Form 3160-3
(June 2015)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

HOBBS OCD
DEC 30 2019
RECEIVED

5. Lease Serial No. NMNM059398	
6. If Indian, Allotee or Tribe Name	
1a. Type of work: ☑ DRILL ☐ REENTER	7. If Unit or CA Agreement, Name and No. NMNM082045
1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other	8. Lease Name and Well No. MESA B 8115 FED COM 10H (326144)
1c. Type of Completion: ☐ Hydraulic Fracturing ☑ Single Zone ☐ Multiple Zone	9. API Well No. 30-025-46666
2. Name of Operator BTA OIL PRODUCERS LLC (260297)	
3a. Address 104 S. Pecos Midland TX 79701	3b. Phone No. *(include area code)* (432)682-3753
	10. Field and Pool, or Exploratory (98097) SANDERS TANK / UPPER WOLFCAMP
4. Location of Well *(Report location clearly and in accordance with any State requirements.*)* At surface NENW / 415 FNL / 1615 FWL / LAT 32.064152 / LONG -103.614597 At proposed prod. zone SESW / 50 FSL / 2310 FWL / LAT 32.050923 / LONG -103.612357	11. Sec., T. R. M. or Blk. and Survey or Area SEC 7 / T26S / R33E / NMP
14. Distance in miles and direction from nearest town or post office* 30 miles	12. County or Parish LEA / 13. State NM
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 415 feet	16. No of acres in lease 79.31 / 17. Spacing Unit dedicated to this well 160
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1235 feet	19. Proposed Depth 12112 feet / 17116 feet / 20. BLM/BIA Bond No. in file FED: NMB000849
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3282 feet	22. Approximate date work will start* 06/20/2019 / 23. Estimated duration 30 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be requested by the BLM.

25. Signature (Electronic Submission)	Name *(Printed/Typed)* Sammy Hajar / Ph: (432)682-3753	Date 01/18/2019
Title Regulatory Analyst		
Approved by *(Signature)* (Electronic Submission)	Name *(Printed/Typed)* Cody Layton / Ph: (575)234-5959	Date 12/13/2019
Title Assistant Field Manager Lands & Minerals	Office CARLSBAD	

Application approval 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.
Conditions of approval, if any, are attached.

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.

GCP Rec 12/30/19

KS 01/02/20

SC

APPROVED WITH CONDITIONS

Approval Date: 12/13/2019

(Continued on page 2)

*(Instructions on page 2)

INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from local Federal offices.

ITEM I: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the wen, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionany drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

ITEM 24: If the proposal will involve hydraulic fracturing operations, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The Privacy Act of 1974 and regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.
AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR 3160
PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service wen or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.
ROUTINE USE: Information from the record and/or the record win be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.
EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:
The BLM conects this information to anow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Conection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

(Continued on page 3)

Additional Operator Remarks

Location of Well

1. SHL: NENW / 415 FNL / 1615 FWL / TWSP: 26S / RANGE: 33E / SECTION: 7 / LAT: 32.064152 / LONG: -103.614597 (TVD: 0 feet, MD: 0 feet)
   PPP: NENW / 330 FNL / 2310 FWL / TWSP: 26S / RANGE: 33E / SECTION: 7 / LAT: 32.064386 / LONG: -103.612354 (TVD: 12032 feet, MD: 12192 feet)
   BHL: SESW / 50 FSL / 2310 FWL / TWSP: 26S / RANGE: 33E / SECTION: 7 / LAT: 32.050923 / LONG: -103.612357 (TVD: 12112 feet, MD: 17116 feet)

BLM Point of Contact

Name: Tanja Baca
Title: Admin Support Assistant
Phone: 5752345940
Email: tabaca@blm.gov

Review and Appeal Rights

A person contesting a decision shall request a State Director review. This request must be filed within 20 working days of receipt of the Notice with the appropriate State Director (see 43 CFR 3165.3). The State Director review decision may be appealed to the Interior Board of Land Appeals, 801 North Quincy Street, Suite 300, Arlington, VA 22203 (see 43 CFR 3165.4). Contact the above listed Bureau of Land Management office for further information.

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	BTA OIL PRODUCERS LLC
LEASE NO.:	NMNM059398
WELL NAME & NO.:	10H – MESA B 8115 FED COM
SURFACE HOLE FOOTAGE:	415'/N & 1615'/W
BOTTOM HOLE FOOTAGE	50'/S & 2310'/W
LOCATION:	SECTION 07, T26S, R33E, NMPM
COUNTY:	LEA

COA

H2S	○ Yes	◉ No	
Potash	◉ None	○ Secretary	○ R-111-P
Cave/Karst Potential	○ Low	◉ Medium	○ High
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

A. HYDROGEN SULFIDE

Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

1. The **13-3/8** inch surface casing shall be set at approximately **840 feet** (a minimum of 25 feet 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.

Intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.

2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing shall be set at approximately **4735 feet** is:

- 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.**

❖ 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 **7** inch production casing is:

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

4. The minimum required fill of cement behind the **4-1/2** inch production liner is:

- Cement should tie-back **100 feet** into the previous casing. Operator shall provide method of verification.

C. 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 **2000 (2M)** 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.

D. 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.

GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

a. Spudding well (minimum of 24 hours)
b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
c. BOPE tests (minimum of 4 hours)

☒ Chaves and Roosevelt Counties
Call the Roswell Field Office, 2909 West Second St., Roswell NM 88201.
During office hours call (575) 627-0272.
After office hours call (575)

☒ Eddy County
Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822

☒ Lea County
Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 393-3612

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

   a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
   b. When the operator proposes to set surface casing with Spudder Rig
      - Notify the BLM when moving in and removing the Spudder Rig.
      - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
      - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.

2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log.

3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements.

4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.

5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.

7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.

2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.

4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:

    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. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
    e. 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.

5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

    a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the

plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time.

c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.

e. The results of the test shall be reported to the appropriate BLM office.

f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.

g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.

h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

Operator Certification

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

NAME: Sammy Hajar **Signed on:** 01/18/2019

Title: Regulatory Analyst

Street Address: 104 S. Pecos

City: Midland **State:** TX **Zip:** 79701

Phone: (432)682-3753

Email address: shajar@btaoil.com

Field Representative

Representative Name:

Street Address: 104 South Pecos

City: Midland **State:** TX **Zip:** 79701

Phone: (432)682-3753

Email address: neaton@btaoil.com

APD ID: 10400038140 **Submission Date:** 01/18/2019

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA B 8115 FED COM **Well Number:** 10H

Well Type: OIL WELL **Well Work Type:** Drill

[redacted]

Show Final Text

Section 1 - General

APD ID: 10400038140 **Tie to previous NOS?** **Submission Date:** 01/18/2019

BLM Office: CARLSBAD **User:** Sammy Hajar **Title:** Regulatory Analyst

Federal/Indian APD: FED **Is the first lease penetrated for production Federal or Indian?** FED

Lease number: NMNM059398 **Lease Acres:** 79.31

Surface access agreement in place? **Allotted?** **Reservation:**

[redacted]

Agreement name:

Keep application confidential? YES

Permitting Agent? NO **APD Operator:** BTA OIL PRODUCERS LLC

Operator letter of designation:

Operator Info

Operator Organization Name: BTA OIL PRODUCERS LLC

Operator Address: 104 S. Pecos

Zip: 79701

Operator PO Box:

Operator City: Midland **State:** TX

Operator Phone: (432)682-3753

Operator Internet Address:

Section 2 - Well Information

Well in Master Development Plan? NO **Master Development Plan name:**

Well in Master SUPO? NO **Master SUPO name:**

Well in Master Drilling Plan? NO **Master Drilling Plan name:**

Well Name: MESA B 8115 FED COM **Well Number:** 10H **Well API Number:**

Field/Pool or Exploratory? Field and Pool **Field Name:** SANDERS TANK **Pool Name:** UPPER WOLFCAMP

Is the proposed well in an area containing other mineral resources? NONE

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA B 8115 FED COM **Well Number:** 10H

