

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT**HOBBS OCD**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.*5. Lease Serial No.
NMNM59398

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.
NMNM820458. Well Name and No.
MESA B 8115 FED COM 11H9. API Well No.
30-025-46635-00-X110. Field and Pool or Exploratory Area
WOLFCAMP11. County or Parish, State
LEA COUNTY, NM**SUBMIT IN TRIPLICATE - Other Instructions on page 3****RECEIVED**1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other2. Name of Operator
BTA OIL PRODUCERS LLC
Contact: SAMMY HAJAR
E-Mail: shajar@btaoil.com3a. Address
104 S. PECOS
MIDLAND, TX 797013b. Phone No. (include area code)
Ph: 432-682-3753

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

Sec 7 T26S R33E NENW 445FNL 1615FWL
32.064072 N Lat, 103.614594 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 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 THE FOLLOWING DRILLING PROGRAM CHANGES, BATCH DRILLING, VARIANCES, and FTP and LTP FOOTAGE CHANGES TO THE ORIGINAL APD AS APPROVED. PLEASE SEE ATTACHED DOCUMENTS FOR MORE DETAILS.

ORIGINAL FTP: 330' FNL, 1650' FWL
ORIGINAL LTP: 330' FSL, 1650' FWLNEW FTP: 100' FNL, 1650' FWL
NEW LTP: 100' FSL, 1650' FWL**Carlsbad Field Office**
Operator Copy

(SHL WILL NOT CHANGE, THERE WILL BE NO ADDITIONAL SURFACE DISTURBANCES)

Approved with Conditions. See attached COA. All Previous COAs Still Apply

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

Electronic Submission #501951 verified by the BLM Well Information System
For BTA OIL PRODUCERS LLC, sent to the Hobbs
Committed to AFMSS for processing by PRISCILLA PEREZ on 02/04/2020 (20PP1195SE)

Name (Printed/Typed) SAMMY HAJAR

Title REGULATORY ANALYST

Signature (Electronic Submission)

Date 02/04/2020

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By OLABODE AJIBOLA

Title PETROLEUM ENGINEER

Date 02/13/2020

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 *****KZ*

Revisions to Operator-Submitted EC Data for Sundry Notice #501951

	Operator Submitted	BLM Revised (AFMSS)
Sundry Type:	OTHER NOI	APDCH NOI
Lease:	NMNM59398	NMNM59398
Agreement:	NMNM82045	NMNM82045 (NMNM82045)
Operator:	BTA OIL PRODUCERS, LLC 104 S. PECOS MIDLAND, TX 79701 Ph: 432-682-3753	BTA OIL PRODUCERS LLC 104 S. PECOS MIDLAND, TX 79701 Ph: 4326823753
Admin Contact:	SAMMY HAJAR REGULATORY ANALYST E-Mail: shajar@btaoil.com Ph: 432-682-3753	SAMMY HAJAR REGULATORY ANALYST E-Mail: shajar@btaoil.com Ph: 432-682-3753
Tech Contact:	SAMMY HAJAR REGULATORY ANALYST E-Mail: shajar@btaoil.com Ph: 432-682-3753	SAMMY HAJAR REGULATORY ANALYST E-Mail: shajar@btaoil.com Ph: 432-682-3753
Location:		
State:	NM	NM
County:	LEA COUNTY	LEA
Field/Pool:	SANDERS TANK/UPPER WOLFCA	WOLFCAMP
Well/Facility:	MESA B 8115 FED COM 11H Sec 7 T26S R33E NENW 445FNL 1615FWL 32.064070 N Lat, 103.614597 W Lon	MESA B 8115 FED COM 11H Sec 7 T26S R33E NENW 445FNL 1615FWL 32.064072 N Lat, 103.614594 W Lon

PECOS DISTRICT

DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	BTA OIL PRODUCERS, LLC
LEASE NO.:	NMNM59398
WELL NAME & NO.:	11H – MESA B 8115 FED COM
SURFACE HOLE FOOTAGE:	445'/N & 1615'/W
BOTTOM HOLE FOOTAGE:	50'/S & 1650'/W
LOCATION:	SECTION 7, T26S, R33E, NMPM
COUNTY:	LEA COUNTY, NEW MEXICO

COA

H2S	☐ Yes	☒ No	
Potash	☒ None	☐ Secretary	☐ R-111-P
Cave/Karst Potential	☐ Low	☒ Medium	☐ High
Cave/Karst Potential	☐ Critical		
Variance	☐ None	☒ Flex Hose	☐ Other
Wellhead	☐ Conventional	☐ Multibowl	☒ Both
Other	☐ 4 String Area	☐ Capitan Reef	☐ WIPP
Other	☐ Fluid Filled	☐ Cement Squeeze	☐ Pilot Hole
Special Requirements	☐ Water Disposal	☒ COM	☐ Unit

All previous COAs still apply.

A. CASING

Primary Casing Design:

1. The 10-3/4 inch surface casing shall be set at approximately **840 feet** (a minimum of 25 feet (Lea County) into the Rustler Anhydrite and above the salt) and cemented to the surface.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
 - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength,

whichever is greater.

- d. If cement falls back, remedial cementing will be done prior to drilling out that string.

2. The minimum required fill of cement behind the 7-5/8 inch intermediate casing is:

Option 1 (Single Stage):

- Cement to surface. If cement does not circulate see B.1.a, c-d above.
Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.
Excess cement calculates to -44%, additional cement might be required.

Option 2:

Operator has proposed a DV tool, the depth may be adjusted as long as the cement is changed proportionally. The DV tool may be cancelled if cement circulates to surface on the first stage.

- a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.

Excess cement calculates to -6%, additional cement might be required.

- b. Second stage above DV tool:

- Cement to surface. If cement does not circulate, contact the appropriate BLM office.

Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.

- ❖ In Medium Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.

3. The minimum required fill of cement behind the 5 1/2 X 5 inch production casing is:

- Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

B. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'

2.

Option 1:

- a. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M) psi**.
- b. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the intermediate casing shoe shall be **10,000 (10M) psi**. **Variance is approved to use a 5000 (5M) Annular which shall be tested to 5000 (5M) psi.**

Option 2:

1. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **10,000 (10M) psi**. **Variance is approved to use a 5000 (5M) Annular which shall be tested to 5000 (5M) psi.**
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
 - e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

C. SPECIAL REQUIREMENT (S)

Communitization Agreement

- The operator will submit a Communitization Agreement to the Carlsbad Field Office, 620 E Greene St. Carlsbad, New Mexico 88220, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

BOP Break Testing Variance (Note: For 5M BOP or less)

- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer prior to the commencement of any BOP Break Testing operations.
- A full BOP test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOP test will be required.

