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

HOBBS OCD
JAN 10 2020
RECEIVED

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
NMNM0160973

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☑ DRILL ☐ REENTER

1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other

1c. Type of Completion: ☐ Hydraulic Fracturing ☑ Single Zone ☐ Multiple Zone

7. If Unit or CA Agreement, Name and No.
NMNM082045

8. Lease Name and Well No.
MESA B 8115 FED COM
14H (326144)

2. Name of Operator
BTA OIL PRODUCERS LLC (260297)

9. API Well No.
30-025-46739

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 NENE / 400 FNL / 800 FEL / LAT 32.064198 / LONG -103.605431

At proposed prod. zone SESE / 50 FSL / 330 FEL / LAT 32.050927 / LONG -103.603902

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*	12. County or Parish	13. State
30 miles	LEA	NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No of acres in lease	17. Spacing Unit dedicated to this well
415 feet	1238.72	160

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. in file
2615 feet	12485 feet / 17482 feet	FED: NMB001711

21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration
3302 feet	05/10/2019	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	Name *(Printed/Typed)*	Date
(Electronic Submission)	Sammy Hajar / Ph: (432)682-3753	12/07/2018

Title
Regulatory Analyst

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
(Electronic Submission)	Cody Layton / Ph: (575)234-5959	12/13/2019

Title	Office
Assistant Field Manager Lands & Minerals	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 01/10/2020

KZ 01/11/2020

SL

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: NENE / 400 FNL / 800 FEL / TWSP: 26S / RANGE: 33E / SECTION: 7 / LAT: 32.064198 / LONG: -103.605431 (TVD: 0 feet, MD: 0 feet)
   PPP: NENE / 100 FNL / 330 FEL / TWSP: 26S / RANGE: 33E / SECTION: 7 / LAT: 32.065023 / LONG: -103.603914 (TVD: 12020 feet, MD: 12061 feet)
   BHL: SESE / 50 FSL / 330 FEL / TWSP: 26S / RANGE: 33E / SECTION: 7 / LAT: 32.050927 / LONG: -103.603902 (TVD: 12485 feet, MD: 17482 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.

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:** 12/04/2018

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: 10400036837 **Submission Date:** 12/07/2018

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA B 8115 FED COM **Well Number:** 14H

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

[redacted]

Show Final Text

Section 1 - General

APD ID: 10400036837 **Tie to previous NOS?** N **Submission Date:** 12/07/2018

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: NMNM0160973 **Lease Acres:** 1238.72

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

Agreement in place? YES **Federal or Indian agreement:** FEDERAL

Agreement number: NMNM082045

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:** 14H **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:** 14H

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:** 14-17

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:** 2615 FT **Distance to lease line:** 415 FT

Reservoir well spacing assigned acres Measurement: 160 Acres

Well plat: Mesa_B_8115_Fed_Com_14H_C102_20191120140500.pdf

Well work start Date: 05/10/2019 **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	400	FNL	800	FEL	26S	33E	7	Aliquot NENE	32.064198	-103.605431	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 0160973	3302	0	0
KOP Leg #1	100	FNL	330	FEL	26S	33E	7	Aliquot NENE	32.065023	-103.603914	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 0160973	-8610	11950	11912
PPP Leg #1-1	100	FNL	330	FEL	26S	33E	7	Aliquot NENE	32.065023	-103.603914	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 0160973	-8718	12061	12020

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA B 8115 FED COM **Well Number:** 14H

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	100	FSL	330	FEL	26S	33E	7	Aliquot SESE	32.051064	-103.603902	LEA	NEW MEXICO	NEW MEXICO	F	FEE	-9183	17202	12485
BHL Leg #1	50	FSL	330	FEL	26S	33E	7	Aliquot SESE	32.050927	-103.603902	LEA	NEW MEXICO	NEW MEXICO	F	FEE	-9183	17482	12485

APD ID: 10400036837 **Submission Date:** 12/07/2018

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA B 8115 FED COM **Well Number:** 14H

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	QUATERNARY	3302	0	0	ALLUVIUM	NONE	N
2	RUSTLER	2488	814	814		NONE	N
3	TOP SALT	1460	1842	1842		NONE	N
4	BASE OF SALT	-1192	4494	4494		NONE	N
5	DELAWARE	-1439	4741	4741		NATURAL GAS,OIL	N
6	BELL CANYON	-1473	4775	4775		NATURAL GAS,OIL	N
7	CHERRY CANYON	-2751	6053	6053		NATURAL GAS,OIL	N
8	BRUSHY CANYON	-4171	7473	7473		NATURAL GAS,OIL	N
9	BONE SPRING LIME	-5668	8970	8970		NATURAL GAS,OIL	N
10	FIRST BONE SPRING SAND	-6627	9929	9929		NATURAL GAS,OIL	N
11	BONE SPRING 2ND	-7192	10494	10494		NATURAL GAS,OIL	N
12	BONE SPRING 3RD	-8293	11595	11595		NATURAL GAS,OIL	N
13	WOLFCAMP	-8718	12020	12020		NATURAL GAS,OIL	Y

Section 2 - Blowout Prevention

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA B 8115 FED COM **Well Number:** 14H

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

Equipment: The blowout preventer equipment (BOP) shown in Exhibit A will consist of a (10M system) double ram type (10,000 psi WP) preventer and a bag-type (Hydril) preventer (5000 psi WP). Both units will be hydraulically operated and the ram type preventer will be equipped with blind rams on top and 5" drill pipe rams on bottom. The BOP's will be installed on the 13-3/8" surface casing and utilized continuously until total depth is reached. A 2" kill line and 3" choke line will be incorporated in the drilling spool below the ram-type BOP. A remote kill line will be used for the 10M system as per onshore order #2. Other accessory BOP equipment will include a Kelly cock, floor safety valve, choke lines, and choke manifold having a 10,000 psi WP rating. The 5M annular on the 10M system will be tested to 100% of rated working pressure.
Requesting Variance? YES

Variance request: A Choke Hose Variance is requested. See attached test chart and spec. 5M annular variance requested.