Is the proposed well in an area containing other mineral resources? NONE

Is the proposed well in a Helium production area? N **Use Existing Well Pad?** NO **New surface disturbance?**

Type of Well Pad: MULTIPLE WELL **Multiple Well Pad Name:** MESA B 8115 FED COM **Number:** 10-13

Well Class: HORIZONTAL **Number of Legs:**

Well Work Type: Drill

Well Type: OIL WELL

Describe Well Type:

Well sub-Type: INFILL

Describe sub-type:

Distance to town: 30 Miles **Distance to nearest well:** 1235 FT **Distance to lease line:** 415 FT

Reservoir well spacing assigned acres Measurement: 160 Acres

Well plat: MESA_B_8115_FED_COM_10H_c102_20190116152723.pdf

Well work start Date: 06/20/2019 **Duration:** 30 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83 **Vertical Datum:** NGVD29

Survey number: **Reference Datum:**

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD
SHL Leg #1	415	FNL	1615	FWL	26S	33E	7	Aliquot NENW	32.064152	-103.614597	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 059398	3282	0	0
KOP Leg #1	330	FNL	2310	FWL	26S	33E	7	Aliquot NENW	32.064386	-103.612354	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 059398	-8257	11590	11539
PPP Leg #1-1	330	FNL	2310	FWL	26S	33E	7	Aliquot NENW	32.064386	-103.612354	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 059398	-8750	12192	12032

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA B 8115 FED COM **Well Number:** 10H

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD
EXIT Leg #1	330	FSL	2310	FWL	26S	33E	7	Aliquot SESW	32.051692	-103.612357	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 016097 3	-8830	16836	12112
BHL Leg #1	50	FSL	2310	FWL	26S	33E	7	Aliquot SESW	32.050923	-103.612357	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 016097 3	-8830	17116	12112

APD ID: 10400038140 **Submission Date:** 01/18/2019

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA B 8115 FED COM **Well Number:** 10H

Well Type: OIL WELL **Well Work Type:** Drill

Show Final Text

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							

Section 2 - Blowout Prevention

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA B 8115 FED COM **Well Number:** 10H

Pressure Rating (PSI): 10M **Rating Depth:** 14000

[redacted]

Requesting Variance? YES

[redacted]

Choke Diagram Attachment:

Choke_Hose___Test_Chart_and_Specs_20181129153440.pdf

10M_choke_mannifold_20181129153440.pdf

BOP Diagram Attachment:

5M_annular_well_control_plan_for_BLM_20181129153535.docx

BLM_10M_BOP_with_5M_annular_20190205073317.pdf

10M_annular_variance__20190205073349.pdf

Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	17.5	13.375	NEW	API	N	0	740	0	740			740	J-55	54.5	ST&C	3.5	8.5	DRY	12.7	DRY	21.2
2	INTERMEDIATE	12.25	9.625	NEW	API	N	0	4735	0	4735			4735	J-55	40	LT&C	1.8	1.6	DRY	2.7	DRY	3.3
3	PRODUCTION	8.75	7.0	NEW	API	N	0	12190	0	12035			12190	P-110	29	LT&C	1.5	1.9	DRY	2.3	DRY	2.7
4	LINER	6.125	4.5	NEW	API	N	11540	17116	11489	12112			5576	P-110	13.5	LT&C	1.7	2	DRY	2.1	DRY	2.6

Casing Attachments

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA B 8115 FED COM **Well Number:** 10H

Casing Attachments

Casing ID: 1 **String Type:** SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Mesa_B_10H_casing_assumption_20190205082213.JPG

Casing ID: 2 **String Type:** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Mesa_B_10H_casing_assumption_20190205082229.JPG

Casing ID: 3 **String Type:** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Mesa_B_10H_casing_assumption_20190205082237.JPG

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA B 8115 FED COM **Well Number:** 10H

Casing Attachments

Casing ID: 4 **String Type:** LINER

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Mesa_B_10H_casing_assumption_20190205082243.JPG

Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0			1.8	13.5		100		2% CaCl2
SURFACE	Tail		545			1.34	14.8		100	Class C	2% CaCl2
INTERMEDIATE	Lead		0			2.18	12.7		100		0.5% CaCl2
INTERMEDIATE	Tail		4045			1.33	14.8		25	Class C	1%CaCl2
PRODUCTION	Lead		3735			2.99	10.5		15		0.4% Fluid Loss
PRODUCTION	Tail		7490			1.19	15.6		15	Class H	0.2% LT Retarder
LINER	Lead		11540			1.86	13.2		10		0.1% Fluid Loss

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA B 8115 FED COM **Well Number:** 10H

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

Description of the equipment for the circulating system in accordance with Onshore Order #2:

Diagram of the equipment for the circulating system in accordance with Onshore Order #2:

Describe what will be on location to control well or mitigate other conditions: Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

Describe the mud monitoring system utilized: PVT/Pason/Visual Monitoring

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	740	OTHER : FW Spud	8.3	8.4							
740	4735	OTHER : Saturated Brine	10	10.2							
4735	12035	OTHER : Cut Brine	8.6	9.2							
12035	12112	OIL-BASED MUD	11	14							

Section 6 - Test, Logging, Coring

List of production tests including testing procedures, equipment and safety measures:

Drill Stem Tests will be based on geological sample shows.

List of open and cased hole logs run in the well:

CBL,GR,MUDLOG

Coring operation description for the well:

None planned

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA B 8115 FED COM **Well Number:** 10H

Section 7 - Pressure

Anticipated Bottom Hole Temperature(F): 178

Anticipated abnormal pressures, temperatures, or potential geologic hazards? NO

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

H2S_Plan_20181129153648.pdf

H2S_Equipment_Schematic_20181129153733.pdf

BTA_Oil_Producers_LLC___EMERGENCY_CALL_LIST_20190205082907.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Mesa_B__10H_directional_plan_20190117154754.pdf

Mesa_B__10H_Wall_plot_20190117154754.pdf

MESA_B_8115_FED_COM_10H_Gas_Capture_Plan_20190117154806.pdf

Other proposed operations facets description:

A variance is requested for a Multi Bowl Wellhead. See the attached schematic and running procedure. *All strings will be kept 1/3 full while running.

