

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM 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.*Lease Serial No.
NMNM100335

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.
OGDEN 20509 32-29 FED COM 6H9. API Well No.
30-015-4434010. Field and Pool or Exploratory Area
PURPLE SAGE-WOLFCAMP (GAS)11. County or Parish, State
EDDY COUNTY, NM**SUBMIT IN TRIPLICATE - Other instructions on page 2**

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

BTA OIL PRODUCERS LLC

Contact: KATY REDDELL
E-Mail: kreddell@btaoil.com

3a. Address

104 S. PECOS
MIDLAND, TX 797013b. Phone No. (include area code)
Ph: 432-557-2869 Ext: 139

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 32 T23S R28E SENW 2472FNL 1327FWL
32.261967 N Lat, 104.113861 W Lon

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 Plans	☐ Plug and Abandon	☐ Temporarily Abandon	Change to Original A
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	PD

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 recompletable 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.

BTA OIL PRODUCERS LLC Respectfully request the following changes to the original APD as approved.

Original 8.75" Hole: 7"@10289'MD(10158'TVD)
Change to: 8.75" Hole: 7"@9563'MD (9373'TVD) No change to cement.**GC 5-24-18**
Accepted for record - NMOCD

RECEIVED

Original 6.125" Hole: 4.5" Liner@9650'MD-17744'MD (9623'TVD-10235'TVD)
Change to: 6.125"Hole: 4.50" Liner@8950MD-17142'MD(8864' TVD-9450'TVD) No change to cement.Original Purple sage field 280 acre unit.
Change to Purple sage field 480 acre unit.**NSP required**

MAY 23 2018

-All previous COA still apply. Additional COA is not required.

DISTRICT II-ARTESIA O.C.D.

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

Electronic Submission #420237 verified by the BLM Well Information System
For BTA OIL PRODUCERS LLC, sent to the Carlsbad
Committed to AFMSS for processing by PRISCILLA PEREZ on 05/16/2018 (18PP1766SE)

Name (Printed/Typed) KATY REDDELL

Title REGULATORY ANALYST

Signature (Electronic Submission)

Date 05/15/2018

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By MUSTAFA HAQUE

Title PETROLEUM ENGINEER

Date 05/18/2018

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 Carlsbad

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 ****

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-6720

DISTRICT II
911 S. First St., Azusa, NM 88210
Phone: (575) 748-4283 Fax: (575) 748-9720

DISTRICT III
1620 Rio Grande Road, Azusa, NM 87410
Phone: (505) 134-6178 Fax: (505) 134-6170

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office.

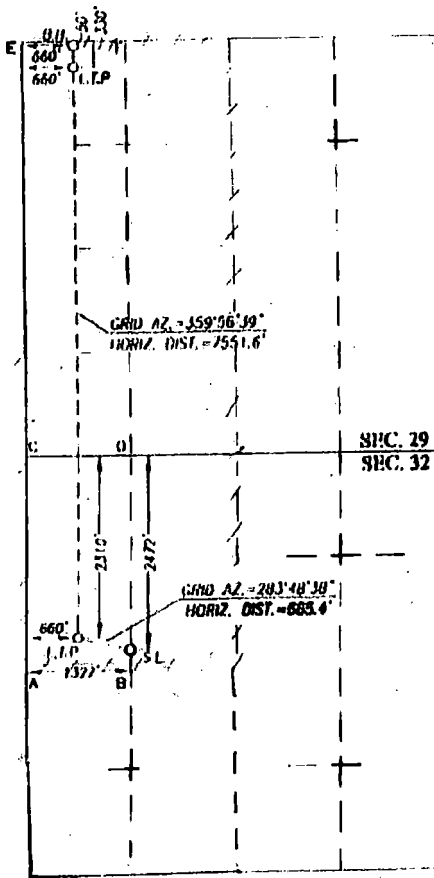
WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-44340	Pool Code 98220	Pool Name PURPLE SAGE/WOLFCAMP
Property Code NMNM 100335	Property Name OGDEN 20509 32-29 FEDERAL COM	Well Number 6H
OCRID No. 260297	Operator Name BTA OIL PRODUCERS, LLC	Elevation 3107'

UL or lot No.	Section	Township	Range	Lot Ids	Feet from the	North/South line	Feet from the	East/West line	County
F	32	23-S	28-E		2472	NORTH	1327	WEST	EDDY

UL or lot No.	Section	Township	Range	Lot Ids	Feet from the	North/South line	Feet from the	East/West line	County
D	29	23-S	28-E		50	NORTH	660	WEST	EDDY
Dedicated Acres 4.80	Joint or Infill	Consolidation Code	Order No.						

