00	359.60	12,265.0	2,098.6	264.1	2,109.6	0.00	0.00	0.00
14,600.0	90.00	359.60	12,265.0	2,198.6	263.4	2,209.4	0.00	0.00	0.00
14,700.0	90.00	359.60	12,265.0	2,298.6	262.7	2,309.2	0.00	0.00	0.00
14,800.0	90.00	359.60	12,265.0	2,398.6	262.0	2,409.1	0.00	0.00	0.00
14,900.0	90.00	359.60	12,265.0	2,498.6	261.3	2,508.9	0.00	0.00	0.00
15,000.0	90.00	359.60	12,265.0	2,598.6	260.6	2,608.7	0.00	0.00	0.00
15,100.0	90.00	359.60	12,265.0	2,698.6	259.9	2,708.5	0.00	0.00	0.00
15,200.0	90.00	359.60	12,265.0	2,798.6	259.2	2,808.4	0.00	0.00	0.00
15,300.0	90.00	359.60	12,265.0	2,898.6	258.5	2,908.2	0.00	0.00	0.00
15,400.0	90.00	359.60	12,265.0	2,998.6	257.8	3,008.0	0.00	0.00	0.00
15,500.0	90.00	359.60	12,265.0	3,098.6	257.1	3,107.8	0.00	0.00	0.00
15,600.0	90.00	359.60	12,265.0	3,198.6	256.4	3,207.7	0.00	0.00	0.00
15,700.0	90.00	359.60	12,265.0	3,298.6	255.7	3,307.5	0.00	0.00	0.00
15,800.0	90.00	359.60	12,265.0	3,398.6	255.0	3,407.3	0.00	0.00	0.00
15,900.0	90.00	359.60	12,265.0	3,498.6	254.3	3,507.1	0.00	0.00	0.00
16,000.0	90.00	359.60	12,265.0	3,598.6	253.6	3,606.9	0.00	0.00	0.00
16,100.0	90.00	359.60	12,265.0	3,698.6	252.9	3,706.8	0.00	0.00	0.00
16,200.0	90.00	359.60	12,265.0	3,798.6	252.2	3,806.6	0.00	0.00	0.00
16,300.0	90.00	359.60	12,265.0	3,898.6	251.5	3,906.4	0.00	0.00	0.00
16,400.0	90.00	359.60	12,265.0	3,998.6	250.8	4,006.2	0.00	0.00	0.00
16,500.0	90.00	359.60	12,265.0	4,098.6	250.1	4,106.1	0.00	0.00	0.00
16,600.0	90.00	359.60	12,265.0	4,198.6	249.4	4,205.9	0.00	0.00	0.00
16,700.0	90.00	359.60	12,265.0	4,298.6	248.7	4,305.7	0.00	0.00	0.00
16,800.0	90.00	359.60	12,265.0	4,398.6	248.0	4,405.5	0.00	0.00	0.00
16,900.0	90.00	359.60	12,265.0	4,498.6	247.3	4,505.4	0.00	0.00	0.00
17,000.0	90.00	359.60	12,265.0	4,598.6	246.6	4,605.2	0.00	0.00	0.00
17,081.4	90.00	359.60	12,265.0	4,680.0	246.0	4,686.5	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
FTP(THOR 21 FED CO - plan misses target center by 34.5usft at 12371.4usft MD (12233.1 TVD, -26.0 N, 278.0 E) - Point	0.00	0.00	12,265.0	-39.0	279.0	372,742.00	735,757.00	32° 1' 21.002 N	103° 34' 21.496 W
PBHL(THOR 21 FED C - plan hits target center - Point	0.00	0.00	12,265.0	4,680.0	246.0	377,461.00	735,724.00	32° 2' 7.703 N	103° 34' 21.494 W