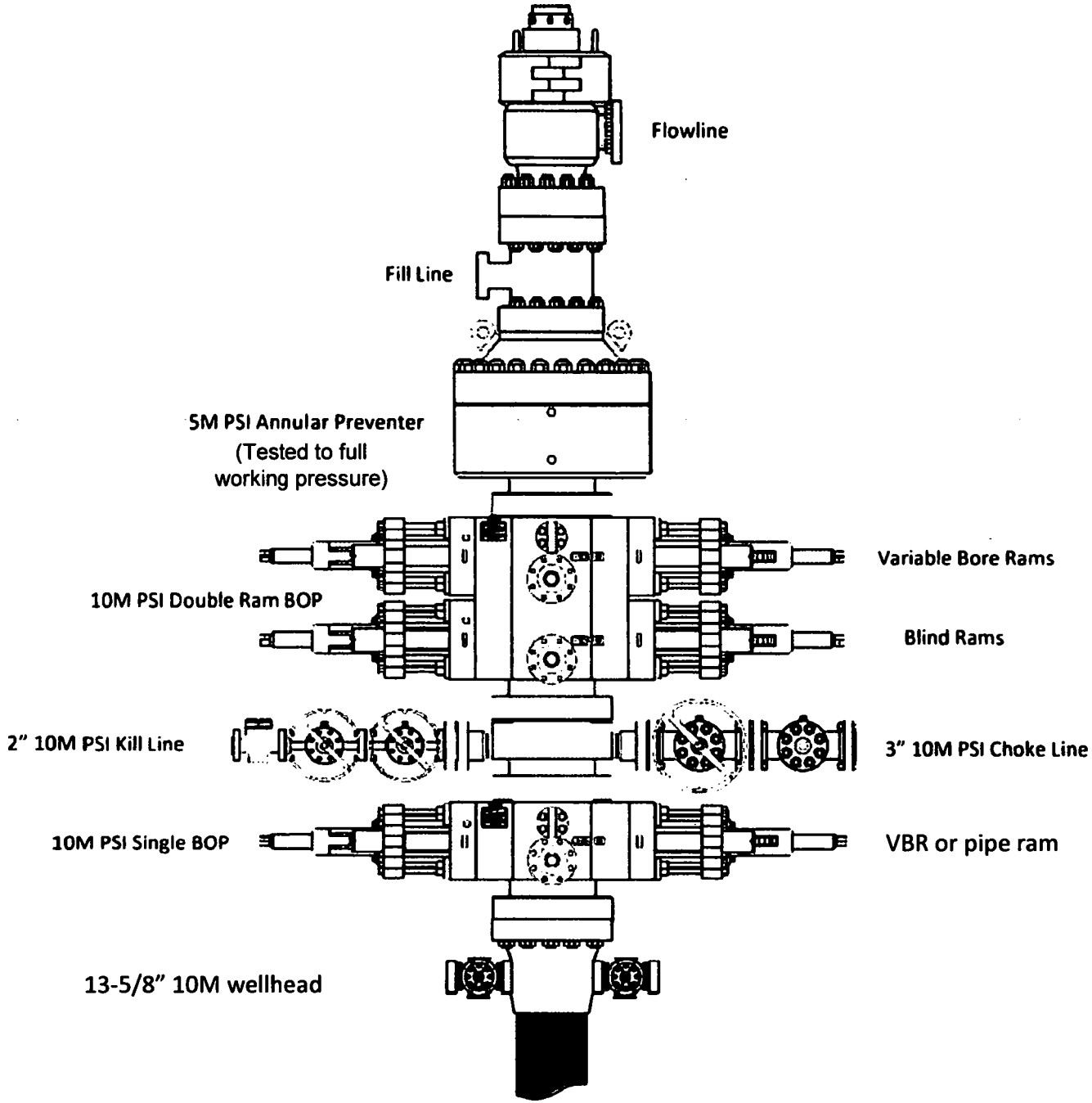
Other proposed operations facets attachment:

Other Variance attachment:

Casing_Head_Running_Procedure_20181129153916.pdf

Multi_Bowl_Diagram_20181129153852.pdf

13-5/8" 10M PSI BOP Stack



BTA OIL PRODUCERS LLC

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

1. HYDROGEN SULFIDE TRAINING

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

a. The hazards and characteristics of hydrogen sulfide (H_2S).
b. The proper use and maintenance of personal protective equipment and life support systems.
c. The proper use of H_2S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
d. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

a. The effects of H2S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
b. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
c. The contents and requirements of the H_2S Drilling Operations Plan and the Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H2S zone (within 3 days or 500 feet) and weekly H2S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H2S Drilling Operations Plan and the Public Protection Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

2. H_2S SAFETY EQUIPMENT AND SYSTEMS

Note: All H_2S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonably expected to contain H2S. If H2S greater than 100 ppm is encountered in the gas stream we will shut in and install H2S equipment.

a. Well Control Equipment:
Flare line.
Choke manifold with remotely operated choke.
Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
Auxiliary equipment to include: annular preventer, mud-gas separator, rotating head.

b. Protective equipment for essential personnel:
Mark II Surviveair 30-minute units located in the dog house and at briefing areas.

c. H2S detection and monitoring equipment:

2 - portable H2S monitor positioned on location for best coverage and response. These units have warning lights and audible sirens when H2S levels of 20 ppm are reached.

d. Visual warning systems:
Caution/Danger signs shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used, when appropriate. See example attached.

e. Mud Program:
The mud program has been designed to minimize the volume of H2S circulated to the surface.

f. Metallurgy:
All drill strings, casings, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service.

g. Communication:
Company vehicles equipped with cellular telephone.

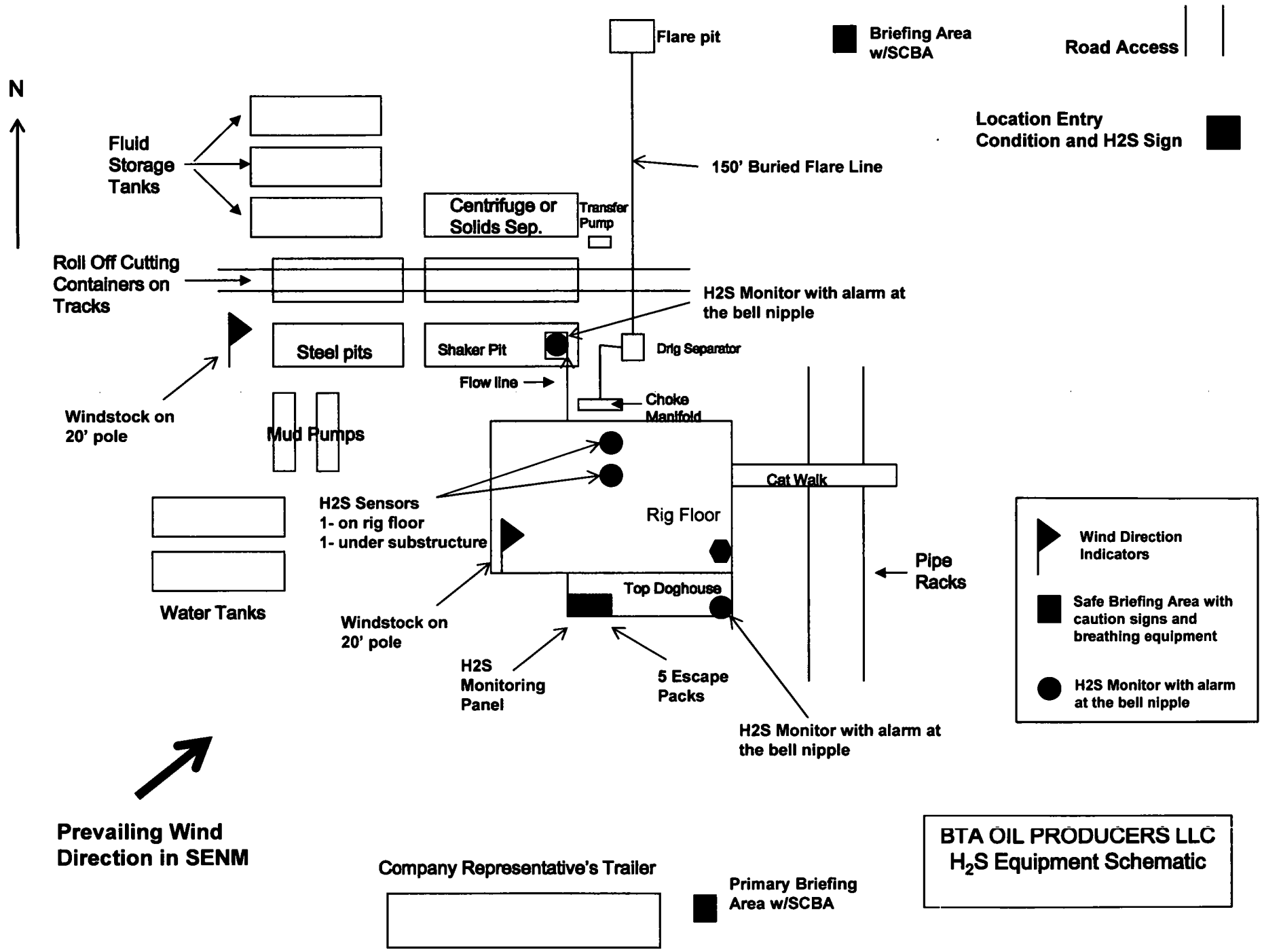
WARNING

YOU ARE ENTERING AN H_2S AREA
AUTHORIZED PERSONNEL ONLY

1. ***BEARDS OR CONTACT LENSES NOT ALLOWED***
2. ***HARD HATS REQUIRED***
3. ***SMOKING IN DESIGNATED AREAS ONLY***
4. ***BE WIND CONSCIOUS AT ALL TIMES***
5. ***CK WITH BTA OIL PRODUCERS LLC FOREMAN AT MAIN OFFICE***