NO ALLOWABLE WELL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



SCALE: 1"=2000'

GEODETIC COORDINATES NAD 83 NME BOTTOM HOLE LOCATION Y=468819.3 N X=608903.9 E LAT.=32.283173° N LONG.=104.115889° W	GEODETIC COORDINATES NAD 27 NME BOTTOM HOLE LOCATION Y=468780.3 N X=587321.2 E LAT.=32.283263° N LONG.=104.115493° W
GEODETIC COORDINATES NAD 83 NME LAST TAKE POINT Y=468838.4 N X=608905.3 E LAT.=32.283404° N LONG.=104.115885° W	GEODETIC COORDINATES NAD 27 NME LAST TAKE POINT Y=468480.4 N X=587322.6 E LAT.=32.282263° N LONG.=104.115490° W

CORNER COORDINATES TABLE

NAD 27 NME

A - Y= 458878.9 N, X= 566665.8 E
B - Y= 458878.7 N, X= 566001.8 E
C - Y= 461521.6 N, X= 566668.3 E
D - Y= 461518.4 N, X= 566027.7 E
E - Y= 466808.8 N, X= 566661.1 E
F - Y= 466812.1 N, X= 567978.9 E

CORNER COORDINATES TABLE

NAD 83 NME

A - Y= 458833.7 N, X= 607848.8 E
B - Y= 458837.5 N, X= 608184.3 E
C - Y= 461580.4 N, X= 607871.1 E
D - Y= 461577.2 N, X= 608210.5 E
E - Y= 466867.5 N, X= 607843.8 E
F - Y= 466871.1 N, X= 608161.6 E

FIRST TAKE POINT
NAD 83 NME
Y=458269.4 N
X=608511.2 E
LAT.=32.262420° N
LONG.=104.116014° W

SURFACE LOCATION
NAD 83 NME
Y= 458105.8 N
X= 608176.7 E
LAT.=32.261888° N
LONG.=104.113953° W

FIRST TAKE POINT
NAD 27 NME
Y=459210.7 N
X=587329.4 E
LAT.=32.282299° N
LONG.=104.118318° W

SURFACE LOCATION
NAD 27 NME
Y= 458047.1 N
X= 587983.8 E
LAT.=32.261846° N
LONG.=104.113368° W

OPERATOR CERTIFICATION

I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unless otherwise stated in the head including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such interest or working interest, or to a preliminary pooling agreement or a compulsory pooling order heretofore entered by the Division.

Signature: *Katy Reddell* Date: *11/19/2018*

KATY REDDELL
Printed Name
kreddell@btaoil.com
E-mail Address

SURVEYOR CERTIFICATION

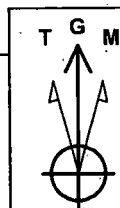
I hereby certify that the well location shown on this plat was placed from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

NOVEMBER 30, 2016
Date of Survey
Signature: *Ronald J. Eidsen*

RONALD J. EIDSEN
NEW MEXICO
3239
SURVEYOR

Ronald J. Eidsen 12/19/2018
Certified Notary Public
Ronald J. Eidsen 3239
ACK. EML. WOLFCAMP JWC. WOLFCAMP

BTA Oil Producers, LLC



Azimuths to Grid North
 True North: -0.12°
 Magnetic North: 7.88°
 Magnetic Field
 Strength: 48757.0snT
 Dip Angle: 60.18°
 Date: 12/31/2009
 Model: IGRF200510

SITE DETAILS: Ogden

Site Centre Northing: 458731.15
 Easting: 608206.70

Positional Uncertainty: 0.0
 Convergence: 0.12
 Local North: Grid

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00
2	100.0	0.00	0.00	100.0	0.0	0.0	0.00
3	5687.1	0.00	0.00	5687.1	0.0	0.0	0.00
4	6497.1	16.20	258.31	6486.4	-23.0	-111.4	2.00
5	8123.1	16.20	258.31	8047.7	-115.0	-555.6	0.00
6	8933.1	0.00	0.00	8847.0	-138.0	-667.0	2.00
7	8963.1	0.00	0.00	8877.0	-138.0	-667.0	0.00
8	9863.1	90.00	359.96	9450.0	435.0	-667.4	10.00
9	17142.2	90.00	359.96	9450.0	7714.1	-672.9	0.00