Testing Procedure: Pipe rams will be operated and checked each 24-hour period and each time the drill pipe is out of the hole. These functional tests will be documented on the daily driller's log. All BOP's and associated equipment will be tested as per BLM drilling Operations Order No. 2.
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_20190207095837.pdf

10M_annular_variance__20190207095848.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	14.75	10.75	NEW	API	N	0	890	0	890			890	J-55	40.5	ST&C	4.1	8.1	DRY	11.7	DRY	17.5
2	INTERMEDIATE	9.875	7.625	NEW	API	Y	0	8007	0	8000			8007	P-110	29.7	BUTT	1.4	2.4	DRY	4	DRY	4
3	PRODUCTION	6.75	5.5	NEW	API	Y	0	11701	0	11412			11701	P-110	20	BUTT	1.3	1.5	DRY	2.9	DRY	2.7
4	INTERMEDIATE	8.75	7.625	NEW	API	Y	8007	11901	8000	11862			3894	P-110	29.7	BUTT	1.7	1.6	DRY	2.7	DRY	2.7
5	PRODUCTION	6.75	5.0	NEW	API	Y	11701	17482	11663	12485			5781	P-110	18	BUTT	1.3	1.4	DRY	1.9	DRY	1.8

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA B 8115 FED COM **Well Number:** 14H

Casing Attachments

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

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

New_Mesa_B_14H_casing_assumption_20191120150142.JPG

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

Inspection Document:

Spec Document:

Tapered String Spec:

7_5_8_tapered_string_spec_9_7_8_hole_20191120145030.jpg

Casing Design Assumptions and Worksheet(s):

New_Mesa_B_14H_casing_assumption_20191120150134.JPG

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

Inspection Document:

Spec Document:

Tapered String Spec:

5.5_tapered_string_spec_20191120145353.jpg

Casing Design Assumptions and Worksheet(s):

New_Mesa_B_14H_casing_assumption_20191120150151.JPG

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA B 8115 FED COM **Well Number:** 14H

Casing Attachments

Casing ID: 4 **String Type:** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

7_5_8_tapered_string_spec_20191120145220.jpg

Casing Design Assumptions and Worksheet(s):

New_Mesa_B_14H_casing_assumption_20191120150159.JPG

Casing ID: 5 **String Type:** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

5_tapered_string_spec_20191120145526.jpg

Casing Design Assumptions and Worksheet(s):

New_Mesa_B_14H_casing_assumption_20191120150205.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					1.8					
SURFACE	Tail										
INTERMEDIATE	Lead					2.19					
INTERMEDIATE	Tail										
INTERMEDIATE	Lead					2.64					

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA B 8115 FED COM **Well Number:** 14H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
INTERMEDIATE	Tail										
PRODUCTION	Lead					0					
PRODUCTION	Lead					1.27					

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	890	OTHER : FW Spud	8.3	8.4							
890	11901	OTHER : DBE	9	9.4							
11901	12485	OIL-BASED MUD	11	14							

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA B 8115 FED COM **Well Number:** 14H

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

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 9089 **Anticipated Surface Pressure:** 6342.3

Anticipated Bottom Hole Temperature(F): 181

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_20190207150839.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Mesa_B__14H_directional_plan_20191120152019.pdf

Mesa_B__14H_Wall_plot_20191120152019.pdf

Mesa_B_8115_Fed_Com_14H_Gas_Capture_Plan_20191120152031.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:

Multi_Bowl_Diagram_20181129153852.pdf

Casing_Head_Running_Procedure_20181129153916.pdf

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.