BTA OIL PRODUCERS LLC

1-432-682-3753



BTA OIL PRODUCERS LLC
H_2S Equipment Schematic

EMERGENCY CALL LIST

	OFFICE	MOBILE
BTA Oil Producers LLC OFFICE	432-682-3753	
BEN GRIMES, Operations	432-682-3753	432-559-4309
NICK EATON, Drilling	432-682-3753	432-260-7841
TRACE WOHLFAHRT, Completions	432-682-3753	

EMERGENCY RESPONSE NUMBERS

	OFFICE
STATE POLICE	575-748-9718
EDDY COUNTY SHERIFF	575-746-2701
EMERGENCY MEDICAL SERVICES (AMBULANCE)	911 or 575-746-2701
EDDY COUNTY EMERGENCY MANAGEMENT (HARRY BURGESS)	575-887-9511
STATE EMERGENCY RESPONSE CENTER (SERC)	575-476-9620
CARLSBAD POLICE DEPARTMENT	575-885-2111
CARLSBAD FIRE DEPARTMENT	575-885-3125
NEW MEXICO OIL CONSERVATION DIVISION	575-748-1283
INDIAN FIRE & SAFETY	800-530-8693
HALLIBURTON SERVICES	800-844-8451

BTA Oil Producers, LLC

Lea County, NM (NAD 83)
Mesa B
Mesa B #10H

Wellbore #1

Plan: Design #1

Standard Planning Report - Geographic

15 January, 2019

BTA

Planning Report - Geographic

Database:	old	**Local Co-ordinate Reference:**	Well Mesa B #10H
Company:	BTA Oil Producers, LLC	**TVD Reference:**	GL @ 3282.0usft
Project:	Lea County, NM (NAD 83)	**MD Reference:**	GL @ 3282.0usft
Site:	Mesa B	**North Reference:**	Grid
Well:	Mesa B #10H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

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	**Latitude:**	32° 3' 4.704 N
From:	Map	**Easting:**	765,479.20 usft	**Longitude:**	103° 36' 35.543 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.38 °

Well	Mesa B #10H					
Well Position	**+N/-S**	0.0 usft	**Northing:**	387,817.00 usft	**Latitude:**	32° 3' 50.943 N
	+E/-W	0.0 usft	**Easting:**	763,984.00 usft	**Longitude:**	103° 36' 52.555 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**		**Ground Level:**	3,282.0 usft

Wellbore	Wellbore #1				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF200510	12/31/2009	7.76	60.08	48,692.63781088

Design	Design #1				
Audit Notes:					
Version:		**Phase:**	PROTOTYPE	**Tie On Depth:**	0.0
Vertical Section:	**Depth From (TVD) (usft)**	**+N/-S (usft)**	**+E/-W (usft)**	**Direction (°)**	
	0.0	0.0	0.0	171.41	

Plan Survey Tool Program **Date** 1/15/2019

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	17,115.5	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	
5,060.0	0.00	0.00	5,060.0	0.0	0.0	0.00	0.00	0.00	0.00	
5,435.0	7.50	60.70	5,434.0	12.0	21.4	2.00	2.00	0.00	60.70	
11,165.2	7.50	60.70	11,115.1	378.0	673.6	0.00	0.00	0.00	0.00	
11,540.2	0.00	0.00	11,489.0	390.0	695.0	2.00	-2.00	0.00	180.00	
11,590.2	0.00	0.00	11,539.0	390.0	695.0	0.00	0.00	0.00	0.00	
12,490.2	90.00	179.66	12,112.0	-182.9	698.4	10.00	10.00	0.00	179.66	
17,115.5	90.00	179.66	12,112.0	-4,808.2	726.0	0.00	0.00	0.00	0.00	Mesa B #10H BHL

BTA

Planning Report - Geographic

Database:	old	**Local Co-ordinate Reference:**	Well Mesa B #10H
Company:	BTA Oil Producers, LLC	**TVD Reference:**	GL @ 3282.0usft
Project:	Lea County, NM (NAD 83)	**MD Reference:**	GL @ 3282.0usft
Site:	Mesa B	**North Reference:**	Grid
Well:	Mesa B #10H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

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	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
100.0	0.00	0.00	100.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
200.0	0.00	0.00	200.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
300.0	0.00	0.00	300.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
400.0	0.00	0.00	400.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
500.0	0.00	0.00	500.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
600.0	0.00	0.00	600.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
700.0	0.00	0.00	700.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
800.0	0.00	0.00	800.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
900.0	0.00	0.00	900.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
1,000.0	0.00	0.00	1,000.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
1,100.0	0.00	0.00	1,100.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
1,200.0	0.00	0.00	1,200.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
1,300.0	0.00	0.00	1,300.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
1,400.0	0.00	0.00	1,400.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
1,500.0	0.00	0.00	1,500.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
1,600.0	0.00	0.00	1,600.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
1,700.0	0.00	0.00	1,700.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
1,800.0	0.00	0.00	1,800.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
1,900.0	0.00	0.00	1,900.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
2,000.0	0.00	0.00	2,000.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
2,100.0	0.00	0.00	2,100.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
2,200.0	0.00	0.00	2,200.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
2,300.0	0.00	0.00	2,300.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
2,400.0	0.00	0.00	2,400.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
2,500.0	0.00	0.00	2,500.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
2,600.0	0.00	0.00	2,600.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
2,700.0	0.00	0.00	2,700.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
2,800.0	0.00	0.00	2,800.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
2,900.0	0.00	0.00	2,900.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
3,000.0	0.00	0.00	3,000.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
3,100.0	0.00	0.00	3,100.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
3,200.0	0.00	0.00	3,200.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
3,300.0	0.00	0.00	3,300.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
3,400.0	0.00	0.00	3,400.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
3,500.0	0.00	0.00	3,500.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
3,600.0	0.00	0.00	3,600.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
3,700.0	0.00	0.00	3,700.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
3,800.0	0.00	0.00	3,800.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
3,900.0	0.00	0.00	3,900.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
4,000.0	0.00	0.00	4,000.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
4,100.0	0.00	0.00	4,100.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
4,200.0	0.00	0.00	4,200.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
4,300.0	0.00	0.00	4,300.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
4,400.0	0.00	0.00	4,400.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
4,500.0	0.00	0.00	4,500.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
4,600.0	0.00	0.00	4,600.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
4,700.0	0.00	0.00	4,700.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
4,800.0	0.00	0.00	4,800.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
4,900.0	0.00	0.00	4,900.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
5,000.0	0.00	0.00	5,000.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
5,060.0	0.00	0.00	5,060.0	0.0	0.0	387,817.00	763,984.00	32° 3' 50.943 N	103° 36' 52.555 W
5,100.0	0.80	60.70	5,100.0	0.1	0.2	387,817.13	763,984.24	32° 3' 50.944 N	103° 36' 52.552 W
5,200.0	2.80	60.70	5,199.9	1.7	3.0	387,818.67	763,986.98	32° 3' 50.959 N	103° 36' 52.520 W
5,300.0	4.80	60.70	5,299.7	4.9	8.8	387,821.91	763,992.76	32° 3' 50.991 N	103° 36' 52.453 W