OTA02132020

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

DISTRICT II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

DISTRICT III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

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

□ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-46635	Pool Code 98097	Pool Name SANDERS TANK ; UPPER WOLFCAMP
Property Code 326144	Property Name MESA B 8115 FED COM	Well Number 11H
OGRID No. 260297	Operator Name BTA OIL PRODUCERS, LLC	Elevation 3283'

Surface Location

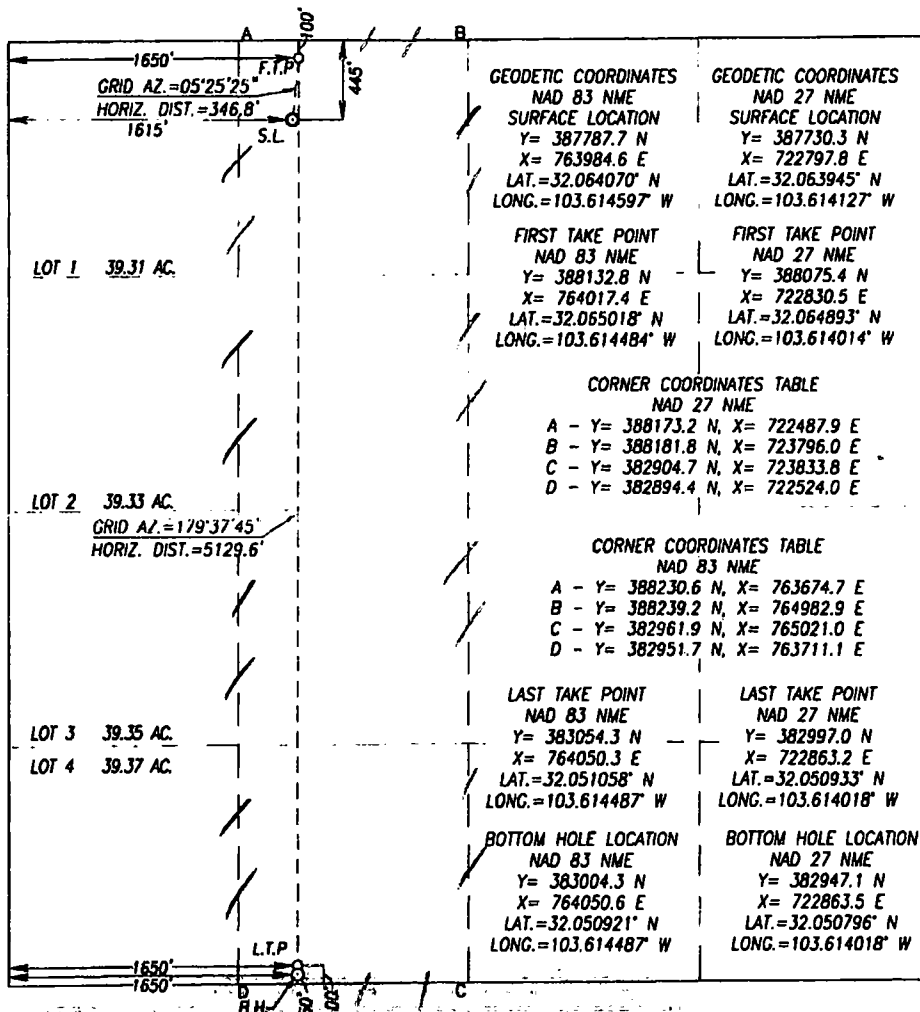
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	7	26-S	33-E		445	NORTH	1615	WEST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	7	26-S	33-E		50	SOUTH	1650	WEST	LEA

Dedicated Acres 160	Joint or Infill	Consolidation Code	Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



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 unleased mineral interest in the land 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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division

Sammy Hajar 2/4/20
Signature Date
Sammy Hajar
Printed Name
SHAJAR@BTAOIL.COM
E-mail Address

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted 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 knowledge

RONALD J. EIDSON
Date of Survey
Signature & Seal of Professional Surveyor
3239
11/11/2019
Certificate Number Gary G. Eidson 12641
Ronald J. Eidson 3239
ACK REL W.O.:18110496 JWSC W.O. 19.13.1131

BATCH DRILLING SEQUENCE OF THE 10H, 11H, 12H, 13H:

- SPUD Mesa B 8115 #10H – rig up walked out, drill 14-3/4" hole and set 10-3/4" csg
- Walk to Mesa B 8115 #11H, SPUD 14-3/4" hole and set 10-3/4" csg
- Walk to Mesa B 8115 #12H, SPUD 14-3/4" hole and set 10-3/4" csg
- Walk to Mesa B 8115 #13H, SPUD 14-3/4" hole and set 10-3/4" csg, test BOP, drill and set 7-5/8" csg
- Walk to Mesa B 8115 #12H, test BOP, drill 9-7/8" hole and set 7-5/8" csg
- Walk to Mesa B 8115 #11H, test BOP, drill 9-7/8" hole and set 7-5/8" csg
- Walk to Mesa B 8115 #10H, test BOP, drill 9-7/8" hole and set 7-5/8" csg, drill 6-3/4" hole and set 5-1/2" x 5" casing.
- Walk to Mesa B 8115 #11H, test BOP, drill 6-3/4" hole and set 5-1/2" x 5" casing.
- Walk to Mesa B 8115 #12H, test BOP, drill 6-3/4" hole and set 5-1/2" x 5" casing.
- Walk to Mesa B 8115 #13H, test BOP, drill 6-3/4" hole and set 5-1/2" x 5" casing.
- Rig released

Mud Program 11H:

Original Permit

- Surface Section – Fresh water 8.4 ppg
- Intermediate – Brine 10.0 – 10.2 ppg
- 2nd Intermediate – Cut brine 8.6 – 9.2 ppg
- Production – OBM 11.5 – 12.0 ppg

Proposed Change

- Surface Section – Fresh water 8.3 - 8.4 ppg
- Intermediate – DBE 9.0 - 9.4 ppg
- Production – OBM 11.5 – 12.0 ppg