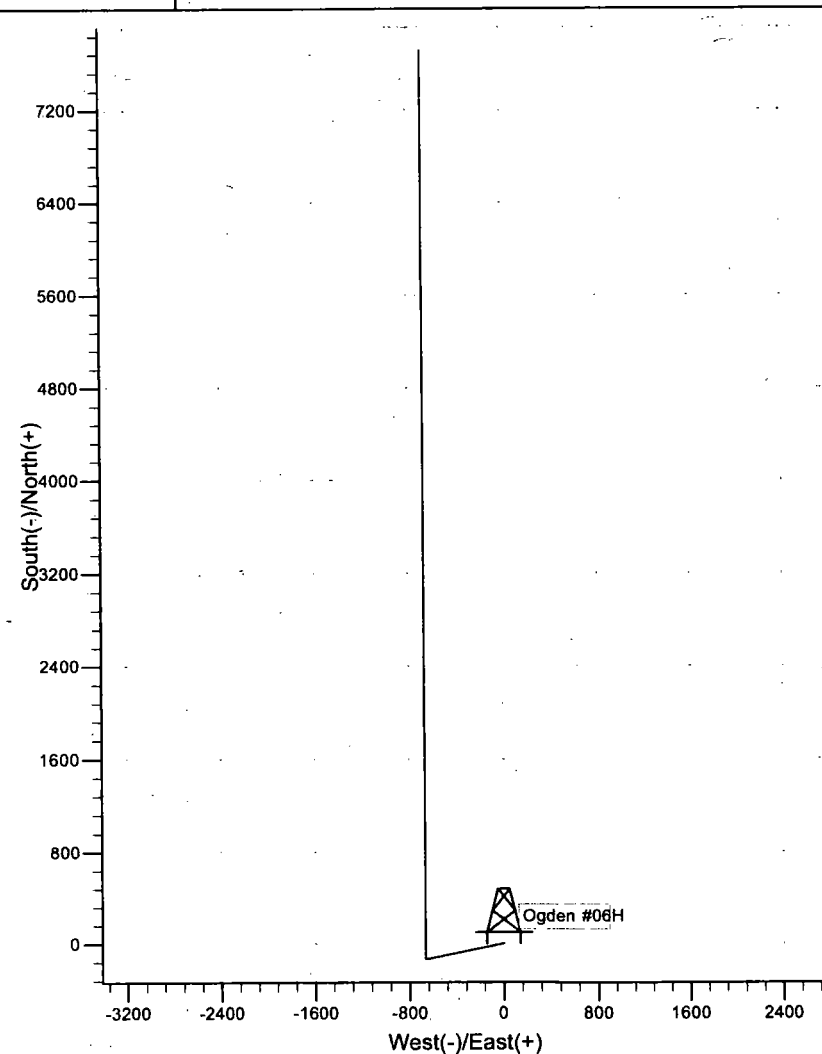
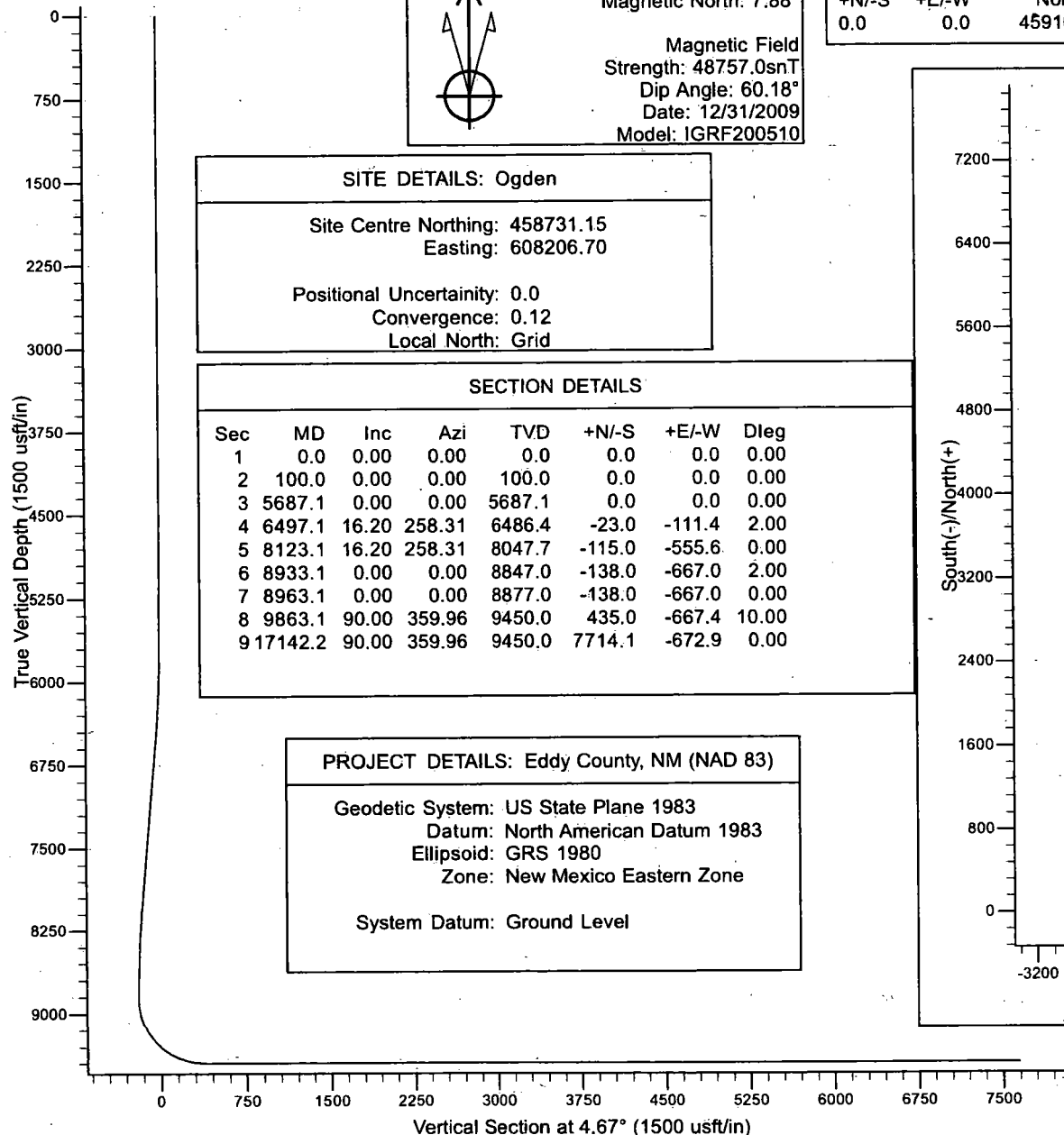
PROJECT DETAILS: Eddy County, NM (NAD 83)

Geodetic System: US State Plane 1983
 Datum: North American Datum 1983
 Ellipsoid: GRS 1980
 Zone: New Mexico Eastern Zone

System Datum: Ground Level

WELL DETAILS: Ogden #06H

Ground Level: 3107.0
 Easting: 609176.7082°
 Latitude: 15° 43.079 N
 Longitude: 104° 6' 49.906 W



BTA Oil Producers, LLC

Eddy County, NM (NAD 83)