BTA

Planning Report - Geographic

Database:	old	**Local Co-ordinate Reference:**	Well Mesa B #10H
Company:	BTA Oil Producers, LLC	**TVD Reference:**	GL @ 3282.0usft
Project:	Lea County, NM (NAD 83)	**MD Reference:**	GL @ 3282.0usft
Site:	Mesa B	**North Reference:**	Grid
Well:	Mesa B #10H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
5,400.0	6.80	60.70	5,399.2	9.9	17.6	387,826.86	764,001.57	32° 3' 51.039 N	103° 36' 52.350 W
5,435.0	7.50	60.70	5,434.0	12.0	21.4	387,828.99	764,005.37	32° 3' 51.060 N	103° 36' 52.306 W
5,500.0	7.50	60.70	5,498.4	16.1	28.8	387,833.14	764,012.76	32° 3' 51.100 N	103° 36' 52.219 W
5,600.0	7.50	60.70	5,597.5	22.5	40.1	387,839.53	764,024.15	32° 3' 51.163 N	103° 36' 52.087 W
5,700.0	7.50	60.70	5,696.7	28.9	51.5	387,845.92	764,035.53	32° 3' 51.225 N	103° 36' 51.954 W
5,800.0	7.50	60.70	5,795.8	35.3	62.9	387,852.30	764,046.91	32° 3' 51.288 N	103° 36' 51.821 W
5,900.0	7.50	60.70	5,895.0	41.7	74.3	387,858.69	764,058.29	32° 3' 51.350 N	103° 36' 51.688 W
6,000.0	7.50	60.70	5,994.1	48.1	85.7	387,865.08	764,069.68	32° 3' 51.413 N	103° 36' 51.556 W
6,100.0	7.50	60.70	6,093.2	54.5	97.1	387,871.46	764,081.06	32° 3' 51.475 N	103° 36' 51.423 W
6,200.0	7.50	60.70	6,192.4	60.9	108.4	387,877.85	764,092.44	32° 3' 51.538 N	103° 36' 51.290 W
6,300.0	7.50	60.70	6,291.5	67.2	119.8	387,884.24	764,103.82	32° 3' 51.600 N	103° 36' 51.157 W
6,400.0	7.50	60.70	6,390.7	73.6	131.2	387,890.63	764,115.21	32° 3' 51.663 N	103° 36' 51.024 W
6,500.0	7.50	60.70	6,489.8	80.0	142.6	387,897.01	764,126.59	32° 3' 51.725 N	103° 36' 50.892 W
6,600.0	7.50	60.70	6,589.0	86.4	154.0	387,903.40	764,137.97	32° 3' 51.787 N	103° 36' 50.759 W
6,700.0	7.50	60.70	6,688.1	92.8	165.4	387,909.79	764,149.35	32° 3' 51.850 N	103° 36' 50.626 W
6,800.0	7.50	60.70	6,787.3	99.2	176.7	387,916.18	764,160.74	32° 3' 51.912 N	103° 36' 50.493 W
6,900.0	7.50	60.70	6,886.4	105.6	188.1	387,922.56	764,172.12	32° 3' 51.975 N	103° 36' 50.361 W
7,000.0	7.50	60.70	6,985.5	112.0	199.5	387,928.95	764,183.50	32° 3' 52.037 N	103° 36' 50.228 W
7,100.0	7.50	60.70	7,084.7	118.3	210.9	387,935.34	764,194.88	32° 3' 52.100 N	103° 36' 50.095 W
7,200.0	7.50	60.70	7,183.8	124.7	222.3	387,941.72	764,206.27	32° 3' 52.162 N	103° 36' 49.962 W
7,300.0	7.50	60.70	7,283.0	131.1	233.7	387,948.11	764,217.65	32° 3' 52.225 N	103° 36' 49.830 W
7,400.0	7.50	60.70	7,382.1	137.5	245.0	387,954.50	764,229.03	32° 3' 52.287 N	103° 36' 49.697 W
7,500.0	7.50	60.70	7,481.3	143.9	256.4	387,960.89	764,240.41	32° 3' 52.350 N	103° 36' 49.564 W
7,600.0	7.50	60.70	7,580.4	150.3	267.8	387,967.27	764,251.80	32° 3' 52.412 N	103° 36' 49.431 W
7,700.0	7.50	60.70	7,679.6	156.7	279.2	387,973.66	764,263.18	32° 3' 52.474 N	103° 36' 49.299 W
7,800.0	7.50	60.70	7,778.7	163.1	290.6	387,980.05	764,274.56	32° 3' 52.537 N	103° 36' 49.166 W
7,900.0	7.50	60.70	7,877.8	169.4	302.0	387,986.44	764,285.94	32° 3' 52.599 N	103° 36' 49.033 W
8,000.0	7.50	60.70	7,977.0	175.8	313.3	387,992.82	764,297.33	32° 3' 52.662 N	103° 36' 48.900 W
8,100.0	7.50	60.70	8,076.1	182.2	324.7	387,999.21	764,308.71	32° 3' 52.724 N	103° 36' 48.767 W
8,200.0	7.50	60.70	8,175.3	188.6	336.1	388,005.60	764,320.09	32° 3' 52.787 N	103° 36' 48.635 W
8,300.0	7.50	60.70	8,274.4	195.0	347.5	388,011.99	764,331.47	32° 3' 52.849 N	103° 36' 48.502 W
8,400.0	7.50	60.70	8,373.6	201.4	358.9	388,018.37	764,342.86	32° 3' 52.912 N	103° 36' 48.369 W
8,500.0	7.50	60.70	8,472.7	207.8	370.3	388,024.76	764,354.24	32° 3' 52.974 N	103° 36' 48.236 W
8,600.0	7.50	60.70	8,571.9	214.2	381.6	388,031.15	764,365.62	32° 3' 53.037 N	103° 36' 48.104 W
8,700.0	7.50	60.70	8,671.0	220.5	393.0	388,037.53	764,377.00	32° 3' 53.099 N	103° 36' 47.971 W
8,800.0	7.50	60.70	8,770.1	226.9	404.4	388,043.92	764,388.39	32° 3' 53.161 N	103° 36' 47.838 W
8,900.0	7.50	60.70	8,869.3	233.3	415.8	388,050.31	764,399.77	32° 3' 53.224 N	103° 36' 47.705 W
9,000.0	7.50	60.70	8,968.4	239.7	427.2	388,056.70	764,411.15	32° 3' 53.286 N	103° 36' 47.573 W
9,100.0	7.50	60.70	9,067.6	246.1	438.6	388,063.08	764,422.53	32° 3' 53.349 N	103° 36' 47.440 W
9,200.0	7.50	60.70	9,166.7	252.5	449.9	388,069.47	764,433.92	32° 3' 53.411 N	103° 36' 47.307 W
9,300.0	7.50	60.70	9,265.9	258.9	461.3	388,075.86	764,445.30	32° 3' 53.474 N	103° 36' 47.174 W
9,400.0	7.50	60.70	9,365.0	265.3	472.7	388,082.25	764,456.68	32° 3' 53.536 N	103° 36' 47.041 W
9,500.0	7.50	60.70	9,464.2	271.6	484.1	388,088.63	764,468.06	32° 3' 53.599 N	103° 36' 46.909 W
9,600.0	7.50	60.70	9,563.3	278.0	495.5	388,095.02	764,479.45	32° 3' 53.661 N	103° 36' 46.776 W
9,700.0	7.50	60.70	9,662.4	284.4	506.8	388,101.41	764,490.83	32° 3' 53.724 N	103° 36' 46.643 W
9,800.0	7.50	60.70	9,761.6	290.8	518.2	388,107.79	764,502.21	32° 3' 53.786 N	103° 36' 46.510 W
9,900.0	7.50	60.70	9,860.7	297.2	529.6	388,114.18	764,513.59	32° 3' 53.848 N	103° 36' 46.378 W
10,000.0	7.50	60.70	9,959.9	303.6	541.0	388,120.57	764,524.98	32° 3' 53.911 N	103° 36' 46.245 W
10,100.0	7.50	60.70	10,059.0	310.0	552.4	388,126.96	764,536.36	32° 3' 53.973 N	103° 36' 46.112 W
10,200.0	7.50	60.70	10,158.2	316.4	563.8	388,133.34	764,547.74	32° 3' 54.036 N	103° 36' 45.979 W
10,300.0	7.50	60.70	10,257.3	322.7	575.1	388,139.73	764,559.12	32° 3' 54.098 N	103° 36' 45.847 W
10,400.0	7.50	60.70	10,356.5	329.1	586.5	388,146.12	764,570.51	32° 3' 54.161 N	103° 36' 45.714 W
10,500.0	7.50	60.70	10,455.6	335.5	597.9	388,152.51	764,581.89	32° 3' 54.223 N	103° 36' 45.581 W
10,600.0	7.50	60.70	10,554.7	341.9	609.3	388,158.89	764,593.27	32° 3' 54.286 N	103° 36' 45.448 W
10,700.0	7.50	60.70	10,653.9	348.3	620.7	388,165.28	764,604.65	32° 3' 54.348 N	103° 36' 45.315 W