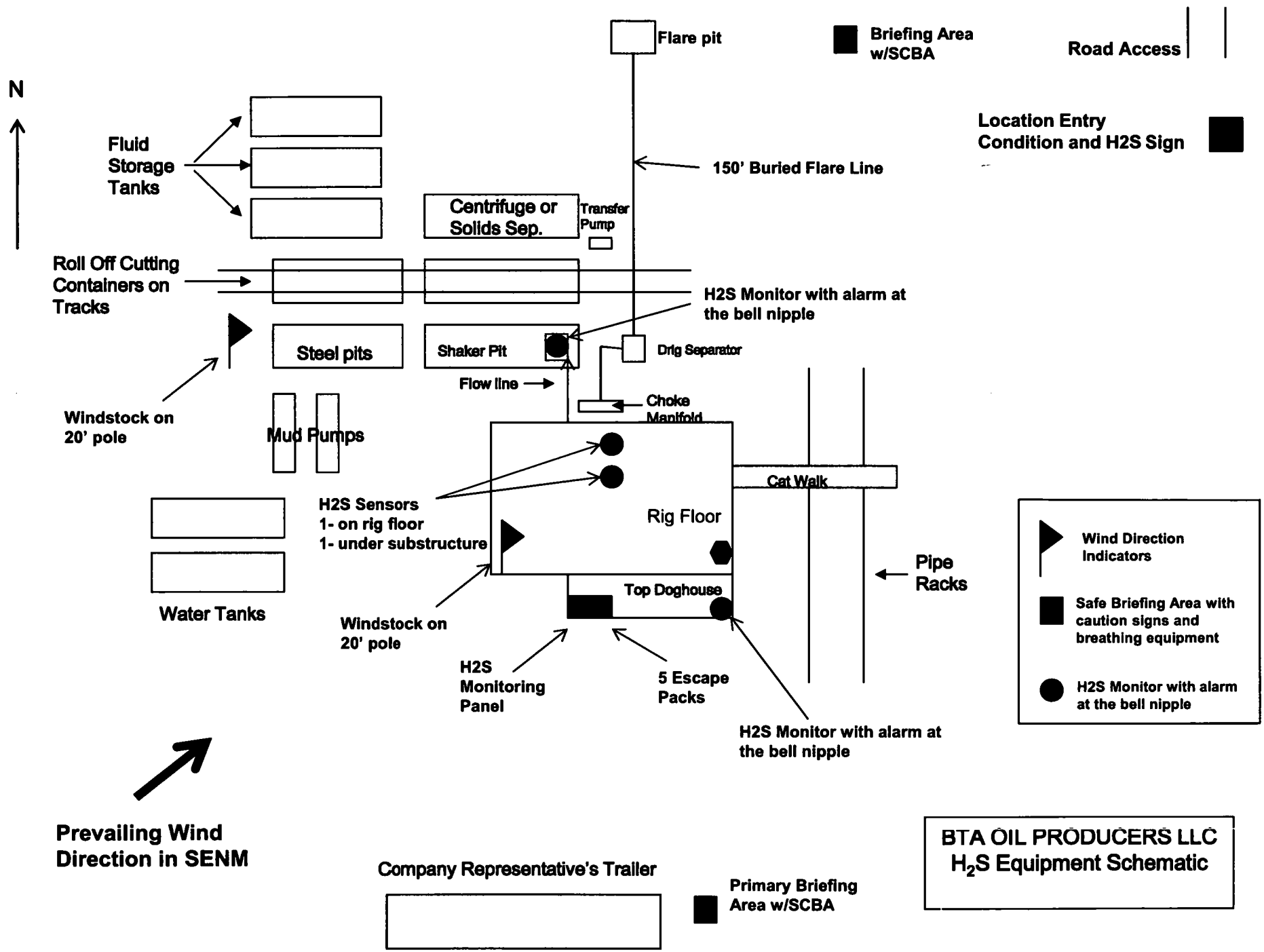
WARNING

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


N
Flare pit
Briefing Area w/SCBA
Road Access
Location Entry Condition and H2S Sign
Fluid Storage Tanks
150' Buried Flare Line
Centrifuge or Solids Sep.
Transfer Pump
Roll Off Cutting Containers on Tracks
H2S Monitor with alarm at the bell nipple
Steel pits
Shaker Pit
Drlg Separator
Flow line
Choke Manifold
Windstock on 20' pole
Mud Pumps
Cat Walk
H2S Sensors
1- on rig floor
1- under substructure
Rig Floor
Pipe Racks
Top Doghouse
Water Tanks
Windstock on 20' pole
H2S Monitoring Panel
5 Escape Packs
H2S Monitor with alarm at the bell nipple
Wind Direction Indicators
Safe Briefing Area with caution signs and breathing equipment
H2S Monitor with alarm at the bell nipple
Prevailing Wind Direction in SENM
Company Representative's Trailer
Primary Briefing Area w/SCBA
BTA OIL PRODUCERS LLC
H2S 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 #14H

Wellbore #1

Plan: Design #1

Standard Planning Report

06 November, 2019

Microsoft
Planning Report

Database:	Old	**Local Co-ordinate Reference:**	Well Mesa B #14H
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 #14H	**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 #14H					
Well Position	**+N/-S**	4,698.8 usft	**Northing:**	387,853.00 usft	**Latitude:**	32° 3' 51.110 N
	+E/-W	1,344.8 usft	**Easting:**	766,824.00 usft	**Longitude:**	103° 36' 19.550 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	0.0 usft	**Ground Level:**	3,290.0 usft

Wellbore	Wellbore #1				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF200510	12/31/2009	7.75	60.09	48,694.05435473

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	174.01	

Plan Survey Tool Program **Date** 11/6/2019

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	17,481.9	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	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,375.0	7.50	51.04	2,373.9	15.4	19.1	2.00	2.00	0.00	51.04	
6,630.0	7.50	51.04	6,592.5	364.6	450.9	0.00	0.00	0.00	0.00	
7,005.0	0.00	0.00	6,966.4	380.0	470.0	2.00	-2.00	0.00	180.00	
11,900.5	0.00	0.00	11,862.0	380.0	470.0	0.00	0.00	0.00	0.00	
11,950.6	0.00	0.00	11,912.0	380.0	470.0	0.00	0.00	0.00	0.00	
12,850.6	90.00	179.60	12,485.0	-192.9	474.0	10.00	10.00	0.00	179.60	
17,481.9	90.00	179.60	12,485.0	-4,824.2	506.0	0.00	0.00	0.00	0.00	Mesa B #14H BHL

Database:	Old	**Local Co-ordinate Reference:**	Well Mesa B #14H
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 #14H	**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)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	2.00	51.04	2,100.0	1.1	1.4	-0.9	2.00	2.00	0.00
2,200.0	4.00	51.04	2,199.8	4.4	5.4	-3.8	2.00	2.00	0.00
2,300.0	6.00	51.04	2,299.5	9.9	12.2	-8.5	2.00	2.00	0.00
2,375.0	7.50	51.04	2,373.9	15.4	19.1	-13.3	2.00	2.00	0.00
2,400.0	7.50	51.04	2,398.7	17.5	21.6	-15.1	0.00	0.00	0.00
2,500.0	7.50	51.04	2,497.9	25.7	31.7	-22.2	0.00	0.00	0.00
2,600.0	7.50	51.04	2,597.0	33.9	41.9	-29.3	0.00	0.00	0.00
2,700.0	7.50	51.04	2,696.1	42.1	52.0	-36.4	0.00	0.00	0.00
2,800.0	7.50	51.04	2,795.3	50.3	62.2	-43.5	0.00	0.00	0.00
2,900.0	7.50	51.04	2,894.4	58.5	72.3	-50.6	0.00	0.00	0.00
3,000.0	7.50	51.04	2,993.6	66.7	82.5	-57.7	0.00	0.00	0.00
3,100.0	7.50	51.04	3,092.7	74.9	92.6	-64.8	0.00	0.00	0.00
3,200.0	7.50	51.04	3,191.9	83.1	102.8	-71.9	0.00	0.00	0.00
3,300.0	7.50	51.04	3,291.0	91.3	112.9	-79.0	0.00	0.00	0.00
3,400.0	7.50	51.04	3,390.2	99.5	123.1	-86.1	0.00	0.00	0.00
3,500.0	7.50	51.04	3,489.3	107.7	133.2	-93.2	0.00	0.00	0.00
3,600.0	7.50	51.04	3,588.4	115.9	143.4	-100.3	0.00	0.00	0.00
3,700.0	7.50	51.04	3,687.6	124.1	153.5	-107.4	0.00	0.00	0.00
3,800.0	7.50	51.04	3,786.7	132.4	163.7	-114.6	0.00	0.00	0.00
3,900.0	7.50	51.04	3,885.9	140.6	173.8	-121.7	0.00	0.00	0.00
4,000.0	7.50	51.04	3,985.0	148.8	184.0	-128.8	0.00	0.00	0.00
4,100.0	7.50	51.04	4,084.2	157.0	194.1	-135.9	0.00	0.00	0.00
4,200.0	7.50	51.04	4,183.3	165.2	204.3	-143.0	0.00	0.00	0.00
4,300.0	7.50	51.04	4,282.5	173.4	214.4	-150.1	0.00	0.00	0.00
4,400.0	7.50	51.04	4,381.6	181.6	224.6	-157.2	0.00	0.00	0.00
4,500.0	7.50	51.04	4,480.8	189.8	234.7	-164.3	0.00	0.00	0.00
4,600.0	7.50	51.04	4,579.9	198.0	244.9	-171.4	0.00	0.00	0.00
4,700.0	7.50	51.04	4,679.0	206.2	255.0	-178.5	0.00	0.00	0.00
4,800.0	7.50	51.04	4,778.2	214.4	265.2	-185.6	0.00	0.00	0.00
4,900.0	7.50	51.04	4,877.3	222.6	275.3	-192.7	0.00	0.00	0.00
5,000.0	7.50	51.04	4,976.5	230.8	285.5	-199.8	0.00	0.00	0.00
5,100.0	7.50	51.04	5,075.6	239.0	295.6	-206.9	0.00	0.00	0.00
5,200.0	7.50	51.04	5,174.8	247.2	305.8	-214.0	0.00	0.00	0.00

Database:	Old	**Local Co-ordinate Reference:**	Well Mesa B #14H
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 #14H	**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)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,300.0	7.50	51.04	5,273.9	255.4	315.9	-221.1	0.00	0.00	0.00
5,400.0	7.50	51.04	5,373.1	263.7	326.1	-228.2	0.00	0.00	0.00
5,500.0	7.50	51.04	5,472.2	271.9	336.2	-235.3	0.00	0.00	0.00
5,600.0	7.50	51.04	5,571.3	280.1	346.4	-242.4	0.00	0.00	0.00
5,700.0	7.50	51.04	5,670.5	288.3	356.5	-249.5	0.00	0.00	0.00
5,800.0	7.50	51.04	5,769.6	296.5	366.7	-256.6	0.00	0.00	0.00
5,900.0	7.50	51.04	5,868.8	304.7	376.8	-263.7	0.00	0.00	0.00
6,000.0	7.50	51.04	5,967.9	312.9	387.0	-270.8	0.00	0.00	0.00
6,100.0	7.50	51.04	6,067.1	321.1	397.2	-277.9	0.00	0.00	0.00
6,200.0	7.50	51.04	6,166.2	329.3	407.3	-285.0	0.00	0.00	0.00
6,300.0	7.50	51.04	6,265.4	337.5	417.5	-292.1	0.00	0.00	0.00
6,400.0	7.50	51.04	6,364.5	345.7	427.6	-299.2	0.00	0.00	0.00
6,500.0	7.50	51.04	6,463.6	353.9	437.8	-306.3	0.00	0.00	0.00
6,600.0	7.50	51.04	6,562.8	362.1	447.9	-313.4	0.00	0.00	0.00
6,630.0	7.50	51.04	6,592.5	364.6	450.9	-315.6	0.00	0.00	0.00
6,700.0	6.10	51.04	6,662.0	369.8	457.4	-320.1	2.00	-2.00	0.00
6,800.0	4.10	51.04	6,761.6	375.4	464.3	-324.9	2.00	-2.00	0.00
6,900.0	2.10	51.04	6,861.5	378.8	468.5	-327.9	2.00	-2.00	0.00
7,000.0	0.10	51.04	6,961.5	380.0	470.0	-328.9	2.00	-2.00	0.00
7,005.0	0.00	0.00	6,966.4	380.0	470.0	-328.9	2.00	-2.00	0.00
7,100.0	0.00	0.00	7,061.5	380.0	470.0	-328.9	0.00	0.00	0.00
7,200.0	0.00	0.00	7,161.5	380.0	470.0	-328.9	0.00	0.00	0.00
7,300.0	0.00	0.00	7,261.5	380.0	470.0	-328.9	0.00	0.00	0.00
7,400.0	0.00	0.00	7,361.5	380.0	470.0	-328.9	0.00	0.00	0.00
7,500.0	0.00	0.00	7,461.5	380.0	470.0	-328.9	0.00	0.00	0.00
7,600.0	0.00	0.00	7,561.5	380.0	470.0	-328.9	0.00	0.00	0.00
7,700.0	0.00	0.00	7,661.5	380.0	470.0	-328.9	0.00	0.00	0.00
7,800.0	0.00	0.00	7,761.5	380.0	470.0	-328.9	0.00	0.00	0.00
7,900.0	0.00	0.00	7,861.5	380.0	470.0	-328.9	0.00	0.00	0.00
8,000.0	0.00	0.00	7,961.5	380.0	470.0	-328.9	0.00	0.00	0.00
8,100.0	0.00	0.00	8,061.5	380.0	470.0	-328.9	0.00	0.00	0.00
8,200.0	0.00	0.00	8,161.5	380.0	470.0	-328.9	0.00	0.00	0.00
8,300.0	0.00	0.00	8,261.5	380.0	470.0	-328.9	0.00	0.00	0.00
8,400.0	0.00	0.00	8,361.5	380.0	470.0	-328.9	0.00	0.00	0.00
8,500.0	0.00	0.00	8,461.5	380.0	470.0	-328.9	0.00	0.00	0.00
8,600.0	0.00	0.00	8,561.5	380.0	470.0	-328.9	0.00	0.00	0.00
8,700.0	0.00	0.00	8,661.5	380.0	470.0	-328.9	0.00	0.00	0.00
8,800.0	0.00	0.00	8,761.5	380.0	470.0	-328.9	0.00	0.00	0.00
8,900.0	0.00	0.00	8,861.5	380.0	470.0	-328.9	0.00	0.00	0.00
9,000.0	0.00	0.00	8,961.5	380.0	470.0	-328.9	0.00	0.00	0.00
9,100.0	0.00	0.00	9,061.5	380.0	470.0	-328.9	0.00	0.00	0.00
9,200.0	0.00	0.00	9,161.5	380.0	470.0	-328.9	0.00	0.00	0.00
9,300.0	0.00	0.00	9,261.5	380.0	470.0	-328.9	0.00	0.00	0.00
9,400.0	0.00	0.00	9,361.5	380.0	470.0	-328.9	0.00	0.00	0.00
9,500.0	0.00	0.00	9,461.5	380.0	470.0	-328.9	0.00	0.00	0.00
9,600.0	0.00	0.00	9,561.5	380.0	470.0	-328.9	0.00	0.00	0.00
9,700.0	0.00	0.00	9,661.5	380.0	470.0	-328.9	0.00	0.00	0.00
9,800.0	0.00	0.00	9,761.5	380.0	470.0	-328.9	0.00	0.00	0.00
9,900.0	0.00	0.00	9,861.5	380.0	470.0	-328.9	0.00	0.00	0.00
10,000.0	0.00	0.00	9,961.5	380.0	470.0	-328.9	0.00	0.00	0.00
10,100.0	0.00	0.00	10,061.5	380.0	470.0	-328.9	0.00	0.00	0.00
10,200.0	0.00	0.00	10,161.5	380.0	470.0	-328.9	0.00	0.00	0.00
10,300.0	0.00	0.00	10,261.5	380.0	470.0	-328.9	0.00	0.00	0.00
10,400.0	0.00	0.00	10,361.5	380.0	470.0	-328.9	0.00	0.00	0.00

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Site:	Mesa B	**North Reference:**	Grid
Well:	Mesa B #14H	**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)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,500.0	0.00	0.00	10,461.5	380.0	470.0	-328.9	0.00	0.00	0.00
10,600.0	0.00	0.00	10,561.5	380.0	470.0	-328.9	0.00	0.00	0.00
10,700.0	0.00	0.00	10,661.5	380.0	470.0	-328.9	0.00	0.00	0.00
10,800.0	0.00	0.00	10,761.5	380.0	470.0	-328.9	0.00	0.00	0.00
10,900.0	0.00	0.00	10,861.5	380.0	470.0	-328.9	0.00	0.00	0.00
11,000.0	0.00	0.00	10,961.5	380.0	470.0	-328.9	0.00	0.00	0.00
11,100.0	0.00	0.00	11,061.5	380.0	470.0	-328.9	0.00	0.00	0.00
11,200.0	0.00	0.00	11,161.5	380.0	470.0	-328.9	0.00	0.00	0.00
11,300.0	0.00	0.00	11,261.5	380.0	470.0	-328.9	0.00	0.00	0.00
11,400.0	0.00	0.00	11,361.5	380.0	470.0	-328.9	0.00	0.00	0.00
11,500.0	0.00	0.00	11,461.5	380.0	470.0	-328.9	0.00	0.00	0.00
11,600.0	0.00	0.00	11,561.5	380.0	470.0	-328.9	0.00	0.00	0.00
11,700.0	0.00	0.00	11,661.5	380.0	470.0	-328.9	0.00	0.00	0.00
11,800.0	0.00	0.00	11,761.5	380.0	470.0	-328.9	0.00	0.00	0.00
11,900.0	0.00	0.00	11,861.5	380.0	470.0	-328.9	0.00	0.00	0.00
11,900.5	0.00	0.00	11,862.0	380.0	470.0	-328.9	0.00	0.00	0.00
11,950.6	0.00	0.00	11,912.0	380.0	470.0	-328.9	0.00	0.00	0.00
12,000.0	4.94	179.60	11,961.4	377.9	470.0	-326.8	10.00	10.00	0.00
12,100.0	14.94	179.60	12,059.8	360.6	470.1	-309.6	10.00	10.00	0.00
12,200.0	24.94	179.60	12,153.7	326.6	470.4	-275.7	10.00	10.00	0.00
12,300.0	34.94	179.60	12,240.2	276.7	470.7	-226.1	10.00	10.00	0.00
12,400.0	44.94	179.60	12,316.8	212.6	471.2	-162.3	10.00	10.00	0.00
12,500.0	54.94	179.60	12,381.0	136.2	471.7	-86.2	10.00	10.00	0.00
12,600.0	64.94	179.60	12,431.1	49.7	472.3	-0.2	10.00	10.00	0.00
12,700.0	74.94	179.60	12,465.3	-44.1	472.9	93.2	10.00	10.00	0.00
12,800.0	84.94	179.60	12,482.8	-142.4	473.6	191.1	10.00	10.00	0.00
12,850.6	90.00	179.60	12,485.0	-192.9	474.0	241.3	10.00	10.00	0.00
12,900.0	90.00	179.60	12,485.0	-242.4	474.3	290.5	0.00	0.00	0.00
13,000.0	90.00	179.60	12,485.0	-342.4	475.0	390.0	0.00	0.00	0.00
13,100.0	90.00	179.60	12,485.0	-442.4	475.7	489.6	0.00	0.00	0.00
13,200.0	90.00	179.60	12,485.0	-542.4	476.4	589.1	0.00	0.00	0.00
13,300.0	90.00	179.60	12,485.0	-642.3	477.1	688.6	0.00	0.00	0.00
13,400.0	90.00	179.60	12,485.0	-742.3	477.8	788.1	0.00	0.00	0.00
13,500.0	90.00	179.60	12,485.0	-842.3	478.5	887.7	0.00	0.00	0.00
13,600.0	90.00	179.60	12,485.0	-942.3	479.2	987.2	0.00	0.00	0.00
13,700.0	90.00	179.60	12,485.0	-1,042.3	479.8	1,086.7	0.00	0.00	0.00
13,800.0	90.00	179.60	12,485.0	-1,142.3	480.5	1,186.2	0.00	0.00	0.00
13,900.0	90.00	179.60	12,485.0	-1,242.3	481.2	1,285.8	0.00	0.00	0.00
14,000.0	90.00	179.60	12,485.0	-1,342.3	481.9	1,385.3	0.00	0.00	0.00
14,100.0	90.00	179.60	12,485.0	-1,442.3	482.6	1,484.8	0.00	0.00	0.00
14,200.0	90.00	179.60	12,485.0	-1,542.3	483.3	1,584.3	0.00	0.00	0.00
14,300.0	90.00	179.60	12,485.0	-1,642.3	484.0	1,683.9	0.00	0.00	0.00
14,400.0	90.00	179.60	12,485.0	-1,742.3	484.7	1,783.4	0.00	0.00	0.00
14,500.0	90.00	179.60	12,485.0	-1,842.3	485.4	1,882.9	0.00	0.00	0.00
14,600.0	90.00	179.60	12,485.0	-1,942.3	486.1	1,982.4	0.00	0.00	0.00
14,700.0	90.00	179.60	12,485.0	-2,042.3	486.8	2,082.0	0.00	0.00	0.00
14,800.0	90.00	179.60	12,485.0	-2,142.3	487.5	2,181.5	0.00	0.00	0.00
14,900.0	90.00	179.60	12,485.0	-2,242.3	488.1	2,281.0	0.00	0.00	0.00
15,000.0	90.00	179.60	12,485.0	-2,342.3	488.8	2,380.5	0.00	0.00	0.00
15,100.0	90.00	179.60	12,485.0	-2,442.3	489.5	2,480.0	0.00	0.00	0.00
15,200.0	90.00	179.60	12,485.0	-2,542.3	490.2	2,579.6	0.00	0.00	0.00
15,300.0	90.00	179.60	12,485.0	-2,642.3	490.9	2,679.1	0.00	0.00	0.00
15,400.0	90.00	179.60	12,485.0	-2,742.3	491.6	2,778.6	0.00	0.00	0.00
15,500.0	90.00	179.60	12,485.0	-2,842.3	492.3	2,878.1	0.00	0.00	0.00

Database:	Old	**Local Co-ordinate Reference:**	Well Mesa B #14H
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 #14H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

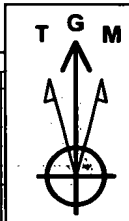
Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
15,600.0	90.00	179.60	12,485.0	-2,942.3	493.0	2,977.7	0.00	0.00	0.00
15,700.0	90.00	179.60	12,485.0	-3,042.3	493.7	3,077.2	0.00	0.00	0.00
15,800.0	90.00	179.60	12,485.0	-3,142.3	494.4	3,176.7	0.00	0.00	0.00
15,900.0	90.00	179.60	12,485.0	-3,242.3	495.1	3,276.2	0.00	0.00	0.00
16,000.0	90.00	179.60	12,485.0	-3,342.3	495.8	3,375.8	0.00	0.00	0.00
16,100.0	90.00	179.60	12,485.0	-3,442.3	496.5	3,475.3	0.00	0.00	0.00
16,200.0	90.00	179.60	12,485.0	-3,542.3	497.1	3,574.8	0.00	0.00	0.00
16,300.0	90.00	179.60	12,485.0	-3,642.3	497.8	3,674.3	0.00	0.00	0.00
16,400.0	90.00	179.60	12,485.0	-3,742.3	498.5	3,773.9	0.00	0.00	0.00
16,500.0	90.00	179.60	12,485.0	-3,842.3	499.2	3,873.4	0.00	0.00	0.00
16,600.0	90.00	179.60	12,485.0	-3,942.3	499.9	3,972.9	0.00	0.00	0.00
16,700.0	90.00	179.60	12,485.0	-4,042.3	500.6	4,072.4	0.00	0.00	0.00
16,800.0	90.00	179.60	12,485.0	-4,142.3	501.3	4,172.0	0.00	0.00	0.00
16,900.0	90.00	179.60	12,485.0	-4,242.3	502.0	4,271.5	0.00	0.00	0.00
17,000.0	90.00	179.60	12,485.0	-4,342.3	502.7	4,371.0	0.00	0.00	0.00
17,100.0	90.00	179.60	12,485.0	-4,442.3	503.4	4,470.5	0.00	0.00	0.00
17,200.0	90.00	179.60	12,485.0	-4,542.3	504.1	4,570.1	0.00	0.00	0.00
17,300.0	90.00	179.60	12,485.0	-4,642.3	504.8	4,669.6	0.00	0.00	0.00
17,400.0	90.00	179.60	12,485.0	-4,742.3	505.4	4,769.1	0.00	0.00	0.00
17,481.9	90.00	179.60	12,485.0	-4,824.2	506.0	4,850.6	0.00	0.00	0.00

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Mesa B #14H BHL - plan hits target center - Point	0.00	0.00	12,485.0	-4,824.2	506.0	383,029.00	767,330.00	32° 3' 3.341 N	103° 36' 14.049 W

BTA Oil Producers, LLC



Azimuths to Grid North
True North: -0.39°
Magnetic North: 7.37°

Magnetic Field
Strength: 48694.1nT
Dip Angle: 60.09°
Date: 12/31/2009
Model: IGRF200510

WELL DETAILS: Mesa B #14H

Ground Level Ground Level: 3290.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	387853.00	766824.00	32° 3' 51.110 N	103° 36' 19.550 W

SITE DETAILS: Mesa B

Site Centre Northing: 383154.37
Easting: 765479.20

Positional Uncertainity: 0.0
Convergence: 0.38
Local North: Grid

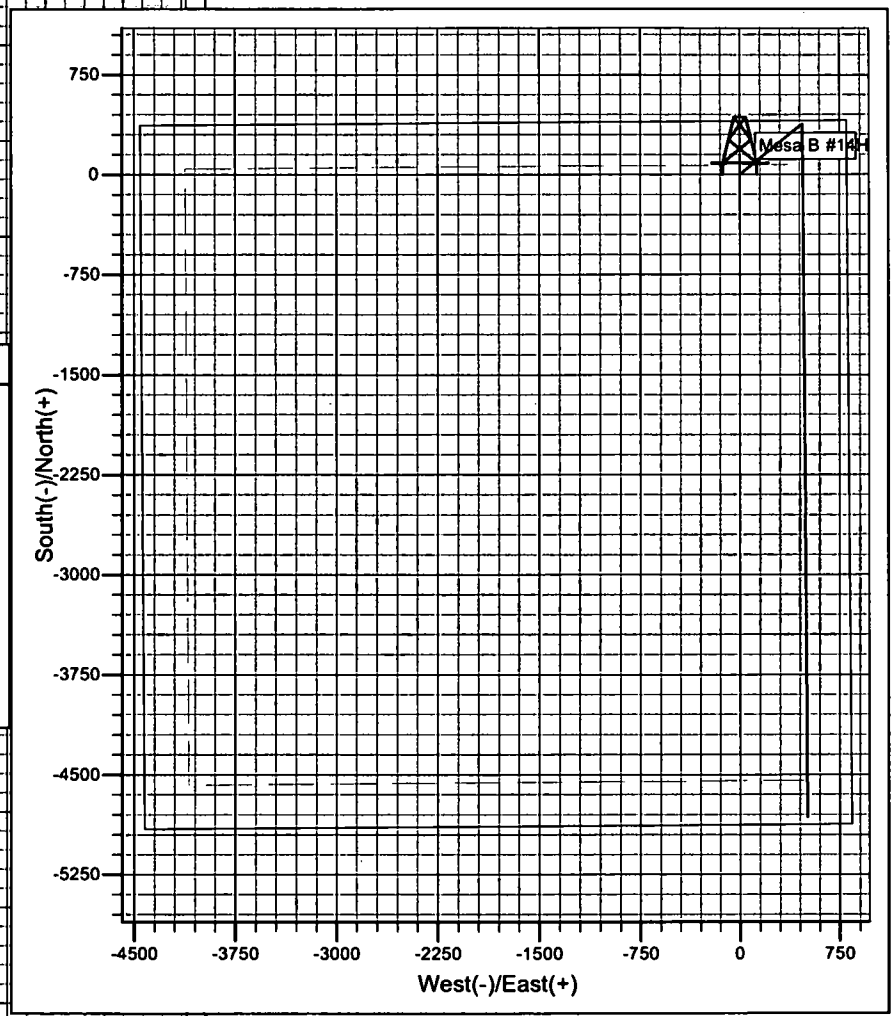
SECTION DETAILS

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	2000.0	0.00	0.00	2000.0	0.0	0.0	0.00
3	2375.0	7.50	51.04	2373.9	15.4	19.1	2.00
4	6630.0	7.50	51.04	6592.5	364.6	450.9	0.00
5	7005.0	0.00	0.00	6966.4	380.0	470.0	2.00
6	11900.5	0.00	0.00	11862.0	380.0	470.0	0.00
7	11950.6	0.00	0.00	11912.0	380.0	470.0	0.00
8	12850.6	90.00	179.60	12485.0	-192.9	474.0	10.00
9	17481.9	90.00	179.60	12485.0	-4824.2	506.0	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

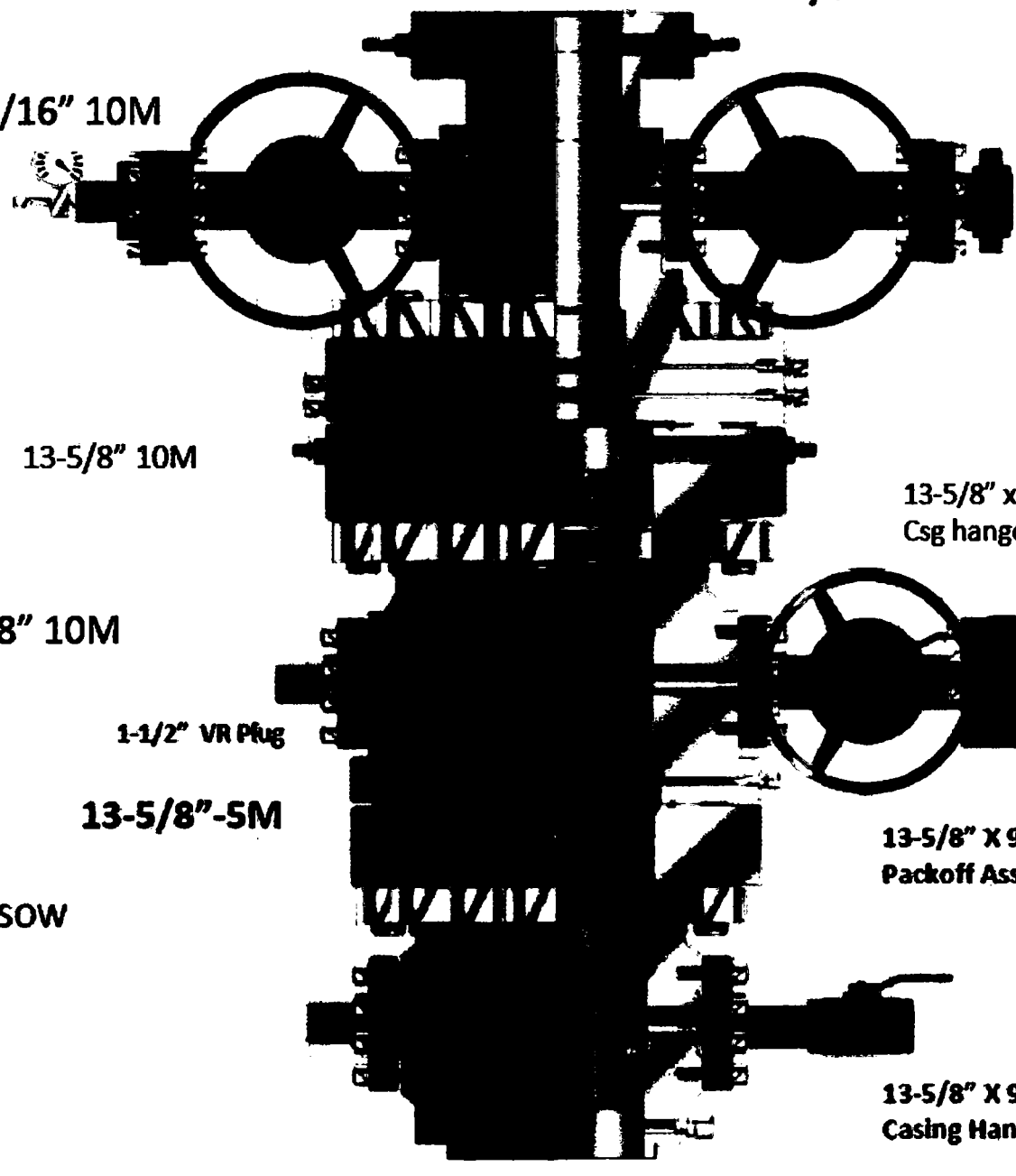
System Datum: Ground Level



Multi-Bowl System

13-5/8" x 9-5/8" x 7"

With 4-1/2" liner downhole



APD ID: 10400036837 **Submission Date:** 12/07/2018

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA B 8115 FED COM **Well Number:** 14H

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:

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA B 8115 FED COM Well Number: 14H

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: 14H

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:** 14H

Other PWD type description:

Other PWD type attachment:

Have other regulatory requirements been met?

Other regulatory requirements attachment:

APD ID: 10400036837

Submission Date: 12/07/2018

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA B 8115 FED COM

Well Number: 14H

Show Final Text

Well Type: OIL WELL

Well Work Type: Drill

Bond Information

Federal/Indian APD: FED

BLM Bond number: NMB001711

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:

AFMSS

U.S. Department of the Interior
Bureau of Land Management

Application for Permit to Drill

APD Package Report

Date Printed: 12/17/2019 07:38 AM

APD ID: 10400036837	Well Status: AAPD
APD Received Date: 12/07/2018 08:21 AM	Well Name: MESA B 8115 FED COM
Operator: BTA OIL PRODUCERS LLC	Well Number: 14H

APD Package Report Contents

- Form 3160-3

- Operator Certification Report

- Application Report
- Application Attachments
  -- Well Plat: 1 file(s)

- Drilling Plan Report
- Drilling Plan Attachments
  -- Blowout Prevention Choke Diagram Attachment: 2 file(s)
  -- Blowout Prevention BOP Diagram Attachment: 3 file(s)
  -- Casing Taperd String Specs: 4 file(s)
  -- Casing Design Assumptions and Worksheet(s): 5 file(s)
  -- Hydrogen sulfide drilling operations plan: 3 file(s)
  -- Proposed horizontal/directional/multi-lateral plan submission: 3 file(s)
  -- Other Variances: 2 file(s)

- SUPO Report
- SUPO Attachments
  -- Existing Road Map: 1 file(s)
  -- New Road Map: 1 file(s)
  -- Attach Well map: 1 file(s)
  -- Production Facilities map: 1 file(s)
  -- Water source and transportation map: 1 file(s)
  -- Well Site Layout Diagram: 3 file(s)

- PWD Report
- PWD Attachments
  -- None

- Bond Report
- Bond Attachments

-- None