Casing Programs

Casing Program 11H

Original APD

- Surface
13-3/8" 54.5# J-55 STC set at 720' in a 17-1/2" hole
- Intermediate
9-5/8" 40# J-55 @ 4720' in a 12-1/4" hole
- 2nd Intermediate
7" 29# P-110 @ 12366' in a 8-3/4" hole
- Liner
4-1/2" 11.6# P-110 liner from 11716' – 17297' in a 6-1/8" hole

Proposed Change

- Surface
10-3/4" 40.5# J-55 STC set at 740' in a 14-3/4" hole
- Intermediate
12-1/4" hole from 740' to 8004' and 8-3/4" hole from 8004' – 11773'. 7-5/8" 29.7# P-110 BTC from 0 - 7700' and 7-5/8" 29.7# P-110 Stinger HC from 7700' – 11773' and DV tool at 4700'
- Production
11573' of 5-1/2" 20# P-110 BTC and 5751' of 5" 18# P-110 BTC set at 17324' (12307' TVD) in a 6-3/4" hole

Cement Programs

Mesa B 8115 #11H

Original

-Surface Cement

Lead: 410 sx, 13.5 ppg, 100% excess, Class C
Tail: 200 sx, 14.8 ppg, 100% excess, Class C

-Intermediate Cement

Lead: 1340 sx, 12.7 ppg, 100% excess, Class C
Tail: 250 sx, 14.8 ppg, 25% excess, Class C

-2nd Intermediate Cement

Lead: 225 sx, 10.5 ppg, 15% excess, 75% Class C 25% Poz
Tail: 765 sx, 15.6 ppg, 15% excess, Class H

-Liner Cement

315 sx, 13.2 ppg, 10% excess, Class H

Proposed Change

-Surface Cement

Lead: 310 sx, 13.5 ppg, 1.8 ft³/sk, 100% excess, Class C
Tail: 200 sx, 14.8 ppg, 1.34 ft³/sk, 100% excess, Class C

-Intermediate Cement

Stage 1:

Lead: 360 sx, 10.5 ppg, 2.64 ft³/sk, 25% excess, Class H
Tail: 400 sx, 15.6 ppg, 1.19 ft³/sk, 25% excess, Class H

Stage 2:

Lead: 685 sx, 12.7 ppg, 2.19 ft³/sk, 50% excess, Class C
Tail: 150 sx, 14.8 ppg, 1.33 ft³/sk, 50% excess, Class C

-Production Cement

Tail: 640 sx, 14.8 ppg, 1.27 ft³/sk, 10% excess, Class H

Variances:

-5M BOP on 9-7/8" hole

~~-10M BOP with 5M annular for 6-3/4" hole~~

-Wave the centralizer requirements for the 5-1/2" and 5" casing in the 6-3/4" hole size. An expansion additive will be utilized in the cement slurry for the entire length of the 6-3/4" hole interval to maximize cement bond and zonal isolation.

-BTA requests permission to allow BOP Break Testing under the following conditions:

- After a full BOP test is conducted on the first well on the pad.
- When skidding to drill a hole section that does not penetrate into the Wolfcamp.
- Full BOP test will be required prior to drilling any production hole.

BTA Oil Producers, LLC

Lea County, NM (NAD 83)

Mesa B

Mesa B #11H

Wellbore #1

Plan: Design #1

Standard Planning Report - Geographic

03 February, 2020

Microsoft
Planning Report - Geographic

Database: Old
Company: BTA Oil Producers, LLC
Project: Lea County, NM (NAD 83)
Site: Mesa B
Well: Mesa B #11H
Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference: Well Mesa B #11H
TVD Reference: GL @ 3283.0usft
MD Reference: GL @ 3283.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Project	Lea County, NM (NAD 83), Lea County, NM		
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	Mesa B		
Site Position:		Northing:	383,154.37 usft
From:	Map	Easting:	765,479.20 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 3' 4.704 N
		Longitude:	103° 36' 35.543 W
		Grid Convergence:	0.38 °

Well	Mesa B #11H		
Well Position	+N/-S	0.0 usft	Northing:
	+E/-W	0.0 usft	Easting:
Position Uncertainty	0.0 usft		Wellhead Elevation:
			Latitude:
			Longitude:
			Ground Level:

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination
			(°)
	IGRF200510	12/31/2009	7.76
			Dip Angle
			(°)
			60.08
			Field Strength
			(nT)
			48,692.58169300

Design	Design #1		
Audit Notes:			
Version:	Phase:	PROTOTYPE	Tie On Depth:
			0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction
			(°)
			179.21

Plan Survey Tool Program Date 2/3/2020

Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	17.171.2 Design #1 (Wellbore #1)		

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	
6,687.1	0.00	0.00	6,687.1	0.0	0.0	0.00	0.00	0.00	0.00	
6,937.1	5.00	4.76	6,936.8	10.9	0.9	2.00	2.00	0.00	4.76	
11,522.6	5.00	4.76	11,504.8	409.1	34.1	0.00	0.00	0.00	0.00	
11,772.6	0.00	0.00	11,754.5	420.0	35.0	2.00	-2.00	0.00	180.00	
11,847.6	0.00	0.00	11,829.5	420.0	35.0	0.00	0.00	0.00	0.00	
12,597.6	90.00	179.66	12,307.0	-57.5	37.8	12.00	12.00	0.00	179.66	
17,323.8	90.00	179.66	12,307.0	-4,783.6	66.0	0.00	0.00	0.00	0.00	Mesa B #11H BHL

Microsoft
Planning Report - Geographic

Database: Old
Company: BTA Oil Producers, LLC
Project: Lea County, NM (NAD 83)
Site: Mesa B
Well: Mesa B #11H
Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference: Well Mesa B #11H
TVD Reference: GL @ 3283.0usft
MD Reference: 3283.0usft
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	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
100.0	0.00	0.00	100.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
200.0	0.00	0.00	200.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
300.0	0.00	0.00	300.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
400.0	0.00	0.00	400.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
500.0	0.00	0.00	500.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
600.0	0.00	0.00	600.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
700.0	0.00	0.00	700.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
800.0	0.00	0.00	800.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
900.0	0.00	0.00	900.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
1,000.0	0.00	0.00	1,000.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
1,100.0	0.00	0.00	1,100.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
1,200.0	0.00	0.00	1,200.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
1,300.0	0.00	0.00	1,300.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
1,400.0	0.00	0.00	1,400.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
1,500.0	0.00	0.00	1,500.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
1,600.0	0.00	0.00	1,600.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
1,700.0	0.00	0.00	1,700.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
1,800.0	0.00	0.00	1,800.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
1,900.0	0.00	0.00	1,900.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
2,000.0	0.00	0.00	2,000.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
2,100.0	0.00	0.00	2,100.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
2,200.0	0.00	0.00	2,200.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
2,300.0	0.00	0.00	2,300.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
2,400.0	0.00	0.00	2,400.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
2,500.0	0.00	0.00	2,500.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
2,600.0	0.00	0.00	2,600.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
2,700.0	0.00	0.00	2,700.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
2,800.0	0.00	0.00	2,800.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
2,900.0	0.00	0.00	2,900.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
3,000.0	0.00	0.00	3,000.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
3,100.0	0.00	0.00	3,100.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
3,200.0	0.00	0.00	3,200.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
3,300.0	0.00	0.00	3,300.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
3,400.0	0.00	0.00	3,400.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
3,500.0	0.00	0.00	3,500.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
3,600.0	0.00	0.00	3,600.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
3,700.0	0.00	0.00	3,700.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
3,800.0	0.00	0.00	3,800.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
3,900.0	0.00	0.00	3,900.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
4,000.0	0.00	0.00	4,000.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
4,100.0	0.00	0.00	4,100.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
4,200.0	0.00	0.00	4,200.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
4,300.0	0.00	0.00	4,300.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
4,400.0	0.00	0.00	4,400.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
4,500.0	0.00	0.00	4,500.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
4,600.0	0.00	0.00	4,600.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
4,700.0	0.00	0.00	4,700.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
4,800.0	0.00	0.00	4,800.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
4,900.0	0.00	0.00	4,900.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
5,000.0	0.00	0.00	5,000.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
5,100.0	0.00	0.00	5,100.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
5,200.0	0.00	0.00	5,200.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
5,300.0	0.00	0.00	5,300.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
5,400.0	0.00	0.00	5,400.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W

Microsoft
Planning Report - Geographic

Database: Old
Company: BTA Oil Producers, LLC
Project: Lea County, NM (NAD 82)
Site: Mesa B
Well: Mesa B #11H
Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference: Well Mesa B #11H
TVD Reference: GL @ 3283.0usft
MD Reference: GL @ 3283.0usft
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
5,500.0	0.00	0.00	5,500.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
5,600.0	0.00	0.00	5,600.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
5,700.0	0.00	0.00	5,700.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
5,800.0	0.00	0.00	5,800.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
5,900.0	0.00	0.00	5,900.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
6,000.0	0.00	0.00	6,000.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
6,100.0	0.00	0.00	6,100.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
6,200.0	0.00	0.00	6,200.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
6,300.0	0.00	0.00	6,300.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
6,400.0	0.00	0.00	6,400.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
6,500.0	0.00	0.00	6,500.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
6,600.0	0.00	0.00	6,600.0	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
6,687.1	0.00	0.00	6,687.1	0.0	0.0	387,787.70	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
6,700.0	0.26	4.76	6,700.0	0.0	0.0	387,787.73	763,984.60	32° 3' 50.653 N	103° 36' 52.550 W
6,800.0	2.26	4.76	6,800.0	2.2	0.2	387,789.92	763,984.78	32° 3' 50.675 N	103° 36' 52.548 W
6,900.0	4.26	4.76	6,899.8	7.9	0.7	387,795.58	763,985.25	32° 3' 50.731 N	103° 36' 52.542 W
6,937.1	5.00	4.76	6,936.8	10.9	0.9	387,798.56	763,985.50	32° 3' 50.760 N	103° 36' 52.539 W
7,000.0	5.00	4.76	6,999.4	16.3	1.4	387,804.03	763,985.96	32° 3' 50.814 N	103° 36' 52.533 W
7,100.0	5.00	4.76	7,099.1	25.0	2.1	387,812.71	763,986.68	32° 3' 50.900 N	103° 36' 52.524 W
7,200.0	5.00	4.76	7,198.7	33.7	2.8	387,821.40	763,987.41	32° 3' 50.986 N	103° 36' 52.515 W
7,300.0	5.00	4.76	7,298.3	42.4	3.5	387,830.08	763,988.13	32° 3' 51.072 N	103° 36' 52.506 W
7,400.0	5.00	4.76	7,397.9	51.1	4.3	387,838.77	763,988.85	32° 3' 51.158 N	103° 36' 52.497 W
7,500.0	5.00	4.76	7,497.5	59.8	5.0	387,847.45	763,989.58	32° 3' 51.244 N	103° 36' 52.488 W
7,600.0	5.00	4.76	7,597.2	68.4	5.7	387,856.14	763,990.30	32° 3' 51.329 N	103° 36' 52.479 W
7,700.0	5.00	4.76	7,696.8	77.1	6.4	387,864.82	763,991.02	32° 3' 51.415 N	103° 36' 52.470 W
7,800.0	5.00	4.76	7,796.4	85.8	7.2	387,873.51	763,991.75	32° 3' 51.501 N	103° 36' 52.460 W
7,900.0	5.00	4.76	7,896.0	94.5	7.9	387,882.19	763,992.47	32° 3' 51.587 N	103° 36' 52.451 W
8,000.0	5.00	4.76	7,995.6	103.2	8.6	387,890.88	763,993.20	32° 3' 51.673 N	103° 36' 52.442 W
8,100.0	5.00	4.76	8,095.3	111.9	9.3	387,899.56	763,993.92	32° 3' 51.759 N	103° 36' 52.433 W
8,200.0	5.00	4.76	8,194.9	120.6	10.0	387,908.25	763,994.64	32° 3' 51.845 N	103° 36' 52.424 W
8,300.0	5.00	4.76	8,294.5	129.2	10.8	387,916.93	763,995.37	32° 3' 51.931 N	103° 36' 52.415 W
8,400.0	5.00	4.76	8,394.1	137.9	11.5	387,925.62	763,996.09	32° 3' 52.017 N	103° 36' 52.406 W
8,500.0	5.00	4.76	8,493.7	146.6	12.2	387,934.30	763,996.81	32° 3' 52.103 N	103° 36' 52.397 W
8,600.0	5.00	4.76	8,593.4	155.3	12.9	387,942.99	763,997.54	32° 3' 52.188 N	103° 36' 52.388 W
8,700.0	5.00	4.76	8,693.0	164.0	13.7	387,951.67	763,998.26	32° 3' 52.274 N	103° 36' 52.379 W
8,800.0	5.00	4.76	8,792.6	172.7	14.4	387,960.36	763,998.99	32° 3' 52.360 N	103° 36' 52.370 W
8,900.0	5.00	4.76	8,892.2	181.4	15.1	387,969.05	763,999.71	32° 3' 52.446 N	103° 36' 52.361 W
9,000.0	5.00	4.76	8,991.8	190.0	15.8	387,977.73	764,000.43	32° 3' 52.532 N	103° 36' 52.351 W
9,100.0	5.00	4.76	9,091.5	198.7	16.6	387,986.42	764,001.16	32° 3' 52.618 N	103° 36' 52.342 W
9,200.0	5.00	4.76	9,191.1	207.4	17.3	387,995.10	764,001.88	32° 3' 52.704 N	103° 36' 52.333 W
9,300.0	5.00	4.76	9,290.7	216.1	18.0	388,003.79	764,002.60	32° 3' 52.790 N	103° 36' 52.324 W
9,400.0	5.00	4.76	9,390.3	224.8	18.7	388,012.47	764,003.33	32° 3' 52.876 N	103° 36' 52.315 W
9,500.0	5.00	4.76	9,489.9	233.5	19.5	388,021.16	764,004.05	32° 3' 52.962 N	103° 36' 52.306 W
9,600.0	5.00	4.76	9,589.5	242.2	20.2	388,029.84	764,004.78	32° 3' 53.047 N	103° 36' 52.297 W
9,700.0	5.00	4.76	9,689.2	250.8	20.9	388,038.53	764,005.50	32° 3' 53.133 N	103° 36' 52.288 W
9,800.0	5.00	4.76	9,788.8	259.5	21.6	388,047.21	764,006.22	32° 3' 53.219 N	103° 36' 52.279 W
9,900.0	5.00	4.76	9,888.4	268.2	22.4	388,055.90	764,006.95	32° 3' 53.305 N	103° 36' 52.270 W
10,000.0	5.00	4.76	9,988.0	276.9	23.1	388,064.58	764,007.67	32° 3' 53.391 N	103° 36' 52.261 W
10,100.0	5.00	4.76	10,087.6	285.6	23.8	388,073.27	764,008.39	32° 3' 53.477 N	103° 36' 52.252 W
10,200.0	5.00	4.76	10,187.3	294.3	24.5	388,081.95	764,009.12	32° 3' 53.563 N	103° 36' 52.242 W
10,300.0	5.00	4.76	10,286.9	302.9	25.2	388,090.64	764,009.84	32° 3' 53.649 N	103° 36' 52.233 W
10,400.0	5.00	4.76	10,386.5	311.6	26.0	388,099.32	764,010.57	32° 3' 53.735 N	103° 36' 52.224 W
10,500.0	5.00	4.76	10,486.1	320.3	26.7	388,108.01	764,011.29	32° 3' 53.820 N	103° 36' 52.215 W
10,600.0	5.00	4.76	10,585.7	329.0	27.4	388,116.69	764,012.01	32° 3' 53.906 N	103° 36' 52.206 W
10,700.0	5.00	4.76	10,685.4	337.7	28.1	388,125.38	764,012.74	32° 3' 53.992 N	103° 36' 52.197 W

TP →

Microsoft
Planning Report - Geographic

Database: Old
Company: BTA Oil Producers, LLC
Project: Lea County, NM (NAD 83)
Site: Mesa B
Well: Mesa B #11H
Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference: Well Mesa B #11H
TVD Reference: GL @ 3283.0usft
MD Reference: GL @ 3283.0usft
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
10,800.0	5.00	4.76	10,785.0	346.4	28.9	388,134.06	764,013.46	32° 3' 54.078 N	103° 36' 52.188 W
10,900.0	5.00	4.76	10,884.6	355.1	29.6	388,142.75	764,014.18	32° 3' 54.164 N	103° 36' 52.179 W
11,000.0	5.00	4.76	10,984.2	363.7	30.3	388,151.43	764,014.91	32° 3' 54.250 N	103° 36' 52.170 W
11,100.0	5.00	4.76	11,083.8	372.4	31.0	388,160.12	764,015.63	32° 3' 54.336 N	103° 36' 52.161 W
11,200.0	5.00	4.76	11,183.5	381.1	31.8	388,168.80	764,016.36	32° 3' 54.422 N	103° 36' 52.152 W
11,300.0	5.00	4.76	11,283.1	389.8	32.5	388,177.49	764,017.08	32° 3' 54.508 N	103° 36' 52.143 W
11,400.0	5.00	4.76	11,382.7	398.5	33.2	388,186.17	764,017.80	32° 3' 54.594 N	103° 36' 52.133 W
11,500.0	5.00	4.76	11,482.3	407.2	33.9	388,194.86	764,018.53	32° 3' 54.679 N	103° 36' 52.124 W
11,522.6	5.00	4.76	11,504.8	409.1	34.1	388,196.82	764,018.69	32° 3' 54.699 N	103° 36' 52.122 W
11,600.0	3.45	4.76	11,582.0	414.8	34.6	388,202.51	764,019.16	32° 3' 54.755 N	103° 36' 52.116 W
11,700.0	1.45	4.76	11,681.9	419.1	34.9	388,206.77	764,019.52	32° 3' 54.797 N	103° 36' 52.112 W
11,772.6	0.00	0.00	11,754.5	420.0	35.0	388,207.68	764,019.60	32° 3' 54.806 N	103° 36' 52.111 W
11,800.0	0.00	0.00	11,781.9	420.0	35.0	388,207.68	764,019.60	32° 3' 54.806 N	103° 36' 52.111 W
11,847.6	0.00	0.00	11,829.5	420.0	35.0	388,207.68	764,019.60	32° 3' 54.806 N	103° 36' 52.111 W
11,900.0	6.29	179.66	11,881.8	417.1	35.0	388,204.81	764,019.61	32° 3' 54.778 N	103° 36' 52.111 W
12,000.0	18.29	179.66	11,979.3	395.9	35.1	388,183.58	764,019.74	32° 3' 54.568 N	103° 36' 52.111 W
12,100.0	30.29	179.66	12,070.3	354.8	35.4	388,142.52	764,019.98	32° 3' 54.161 N	103° 36' 52.111 W
12,200.0	42.29	179.66	12,150.8	295.8	35.7	388,083.45	764,020.34	32° 3' 53.577 N	103° 36' 52.112 W
12,300.0	54.29	179.66	12,217.2	221.3	36.2	388,008.95	764,020.78	32° 3' 52.840 N	103° 36' 52.113 W
12,400.0	66.29	179.66	12,266.7	134.6	36.7	387,922.26	764,021.30	32° 3' 51.982 N	103° 36' 52.113 W
12,500.0	78.29	179.66	12,297.1	39.5	37.3	387,827.18	764,021.86	32° 3' 51.041 N	103° 36' 52.114 W
12,597.6	90.00	179.66	12,307.0	-57.5	37.8	387,730.24	764,022.44	32° 3' 50.082 N	103° 36' 52.115 W
12,600.0	90.00	179.66	12,307.0	-59.8	37.9	387,727.86	764,022.45	32° 3' 50.058 N	103° 36' 52.115 W
12,700.0	90.00	179.66	12,307.0	-159.8	38.5	387,627.87	764,023.05	32° 3' 49.068 N	103° 36' 52.116 W
12,800.0	90.00	179.66	12,307.0	-259.8	39.1	387,527.87	764,023.65	32° 3' 48.079 N	103° 36' 52.117 W
12,900.0	90.00	179.66	12,307.0	-359.8	39.6	387,427.88	764,024.24	32° 3' 47.089 N	103° 36' 52.117 W
13,000.0	90.00	179.66	12,307.0	-459.8	40.2	387,327.88	764,024.84	32° 3' 46.100 N	103° 36' 52.118 W
13,100.0	90.00	179.66	12,307.0	-559.8	40.8	387,227.89	764,025.43	32° 3' 45.110 N	103° 36' 52.119 W
13,200.0	90.00	179.66	12,307.0	-659.8	41.4	387,127.89	764,026.03	32° 3' 44.121 N	103° 36' 52.120 W
13,300.0	90.00	179.66	12,307.0	-759.8	42.0	387,027.90	764,026.62	32° 3' 43.131 N	103° 36' 52.121 W
13,400.0	90.00	179.66	12,307.0	-859.8	42.6	386,927.90	764,027.22	32° 3' 42.142 N	103° 36' 52.121 W
13,500.0	90.00	179.66	12,307.0	-959.8	43.2	386,827.91	764,027.82	32° 3' 41.152 N	103° 36' 52.122 W
13,600.0	90.00	179.66	12,307.0	-1,059.8	43.8	386,727.92	764,028.41	32° 3' 40.163 N	103° 36' 52.123 W
13,700.0	90.00	179.66	12,307.0	-1,159.8	44.4	386,627.92	764,029.01	32° 3' 39.173 N	103° 36' 52.124 W
13,800.0	90.00	179.66	12,307.0	-1,259.8	45.0	386,527.93	764,029.60	32° 3' 38.184 N	103° 36' 52.125 W
13,900.0	90.00	179.66	12,307.0	-1,359.8	45.6	386,427.93	764,030.20	32° 3' 37.194 N	103° 36' 52.125 W
14,000.0	90.00	179.66	12,307.0	-1,459.8	46.2	386,327.94	764,030.80	32° 3' 36.204 N	103° 36' 52.126 W
14,100.0	90.00	179.66	12,307.0	-1,559.8	46.8	386,227.94	764,031.39	32° 3' 35.215 N	103° 36' 52.127 W
14,200.0	90.00	179.66	12,307.0	-1,659.8	47.4	386,127.95	764,031.99	32° 3' 34.225 N	103° 36' 52.128 W
14,300.0	90.00	179.66	12,307.0	-1,759.8	48.0	386,027.95	764,032.58	32° 3' 33.236 N	103° 36' 52.129 W
14,400.0	90.00	179.66	12,307.0	-1,859.8	48.6	385,927.96	764,033.18	32° 3' 32.246 N	103° 36' 52.130 W
14,500.0	90.00	179.66	12,307.0	-1,959.8	49.2	385,827.96	764,033.77	32° 3' 31.257 N	103° 36' 52.130 W
14,600.0	90.00	179.66	12,307.0	-2,059.8	49.8	385,727.97	764,034.37	32° 3' 30.267 N	103° 36' 52.131 W
14,700.0	90.00	179.66	12,307.0	-2,159.8	50.4	385,627.97	764,034.97	32° 3' 29.278 N	103° 36' 52.132 W
14,800.0	90.00	179.66	12,307.0	-2,259.8	51.0	385,527.98	764,035.56	32° 3' 28.288 N	103° 36' 52.133 W
14,900.0	90.00	179.66	12,307.0	-2,359.8	51.6	385,427.98	764,036.16	32° 3' 27.299 N	103° 36' 52.134 W
15,000.0	90.00	179.66	12,307.0	-2,459.8	52.2	385,327.99	764,036.75	32° 3' 26.309 N	103° 36' 52.134 W
15,100.0	90.00	179.66	12,307.0	-2,559.8	52.8	385,227.99	764,037.35	32° 3' 25.319 N	103° 36' 52.135 W
15,200.0	90.00	179.66	12,307.0	-2,659.8	53.3	385,128.00	764,037.94	32° 3' 24.330 N	103° 36' 52.136 W
15,300.0	90.00	179.66	12,307.0	-2,759.8	53.9	385,028.00	764,038.54	32° 3' 23.340 N	103° 36' 52.137 W
15,400.0	90.00	179.66	12,307.0	-2,859.8	54.5	384,928.01	764,039.14	32° 3' 22.351 N	103° 36' 52.138 W
15,500.0	90.00	179.66	12,307.0	-2,959.8	55.1	384,828.01	764,039.73	32° 3' 21.361 N	103° 36' 52.139 W
15,600.0	90.00	179.66	12,307.0	-3,059.8	55.7	384,728.02	764,040.33	32° 3' 20.372 N	103° 36' 52.139 W
15,700.0	90.00	179.66	12,307.0	-3,159.8	56.3	384,628.02	764,040.92	32° 3' 19.382 N	103° 36' 52.140 W
15,800.0	90.00	179.66	12,307.0	-3,259.8	56.9	384,528.03	764,041.52	32° 3' 18.393 N	103° 36' 52.141 W

Microsoft
Planning Report - Geographic

Database: Old
Company: BTA Oil Producers, LLC
Project: Lea County, NM (NAD 83)
Site: Mesa B
Well: Mesa B #11H
Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference: Well Mesa B #11H
TVD Reference: GL @ 3283.0usft
MD Reference: GL @ 3283.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

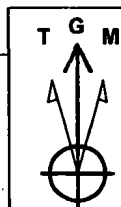
Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
15,900.0	90.00	179.66	12,307.0	-3,359.8	57.5	384,428.03	764,042.11	32° 3' 17.403 N	103° 36' 52.142 W
16,000.0	90.00	179.66	12,307.0	-3,459.8	58.1	384,328.04	764,042.71	32° 3' 16.414 N	103° 36' 52.143 W
16,100.0	90.00	179.66	12,307.0	-3,559.8	58.7	384,228.04	764,043.31	32° 3' 15.424 N	103° 36' 52.143 W
16,200.0	90.00	179.66	12,307.0	-3,659.8	59.3	384,128.05	764,043.90	32° 3' 14.435 N	103° 36' 52.144 W
16,300.0	90.00	179.66	12,307.0	-3,759.8	59.9	384,028.06	764,044.50	32° 3' 13.445 N	103° 36' 52.145 W
16,400.0	90.00	179.66	12,307.0	-3,859.8	60.5	383,928.06	764,045.09	32° 3' 12.455 N	103° 36' 52.146 W
16,500.0	90.00	179.66	12,307.0	-3,959.8	61.1	383,828.07	764,045.69	32° 3' 11.466 N	103° 36' 52.147 W
16,600.0	90.00	179.66	12,307.0	-4,059.8	61.7	383,728.07	764,046.28	32° 3' 10.476 N	103° 36' 52.148 W
16,700.0	90.00	179.66	12,307.0	-4,159.8	62.3	383,628.08	764,046.88	32° 3' 9.487 N	103° 36' 52.148 W
16,800.0	90.00	179.66	12,307.0	-4,259.8	62.9	383,528.08	764,047.48	32° 3' 8.497 N	103° 36' 52.149 W
16,900.0	90.00	179.66	12,307.0	-4,359.8	63.5	383,428.09	764,048.07	32° 3' 7.508 N	103° 36' 52.150 W
17,000.0	90.00	179.66	12,307.0	-4,459.8	64.1	383,328.09	764,048.67	32° 3' 6.518 N	103° 36' 52.151 W
17,100.0	90.00	179.66	12,307.0	-4,559.8	64.7	383,228.10	764,049.26	32° 3' 5.529 N	103° 36' 52.152 W
17,200.0	90.00	179.66	12,307.0	-4,659.8	65.3	383,128.10	764,049.86	32° 3' 4.539 N	103° 36' 52.152 W
17,300.0	90.00	179.66	12,307.0	-4,759.8	65.9	383,028.11	764,050.46	32° 3' 3.550 N	103° 36' 52.153 W
17,323.8	90.00	179.66	12,307.0	-4,783.6	66.0	383,004.30	764,050.60	32° 3' 3.314 N	103° 36' 52.153 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									
Mesa B #11H BHL	0.00	0.00	12,307.0	-4,783.6	66.0	383,004.30	764,050.60	32° 3' 3.314 N	103° 36' 52.153 W
- plan hits target center									
- Point									

BTA Oil Producers, LLC



Azimuths to Grid North
 True North: -0.38°
 Magnetic North: 7.38°
 Magnetic Field
 Strength: 48692.6nT
 Dip Angle: 60.08°
 Date: 12/31/2009
 Model: IGRF200510

SITE DETAILS: Mesa B

Site Centre Northing: 383154.37
 Easting: 765479.20

Positional Uncertainty: 0.0
 Convergence: 0.38
 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	6687.1	0.00	0.00	6687.1	0.0	0.0	0.00
3	6937.1	5.00	4.76	6936.8	10.9	0.9	2.00
4	11522.6	5.00	4.76	11504.8	409.1	34.1	0.00
5	11772.6	0.00	0.00	11754.5	420.0	35.0	2.00
6	11847.6	0.00	0.00	11829.5	420.0	35.0	0.00
7	12597.6	90.00	179.66	12307.0	-57.5	37.8	12.00
8	17323.8	90.00	179.66	12307.0	-4783.6	66.0	0.00

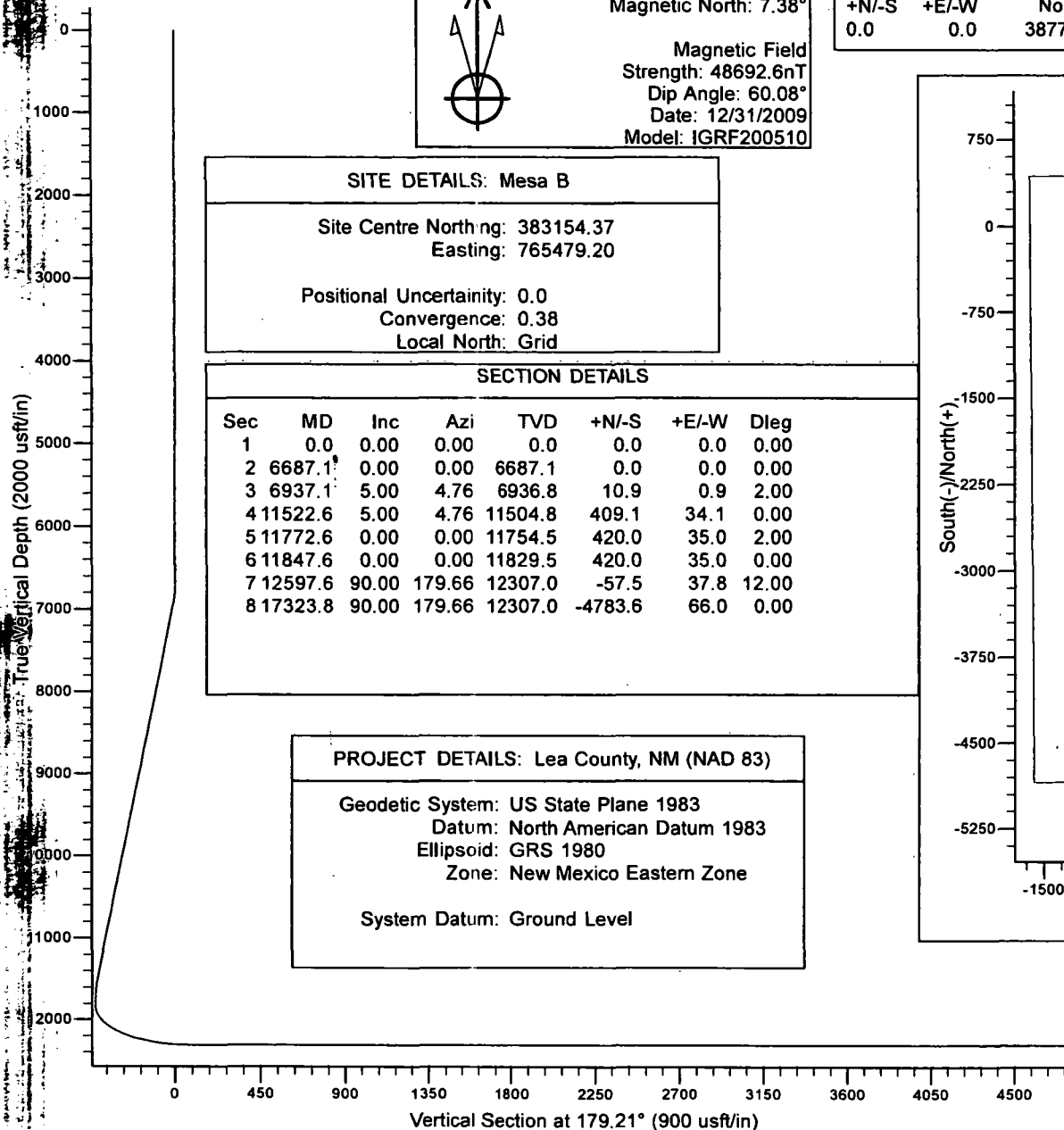
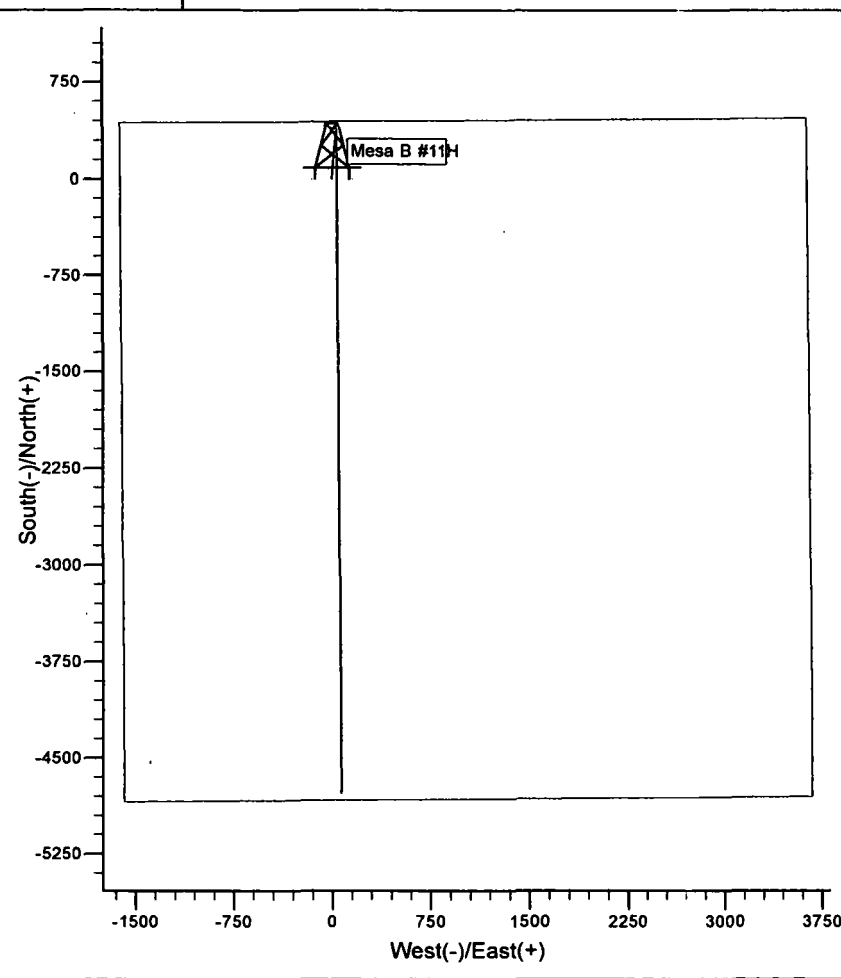
PROJECT DETAILS: Lea County, NM (NAD 83)

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: Mesa B #11H

+N/-S	+E/-W	Northing	Ground Level	Easting	Latitude	Longitude
0.0	0.0	387787.70	3283.0	763984.60	32° 3' 50.653103° 36' 52.550 W	





BTA Oil Producers, LLC
104 S Pecos
Midland, TX 79701

WELL: Mesa 'B' 8115 Fed Com #11H (WUCN)
TVD: 12307
MD: 17324

DRILLING PLAN

Casing Program

Hole Size	Csg. Size	From (MD)	To (MD)	From (TVD)	To (TVD)	Tapered String	Weight (lbs)	Grade	Conn.	Collapse	Burst	Body Tension	Joint Tension	Dry/Buoyant	Mud Weight (ppg)
14 3/4	10 3/4	0	740	0	740	No	40.5	J-55	STC	4.9	9.8	21.0	14.0	Dry	8.3
9 7/8	7 5/8	0	8004	0	8000	yes	29.7	P110	Buttress	1.4	2.4	4.0	4.0	Dry	9.4
8 3/4	7 5/8	8004	11773	8000	11755	yes	29.7	P110	FJ	1.7	1.6	2.7	2.7	Dry	9.4
6 3/4	5 1/2	0	11573	0	11555	Yes	20	P110	Buttress	1.3	1.5	2.8	2.9	Dry	14
6 3/4	5	11573	17324	11555	12307	Yes	18	P110	Buttress	1.3	1.4	1.9	1.9	Dry	14

• 7 5/8" has DV Tool @ 4700'