Database:	old	**Local Co-ordinate Reference:**	Well Mesa B #10H
Company:	BTA Oil Producers, LLC	**TVD Reference:**	GL @ 3282.0usft
Project:	Lea County, NM (NAD 83)	**MD Reference:**	GL @ 3282.0usft
Site:	Mesa B	**North Reference:**	Grid
Well:	Mesa B #10H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	*Design #1*		

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	7.50	60.70	10,753.0	354.7	632.1	388,171.67	764,616.04	32° 3' 54.411 N	103° 36' 45.183 W
10,900.0	7.50	60.70	10,852.2	361.1	643.4	388,178.06	764,627.42	32° 3' 54.473 N	103° 36' 45.050 W
11,000.0	7.50	60.70	10,951.3	367.5	654.8	388,184.44	764,638.80	32° 3' 54.535 N	103° 36' 44.917 W
11,100.0	7.50	60.70	11,050.5	373.8	666.2	388,190.83	764,650.18	32° 3' 54.598 N	103° 36' 44.784 W
11,165.2	7.50	60.70	11,115.1	378.0	673.6	388,194.99	764,657.60	32° 3' 54.639 N	103° 36' 44.698 W
11,200.0	6.80	60.70	11,149.6	380.1	677.4	388,197.11	764,661.38	32° 3' 54.659 N	103° 36' 44.654 W
11,300.0	4.80	60.70	11,249.1	385.1	686.2	388,202.06	764,670.20	32° 3' 54.708 N	103° 36' 44.551 W
11,400.0	2.80	60.70	11,348.9	388.3	692.0	388,205.31	764,675.98	32° 3' 54.739 N	103° 36' 44.483 W
11,500.0	0.80	60.70	11,448.8	389.9	694.8	388,206.85	764,678.73	32° 3' 54.755 N	103° 36' 44.451 W
11,540.2	0.00	0.00	11,489.0	390.0	695.0	388,206.99	764,678.97	32° 3' 54.756 N	103° 36' 44.449 W
11,590.2	0.00	0.00	11,539.0	390.0	695.0	388,206.99	764,678.97	32° 3' 54.756 N	103° 36' 44.449 W
11,600.0	0.98	179.66	11,548.8	389.9	695.0	388,206.90	764,678.97	32° 3' 54.755 N	103° 36' 44.449 W
11,700.0	10.98	179.66	11,648.2	379.5	695.1	388,196.50	764,679.04	32° 3' 54.652 N	103° 36' 44.449 W
11,800.0	20.98	179.66	11,744.2	352.0	695.2	388,169.00	764,679.20	32° 3' 54.380 N	103° 36' 44.449 W
11,900.0	30.98	179.66	11,834.0	308.3	695.5	388,125.26	764,679.46	32° 3' 53.947 N	103° 36' 44.449 W
12,000.0	40.98	179.66	11,914.8	249.6	695.8	388,066.59	764,679.81	32° 3' 53.366 N	103° 36' 44.450 W
12,100.0	50.98	179.66	11,984.2	177.8	696.3	387,994.77	764,680.24	32° 3' 52.656 N	103° 36' 44.450 W
12,200.0	60.98	179.66	12,040.1	95.0	696.8	387,912.00	764,680.73	32° 3' 51.837 N	103° 36' 44.451 W
12,300.0	70.98	179.66	12,080.7	3.8	697.3	387,820.78	764,681.28	32° 3' 50.934 N	103° 36' 44.452 W
12,400.0	80.98	179.66	12,104.9	-93.1	697.9	387,723.88	764,681.86	32° 3' 49.975 N	103° 36' 44.453 W
12,490.2	90.00	179.66	12,112.0	-182.9	698.4	387,634.06	764,682.39	32° 3' 49.086 N	103° 36' 44.453 W
12,500.0	90.00	179.66	12,112.0	-192.7	698.5	387,624.26	764,682.45	32° 3' 48.989 N	103° 36' 44.453 W
12,600.0	90.00	179.66	12,112.0	-292.7	699.1	387,524.27	764,683.05	32° 3' 48.000 N	103° 36' 44.454 W
12,700.0	90.00	179.66	12,112.0	-392.7	699.7	387,424.27	764,683.64	32° 3' 47.010 N	103° 36' 44.455 W
12,800.0	90.00	179.66	12,112.0	-492.7	700.3	387,324.28	764,684.24	32° 3' 46.021 N	103° 36' 44.456 W
12,900.0	90.00	179.66	12,112.0	-592.7	700.9	387,224.28	764,684.84	32° 3' 45.031 N	103° 36' 44.457 W
13,000.0	90.00	179.66	12,112.0	-692.7	701.5	387,124.29	764,685.44	32° 3' 44.042 N	103° 36' 44.458 W
13,100.0	90.00	179.66	12,112.0	-792.7	702.1	387,024.29	764,686.03	32° 3' 43.052 N	103° 36' 44.458 W
13,200.0	90.00	179.66	12,112.0	-892.7	702.7	386,924.30	764,686.63	32° 3' 42.062 N	103° 36' 44.459 W
13,300.0	90.00	179.66	12,112.0	-992.7	703.3	386,824.30	764,687.23	32° 3' 41.073 N	103° 36' 44.460 W
13,400.0	90.00	179.66	12,112.0	-1,092.7	703.8	386,724.31	764,687.82	32° 3' 40.083 N	103° 36' 44.461 W
13,500.0	90.00	179.66	12,112.0	-1,192.7	704.4	386,624.31	764,688.42	32° 3' 39.094 N	103° 36' 44.462 W
13,600.0	90.00	179.66	12,112.0	-1,292.7	705.0	386,524.32	764,689.02	32° 3' 38.104 N	103° 36' 44.463 W
13,700.0	90.00	179.66	12,112.0	-1,392.7	705.6	386,424.32	764,689.61	32° 3' 37.115 N	103° 36' 44.463 W
13,800.0	90.00	179.66	12,112.0	-1,492.7	706.2	386,324.33	764,690.21	32° 3' 36.125 N	103° 36' 44.464 W
13,900.0	90.00	179.66	12,112.0	-1,592.7	706.8	386,224.33	764,690.81	32° 3' 35.136 N	103° 36' 44.465 W
14,000.0	90.00	179.66	12,112.0	-1,692.7	707.4	386,124.34	764,691.40	32° 3' 34.146 N	103° 36' 44.466 W
14,100.0	90.00	179.66	12,112.0	-1,792.7	708.0	386,024.35	764,692.00	32° 3' 33.157 N	103° 36' 44.467 W
14,200.0	90.00	179.66	12,112.0	-1,892.7	708.6	385,924.35	764,692.60	32° 3' 32.167 N	103° 36' 44.467 W
14,300.0	90.00	179.66	12,112.0	-1,992.7	709.2	385,824.36	764,693.19	32° 3' 31.178 N	103° 36' 44.468 W
14,400.0	90.00	179.66	12,112.0	-2,092.7	709.8	385,724.36	764,693.79	32° 3' 30.188 N	103° 36' 44.469 W
14,500.0	90.00	179.66	12,112.0	-2,192.7	710.4	385,624.37	764,694.39	32° 3' 29.198 N	103° 36' 44.470 W
14,600.0	90.00	179.66	12,112.0	-2,292.7	711.0	385,524.37	764,694.98	32° 3' 28.209 N	103° 36' 44.471 W
14,700.0	90.00	179.66	12,112.0	-2,392.7	711.6	385,424.38	764,695.58	32° 3' 27.219 N	103° 36' 44.472 W
14,800.0	90.00	179.66	12,112.0	-2,492.7	712.2	385,324.38	764,696.18	32° 3' 26.230 N	103° 36' 44.472 W
14,900.0	90.00	179.66	12,112.0	-2,592.7	712.8	385,224.39	764,696.77	32° 3' 25.240 N	103° 36' 44.473 W
15,000.0	90.00	179.66	12,112.0	-2,692.7	713.4	385,124.39	764,697.37	32° 3' 24.251 N	103° 36' 44.474 W
15,100.0	90.00	179.66	12,112.0	-2,792.7	714.0	385,024.40	764,697.97	32° 3' 23.261 N	103° 36' 44.475 W
15,200.0	90.00	179.66	12,112.0	-2,892.7	714.6	384,924.40	764,698.57	32° 3' 22.272 N	103° 36' 44.476 W
15,300.0	90.00	179.66	12,112.0	-2,992.7	715.2	384,824.41	764,699.16	32° 3' 21.282 N	103° 36' 44.477 W
15,400.0	90.00	179.66	12,112.0	-3,092.7	715.8	384,724.41	764,699.76	32° 3' 20.293 N	103° 36' 44.477 W
15,500.0	90.00	179.66	12,112.0	-3,192.7	716.4	384,624.42	764,700.36	32° 3' 19.303 N	103° 36' 44.478 W
15,600.0	90.00	179.66	12,112.0	-3,292.7	717.0	384,524.42	764,700.95	32° 3' 18.313 N	103° 36' 44.479 W
15,700.0	90.00	179.66	12,112.0	-3,392.7	717.6	384,424.43	764,701.55	32° 3' 17.324 N	103° 36' 44.480 W
15,800.0	90.00	179.66	12,112.0	-3,492.7	718.2	384,324.43	764,702.15	32° 3' 16.334 N	103° 36' 44.481 W