Ogden

Ogden #06H

Wellbore #1

Plan: Permit

Standard Planning Report - Geographic

14 May, 2018

BTA
Planning Report - Geographic

Database: EDM 5000.1 Single User Db
Company: BTA Oil Producers, LLC
Project: Eddy County, NM (NAD 83)
Site: Ogden
Well: Ogden #06H
Wellbore: Wellbore #1
Design: Permit

Local Co-ordinate Reference: Well Ogden #06H
TVD Reference: WELL @ 3101.0usft (Original Well Elev)
MD Reference: WELL @ 3101.0usft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Project	Eddy County, NM (NAD 83)		
Map System:	US State Plane 1983	System Datum:	Ground Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		Using geodetic scale factor

Site	Ogden		
Site Position:		Northing: 458,731.15 usft	Latitude: 32° 15' 39.390 N
From: Map		Easting: 608,206.70 usft	Longitude: 104° 7' 1.212 W
Position Uncertainty:	0.0 usft	Slot Radius: 13-3/16 "	Grid Convergence: 0.12 °

Well	Ogden #06H		
Well Position	+N/-S	0.0 usft	Northing: 459,105.87 usft
	+E/-W	0.0 usft	Easting: 609,176.71 usft
Position Uncertainty	0.0 usft	Wellhead Elevation: 0.0 usft	Latitude: 32° 15' 43.079 N
			Longitude: 104° 6' 49.906 W
			Ground Level: 3,107.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
	IGRF200510	12/31/2009	(°)	(°)	(nT)
			8.00	60.18	48,757

Design	Permit			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(usft)	(usft)	(usft)	(°)
	0.0	0.0	0.0	4.67

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	
100.0	0.00	0.00	100.0	0.0	0.0	0.00	0.00	0.00	0.00	
5,687.1	0.00	0.00	5,687.1	0.0	0.0	0.00	0.00	0.00	0.00	
6,497.1	16.20	258.31	6,486.4	-23.0	-111.4	2.00	2.00	0.00	258.31	
8,123.1	16.20	258.31	8,047.7	-115.0	-555.6	0.00	0.00	0.00	0.00	
8,933.1	0.00	0.00	8,847.0	-138.0	-667.0	2.00	-2.00	0.00	180.00	
8,963.1	0.00	0.00	8,877.0	-138.0	-667.0	0.00	0.00	0.00	0.00	
9,863.1	90.00	359.96	9,450.0	435.0	-667.4	10.00	10.00	0.00	359.96	
17,142.2	-90.00	359.96	9,450.0	7,714.1	-672.9	0.00	0.00	0.00	0.00	Ogden #6H BHL

BTA
Planning Report - Geographic

Database: EDM 5000.1 Single User Db
Company: BTA Oil Producers, LLC
Project: Eddy County, NM (NAD 83)
Site: Ogden
Well: Ogden #06H
Wellbore: Wellbore #1
Design: Permit

Local Co-ordinate Reference: Well Ogden #06H
TVD Reference: WELL @ 3101.0usft (Original Well Elev)
MD Reference: WELL @ 3101.0usft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.0	0.00	0.00	0.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
100.0	0.00	0.00	100.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
200.0	0.00	0.00	200.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
300.0	0.00	0.00	300.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
400.0	0.00	0.00	400.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
500.0	0.00	0.00	500.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
600.0	0.00	0.00	600.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
700.0	0.00	0.00	700.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
800.0	0.00	0.00	800.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
900.0	0.00	0.00	900.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
1,000.0	0.00	0.00	1,000.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
1,100.0	0.00	0.00	1,100.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
1,200.0	0.00	0.00	1,200.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
1,300.0	0.00	0.00	1,300.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
1,400.0	0.00	0.00	1,400.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
1,500.0	0.00	0.00	1,500.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
1,600.0	0.00	0.00	1,600.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
1,700.0	0.00	0.00	1,700.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
1,800.0	0.00	0.00	1,800.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
1,900.0	0.00	0.00	1,900.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
2,000.0	0.00	0.00	2,000.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
2,100.0	0.00	0.00	2,100.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
2,200.0	0.00	0.00	2,200.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
2,300.0	0.00	0.00	2,300.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
2,400.0	0.00	0.00	2,400.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
2,500.0	0.00	0.00	2,500.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
2,600.0	0.00	0.00	2,600.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
2,700.0	0.00	0.00	2,700.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
2,800.0	0.00	0.00	2,800.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
2,900.0	0.00	0.00	2,900.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
3,000.0	0.00	0.00	3,000.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
3,100.0	0.00	0.00	3,100.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
3,200.0	0.00	0.00	3,200.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
3,300.0	0.00	0.00	3,300.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
3,400.0	0.00	0.00	3,400.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
3,500.0	0.00	0.00	3,500.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
3,600.0	0.00	0.00	3,600.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
3,700.0	0.00	0.00	3,700.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
3,800.0	0.00	0.00	3,800.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
3,900.0	0.00	0.00	3,900.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
4,000.0	0.00	0.00	4,000.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
4,100.0	0.00	0.00	4,100.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
4,200.0	0.00	0.00	4,200.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
4,300.0	0.00	0.00	4,300.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
4,400.0	0.00	0.00	4,400.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
4,500.0	0.00	0.00	4,500.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
4,600.0	0.00	0.00	4,600.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
4,700.0	0.00	0.00	4,700.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
4,800.0	0.00	0.00	4,800.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
4,900.0	0.00	0.00	4,900.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
5,000.0	0.00	0.00	5,000.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
5,100.0	0.00	0.00	5,100.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
5,200.0	0.00	0.00	5,200.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
5,300.0	0.00	0.00	5,300.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
5,400.0	0.00	0.00	5,400.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W

BTA

Planning Report - Geographic

Database: EDM 5000.1 Single User Db
Company: BTA Oil Producers, LLC
Project: Eddy County, NM (NAD 83)
Site: Ogden
Well: Ogden #06H
Wellbore: Wellbore #1
Design: Permit

Local Co-ordinate Reference: Well Ogden #06H
TVD Reference: WELL @ 3101.0usft (Original Well Elev)
MD Reference: WELL @ 3101.0usft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Eastings (usft)	Latitude	Longitude
5,500.0	0.00	0.00	5,500.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
5,600.0	0.00	0.00	5,600.0	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
5,687.1	0.00	0.00	5,687.1	0.0	0.0	459,105.87	609,176.71	32° 15' 43.079 N	104° 6' 49.906 W
5,700.0	0.26	258.31	5,700.0	0.0	0.0	459,105.87	609,176.68	32° 15' 43.079 N	104° 6' 49.906 W
5,800.0	2.26	258.31	5,800.0	-0.5	-2.2	459,105.42	609,174.53	32° 15' 43.075 N	104° 6' 49.931 W
5,900.0	4.26	258.31	5,899.8	-1.6	-7.7	459,104.27	609,168.96	32° 15' 43.063 N	104° 6' 49.996 W
6,000.0	6.26	258.31	5,999.4	-3.5	-16.7	459,102.41	609,159.99	32° 15' 43.045 N	104° 6' 50.100 W
6,100.0	8.26	258.31	6,098.6	-6.0	-29.1	459,099.86	609,147.62	32° 15' 43.020 N	104° 6' 50.245 W
6,200.0	10.26	258.31	6,197.3	-9.3	-44.8	459,096.60	609,131.87	32° 15' 42.988 N	104° 6' 50.428 W
6,300.0	12.26	258.31	6,295.3	-13.2	-64.0	459,092.64	609,112.76	32° 15' 42.949 N	104° 6' 50.651 W
6,400.0	14.26	258.31	6,392.7	-17.9	-86.4	459,088.00	609,090.30	32° 15' 42.904 N	104° 6' 50.912 W
6,497.1	16.20	258.31	6,486.4	-23.0	-111.4	459,082.83	609,065.33	32° 15' 42.853 N	104° 6' 51.203 W
6,500.0	16.20	258.31	6,489.1	-23.2	-112.2	459,082.66	609,064.54	32° 15' 42.852 N	104° 6' 51.213 W
6,600.0	16.20	258.31	6,585.2	-28.9	-139.5	459,077.01	609,037.22	32° 15' 42.796 N	104° 6' 51.531 W
6,700.0	16.20	258.31	6,681.2	-34.5	-166.8	459,071.36	609,009.90	32° 15' 42.741 N	104° 6' 51.849 W
6,800.0	16.20	258.31	6,777.2	-40.2	-194.1	459,065.71	608,982.58	32° 15' 42.686 N	104° 6' 52.168 W
6,900.0	16.20	258.31	6,873.3	-45.8	-221.5	459,060.06	608,955.26	32° 15' 42.630 N	104° 6' 52.486 W
7,000.0	16.20	258.31	6,969.3	-51.5	-248.8	459,054.40	608,927.94	32° 15' 42.575 N	104° 6' 52.804 W
7,100.0	16.20	258.31	7,065.3	-57.1	-276.1	459,048.75	608,900.63	32° 15' 42.519 N	104° 6' 53.122 W
7,200.0	16.20	258.31	7,161.3	-62.8	-303.4	459,043.10	608,873.31	32° 15' 42.464 N	104° 6' 53.441 W
7,300.0	16.20	258.31	7,257.4	-68.4	-330.7	459,037.45	608,845.99	32° 15' 42.409 N	104° 6' 53.759 W
7,400.0	16.20	258.31	7,353.4	-74.1	-358.1	459,031.80	608,818.67	32° 15' 42.353 N	104° 6' 54.077 W
7,500.0	16.20	258.31	7,449.4	-79.7	-385.4	459,026.14	608,791.35	32° 15' 42.298 N	104° 6' 54.396 W
7,600.0	16.20	258.31	7,545.5	-85.4	-412.7	459,020.49	608,764.04	32° 15' 42.242 N	104° 6' 54.714 W
7,700.0	16.20	258.31	7,641.5	-91.0	-440.0	459,014.84	608,736.72	32° 15' 42.187 N	104° 6' 55.032 W
7,800.0	16.20	258.31	7,737.5	-96.7	-467.3	459,009.19	608,709.40	32° 15' 42.132 N	104° 6' 55.351 W
7,900.0	16.20	258.31	7,833.5	-102.3	-494.7	459,003.54	608,682.08	32° 15' 42.076 N	104° 6' 55.669 W
8,000.0	16.20	258.31	7,929.6	-108.0	-522.0	458,997.88	608,654.76	32° 15' 42.021 N	104° 6' 55.987 W
8,100.0	16.20	258.31	8,025.6	-113.7	-549.3	458,992.23	608,627.44	32° 15' 41.966 N	104° 6' 56.305 W
8,123.1	16.20	258.31	8,047.7	-115.0	-555.6	458,990.93	608,621.15	32° 15' 41.953 N	104° 6' 56.379 W
8,200.0	14.66	258.31	8,121.9	-119.1	-575.7	458,986.78	608,601.10	32° 15' 41.912 N	104° 6' 56.612 W
8,300.0	12.66	258.31	8,219.1	-123.9	-598.8	458,982.00	608,577.98	32° 15' 41.865 N	104° 6' 56.882 W
8,400.0	10.66	258.31	8,317.0	-128.0	-618.6	458,977.90	608,558.19	32° 15' 41.825 N	104° 6' 57.112 W
8,500.0	8.66	258.31	8,415.6	-131.4	-635.0	458,974.50	608,541.75	32° 15' 41.792 N	104° 6' 57.304 W
8,600.0	6.66	258.31	8,514.7	-134.1	-648.1	458,971.80	608,528.70	32° 15' 41.765 N	104° 6' 57.456 W
8,700.0	4.66	258.31	8,614.2	-136.1	-657.7	458,969.80	608,519.04	32° 15' 41.746 N	104° 6' 57.568 W
8,800.0	2.66	258.31	8,714.0	-137.4	-664.0	458,968.51	608,512.79	32° 15' 41.733 N	104° 6' 57.641 W
8,900.0	0.66	258.31	8,813.9	-138.0	-666.8	458,967.92	608,509.95	32° 15' 41.727 N	104° 6' 57.674 W
8,933.1	0.00	0.00	8,847.0	-138.0	-667.0	458,967.88	608,509.76	32° 15' 41.727 N	104° 6' 57.677 W
8,963.1	0.00	0.00	8,877.0	-138.0	-667.0	458,967.88	608,509.76	32° 15' 41.727 N	104° 6' 57.677 W
9,000.0	3.69	359.96	8,913.9	-136.8	-667.0	458,969.07	608,509.76	32° 15' 41.739 N	104° 6' 57.677 W
9,100.0	13.69	359.96	9,012.6	-121.7	-667.0	458,984.16	608,509.75	32° 15' 41.888 N	104° 6' 57.676 W
9,200.0	23.69	359.96	9,107.2	-89.7	-667.0	459,016.16	608,509.73	32° 15' 42.205 N	104° 6' 57.676 W
9,300.0	33.69	359.96	9,194.9	-41.8	-667.1	459,064.10	608,509.69	32° 15' 42.679 N	104° 6' 57.675 W
9,400.0	43.69	359.96	9,272.8	20.7	-667.1	459,126.53	608,509.65	32° 15' 43.297 N	104° 6' 57.674 W
9,500.0	53.69	359.96	9,338.7	95.7	-667.2	459,201.54	608,509.59	32° 15' 44.039 N	104° 6' 57.673 W
9,600.0	63.69	359.96	9,390.6	181.0	-667.2	459,286.86	608,509.53	32° 15' 44.884 N	104° 6' 57.672 W
9,700.0	73.69	359.96	9,426.9	274.1	-667.3	459,379.90	608,509.46	32° 15' 45.804 N	104° 6' 57.670 W
9,800.0	83.69	359.96	9,446.5	372.0	-667.4	459,477.82	608,509.38	32° 15' 46.773 N	104° 6' 57.669 W
9,863.1	90.00	359.96	9,450.0	435.0	-667.4	459,540.79	608,509.34	32° 15' 47.396 N	104° 6' 57.668 W
9,900.0	90.00	359.96	9,450.0	471.9	-667.5	459,577.69	608,509.31	32° 15' 47.762 N	104° 6' 57.667 W
10,000.0	90.00	359.96	9,450.0	571.9	-667.5	459,677.68	608,509.23	32° 15' 48.751 N	104° 6' 57.666 W
10,100.0	90.00	359.96	9,450.0	671.9	-667.6	459,777.67	608,509.16	32° 15' 49.741 N	104° 6' 57.664 W
10,200.0	90.00	359.96	9,450.0	771.9	-667.7	459,877.66	608,509.08	32° 15' 50.730 N	104° 6' 57.663 W
10,300.0	90.00	359.96	9,450.0	871.9	-667.8	459,977.65	608,509.01	32° 15' 51.720 N	104° 6' 57.661 W

BTA
Planning Report - Geographic

Database: EDM 5000.1 Single User Db
Company: BTA Oil Producers, LLC
Project: Eddy County, NM (NAD 83)
Site: Ogden
Well: Ogden #06H
Wellbore: Wellbore #1
Design: Permit

Local Co-ordinate Reference: Well Ogden #06H
TVD Reference: WELL @ 3101.0usft (Original Well Elev)
MD Reference: WELL @ 3101.0usft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
10,400.0	90.00	359.96	9,450.0	971.9	-667.8	460,077.65	608,508.94	32° 15' 52.709 N	104° 6' 57.660 W
10,500.0	90.00	359.96	9,450.0	1,071.9	-667.9	460,177.64	608,508.86	32° 15' 53.699 N	104° 6' 57.659 W
10,600.0	90.00	359.96	9,450.0	1,171.9	-668.0	460,277.63	608,508.79	32° 15' 54.688 N	104° 6' 57.657 W
10,700.0	90.00	359.96	9,450.0	1,271.9	-668.1	460,377.62	608,508.71	32° 15' 55.678 N	104° 6' 57.656 W
10,800.0	90.00	359.96	9,450.0	1,371.9	-668.1	460,477.61	608,508.64	32° 15' 56.667 N	104° 6' 57.654 W
10,900.0	90.00	359.96	9,450.0	1,471.9	-668.2	460,577.60	608,508.56	32° 15' 57.657 N	104° 6' 57.653 W
11,000.0	90.00	359.96	9,450.0	1,571.9	-668.3	460,677.59	608,508.49	32° 15' 58.646 N	104° 6' 57.651 W
11,100.0	90.00	359.96	9,450.0	1,671.9	-668.4	460,777.59	608,508.41	32° 15' 59.636 N	104° 6' 57.650 W
11,200.0	90.00	359.96	9,450.0	1,771.9	-668.4	460,877.58	608,508.34	32° 16' 0.625 N	104° 6' 57.648 W
11,300.0	90.00	359.96	9,450.0	1,871.9	-668.5	460,977.57	608,508.26	32° 16' 1.615 N	104° 6' 57.647 W
11,400.0	90.00	359.96	9,450.0	1,971.9	-668.6	461,077.56	608,508.19	32° 16' 2.604 N	104° 6' 57.645 W
11,500.0	90.00	359.96	9,450.0	2,071.9	-668.6	461,177.55	608,508.11	32° 16' 3.594 N	104° 6' 57.644 W
11,600.0	90.00	359.96	9,450.0	2,171.9	-668.7	461,277.54	608,508.04	32° 16' 4.583 N	104° 6' 57.642 W
11,700.0	90.00	359.96	9,450.0	2,271.9	-668.8	461,377.53	608,507.97	32° 16' 5.573 N	104° 6' 57.641 W
11,800.0	90.00	359.96	9,450.0	2,371.9	-668.9	461,477.53	608,507.89	32° 16' 6.562 N	104° 6' 57.639 W
11,900.0	90.00	359.96	9,450.0	2,471.9	-668.9	461,577.52	608,507.82	32° 16' 7.552 N	104° 6' 57.638 W
12,000.0	90.00	359.96	9,450.0	2,571.9	-669.0	461,677.51	608,507.74	32° 16' 8.541 N	104° 6' 57.636 W
12,100.0	90.00	359.96	9,450.0	2,671.9	-669.1	461,777.50	608,507.67	32° 16' 9.531 N	104° 6' 57.635 W
12,200.0	90.00	359.96	9,450.0	2,771.9	-669.2	461,877.49	608,507.59	32° 16' 10.520 N	104° 6' 57.633 W
12,300.0	90.00	359.96	9,450.0	2,871.9	-669.2	461,977.48	608,507.52	32° 16' 11.510 N	104° 6' 57.632 W
12,400.0	90.00	359.96	9,450.0	2,971.9	-669.3	462,077.47	608,507.44	32° 16' 12.499 N	104° 6' 57.630 W
12,500.0	90.00	359.96	9,450.0	3,071.9	-669.4	462,177.47	608,507.37	32° 16' 13.489 N	104° 6' 57.629 W
12,600.0	90.00	359.96	9,450.0	3,171.9	-669.5	462,277.46	608,507.29	32° 16' 14.478 N	104° 6' 57.627 W
12,700.0	90.00	359.96	9,450.0	3,271.9	-669.5	462,377.45	608,507.22	32° 16' 15.468 N	104° 6' 57.626 W
12,800.0	90.00	359.96	9,450.0	3,371.9	-669.6	462,477.44	608,507.14	32° 16' 16.457 N	104° 6' 57.624 W
12,900.0	90.00	359.96	9,450.0	3,471.9	-669.7	462,577.43	608,507.07	32° 16' 17.447 N	104° 6' 57.623 W
13,000.0	90.00	359.96	9,450.0	3,571.9	-669.8	462,677.42	608,507.00	32° 16' 18.436 N	104° 6' 57.621 W
13,100.0	90.00	359.96	9,450.0	3,671.9	-669.8	462,777.41	608,506.92	32° 16' 19.426 N	104° 6' 57.620 W
13,200.0	90.00	359.96	9,450.0	3,771.9	-669.9	462,877.40	608,506.85	32° 16' 20.415 N	104° 6' 57.618 W
13,300.0	90.00	359.96	9,450.0	3,871.9	-670.0	462,977.40	608,506.77	32° 16' 21.405 N	104° 6' 57.617 W
13,400.0	90.00	359.96	9,450.0	3,971.9	-670.1	463,077.39	608,506.70	32° 16' 22.394 N	104° 6' 57.615 W
13,500.0	90.00	359.96	9,450.0	4,071.9	-670.1	463,177.38	608,506.62	32° 16' 23.384 N	104° 6' 57.614 W
13,600.0	90.00	359.96	9,450.0	4,171.9	-670.2	463,277.37	608,506.55	32° 16' 24.373 N	104° 6' 57.612 W
13,700.0	90.00	359.96	9,450.0	4,271.9	-670.3	463,377.36	608,506.47	32° 16' 25.363 N	104° 6' 57.611 W
13,800.0	90.00	359.96	9,450.0	4,371.9	-670.4	463,477.35	608,506.40	32° 16' 26.352 N	104° 6' 57.609 W
13,900.0	90.00	359.96	9,450.0	4,471.9	-670.4	463,577.34	608,506.32	32° 16' 27.342 N	104° 6' 57.608 W
14,000.0	90.00	359.96	9,450.0	4,571.9	-670.5	463,677.34	608,506.25	32° 16' 28.331 N	104° 6' 57.606 W
14,100.0	90.00	359.96	9,450.0	4,671.9	-670.6	463,777.33	608,506.17	32° 16' 29.321 N	104° 6' 57.605 W
14,200.0	90.00	359.96	9,450.0	4,771.9	-670.7	463,877.32	608,506.10	32° 16' 30.310 N	104° 6' 57.603 W
14,300.0	90.00	359.96	9,450.0	4,871.9	-670.7	463,977.31	608,506.02	32° 16' 31.300 N	104° 6' 57.602 W
14,400.0	90.00	359.96	9,450.0	4,971.9	-670.8	464,077.30	608,505.95	32° 16' 32.289 N	104° 6' 57.600 W
14,500.0	90.00	359.96	9,450.0	5,071.9	-670.9	464,177.29	608,505.88	32° 16' 33.279 N	104° 6' 57.599 W
14,600.0	90.00	359.96	9,450.0	5,171.9	-671.0	464,277.28	608,505.80	32° 16' 34.268 N	104° 6' 57.597 W
14,700.0	90.00	359.96	9,450.0	5,271.9	-671.0	464,377.28	608,505.73	32° 16' 35.258 N	104° 6' 57.596 W
14,800.0	90.00	359.96	9,450.0	5,371.9	-671.1	464,477.27	608,505.65	32° 16' 36.247 N	104° 6' 57.594 W
14,900.0	90.00	359.96	9,450.0	5,471.9	-671.2	464,577.26	608,505.58	32° 16' 37.237 N	104° 6' 57.593 W
15,000.0	90.00	359.96	9,450.0	5,571.9	-671.3	464,677.25	608,505.50	32° 16' 38.226 N	104° 6' 57.591 W
15,100.0	90.00	359.96	9,450.0	5,671.9	-671.3	464,777.24	608,505.43	32° 16' 39.216 N	104° 6' 57.590 W
15,200.0	90.00	359.96	9,450.0	5,771.9	-671.4	464,877.23	608,505.35	32° 16' 40.206 N	104° 6' 57.589 W
15,300.0	90.00	359.96	9,450.0	5,871.9	-671.5	464,977.22	608,505.28	32° 16' 41.195 N	104° 6' 57.587 W
15,400.0	90.00	359.96	9,450.0	5,971.9	-671.6	465,077.22	608,505.20	32° 16' 42.185 N	104° 6' 57.586 W
15,500.0	90.00	359.96	9,450.0	6,071.9	-671.6	465,177.21	608,505.13	32° 16' 43.174 N	104° 6' 57.584 W
15,600.0	90.00	359.96	9,450.0	6,171.9	-671.7	465,277.20	608,505.05	32° 16' 44.164 N	104° 6' 57.583 W
15,700.0	90.00	359.96	9,450.0	6,271.9	-671.8	465,377.19	608,504.98	32° 16' 45.153 N	104° 6' 57.581 W
15,800.0	90.00	359.96	9,450.0	6,371.9	-671.9	465,477.18	608,504.91	32° 16' 46.143 N	104° 6' 57.580 W

BTA

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15,900.0	90.00	359.96	9,450.0	6,471.9	-671.9	465,577.17	608,504.83	32° 16' 47.132 N	104° 6' 57.578 W
16,000.0	90.00	359.96	9,450.0	6,571.9	-672.0	465,677.16	608,504.76	32° 16' 48.122 N	104° 6' 57.577 W
16,100.0	90.00	359.96	9,450.0	6,671.9	-672.1	465,777.16	608,504.68	32° 16' 49.111 N	104° 6' 57.575 W
16,200.0	90.00	359.96	9,450.0	6,771.9	-672.2	465,877.15	608,504.61	32° 16' 50.101 N	104° 6' 57.574 W
16,300.0	90.00	359.96	9,450.0	6,871.9	-672.2	465,977.14	608,504.53	32° 16' 51.090 N	104° 6' 57.572 W
16,400.0	90.00	359.96	9,450.0	6,971.9	-672.3	466,077.13	608,504.46	32° 16' 52.080 N	104° 6' 57.571 W
16,500.0	90.00	359.96	9,450.0	7,071.9	-672.4	466,177.12	608,504.38	32° 16' 53.069 N	104° 6' 57.569 W
16,600.0	90.00	359.96	9,450.0	7,171.9	-672.5	466,277.11	608,504.31	32° 16' 54.059 N	104° 6' 57.568 W
16,700.0	90.00	359.96	9,450.0	7,271.9	-672.5	466,377.10	608,504.23	32° 16' 55.048 N	104° 6' 57.566 W
16,800.0	90.00	359.96	9,450.0	7,371.9	-672.6	466,477.10	608,504.16	32° 16' 56.038 N	104° 6' 57.565 W
16,900.0	90.00	359.96	9,450.0	7,471.9	-672.7	466,577.09	608,504.08	32° 16' 57.027 N	104° 6' 57.563 W
17,000.0	90.00	359.96	9,450.0	7,571.9	-672.8	466,677.08	608,504.01	32° 16' 58.017 N	104° 6' 57.562 W
17,100.0	90.00	359.96	9,450.0	7,671.9	-672.8	466,777.07	608,503.94	32° 16' 59.006 N	104° 6' 57.560 W
17,142.2	90.00	359.96	9,450.0	7,714.1	-672.9	466,819.30	608,503.90	32° 16' 59.424 N	104° 6' 57.560 W

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									
Ogden #6H BHL	0.00	0.07	9,450.0	7,714.1	-672.9	466,819.30	608,503.90	32° 16' 59.424 N	104° 6' 57.560 W
- plan hits target center									
- Point									