

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Hobbs

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

HOBBS OCD

JAN 12 2017

RECEIVED

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

1. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other		8. Well Name and No. STARCASTER 18 FED COM 1H
2. Name of Operator BTA OIL PRODUCERS LLC Contact: PAM INSKEEP E-Mail: pinskeep@btaoil.com		9. API Well No. 30-025-43388
3a. Address 104 S PECOS MIDLAND, TX 79701	3b. Phone No. (include area code) Ph: 432-682-3753 Fx: 432-683-0325	10. Field and Pool or Exploratory Area BELL LAKE; BONE SPRING N
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 18 T23S R34E NENW 330FNL 1340FWL		11. County or Parish, State LEA COUNTY 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 Plans	☐ Plug and Abandon	☐ Temporarily Abandon	Change to Original APD
	☐ 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 recompleat 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 recompleat 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 requests approval for the following changes to the original approved APD:

Approved SHL: 330' FNL & 1270' FWL
Proposed Change: 330' FNL & 1340' FWL
Note: No additional surface disturbance will occur

Attachments related to #1H, due to change in SHL, are:

Revised Directional Drilling Plan
C-102

Eng OK 1/9/17 CRW OK per B & Balle 1-6-2017 per EA DOI-BLM-NM-PZ-2016-1

14. I hereby certify that the foregoing is true and correct. Electronic Submission #362968 verified by the BLM Well Information System For BTA OIL PRODUCERS LLC, sent to the Hobbs Committed to AFMSS for processing by DEBORAH MCKINNEY on 01/05/2017 ()	
Name (Printed/Typed) PAM INSKEEP	Title REGULATORY ADMINISTRATOR
Signature (Electronic Submission)	Date 01/05/2017

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By <u>Cathy P. Taylor</u>	Title <u>AFM - Lands & Minerals</u>	Date <u>1/9/17</u>
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 <u>CF-0</u>

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)

** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED **

Kz

b

Additional data for EC transaction #362968 that would not fit on the form

32. Additional remarks, continued

Site Map
Location Verification Map
Vicinity Map
Aerial Photo Map
Access Aerial Photo Map

Site Map for the Starcaster 18 Fed Com #2H, API 30-025-43213

BTA Oil Producers, LLC

Lea County, NM

Starcaster

Starcaster #1H

Wellbore #1

Plan: Design #1

Standard Planning Report

05 January, 2017

BTA Planning Report

Database: EDM 5000.1 Single User Db
Company: BTA Oil Producers, LLC
Project: Lea County, NM
Site: Starcaster
Well: Starcaster #1H
Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference: Well Starcaster #1H
TVD Reference: WELL @ 3509.0usft (Original Well Elev)
MD Reference: WELL @ 3509.0usft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Project	Lea County, NM, Lea County, NM		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Ground Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		Using geodetic scale factor

Site	Starcaster			
Site Position:		Northing:	477,774.30 usft	Latitude: 32° 18' 39.057 N
From:	Map	Easting:	753,564.86 usft	Longitude: 103° 30' 45.358 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence: 0.44 °

Well	Starcaster #1H			
Well Position	+N-S	-0.2 usft	Northing:	477,774.06 usft
	+E-W	-30.0 usft	Easting:	753,534.86 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level: 3,507.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
	IGRF200510	12/31/2009	(°)	(°)	(nT)
			7.73	60.33	48,851

Design	Design #1			
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	187.62

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	
2,428.3	0.00	0.00	2,428.3	0.0	0.0	0.00	0.00	0.00	0.00	
2,728.3	6.00	293.81	2,727.8	6.3	-14.4	2.00	2.00	0.00	293.81	
9,538.4	6.00	293.81	9,500.5	293.7	-665.6	0.00	0.00	0.00	0.00	
9,838.4	0.00	0.00	9,800.0	300.0	-680.0	2.00	-2.00	0.00	180.00	
9,884.4	0.00	0.00	9,846.0	300.0	-680.0	0.00	0.00	0.00	0.00	
10,784.4	90.00	179.61	10,419.0	-272.9	-676.1	10.00	10.00	0.00	179.61	
15,334.4	90.00	179.61	10,419.0	-4,822.8	-645.3	0.00	0.00	0.00	0.00	Starcaster #1H BHL

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MD Reference: WELL @ 3509.0usft (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)	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
2,428.3	0.00	0.00	2,428.3	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	1.43	293.81	2,500.0	0.4	-0.8	-0.3	2.00	2.00	0.00
2,600.0	3.43	293.81	2,599.9	2.1	-4.7	-1.4	2.00	2.00	0.00
2,700.0	5.43	293.81	2,699.6	5.2	-11.8	-3.6	2.00	2.00	0.00
2,728.3	6.00	293.81	2,727.8	6.3	-14.4	-4.4	2.00	2.00	0.00
2,800.0	6.00	293.81	2,799.1	9.4	-21.2	-6.5	0.00	0.00	0.00
2,900.0	6.00	293.81	2,898.5	13.6	-30.8	-9.4	0.00	0.00	0.00
3,000.0	6.00	293.81	2,998.0	17.8	-40.3	-12.3	0.00	0.00	0.00
3,100.0	6.00	293.81	3,097.4	22.0	-49.9	-15.2	0.00	0.00	0.00
3,200.0	6.00	293.81	3,196.9	26.2	-59.5	-18.1	0.00	0.00	0.00
3,300.0	6.00	293.81	3,296.3	30.5	-69.0	-21.0	0.00	0.00	0.00
3,400.0	6.00	293.81	3,395.8	34.7	-78.6	-23.9	0.00	0.00	0.00
3,500.0	6.00	293.81	3,495.2	38.9	-88.2	-26.9	0.00	0.00	0.00
3,600.0	6.00	293.81	3,594.7	43.1	-97.7	-29.8	0.00	0.00	0.00
3,700.0	6.00	293.81	3,694.1	47.3	-107.3	-32.7	0.00	0.00	0.00
3,800.0	6.00	293.81	3,793.6	51.6	-116.8	-35.6	0.00	0.00	0.00
3,900.0	6.00	293.81	3,893.0	55.8	-126.4	-38.5	0.00	0.00	0.00
4,000.0	6.00	293.81	3,992.5	60.0	-136.0	-41.4	0.00	0.00	0.00
4,100.0	6.00	293.81	4,091.9	64.2	-145.5	-44.3	0.00	0.00	0.00
4,200.0	6.00	293.81	4,191.4	68.4	-155.1	-47.3	0.00	0.00	0.00
4,300.0	6.00	293.81	4,290.8	72.6	-164.7	-50.2	0.00	0.00	0.00
4,400.0	6.00	293.81	4,390.3	76.9	-174.2	-53.1	0.00	0.00	0.00
4,500.0	6.00	293.81	4,489.7	81.1	-183.8	-56.0	0.00	0.00	0.00
4,600.0	6.00	293.81	4,589.2	85.3	-193.4	-58.9	0.00	0.00	0.00
4,700.0	6.00	293.81	4,688.7	89.5	-202.9	-61.8	0.00	0.00	0.00
4,800.0	6.00	293.81	4,788.1	93.7	-212.5	-64.7	0.00	0.00	0.00
4,900.0	6.00	293.81	4,887.6	98.0	-222.0	-67.6	0.00	0.00	0.00
5,000.0	6.00	293.81	4,987.0	102.2	-231.6	-70.6	0.00	0.00	0.00
5,100.0	6.00	293.81	5,086.5	106.4	-241.2	-73.5	0.00	0.00	0.00

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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)
5,200.0	6.00	293.81	5,185.9	110.6	-250.7	-76.4	0.00	0.00	0.00
5,300.0	6.00	293.81	5,285.4	114.8	-260.3	-79.3	0.00	0.00	0.00
5,400.0	6.00	293.81	5,384.8	119.1	-269.9	-82.2	0.00	0.00	0.00
5,500.0	6.00	293.81	5,484.3	123.3	-279.4	-85.1	0.00	0.00	0.00
5,600.0	6.00	293.81	5,583.7	127.5	-289.0	-88.0	0.00	0.00	0.00
5,700.0	6.00	293.81	5,683.2	131.7	-298.6	-91.0	0.00	0.00	0.00
5,800.0	6.00	293.81	5,782.6	135.9	-308.1	-93.9	0.00	0.00	0.00
5,900.0	6.00	293.81	5,882.1	140.2	-317.7	-96.8	0.00	0.00	0.00
6,000.0	6.00	293.81	5,981.5	144.4	-327.2	-99.7	0.00	0.00	0.00
6,100.0	6.00	293.81	6,081.0	148.6	-336.8	-102.6	0.00	0.00	0.00
6,200.0	6.00	293.81	6,180.4	152.8	-346.4	-105.5	0.00	0.00	0.00
6,300.0	6.00	293.81	6,279.9	157.0	-355.9	-108.4	0.00	0.00	0.00
6,400.0	6.00	293.81	6,379.3	161.3	-365.5	-111.4	0.00	0.00	0.00
6,500.0	6.00	293.81	6,478.8	165.5	-375.1	-114.3	0.00	0.00	0.00
6,600.0	6.00	293.81	6,578.2	169.7	-384.6	-117.2	0.00	0.00	0.00
6,700.0	6.00	293.81	6,677.7	173.9	-394.2	-120.1	0.00	0.00	0.00
6,800.0	6.00	293.81	6,777.1	178.1	-403.8	-123.0	0.00	0.00	0.00
6,900.0	6.00	293.81	6,876.6	182.3	-413.3	-125.9	0.00	0.00	0.00
7,000.0	6.00	293.81	6,976.1	186.6	-422.9	-128.8	0.00	0.00	0.00
7,100.0	6.00	293.81	7,075.5	190.8	-432.4	-131.7	0.00	0.00	0.00
7,200.0	6.00	293.81	7,175.0	195.0	-442.0	-134.7	0.00	0.00	0.00
7,300.0	6.00	293.81	7,274.4	199.2	-451.6	-137.6	0.00	0.00	0.00
7,400.0	6.00	293.81	7,373.9	203.4	-461.1	-140.5	0.00	0.00	0.00
7,500.0	6.00	293.81	7,473.3	207.7	-470.7	-143.4	0.00	0.00	0.00
7,600.0	6.00	293.81	7,572.8	211.9	-480.3	-146.3	0.00	0.00	0.00
7,700.0	6.00	293.81	7,672.2	216.1	-489.8	-149.2	0.00	0.00	0.00
7,800.0	6.00	293.81	7,771.7	220.3	-499.4	-152.1	0.00	0.00	0.00
7,900.0	6.00	293.81	7,871.1	224.5	-509.0	-155.1	0.00	0.00	0.00
8,000.0	6.00	293.81	7,970.6	228.8	-518.5	-158.0	0.00	0.00	0.00
8,100.0	6.00	293.81	8,070.0	233.0	-528.1	-160.9	0.00	0.00	0.00
8,200.0	6.00	293.81	8,169.5	237.2	-537.6	-163.8	0.00	0.00	0.00
8,300.0	6.00	293.81	8,268.9	241.4	-547.2	-166.7	0.00	0.00	0.00
8,400.0	6.00	293.81	8,368.4	245.6	-556.8	-169.6	0.00	0.00	0.00
8,500.0	6.00	293.81	8,467.8	249.9	-566.3	-172.5	0.00	0.00	0.00
8,600.0	6.00	293.81	8,567.3	254.1	-575.9	-175.5	0.00	0.00	0.00
8,700.0	6.00	293.81	8,666.7	258.3	-585.5	-178.4	0.00	0.00	0.00
8,800.0	6.00	293.81	8,766.2	262.5	-595.0	-181.3	0.00	0.00	0.00
8,900.0	6.00	293.81	8,865.6	266.7	-604.6	-184.2	0.00	0.00	0.00
9,000.0	6.00	293.81	8,965.1	270.9	-614.2	-187.1	0.00	0.00	0.00
9,100.0	6.00	293.81	9,064.5	275.2	-623.7	-190.0	0.00	0.00	0.00
9,200.0	6.00	293.81	9,164.0	279.4	-633.3	-192.9	0.00	0.00	0.00
9,300.0	6.00	293.81	9,263.5	283.6	-642.8	-195.8	0.00	0.00	0.00
9,400.0	6.00	293.81	9,362.9	287.8	-652.4	-198.8	0.00	0.00	0.00
9,500.0	6.00	293.81	9,462.4	292.0	-662.0	-201.7	0.00	0.00	0.00
9,538.4	6.00	293.81	9,500.5	293.7	-665.6	-202.8	0.00	0.00	0.00
9,600.0	4.77	293.81	9,561.9	296.0	-670.9	-204.4	2.00	-2.00	0.00
9,700.0	2.77	293.81	9,661.7	298.7	-676.9	-206.2	2.00	-2.00	0.00
9,800.0	0.77	293.81	9,761.6	299.9	-679.8	-207.1	2.00	-2.00	0.00
9,838.4	0.00	0.00	9,800.0	300.0	-680.0	-207.2	2.00	-2.00	0.00
9,884.4	0.00	0.00	9,846.0	300.0	-680.0	-207.2	0.00	0.00	0.00
9,900.0	1.56	179.61	9,861.6	299.8	-680.0	-207.0	10.00	10.00	0.00
10,000.0	11.56	179.61	9,960.8	288.4	-679.9	-195.7	10.00	10.00	0.00
10,100.0	21.56	179.61	10,056.5	259.9	-679.7	-167.5	10.00	10.00	0.00
10,200.0	31.56	179.61	10,145.9	215.3	-679.4	-123.3	10.00	10.00	0.00

BTA
Planning Report

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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)
10,300.0	41.56	179.61	10,226.1	155.8	-679.0	-64.4	10.00	10.00	0.00
10,400.0	51.56	179.61	10,294.8	83.3	-678.5	7.4	10.00	10.00	0.00
10,500.0	61.56	179.61	10,349.8	0.0	-678.0	90.0	10.00	10.00	0.00
10,600.0	71.56	179.61	10,389.6	-91.7	-677.3	180.7	10.00	10.00	0.00
10,700.0	81.56	179.61	10,412.8	-188.8	-676.7	276.9	10.00	10.00	0.00
10,784.4	90.00	179.61	10,419.0	-272.9	-676.1	360.2	10.00	10.00	0.00
10,800.0	90.00	179.61	10,419.0	-288.5	-676.0	375.6	0.00	0.00	0.00
10,900.0	90.00	179.61	10,419.0	-388.5	-675.3	474.6	0.00	0.00	0.00
11,000.0	90.00	179.61	10,419.0	-488.5	-674.7	573.7	0.00	0.00	0.00
11,100.0	90.00	179.61	10,419.0	-588.5	-674.0	672.7	0.00	0.00	0.00
11,200.0	90.00	179.61	10,419.0	-688.5	-673.3	771.7	0.00	0.00	0.00
11,300.0	90.00	179.61	10,419.0	-788.5	-672.6	870.7	0.00	0.00	0.00
11,400.0	90.00	179.61	10,419.0	-888.5	-671.9	969.8	0.00	0.00	0.00
11,500.0	90.00	179.61	10,419.0	-988.5	-671.3	1,068.8	0.00	0.00	0.00
11,600.0	90.00	179.61	10,419.0	-1,088.5	-670.6	1,167.8	0.00	0.00	0.00
11,700.0	90.00	179.61	10,419.0	-1,188.5	-669.9	1,266.8	0.00	0.00	0.00
11,800.0	90.00	179.61	10,419.0	-1,288.5	-669.2	1,365.9	0.00	0.00	0.00
11,900.0	90.00	179.61	10,419.0	-1,388.5	-668.6	1,464.9	0.00	0.00	0.00
12,000.0	90.00	179.61	10,419.0	-1,488.5	-667.9	1,563.9	0.00	0.00	0.00
12,100.0	90.00	179.61	10,419.0	-1,588.5	-667.2	1,662.9	0.00	0.00	0.00
12,200.0	90.00	179.61	10,419.0	-1,688.5	-666.5	1,761.9	0.00	0.00	0.00
12,300.0	90.00	179.61	10,419.0	-1,788.5	-665.9	1,861.0	0.00	0.00	0.00
12,400.0	90.00	179.61	10,419.0	-1,888.5	-665.2	1,960.0	0.00	0.00	0.00
12,500.0	90.00	179.61	10,419.0	-1,988.5	-664.5	2,059.0	0.00	0.00	0.00
12,600.0	90.00	179.61	10,419.0	-2,088.5	-663.8	2,158.0	0.00	0.00	0.00
12,700.0	90.00	179.61	10,419.0	-2,188.5	-663.1	2,257.1	0.00	0.00	0.00
12,800.0	90.00	179.61	10,419.0	-2,288.5	-662.5	2,356.1	0.00	0.00	0.00
12,900.0	90.00	179.61	10,419.0	-2,388.5	-661.8	2,455.1	0.00	0.00	0.00
13,000.0	90.00	179.61	10,419.0	-2,488.4	-661.1	2,554.1	0.00	0.00	0.00
13,100.0	90.00	179.61	10,419.0	-2,588.4	-660.4	2,653.2	0.00	0.00	0.00
13,200.0	90.00	179.61	10,419.0	-2,688.4	-659.8	2,752.2	0.00	0.00	0.00
13,300.0	90.00	179.61	10,419.0	-2,788.4	-659.1	2,851.2	0.00	0.00	0.00
13,400.0	90.00	179.61	10,419.0	-2,888.4	-658.4	2,950.2	0.00	0.00	0.00
13,500.0	90.00	179.61	10,419.0	-2,988.4	-657.7	3,049.3	0.00	0.00	0.00
13,600.0	90.00	179.61	10,419.0	-3,088.4	-657.0	3,148.3	0.00	0.00	0.00
13,700.0	90.00	179.61	10,419.0	-3,188.4	-656.4	3,247.3	0.00	0.00	0.00
13,800.0	90.00	179.61	10,419.0	-3,288.4	-655.7	3,346.3	0.00	0.00	0.00
13,900.0	90.00	179.61	10,419.0	-3,388.4	-655.0	3,445.4	0.00	0.00	0.00
14,000.0	90.00	179.61	10,419.0	-3,488.4	-654.3	3,544.4	0.00	0.00	0.00
14,100.0	90.00	179.61	10,419.0	-3,588.4	-653.7	3,643.4	0.00	0.00	0.00
14,200.0	90.00	179.61	10,419.0	-3,688.4	-653.0	3,742.4	0.00	0.00	0.00
14,300.0	90.00	179.61	10,419.0	-3,788.4	-652.3	3,841.5	0.00	0.00	0.00
14,400.0	90.00	179.61	10,419.0	-3,888.4	-651.6	3,940.5	0.00	0.00	0.00
14,500.0	90.00	179.61	10,419.0	-3,988.4	-651.0	4,039.5	0.00	0.00	0.00
14,600.0	90.00	179.61	10,419.0	-4,088.4	-650.3	4,138.5	0.00	0.00	0.00
14,700.0	90.00	179.61	10,419.0	-4,188.4	-649.6	4,237.6	0.00	0.00	0.00
14,800.0	90.00	179.61	10,419.0	-4,288.4	-648.9	4,336.6	0.00	0.00	0.00
14,900.0	90.00	179.61	10,419.0	-4,388.4	-648.2	4,435.6	0.00	0.00	0.00
15,000.0	90.00	179.61	10,419.0	-4,488.4	-647.6	4,534.6	0.00	0.00	0.00
15,100.0	90.00	179.61	10,419.0	-4,588.4	-646.9	4,633.7	0.00	0.00	0.00
15,200.0	90.00	179.61	10,419.0	-4,688.4	-646.2	4,732.7	0.00	0.00	0.00
15,300.0	90.00	179.61	10,419.0	-4,788.4	-645.5	4,831.7	0.00	0.00	0.00
15,334.4	90.00	179.61	10,419.0	-4,822.8	-645.3	4,865.8	0.00	0.00	0.00

BTA

Planning Report

Database: EDM 5000.1 Single User Db
 Company: BTA Oil Producers, LLC
 Project: Lea County, NM
 Site: Starcaster
 Well: Starcaster #1H
 Wellbore: Wellbore #1
 Design: Design #1

Local Co-ordinate Reference: Well Starcaster #1H
 TVD Reference: WELL @ 3509.0usft (Original Well Elev)
 MD Reference: WELL @ 3509.0usft (Original Well Elev)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

Design Targets

Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
Starcaster #1H BHL	0.00	0.00	10,419.0	-4,622.8	-645.3	473,151.32	752,889.57	32° 17' 53.363 N	103° 30' 53.637 W
- plan misses target center by 1.4usft at 15134.4usft MD (10419.0 TVD, -4622.8 N, -646.7 E)									
- Point									



Azimuths to Grid North
 True North: -0.44°
 Magnetic North: 7.29°

 Magnetic Field
 Strength: 48851.5nT
 Dip Angle: 60.33°
 Date: 12/31/2009
 Model: IGRF200510

WELL DETAILS: Starcaster #1H

			Ground Level: 3507.0		
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	477774.06	753534.86	$32^{\circ} 18' 39.057 \text{ N}$	$103^{\circ} 30' 45.707 \text{ W}$

SITE DETAILS: Starcaster

Site Centre Northing: 477774.30
 Easting: 753564.86

Positional Uncertainty: 0.0
 Convergence: 0.44
 Local North: Grid

BTA Oil Producers, LLC

PROJECT DETAILS: Lea County, NM

Geodetic System: US State Plane 1927 (Exact solution)
 Datum: NAD 1927 (NADCON CONUS)
 Ellipsoid: Clarke 1866
 Zone: New Mexico East 3001

System Datum: Ground Level