Database:	old	**Local Co-ordinate Reference:**	Well Mesa B #10H
Company:	BTA Oil Producers, LLC	**TVD Reference:**	GL @ 3282.0usft
Project:	Lea County, NM (NAD 83)	**MD Reference:**	GL @ 3282.0usft
Site:	Mesa B	**North Reference:**	Grid
Well:	Mesa B #10H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

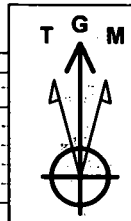
Planned Survey

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	12,112.0	-3,592.7	718.8	384,224.44	764,702.74	32° 3' 15.345 N	103° 36' 44.482 W
16,000.0	90.00	179.66	12,112.0	-3,692.7	719.4	384,124.44	764,703.34	32° 3' 14.355 N	103° 36' 44.482 W
16,100.0	90.00	179.66	12,112.0	-3,792.7	720.0	384,024.45	764,703.94	32° 3' 13.366 N	103° 36' 44.483 W
16,200.0	90.00	179.66	12,112.0	-3,892.7	720.6	383,924.45	764,704.53	32° 3' 12.376 N	103° 36' 44.484 W
16,300.0	90.00	179.66	12,112.0	-3,992.7	721.2	383,824.46	764,705.13	32° 3' 11.387 N	103° 36' 44.485 W
16,400.0	90.00	179.66	12,112.0	-4,092.7	721.8	383,724.46	764,705.73	32° 3' 10.397 N	103° 36' 44.486 W
16,500.0	90.00	179.66	12,112.0	-4,192.7	722.4	383,624.47	764,706.32	32° 3' 9.408 N	103° 36' 44.486 W
16,600.0	90.00	179.66	12,112.0	-4,292.7	722.9	383,524.47	764,706.92	32° 3' 8.418 N	103° 36' 44.487 W
16,700.0	90.00	179.66	12,112.0	-4,392.7	723.5	383,424.48	764,707.52	32° 3' 7.429 N	103° 36' 44.488 W
16,800.0	90.00	179.66	12,112.0	-4,492.7	724.1	383,324.49	764,708.11	32° 3' 6.439 N	103° 36' 44.489 W
16,900.0	90.00	179.66	12,112.0	-4,592.7	724.7	383,224.49	764,708.71	32° 3' 5.449 N	103° 36' 44.490 W
17,000.0	90.00	179.66	12,112.0	-4,692.7	725.3	383,124.50	764,709.31	32° 3' 4.460 N	103° 36' 44.491 W
17,100.0	90.00	179.66	12,112.0	-4,792.7	725.9	383,024.50	764,709.90	32° 3' 3.470 N	103° 36' 44.491 W
17,115.5	90.00	179.66	12,112.0	-4,808.2	726.0	383,009.00	764,710.00	32° 3' 3.317 N	103° 36' 44.492 W

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Mesa B #10H BHL - plan hits target center - Point	0.00	0.00	12,112.0	-4,808.2	726.0	383,009.00	764,710.00	32° 3' 3.317 N	103° 36' 44.492 W

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

WELL DETAILS: Mesa B #10H

3282.0

+N/-S	+E/-W	Northing	Easting	Latittude	Longitude
0.0	0.0	387817.00	763984.00	32° 3' 50.943 N	103° 36' 52.555 W

SITE DETAILS: Mesa B

Site Centre Northing: 383154.37
Easting: 765479.20

Positional Uncertainity: 0.0
Convergence: 0.38
Local North: Grid

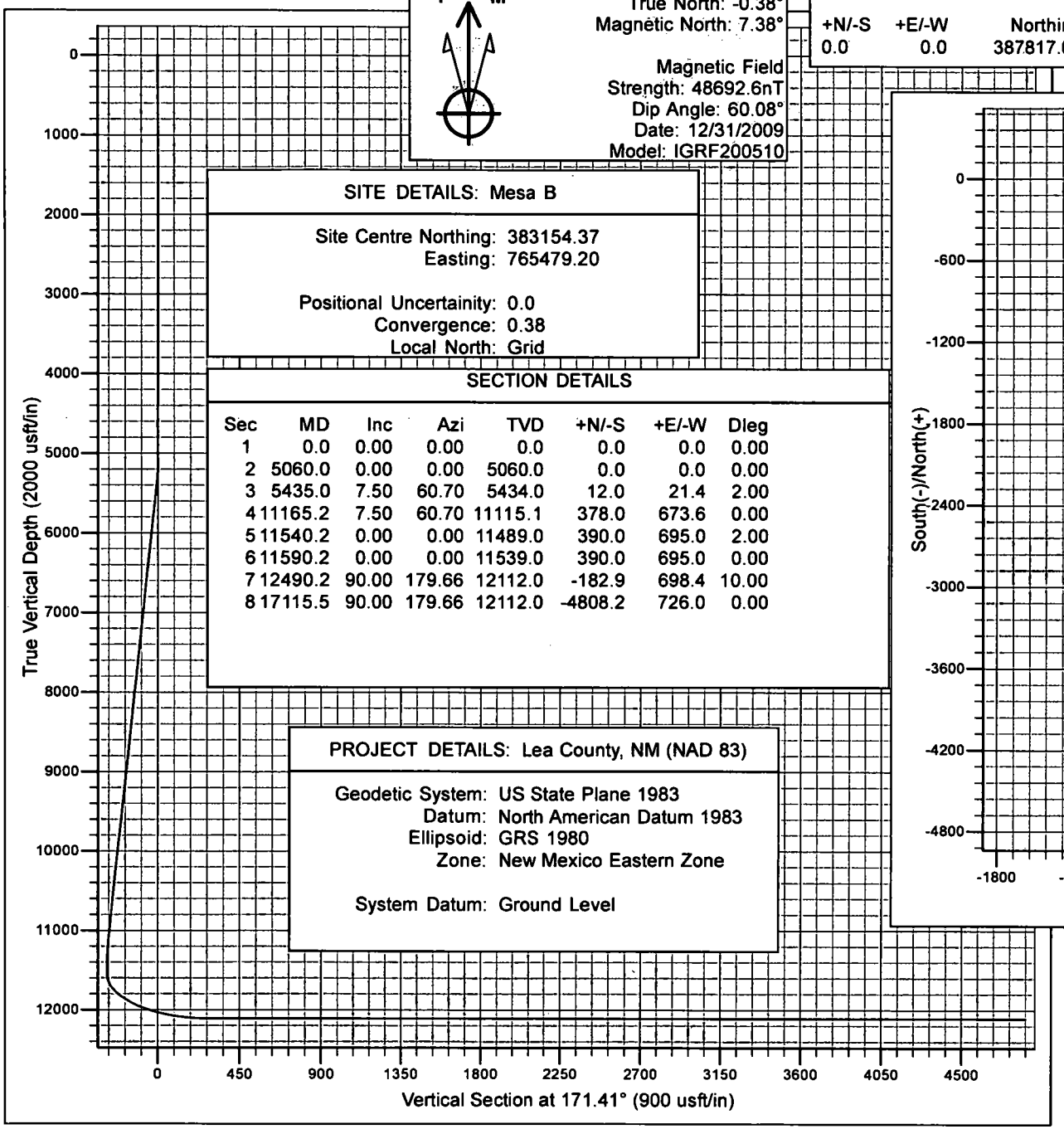
SECTION DETAILS

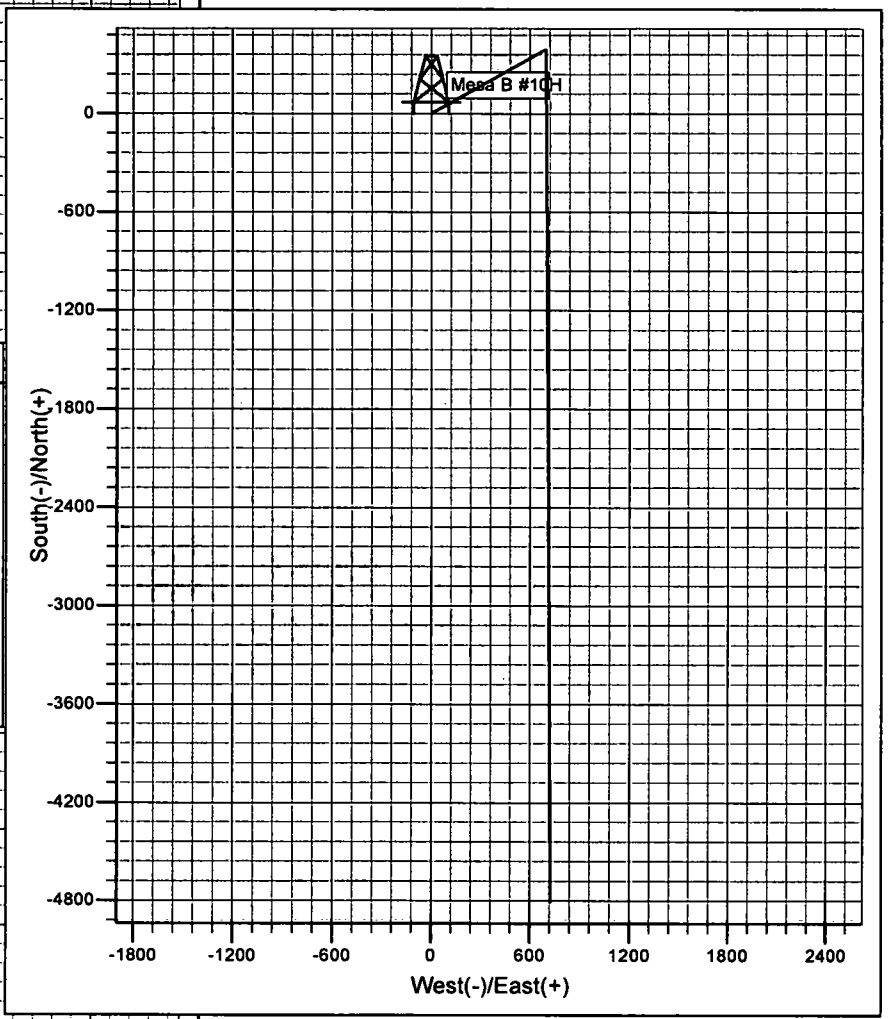
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00
2	5060.0	0.00	0.00	5060.0	0.0	0.0	0.00
3	5435.0	7.50	60.70	5434.0	12.0	21.4	2.00
4	11165.2	7.50	60.70	11115.1	378.0	673.6	0.00
5	11540.2	0.00	0.00	11489.0	390.0	695.0	2.00
6	11590.2	0.00	0.00	11539.0	390.0	695.0	0.00
7	12490.2	90.00	179.66	12112.0	-182.9	698.4	10.00
8	17115.5	90.00	179.66	12112.0	-4808.2	726.0	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





APD ID: 10400038140 **Submission Date:** 01/18/2019

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA B 8115 FED COM **Well Number:** 10H

Well Type: OIL WELL **Well Work Type:** Drill

Section 1 - General

Would you like to address long-term produced water disposal? NO

Section 2 - Lined Pits

Would you like to utilize Lined Pit PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Lined pit PWD on or off channel:

Lined pit PWD discharge volume (bbl/day):

Lined pit specifications:

Pit liner description:

Pit liner manufacturers information:

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Lined pit precipitated solids disposal schedule:

Lined pit precipitated solids disposal schedule attachment:

Lined pit reclamation description:

Lined pit reclamation attachment:

Leak detection system description:

Leak detection system attachment:

Lined pit Monitor description:

Lined pit Monitor attachment:

Lined pit: do you have a reclamation bond for the pit?

Is the reclamation bond a rider under the BLM bond?

Lined pit bond number:

Lined pit bond amount:

Additional bond information attachment:

Section 3 - Unlined Pits

Would you like to utilize Unlined Pit PWD options? NO

Produced Water Disposal (PWD) Location:

PWD disturbance (acres): **PWD surface owner:**

Unlined pit PWD on or off channel:

Unlined pit PWD discharge volume (bbl/day):

Unlined pit specifications:

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Unlined pit precipitated solids disposal schedule:

Unlined pit precipitated solids disposal schedule attachment:

Unlined pit reclamation description:

Unlined pit reclamation attachment:

Unlined pit Monitor description:

Unlined pit Monitor attachment:

Do you propose to put the produced water to beneficial use?

Beneficial use user confirmation:

Estimated depth of the shallowest aquifer (feet):

Does the produced water have an annual average Total Dissolved Solids (TDS) concentration equal to or less than that of the existing water to be protected?

TDS lab results:

Geologic and hydrologic evidence:

State authorization:

Unlined Produced Water Pit Estimated percolation:

Unlined pit: do you have a reclamation bond for the pit?

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA B 8115 FED COM Well Number: 10H

Is the reclamation bond a rider under the BLM bond?

Unlined pit bond number:

Unlined pit bond amount:

Additional bond information attachment:

Section 4 - Injection

Would you like to utilize Injection PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner: PWD disturbance (acres):

Injection PWD discharge volume (bbl/day):

Injection well mineral owner:

Injection well type:

Injection well number: Injection well name:

Assigned injection well API number? Injection well API number:

Injection well new surface disturbance (acres):

Minerals protection information:

Mineral protection attachment:

Underground Injection Control (UIC) Permit?

UIC Permit attachment:

Section 5 - Surface Discharge

Would you like to utilize Surface Discharge PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner: PWD disturbance (acres):

Surface discharge PWD discharge volume (bbl/day):

Surface Discharge NPDES Permit?

Surface Discharge NPDES Permit attachment:

Surface Discharge site facilities information:

Surface discharge site facilities map:

Section 6 - Other

Would you like to utilize Other PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner: PWD disturbance (acres):

Other PWD discharge volume (bbl/day):

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA B 8115 FED COM **Well Number:** 10H

Other PWD type description:

Other PWD type attachment:

Have other regulatory requirements been met?

Other regulatory requirements attachment:

APD ID: 10400038140 **Submission Date:** 01/18/2019

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA B 8115 FED COM **Well Number:** 10H

Well Type: OIL WELL **Well Work Type:** Drill

Show Final Text

Bond Information

Federal/Indian APD: FED

BLM Bond number: NMB000849

BIA Bond number:

Do you have a reclamation bond? NO

Is the reclamation bond a rider under the BLM bond?

Is the reclamation bond BLM or Forest Service?

BLM reclamation bond number:

Forest Service reclamation bond number:

Forest Service reclamation bond attachment:

Reclamation bond number:

Reclamation bond amount:

Reclamation bond rider amount:

Additional reclamation bond information attachment: