Form 3160-3 (June 2015)				OMB No.	PPROVED 1004-0137 pary 31, 2018
UNITED STATE				*	
DEPARTMENT OF THE BUREAU OF LAND MAI		,		5. Lease Serial No.	
APPLICATION FOR PERMIT TO				6. If Indian, Allotee or	Tribe Name
la. Type of work: DRILL	REENTER			7. If Unit or CA Agree	ement, Name and No.
	Other				
	Single Zone	Multiple Zone		8. Lease Name and W	ell No.
Te. Type of Completion.	Shighe Zone	Nutriple Zolle		[328]	173]
2. Name of Operator [260297]				9. API Well No. <b>30</b>	-025-49296
3a. Address	3b. Phone N	o. (include area co	ode)	10. Field and Pool, or	Exploratory [98158]
4. Location of Well (Report location clearly and in accordance	e with any State	requirements.*)		11. Sec., T. R. M. or B	Blk. and Survey or Area
At surface					
At proposed prod. zone					
14. Distance in miles and direction from nearest town or post of	office*			12. County or Parish	13. State
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No of ac	res in lease	17. Spaci	ng Unit dedicated to this	s well
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed	l Depth	20. BLM/	BIA Bond No. in file	
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approxim	mate date work wi	ll start*	23. Estimated duration	1
	24. Attacl	hments			
The following, completed in accordance with the requirements (as applicable)	of Onshore Oil	and Gas Order No	. 1, and the I	Iydraulic Fracturing rul	e per 43 CFR 3162.3-3
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest Sys SUPO must be filed with the appropriate Forest Service Office)</li> </ol>		Item 20 above 5. Operator certification	). fication.	s unless covered by an e	existing bond on file (see
25. Signature	Name	(Printed/Typed)			Date
Title	l			1	
Approved by (Signature)	Name	(Printed/Typed)		Γ	Date
Title	Office				
Application approval does not warrant or certify that the applicant to conduct operations thereon.  Conditions of approval, if any, are attached.	ant holds legal o	or equitable title to	those rights	in the subject lease whi	ch would entitle the
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212 of the United States any false, fictitious or fraudulent statement					y department or agency
NGMP Rec 08/09/2021					
	#47E	rh condi	TIONS	<b>k</b> 08/1	( <u>)</u> 0/2021
SL	OVED WE	III OUT			
(Continued on page 2)	01111			*(Inst	ructions on page 2)

DISTRICT I 1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720 DISTRICT II 811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720 DISTRICT III 1000 Rio Brezos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170

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

DISTRICT IV

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

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

□AMENDED REPORT

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name	
30-025-49296	98158	WC-025 G-09 S253236A;UP	R WOLFCAMP
Property Code	P	roperty Name	Well Number
328173	MESA 81	05 11 FEDERAL	78H
OGRID No.	0	perator Name	Elevation
260297	BTA OIL P	RODUCERS, LLC	3245'

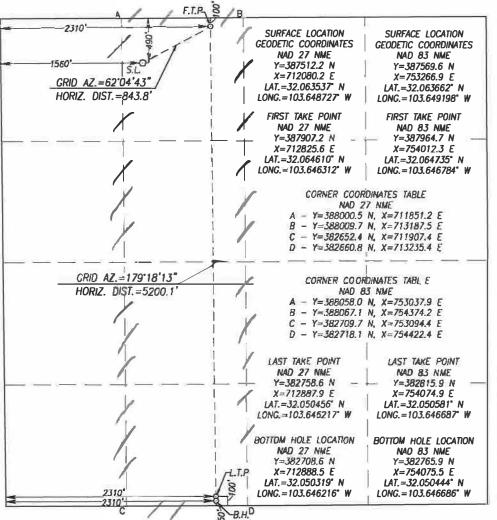
#### Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
С	11	26-S	32-E		490	NORTH	1560	WEST	LEA

#### Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	11	26-S	32-E		50	SOUTH	2310	WEST	LEA
Dedicated Acres	Joint or	Infill	Consolidation C	ode Ord	ler No.				
160									

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



#### OPERATOR CERTIFICATION

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

7/13/2020 Date

Sammy Hajar

Printed Name

SHAJAR@BTAOIL.COM

E-mail Address

#### SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from tiple fighes of a final surveys made by me or under my suffer issue, and about the stage is true and correct to the less of any males.

IANY

Date of Survey 3239 Signature PROFESSIONA PROFESSIONA

Gary G. Eidson 12641 Certificate Number

ACK

Ronald J. Eidson 3239 JWSC W.O.: 19.11.1280

# PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: | BTA Oil Producers LLC

LEASE NO.: | NMNM014492

WELL NAME & NO.: MESA 8105 11 Federal 78H

**SURFACE HOLE FOOTAGE:** 490'/N & 1560'/W **BOTTOM HOLE FOOTAGE** 50'/S & 2310'/W

**LOCATION:** Section 11, T.26 S., R.32 E., NMP

**COUNTY:** Lea County, New Mexico

COA

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

# **Casing Design:**

- 1. The 10-3/4 inch surface casing shall be set at approximately 795 feet (a minimum of 25 feet (Lea County) into the Rustler Anhydrite and above the salt) and cemented to the surface.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after

- completing the cement job.
- b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8** hours or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The **7-5/8** inch intermediate casing shall be set at approximately **12,881** feet. The minimum required fill of cement behind the **7-5/8** inch intermediate casing is:

# **Option 1 (Single Stage):**

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

Excess cement calculates to -46%, additional cement might be required.

# **Option 2:**

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

- a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
  - Excess cement calculates to -16%, additional cement might be required.
- b. Second stage above DV tool:
- Cement to surface. If cement does not circulate, contact the appropriate BLM office.
  - Wait on cement (WOC) time for a primary cement job is to include tlead cement slurry due to cave/karst or potash.
- ❖ In Medium Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
- 3. The minimum required fill of cement behind the 5 1/2 X 5 inch production casing is:
  - Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

#### 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. 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.

# **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)
  - \( \sum\_{\text{ounties}} \)
     \( \text{Call the Roswell Field Office, 2909 West Second St., Roswell NM 88201. \)
     \( \text{During office hours call (575) 627-0272. } \)
     \( \text{After office hours call (575)} \)
  - 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 2<sup>nd</sup> 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.

# OTA06212021



U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

Well Name: MESA 8105 11 FEDERAL

# Application Data Report

APD ID: 10400059092

Submission Date: 07/15/2020

Highlighted data reflects the most recent changes

Operator Name: BTA OIL PRODUCERS LLC

Well Number: 78H

Show Final Text

Well Type: OIL WELL

Well Work Type: Drill

## **Section 1 - General**

APD ID: 10400059092 Tie to previous NOS?

Submission Date: 07/15/2020

**BLM Office:** Carlsbad

User: Sammy Hajar

Title: Regulatory Analyst

Federal/Indian APD: FED

Lease number: NMNM014492

Is the first lease penetrated for production Federal or Indian? FED **Lease Acres:** 

Surface access agreement in place?

Allotted?

Reservation:

Agreement in place? N

Federal or Indian agreement:

Agreement number:

Agreement name:

Keep application confidential? Y

**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

Well Name: MESA 8105 11 FEDERAL

Master Drilling Plan name:

Well Number: 78H

Well API Number:

Field/Pool or Exploratory? Field and Pool

Field Name: WC-025

Pool Name: UPPER

WOLFCAMP

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

Page 1 of 3

Well Name: MESA 8105 11 FEDERAL Well Number: 78H

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? Y New surface disturbance? Y

Type of Well Pad: MULTIPLE WELL Multiple Well Pad Name: MESA Number: 78H, 79H, 80H, and

8105 11 FEDERAL 81H Well Class: HORIZONTAL

Number of Legs: 1

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

Well sub-Type: INFILL

Describe sub-type:

Distance to nearest well: 215 FT Distance to lease line: 490 FT Distance to town:

Reservoir well spacing assigned acres Measurement: 160 Acres

Well plat: Signed\_Mesa\_8105\_11\_Federal\_78H\_C102\_20200715135409.pdf

Well work start Date: 12/12/2021 **Duration: 30 DAYS** 

# **Section 3 - Well Location Table**

Survey Type: RECTANGULAR

**Describe Survey Type:** 

Datum: NAD83 Vertical Datum: NGVD29

Reference Datum: GROUND LEVEL Survey number:

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	Will this well produce from this lease?
SHL	490	FNL	156	FW	26S	32E	11	Aliquot	32.06366	-	LEA	NEW	NEW	F	NMNM	324	0	0	Υ
Leg			0	L				NENW	2	103.6491			MEXI		014492	5			
#1										98		СО	СО						
KOP	100	FNL	231	FW	26S	32E	11	Aliquot	32.06473	-	LEA	NEW	NEW	F	NMNM	-	120	119	Υ
Leg			0	L				NENW	5	103.6467			MEXI		014492	871	19	55	
#1										84		СО	СО			0			
PPP	100	FNL	231	FW	26S	32E	11	Aliquot	32.06473	-	LEA	NEW	NEW	F	NMNM	-	120	119	Υ
Leg			0	L				NENW	5	103.6467		I	MEXI		014492	870	14	50	
#1-1										84		СО	СО			5			

Well Name: MESA 8105 11 FEDERAL Well Number: 78H

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	Will this well produce from this lease?
EXIT Leg #1	100	FSL	231 0	FW L	26S	32E		Aliquot SESW	32.05058 1	- 103.6466 87	LEA	NEW MEXI CO	ı	F	NMNM 014492	- 918 8	172 87	124 33	Υ
BHL Leg #1	50	FSL	231 0	FW L	26S	32E	' '	Aliquot SESW	32.05044 4	- 103.6466 86	LEA	NEW MEXI CO		F	NMNM 014492	- 918 8	175 67	124 33	Y



**APD ID:** 10400059092

# U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

# Drilling Plan Data Report

**Submission Date:** 07/15/2020

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA 8105 11 FEDERAL Well Number: 78H

Well Type: OIL WELL Well Work Type: Drill

Highlighted data reflects the most recent changes

**Show Final Text** 

# **Section 1 - Geologic Formations**

Formation			True Vertical	Measured			Producing
ID	Formation Name	Elevation	Depth	Depth	Lithologies	Mineral Resources	Formation
788490	QUATERNARY	3245	0	0	ALLUVIUM	NONE	N
788491	RUSTLER	2534	711	711	ANHYDRITE	NONE	N
788492	TOP SALT	2050	1195	1195	SALT	NONE	N
788493	BASE OF SALT	-1150	4395	4395	SALT	NONE	N
788494	DELAWARE	-1360	4605	4605	LIMESTONE	NATURAL GAS, OIL	N
788503	BELL CANYON	-1385	4630	4630	SANDSTONE	NATURAL GAS, OIL	N
788496	CHERRY CANYON	-2735	5980	5980	SANDSTONE	NATURAL GAS, OIL	N
788497	BRUSHY CANYON	-4005	7250	7250	SANDSTONE	NATURAL GAS, OIL	N
788498	BONE SPRING LIME	-5600	8845	8845	LIMESTONE	NATURAL GAS, OIL	N
788499	FIRST BONE SPRING SAND	-6500	9745	9745	SANDSTONE	NATURAL GAS, OIL	N
788500	BONE SPRING 2ND	-7100	10345	10345	SANDSTONE	NATURAL GAS, OIL	N
788501	BONE SPRING 3RD	-8250	11495	11495	SANDSTONE	NATURAL GAS, OIL	N
788502	WOLFCAMP	-8705	11950	11950	SHALE	NATURAL GAS, OIL	Y

# **Section 2 - Blowout Prevention**

Well Name: MESA 8105 11 FEDERAL Well Number: 78H

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 BOPs will be installed on the 10-3/4" 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 will be tested as per BLM drilling Operations Order No. 2, and will be test to 100% of working pressure.

# Requesting Variance? NO

#### Variance request:

**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 drillers log. All BOPs and associated equipment will be tested as per BLM drilling Operations Order No. 2.

# **Choke Diagram Attachment:**

Choke\_Hose\_\_\_Test\_Chart\_and\_Specs\_20190723082742.pdf

10M\_choke\_mannifold\_20200521113335.pdf

### **BOP Diagram Attachment:**

BLM\_10M\_BOP\_with\_5M\_annular\_20200521113411.pptx

5M\_annular\_well\_control\_plan\_for\_BLM\_20200521113411.docx

10M\_annular\_variance\_20200521113430.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	14.7 5	10.75	NEW	API	N	0	750	0	750	3245	2495	750	J-55	40.5	ST&C	4.9	9.7	DRY	13.8	DRY	20.7
	INTERMED IATE	9.87 5	7.625	NEW	API	Υ	0	8064	0	8000	3018	-4755		P- 110	29.7	BUTT	1.4	2.4	DRY	4	DRY	3.9
3	PRODUCTI ON	6.75	5.5	NEW	API	Y	0	11745	0	11681	3018	-8436	11745	P- 110	20	BUTT	1.3	1.5	DRY	2.8	DRY	2.7
	INTERMED IATE	8.75	7.625	NEW	API	Υ	8064	11945	8000	11881	-4635	-8636		P- 110	29.7	FJ	1.7	1.6	DRY	2.7	DRY	2.6
5	PRODUCTI ON	6.75	5.0	NEW	API	Υ	11745	17567	11681	12433	-8436	-9188	1	P- 110	18	BUTT	1.3	1.4	DRY	1.9	DRY	1.9

Well Name: MESA 8105 11 FEDERAL Well Number: 78H

Casing	<b>Attachments</b>

Casing ID: 1

String Type: SURFACE

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

Mesa\_78H\_casing\_assumption\_20200715140954.JPG

Casing ID: 2

String Type: INTERMEDIATE

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

7\_5\_8\_tapered\_string\_9\_7\_8\_hole\_spec\_\_20200521134254.jpg

Casing Design Assumptions and Worksheet(s):

Mesa\_78H\_casing\_assumption\_20200715141030.JPG

Casing ID: 3

String Type: PRODUCTION

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

5.5\_tapered\_string\_spec\_20190930151650.jpg

Casing Design Assumptions and Worksheet(s):

 $Mesa\_78H\_casing\_assumption\_20200715141140.JPG$ 

Well Name: MESA 8105 11 FEDERAL Well Number: 78H

# **Casing Attachments**

Casing ID: 4

String Type: INTERMEDIATE

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

7\_5\_8\_tapered\_string\_8\_3\_4\_hole\_spec\_for\_FJ\_20200521140259.jpg

Casing Design Assumptions and Worksheet(s):

Mesa\_78H\_casing\_assumption\_20200715141245.JPG

Casing ID: 5

String Type: PRODUCTION

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

5\_tapered\_string\_spec\_20190930151627.jpg

Casing Design Assumptions and Worksheet(s):

Mesa\_78H\_casing\_assumption\_20200715140916.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	505	315	1.8	13.5	567	100	Class C	2% CaCl2
SURFACE	Tail		505	750	200	1.34	14.8	268	100	Class C	2% CaCl2
INTERMEDIATE	Lead	4622	0	4200	675	2.19	12.7	1478. 25	50	Class C	0.5% CaCl2
INTERMEDIATE	Tail		4200	4622	150	1.33	14.8	199.5	50	Class C	1% CaCl2
INTERMEDIATE	Lead		4622	8395	385	2.64	10.5	1016. 4	25	Class H	0.5% CaCl2

Well Name: MESA 8105 11 FEDERAL

Well Number: 78H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
INTERMEDIATE	Tail		8395	1194 5	400	1.19	15.6	476	25	Class H	1% CaCl2
PRODUCTION	Lead		1094 5	1174 5	0	0	0	0		n/a	n/a

PRODUCTION	Lead	1174	1756	645	1.27	14.8	819.1	10	Class H	0.1% Fluid Loss
		5	7				5			

# **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)	ЬН	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	750	OTHER : FW SPUD	8.3	8.4							
750	1194 5	OTHER : DBE	9	9.4							
1194 5	1243 3	OIL-BASED MUD	11	14							

Well Name: MESA 8105 11 FEDERAL Well Number: 78H

# 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:

MUD LOG/GEOLOGICAL LITHOLOGY LOG, GAMMA RAY LOG, CEMENT BOND LOG,

Coring operation description for the well:

None planned

# **Section 7 - Pressure**

Anticipated Bottom Hole Pressure: 9051 Anticipated Surface Pressure: 6315

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:

BTA\_Oil\_Producers\_LLC\_\_\_EMERGENCY\_CALL\_LIST\_20190723161502.pdf

H2S\_Equipment\_Schematic\_20190723161502.pdf

H2S\_Plan\_20190723161502.pdf

# **Section 8 - Other Information**

### Proposed horizontal/directional/multi-lateral plan submission:

Mesa\_78H\_Wall\_plot\_20200715143125.pdf

Mesa\_78H\_directional\_plan\_20200715143125.pdf

Mesa\_8105\_78H\_Gas\_Capture\_Plan\_20200715143237.pdf

# Other proposed operations facets description:

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

Other proposed operations facets attachment:

Other Variance attachment:

BTA\_MB\_10\_34\_\_\_7\_58\_\_\_5\_12\_20200521143833.pdf



Contifech

CONTITECH RUBBER Industrial Kft.

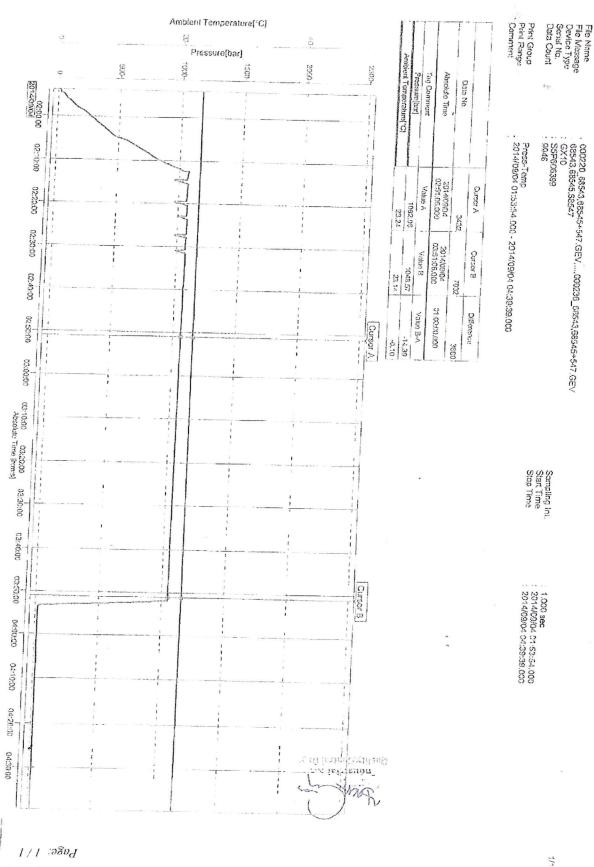
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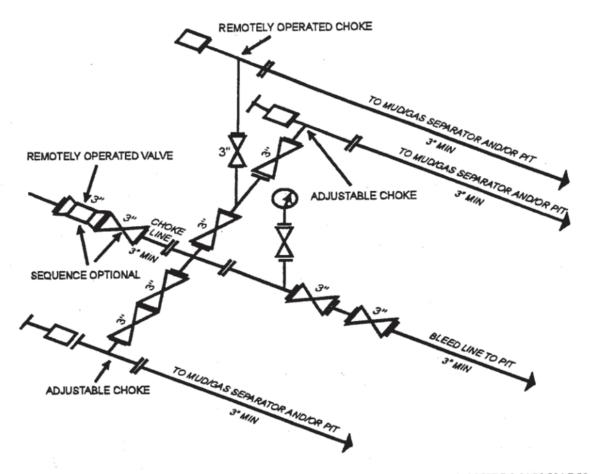
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QUALI INSPECTION /	TY CONT AND TEST		ICATE	en e	CERT. N	jo.	1592	2	
PURCHASER:	ContiTech C	il & Marine	Corp.		P.O. N°:		450046	1753	
CONTITECH ORDER N°:	539225	HOSE TYPE	3"	ID	L.	Choke	& Kill Hose	)	
HOSE SERIAL Nº:	68547	NOMINAL / A	NOMINAL / ACTUAL LENGTH: 7,62 m / 7,66 m						
W.P. 68,9 MPa	10000 psi	T.P. 103,4	. МРа	1500	00 psi	Duration:	60	min.	
ambient temperature  → 10 Min		'See attac	shment.	( 1 pa	ge)				
↑ 50 MP:	The agrant strategy of the last last a			7111 CANCES	O	.:		a softense <del>ende ko</del> ntbo	
COUPLINGS Typ			ial N°		Qua		Hea		
3" coupling with 4 1/16" 10K API Swivel F	1	2574	553	3	AISI 4		A1582N 588	H8672	
Hub	lange en				AISI		A1199N		
Not Designed For V	Vell Testinç	}				i	API Spec	16 C	
Fire Rated						Ten	perature	rate:"B"	
All metal parts are flawless						*			
WE CERTIFY THAT THE ABOVE INSPECTED AND PRESSURE T				CCORDA RESULT.	NCE WITH	THE TERM	AS OF THE OF	DER	
STATEMENT OF CONFORMITY: We hereby certify that the above items/equipment supplied by us are in conformity with the terms, conditions and specifications of the above Purchaser Order and that these items/equipment were fabricated inspected and tested in accordance with the referenced standards, codes and specifications and meet the relevant acceptance criteria and design requirements.									
Date."	Inspector		Quality	/ Contro	1				
O4. September 2014.  Inspector  Quality Control  Cardinal Rubber Industrial Rith Registry Control De 2014.								192	

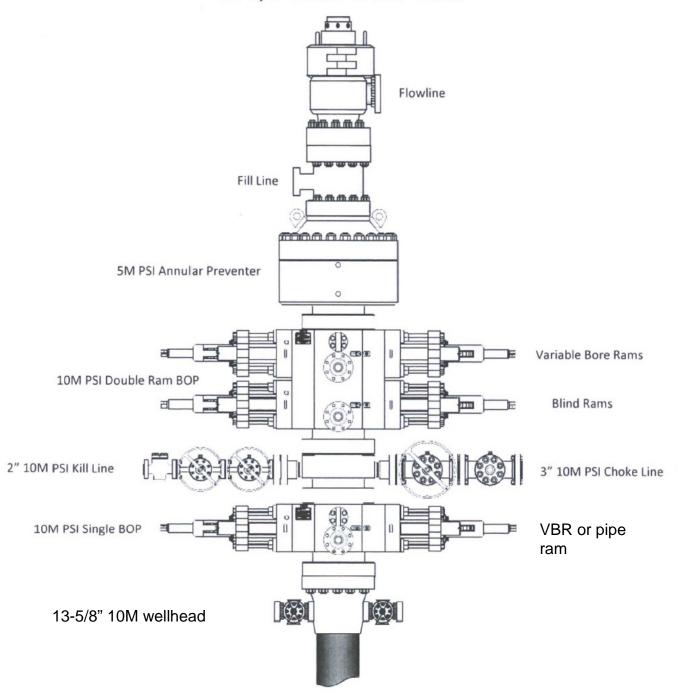
Contificin Ryther Industrial Kit. | Budagosti ĉi 10.11-6728 Szeged | IN-6701 P.O.Box 152 Szaged, Hungshy Phone: 156.67.66 737 | Fax: +36.62.556 738 | e-mail inte@fluid contiects in I Internet www.contiects.rut.evr.in.contiects in The Court of Osongrád County as Registry Court | Registry Court No. Cg 08-69-69252? | FITVAT No. P.I.11087298 Book cots Commerciand, Zit., Budogost | 14220106-26833693



VILIVCHWENI OF QUALITY CONTROL INSPECTION AND TEST CERTIFICATE — Vo.: 1588, 1590, 1592



10M AND 15M CHOKE MANIFOLD EQUIPMENT - CONFIGURATION OF CHOKES MAY VARY [53 FR 49661, Dec. 9, 1988 and 54 FR 39528, Sept. 27, 1989]



# Well control plan for 10M BOPE with 5M annular

# **Drilling**

- 1. Sound alarm (alert crew).
- 2. Space out drill string.
- 3. Shut down pumps (stop pumps and rotary).
- 4. Shut-in Well with annular with HCR and choke in closed position.
- 5. Confirm shut-in.
- 6. Notify tool pusher/company representative.
- 7. Read and record the following:
- a. SIDPP & SICP
- b. Time of shut in
- c. Pit gain
- 8. Regroup and identify forward plan. If pressure has increased to 2500 psi, confirm spacing and close the upper variable bore rams.
- 9. Prepare for well kill operation.

# **Tripping**

- Sound alarm (alert rig crew)
- 2. Stab full opening safety valve and close valve
- 3. Sapce out drill string
- 4. Shut in the well with the annular with HCR and choke in closed position
- 5. Confirm shut in
- 6. Notify tool pusher/company representative
- 7. Read and record the following
- a. Time of shut in
- b. SIDPP and SICP
- c. Pit gain
- 8. If pressure has increased to 2500 psi, confirm spacing and close the upper most variable bore ram.
- 9. Prepare for well kill operation.

# While Running Casing

- 1. Sound alarm (alert rig crew)
- 2. Stab crossover and full opening safety valve and close valve
- Space out casing string
- 4. Shut in well with annular with HCR and choke in closed position
- 5. Confirm shut in
- 6. Notify tool pusher/company representative
- 7. Read and record the following:
- a. SIDPP & SICP
- b. Pit gain
- c. Time
- 8. If pressure has increased to 2500 psi, confirm spacing and close the upper most variable bore ram.
- 9. Prepare for well kill operation.

# No Pipe In Hole (Open Hole)

1. Sound alarm (alert rig crew)

### Well control plan for 10M BOPE with 5M annular

- Shut in blind rams with HCR and choke in closed position 2.
- 3. Confirm shut in
- 4. Notify tool pusher/company representative
- Read and record the following: 5.
- SICP a.
- Pit gain b.
- Time C.
- Prepare for well kill operation 6.

- Pulling BHA thru Stack
  1. Prior to pulling last joint of drill pipe thru the stack
  - Perform flow check, if flowing: a.
  - Sound Alarm (alert crew) a.i.
  - Stab full opening safety valve and close valve a.ii.
  - Space out drill string a.iii.
  - Shut in using upper most VBR, choke and HCR in closed positon a.iv.
  - Confirm shut in a.v.
  - Notify tool pusher/company representative. a.vi.
  - Read and record the following: a.vii.
    - a.vii.1. SIDPP and SICP
    - a.vii.2. Pit gain
    - a.vii.3. Time
  - Prepare for well kill operation a.viii.
    - With BHA in the stack: 2.
    - If possible pull BHA clear of stack a.
    - Follow 'open hole' procedure above a.i.
      - If unable to pull BHA clear of stack b.
    - Stab crossover with full opening safety valve, close valve. b.i.
    - Space out b.ii.
  - Shut in using upper most VBR. HCR and choke in closed position. b.iii.
  - Confirm shut in b.iv.
  - Notify tool pusher/company rep b.v. Read and record the following: b.vi.
    - b.vi.1. SIDPP and SICP
      - b.vi.2. Pit gain
      - b.vi.3. Time
  - Prepare for well kill operation b.vii.

# <u>Drilling component and preventer compatibility table</u> <u>for 10M approval</u>

The following table outlines the drilling and production liner components for Wolfcamp targets requiring 10M BOPE approval. Variance is requested to utilize a 5M annular preventer in 6-1/8" hole as all components can be covered using 10M rated VBR's (variable bore rams). 5M annular on the 10M system will be tested to 100% of rated working pressure.

6-1/8" ho	le section – 10M Bo	OPE requirement (13-	5/8" BOP)
Component	OD	Preventer	RWP
Drill pipe	4"	3.5"-5.5" VBR	10M
HWDP	4"	3.5"-5.5" VBR	10M
Jars	5"	3.5"-5.5" VBR	10M
DC's and NMDC's	4-3/4"	3.5"-5.5" VBR	10M
Mud motor	5"	3.5"-5.5" VBR	10M
Casing	4-1/2"	3.5"-5.5" VBR	10M
Open hole	NA	Blind rams	10M

12-1/4" & 8	-3/4" hole section	ons – 5M BOPE requirement	t (13-5/8" BOP)
Component	OD	Preventer	RWP
Drill pipe	5"	3.5"-5.5" VBR or 5" pipe rams	10M
HWDP	5"	3.5"-5.5" VBR or 5" pipe rams	10M
Jars	6-1/4"	Annular	5M
DC's and NMDC's	7"-8"	Annular	5M
Mud motor	7"-8"	Annular	5M
Casing	9-5/8" & 7"	Annular	5M
Open hole	NA	Blind rams	10M

	_	BTA Oil	Producers, L	LC						WELL:	Mesa 8	105 11 1	Fed #78	H (WUC	N)
13		104 S Pe	cos							TVD:	12433				
	V	Midland,	TX 79701							MD:	17567				
_						Ε	RILLING PI	LAN							
Casing P	rogram														
Hole Size	Csg.Size	From (MD)	To (MD)	From (TVD)	To (TVD)	Tapered String	Weight (lbs)	Grade	Conn.	Collapse	Burst	Body Tension	Joint Tension	Dry/ Buoyant	Mud Weight (ppg)
14 3/4	10 3/4	0	750	0	750	No	40.5	J-55	STC	4.9	9.7	20.7	13.8	Dry	8.3
9 7/8	7 5/8	o	8064	0	8000	yes	29.7	P110	Buttress	1.4	2.4	3.9	4.0	Dry	9.4
8 3/4	7 5/8	8064	11945	8000	11881	yes	29.7	P110	FJ	1.7	1.6	2.6	2.7	Dry	9.4
6 3/4	5 1/2	0	11745	0	11681	Yes	20	P110	Buttress	1.3	1.5	2.7	2.8	Dry	14
6 3/4	5	11745	17567	11681	12433	Yes	18	P110	Buttress	1.3	1.4	1.8	1.9	Dry	14
*7 5/8" h	as DV Too	ol @ 4622'				)		10	02						

# **EMERGENCY CALL LIST**

	<u>OFFICE</u>	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



# **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<sub>2</sub>S).
- b. The proper use and maintenance of personal protective equipment and life support systems.
- c. The proper use of H<sub>2</sub>S 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<sub>2</sub>S 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<sub>2</sub>S SAFETY EQUIPMENT AND SYSTEMS

Note: All H<sub>2</sub>S 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

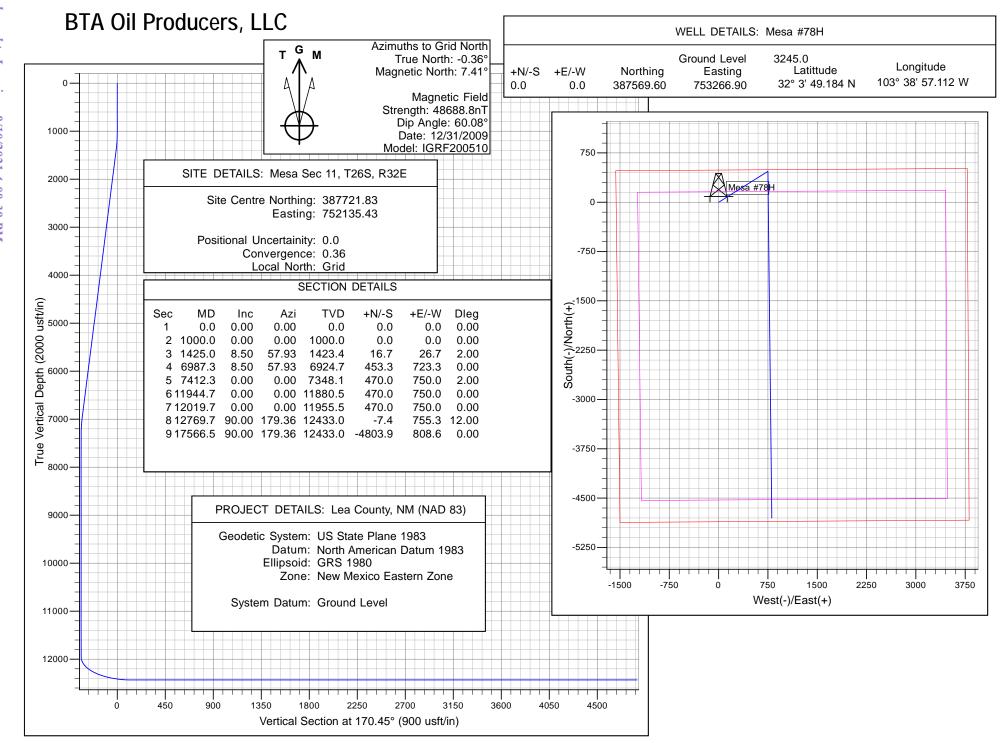
# YOU ARE ENTERING AN H<sub>2</sub>S AREA AUTHORIZED PERSONNEL ONLY

- 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

Received by OCD: 8/9/2021 1:50:55 PM



# **BTA Oil Producers, LLC**

Lea County, NM (NAD 83) Mesa Sec 11, T26S, R32E Mesa #78H

Wellbore #1

Plan: Design #1

# **Standard Planning Report - Geographic**

14 July, 2020

#### Planning Report - Geographic

Database: Company:

Old

BTA Oil Producers, LLC

Mesa Sec 11, T26S, R32E

Mesa #78H Wellbore: Wellbore #1

TVD Reference: Lea County, NM (NAD 83) MD Reference:

North Reference:

**Survey Calculation Method:** 

**Local Co-ordinate Reference:** 

Well Mesa #78H

GL @ 3245.0usft GL @ 3245.0usft

Grid

Minimum Curvature

Design: Project

Project:

Site:

Well:

Lea County, NM (NAD 83), Lea County, NM

0.0 usft

0.0 usft

Map System: Geo Datum:

Map Zone:

Site

US State Plane 1983 North American Datum 1983

New Mexico Eastern Zone

System Datum:

Ground Level

Using geodetic scale factor

Mesa Sec 11, T26S, R32E

Design #1

Site Position: Мар From:

Northing: Easting:

Slot Radius:

Northing:

387,721.83 usft 752,135.43 usft

13-3/16 "

Latitude: Longitude: **Grid Convergence:** 

32° 3' 50.761 N 103° 39' 10.249 W

0.36

Position Uncertainty: Well

Mesa #78H

387,569.60 usft

Latitude:

32° 3' 49.184 N

**Position Uncertainty** 

**Well Position** 

Wellbore

0.0 usft 0.0 usft

Easting: Wellhead Elevation: 753,266.90 usft

Longitude: Ground Level: 103° 38' 57.112 W 3,245.0 usft

Wellbore #1

+N/-S

+E/-W

Magnetics **Model Name** Sample Date Declination Dip Angle Field Strength (°) (°) (nT) IGRF200510 12/31/2009 7.77 60.08 48,688.75745157

Design

Audit Notes: Version:

Phase:

Design #1

**PROTOTYPE** 

Tie On Depth:

0.0

**Vertical Section:** 

Depth From (TVD) (usft) 0.0

+N/-S (usft) 0.0

+E/-W (usft) 0.0

Direction (°) 170.45

**Plan Survey Tool Program** Depth From

(usft)

Date 7/14/2020

Depth To

(usft)

Survey (Wellbore)

**Tool Name** 

Remarks

0.0

17,566.5 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	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,425.0	8.50	57.93	1,423.4	16.7	26.7	2.00	2.00	0.00	57.93	
6,987.3	8.50	57.93	6,924.7	453.3	723.3	0.00	0.00	0.00	0.00	
7,412.3	0.00	0.00	7,348.1	470.0	750.0	2.00	-2.00	0.00	180.00	
11,944.7	0.00	0.00	11,880.5	470.0	750.0	0.00	0.00	0.00	0.00	
12,019.7	0.00	0.00	11,955.5	470.0	750.0	0.00	0.00	0.00	0.00	
12,769.7	90.00	179.36	12,433.0	-7.4	755.3	12.00	12.00	0.00	179.36	
17,566.5	90.00	179.36	12,433.0	-4,803.9	808.6	0.00	0.00	0.00	0.00	Mesa #78H BHL

# Planning Report - Geographic

Database:

Company:

Old

BTA Oil Producers, LLC

Project: Site:

Lea County, NM (NAD 83) Mesa Sec 11, T26S, R32E

Well: Mesa #78H Wellbore #1 Wellbore: Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: **Survey Calculation Method:**  Well Mesa #78H

GL @ 3245.0usft GL @ 3245.0usft

Grid

Minimum Curvature

Design:	Desig	JII # I							
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	387,569.60	753,266.90	32° 3' 49.184 N	103° 38' 57.112 W
100.0	0.00	0.00	100.0	0.0	0.0	387,569.60	753,266.90	32° 3′ 49.184 N	103° 38' 57.112 W
200.0	0.00	0.00	200.0	0.0	0.0	387,569.60	753,266.90	32° 3′ 49.184 N	103° 38' 57.112 W
300.0	0.00	0.00	300.0	0.0	0.0	387,569.60	753,266.90	32° 3' 49.184 N	103° 38' 57.112 W
400.0	0.00	0.00	400.0	0.0	0.0	387,569.60	753,266.90	32° 3' 49.184 N	103° 38' 57.112 W
500.0	0.00	0.00	500.0	0.0	0.0	387,569.60	753,266.90	32° 3' 49.184 N	103° 38' 57.112 W
600.0	0.00	0.00	600.0	0.0	0.0	387,569.60	753,266.90	32° 3' 49.184 N	103° 38' 57.112 W
700.0	0.00	0.00	700.0	0.0	0.0	387,569.60	753,266.90	32° 3′ 49.184 N	103° 38' 57.112 W
800.0	0.00	0.00	800.0	0.0	0.0	387,569.60	753,266.90	32° 3′ 49.184 N	103° 38' 57.112 W
900.0	0.00	0.00	900.0	0.0	0.0	387,569.60	753,266.90	32° 3′ 49.184 N	103° 38' 57.112 W
1,000.0	0.00	0.00	1,000.0	0.0	0.0	387,569.60	753,266.90	32° 3′ 49.184 N	103° 38' 57.112 W
1,100.0	2.00	57.93	1,100.0	0.9	1.5	387,570.53	753,268.38	32° 3′ 49.193 N	103° 38' 57.095 W
1,200.0	4.00	57.93	1,199.8	3.7	5.9	387,573.30	753,272.81	32° 3′ 49.220 N	103° 38' 57.043 W
1,300.0	6.00	57.93	1,299.5	8.3	13.3	387,577.93	753,280.19	32° 3′ 49.265 N	103° 38' 56.957 W
1,400.0	8.00	57.93	1,398.7	14.8	23.6	387,584.40	753,290.52	32° 3′ 49.329 N	103° 38' 56.836 W
1,425.0	8.50	57.93	1,423.4	16.7	26.7	387,586.31	753,293.56	32° 3′ 49.347 N	103° 38' 56.801 W
1,500.0	8.50	57.93	1,497.6	22.6	36.1	387,592.19	753,302.95	32° 3′ 49.405 N	103° 38' 56.691 W
1,600.0	8.50	57.93	1,596.5	30.4	48.6	387,600.04	753,315.48	32° 3′ 49.482 N	103° 38' 56.545 W
1,700.0	8.50	57.93	1,695.4	38.3	61.1	387,607.89	753,328.00	32° 3′ 49.559 N	103° 38' 56.399 W
1,800.0	8.50	57.93	1,794.3	46.1	73.6	387,615.74	753,340.53	32° 3′ 49.636 N	103° 38' 56.253 W
1,900.0	8.50	57.93	1,893.2	54.0	86.2	387,623.59	753,353.05	32° 3' 49.713 N	103° 38' 56.107 W
2,000.0	8.50	57.93	1,992.1	61.8	98.7	387,631.44	753,365.57	32° 3′ 49.789 N	103° 38' 55.961 W
2,100.0	8.50	57.93	2,091.0	69.7	111.2	387,639.29	753,378.10	32° 3' 49.866 N	103° 38' 55.815 W
2,200.0	8.50	57.93	2,189.9	77.5	123.7	387,647.13	753,390.62	32° 3' 49.943 N	103° 38' 55.669 W
2,300.0	8.50	57.93	2,288.8	85.4	136.3	387,654.98	753,403.15	32° 3' 50.020 N	103° 38' 55.522 W
2,400.0	8.50	57.93	2,387.7	93.2	148.8	387,662.83	753,415.67	32° 3′ 50.097 N	103° 38' 55.376 W
2,500.0	8.50	57.93	2,486.6	101.1	161.3	387,670.68	753,428.20	32° 3′ 50.174 N	103° 38' 55.230 W
2,600.0	8.50	57.93	2,585.5	108.9	173.8	387,678.53	753,440.72	32° 3′ 50.251 N	103° 38' 55.084 W
2,700.0 2,800.0	8.50	57.93 57.93	2,684.4	116.8	186.4 198.9	387,686.38	753,453.25	32° 3′ 50.328 N	103° 38' 54.938 W
2,800.0	8.50	57.93 57.93	2,783.3 2,882.2	124.6 132.5		387,694.23	753,465.77	32° 3′ 50.404 N	103° 38' 54.792 W 103° 38' 54.646 W
3,000.0	8.50 8.50	57.93 57.93	2,002.2	140.3	211.4 223.9	387,702.07 387,709.92	753,478.29 753,490.82	32° 3' 50.481 N 32° 3' 50.558 N	103° 38′ 54.500 W
3,100.0	8.50	57.93	3,080.0	148.2	236.5	387,717.77	753,503.34	32° 3′ 50.635 N	103° 38′ 54.354 W
3,200.0	8.50	57.93	3,178.9	156.0	249.0	387,725.62	753,515.87	32° 3′ 50.712 N	103° 38′ 54.207 W
3,300.0	8.50	57.93	3,277.8	163.9	261.5	387,733.47	753,528.39	32° 3' 50.789 N	103° 38' 54.061 W
3,400.0	8.50	57.93	3,376.7	171.7	274.0	387,741.32	753,540.92	32° 3' 50.866 N	103° 38' 53.915 W
3,500.0	8.50	57.93	3,475.7	179.6	286.6	387,749.17	753,553.44	32° 3' 50.943 N	103° 38' 53.769 W
3,600.0	8.50	57.93	3,574.6	187.4	299.1	387,757.01	753,565,96	32° 3' 51.020 N	103° 38' 53.623 W
3,700.0	8.50	57.93	3,673.5	195.3	311.6	387,764.86	753,578.49	32° 3′ 51.096 N	103° 38' 53.477 W
3,800.0	8.50	57.93	3,772.4	203.1	324.1	387,772.71	753,591.01	32° 3' 51.173 N	103° 38' 53.331 W
3,900.0	8.50	57.93	3,871.3	211.0	336.7	387,780.56	753,603.54	32° 3' 51.250 N	103° 38' 53.185 W
4,000.0	8.50	57.93	3,970.2	218.8	349.2	387,788.41	753,616.06	32° 3' 51.327 N	103° 38' 53.038 W
4,100.0	8.50	57.93	4,069.1	226.7	361.7	387,796.26	753,628.59	32° 3′ 51.404 N	103° 38' 52.892 W
4,200.0	8.50	57.93	4,168.0	234.5	374.2	387,804.11	753,641.11	32° 3′ 51.481 N	103° 38' 52.746 W
4,300.0	8.50	57.93	4,266.9	242.4	386.8	387,811.95	753,653.63	32° 3' 51.558 N	103° 38' 52.600 W
4,400.0	8.50	57.93	4,365.8	250.2	399.3	387,819.80	753,666.16	32° 3′ 51.635 N	103° 38' 52.454 W
4,500.0	8.50	57.93	4,464.7	258.1	411.8	387,827.65	753,678.68	32° 3′ 51.711 N	103° 38' 52.308 W
4,600.0	8.50	57.93	4,563.6	265.9	424.3	387,835.50	753,691.21	32° 3′ 51.788 N	103° 38' 52.162 W
4,700.0	8.50	57.93	4,662.5	273.8	436.9	387,843.35	753,703.73	32° 3′ 51.865 N	103° 38' 52.016 W
4,800.0	8.50	57.93	4,761.4	281.6	449.4	387,851.20	753,716.26	32° 3′ 51.942 N	103° 38' 51.870 W
4,900.0	8.50	57.93	4,860.3	289.5	461.9	387,859.05	753,728.78	32° 3′ 52.019 N	103° 38' 51.723 W
5,000.0	8.50	57.93	4,959.2	297.3	474.4	387,866.89	753,741.30	32° 3′ 52.096 N	103° 38' 51.577 W
5,100.0	8.50	57.93	5,058.1	305.2	487.0	387,874.74	753,753.83	32° 3' 52.173 N	103° 38' 51.431 W
5,200.0	8.50	57.93	5,157.0	313.0	499.5	387,882.59	753,766.35	32° 3' 52.250 N	103° 38' 51.285 W
5,300.0	8.50	57.93	5,255.9	320.9	512.0	387,890.44	753,778.88	32° 3' 52.326 N	103° 38' 51.139 W

# Planning Report - Geographic

Old Database:

Company:

Project:

Well:

Mesa #78H

BTA Oil Producers, LLC Lea County, NM (NAD 83)

Mesa Sec 11, T26S, R32E Site:

Wellbore #1 Wellbore: Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well Mesa #78H

GL @ 3245.0usft GL @ 3245.0usft

Grid

Minimum Curvature

Design:		jn #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	8.50	57.93	5,354.8	328.7	524.5	387,898.29	753,791.40	32° 3′ 52.403 N	103° 38' 50.993 W
5,500.0	8.50	57.93	5,453.7	336.6	537.1	387,906.14	753,803.93	32° 3′ 52.480 N	103° 38' 50.847 W
5,600.0	8.50	57.93	5,552.6	344.4	549.6	387,913.99	753,816.45	32° 3′ 52.557 N	103° 38' 50.701 W
5,700.0	8.50	57.93	5,651.5	352.2	562.1	387,921.83	753,828.97	32° 3′ 52.634 N	103° 38' 50.554 W
5,800.0	8.50	57.93	5,750.4	360.1	574.6	387,929.68	753,841.50	32° 3′ 52.711 N	103° 38' 50.408 W
5,900.0	8.50	57.93	5,849.3	367.9	587.1	387,937.53	753,854.02	32° 3′ 52.788 N	103° 38' 50.262 W
6,000.0	8.50	57.93	5,948.2	375.8	599.7	387,945.38	753,866.55	32° 3′ 52.865 N	103° 38' 50.116 W
6,100.0	8.50	57.93	6,047.1	383.6	612.2	387,953.23	753,879.07	32° 3′ 52.941 N	103° 38' 49.970 W
6,200.0	8.50	57.93	6,146.0	391.5	624.7	387,961.08	753,891.60	32° 3′ 53.018 N	103° 38' 49.824 W
6,300.0	8.50	57.93	6,244.9	399.3	637.2	387,968.93	753,904.12	32° 3′ 53.095 N	103° 38' 49.678 W
6,400.0	8.50	57.93	6,343.8	407.2	649.8	387,976.77	753,916.65	32° 3′ 53.172 N	103° 38' 49.532 W
6,500.0	8.50	57.93	6,442.7	415.0	662.3	387,984.62	753,929.17	32° 3′ 53.249 N	103° 38' 49.385 W
6,600.0	8.50	57.93	6,541.6	422.9	674.8	387,992.47	753,941.69	32° 3′ 53.326 N	103° 38' 49.239 W
6,700.0	8.50	57.93	6,640.5	430.7	687.3	388,000.32	753,954.22	32° 3′ 53.403 N	103° 38' 49.093 W
6,800.0	8.50	57.93	6,739.4	438.6	699.9	388,008.17	753,966.74	32° 3′ 53.480 N	103° 38' 48.947 W
6,900.0	8.50	57.93	6,838.3	446.4	712.4	388,016.02	753,979.27	32° 3′ 53.557 N	103° 38' 48.801 W
6,987.3	8.50	57.93	6,924.7	453.3	723.3	388,022.87	753,990.20	32° 3′ 53.624 N	103° 38' 48.673 W
7,000.0	8.25	57.93	6,937.2	454.3	724.9	388,023.85	753,991.77	32° 3′ 53.633 N	103° 38' 48.655 W
7,100.0	6.25	57.93	7,036.4	461.0	735.6	388,030.55	754,002.46	32° 3′ 53.699 N	103° 38' 48.530 W
7,200.0	4.25	57.93	7,136.0	465.8	743.3	388,035.40	754,010.20	32° 3′ 53.746 N	103° 38' 48.440 W
7,300.0	2.25	57.93	7,235.8	468.8	748.1	388,038.41	754,015.00	32° 3′ 53.776 N	103° 38' 48.384 W
7,400.0	0.25	57.93	7,335.8	470.0	750.0	388,039.57	754,016.84	32° 3′ 53.787 N	103° 38' 48.363 W
7,412.3	0.00	0.00	7,348.1	470.0	750.0	388,039.58	754,016.87	32° 3′ 53.787 N	103° 38' 48.362 W
7,500.0	0.00	0.00	7,435.8	470.0	750.0	388,039.58	754,016.87	32° 3′ 53.787 N	103° 38' 48.362 W
7,600.0	0.00	0.00	7,535.8	470.0	750.0	388,039.58	754,016.87	32° 3′ 53.787 N	103° 38' 48.362 W
7,700.0	0.00	0.00	7,635.8	470.0	750.0	388,039.58	754,016.87	32° 3' 53.787 N	103° 38' 48.362 W
7,800.0	0.00	0.00	7,735.8	470.0	750.0	388,039.58	754,016.87	32° 3' 53.787 N	103° 38' 48.362 W
7,900.0	0.00	0.00	7,835.8	470.0	750.0	388,039.58	754,016.87	32° 3' 53.787 N	103° 38' 48.362 W
8,000.0	0.00	0.00	7,935.8	470.0	750.0	388,039.58	754,016.87	32° 3' 53.787 N	103° 38' 48.362 W
8,100.0	0.00	0.00	8,035.8	470.0	750.0	388,039.58	754,016.87	32° 3' 53.787 N	103° 38' 48.362 W
8,200.0	0.00	0.00	8,135.8	470.0	750.0	388,039.58	754,016.87	32° 3' 53.787 N	103° 38' 48.362 W
8,300.0	0.00	0.00	8,235.8	470.0	750.0	388,039.58	754,016.87	32° 3' 53.787 N	103° 38' 48.362 W
8,400.0 8,500.0	0.00	0.00 0.00	8,335.8	470.0	750.0	388,039.58	754,016.87	32° 3' 53.787 N	103° 38' 48.362 W 103° 38' 48.362 W
	0.00	0.00	8,435.8	470.0	750.0 750.0	388,039.58	754,016.87	32° 3' 53.787 N 32° 3' 53.787 N	
8,600.0 8,700.0	0.00	0.00	8,535.8 8,635.8	470.0 470.0	750.0 750.0	388,039.58 388,039.58	754,016.87 754,016.87	32° 3' 53.787 N	103° 38' 48.362 W 103° 38' 48.362 W
8,800.0	0.00	0.00	8,735.8	470.0	750.0 750.0	388,039.58	754,016.87	32° 3' 53.787 N	103° 38' 48.362 W
8,900.0	0.00	0.00	8,835.8	470.0	750.0	388,039.58	754,016.87	32° 3' 53.787 N	103° 38' 48.362 W
9,000.0	0.00	0.00	8,935.8	470.0	750.0	388,039.58	754,016.87	32° 3' 53.787 N	103° 38' 48.362 W
9,100.0	0.00	0.00	9,035.8	470.0	750.0	388,039.58	754,016.87	32° 3' 53.787 N	103° 38' 48.362 W
9,200.0	0.00	0.00	9,135.8	470.0	750.0	388,039.58	754,016.87	32° 3' 53.787 N	103° 38' 48.362 W
9,300.0	0.00	0.00	9,235.8	470.0	750.0	388,039.58	754,016.87	32° 3' 53.787 N	103° 38' 48.362 W
9,400.0	0.00	0.00	9,335.8	470.0	750.0	388,039.58	754,016.87	32° 3' 53.787 N	103° 38' 48.362 W
9,500.0	0.00	0.00	9,435.8	470.0	750.0	388,039.58	754,016.87	32° 3' 53.787 N	103° 38' 48.362 W
9,600.0	0.00	0.00	9,535.8	470.0	750.0	388,039.58	754,016.87	32° 3' 53.787 N	103° 38' 48.362 W
9,700.0	0.00	0.00	9,635.8	470.0	750.0	388,039.58	754,016.87	32° 3' 53.787 N	103° 38' 48.362 W
9,800.0	0.00	0.00	9,735.8	470.0	750.0	388,039.58	754,016.87	32° 3′ 53.787 N	103° 38' 48.362 W
9,900.0	0.00	0.00	9,835.8	470.0	750.0	388,039.58	754,016.87	32° 3′ 53.787 N	103° 38' 48.362 W
10,000.0	0.00	0.00	9,935.8	470.0	750.0	388,039.58	754,016.87	32° 3′ 53.787 N	103° 38' 48.362 W
10,100.0	0.00	0.00	10,035.8	470.0	750.0	388,039.58	754,016.87	32° 3′ 53.787 N	103° 38' 48.362 W
10,200.0	0.00	0.00	10,135.8	470.0	750.0	388,039.58	754,016.87	32° 3' 53.787 N	103° 38' 48.362 W
10,300.0	0.00	0.00	10,235.8	470.0	750.0	388,039.58	754,016.87	32° 3' 53.787 N	103° 38' 48.362 W
10,400.0	0.00	0.00	10,335.8	470.0	750.0	388,039.58	754,016.87	32° 3' 53.787 N	103° 38' 48.362 W
10,500.0	0.00	0.00	10,435.8	470.0	750.0	388,039.58	754,016.87	32° 3′ 53.787 N	103° 38' 48.362 W
10,600.0	0.00	0.00	10,535.8	470.0	750.0	388,039.58	754,016.87	32° 3′ 53.787 N	103° 38' 48.362 W

# Planning Report - Geographic

Old Database:

Site:

BTA Oil Producers, LLC Company: Project: Lea County, NM (NAD 83)

Mesa Sec 11, T26S, R32E Mesa #78H

Well: Wellbore #1 Wellbore: Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well Mesa #78H

GL @ 3245.0usft GL @ 3245.0usft

Grid

Minimum Curvature

Jesign:	Desig	,							
Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
10,700.0	0.00	0.00	10,635.8	470.0	750.0	388,039.58	754,016.87	32° 3′ 53.787 N	103° 38' 48.362 W
10,800.0	0.00	0.00	10,735.8	470.0	750.0	388,039.58	754,016.87	32° 3′ 53.787 N	103° 38' 48.362 W
10,900.0	0.00	0.00	10,835.8	470.0	750.0	388,039.58	754,016.87	32° 3' 53.787 N	103° 38' 48.362 W
11,000.0	0.00	0.00	10,935.8	470.0	750.0	388,039.58	754,016.87	32° 3' 53.787 N	103° 38' 48.362 W
11,100.0	0.00	0.00	11,035.8	470.0	750.0	388,039.58	754,016.87	32° 3' 53.787 N	103° 38' 48.362 W
11,200.0	0.00	0.00	11,135.8	470.0	750.0	388,039.58	754,016.87	32° 3' 53.787 N	103° 38' 48.362 W
11,300.0	0.00	0.00	11,235.8	470.0	750.0	388,039.58	754,016.87	32° 3′ 53.787 N	103° 38' 48.362 W
11,400.0	0.00	0.00	11,335.8	470.0	750.0	388,039.58	754,016.87	32° 3′ 53.787 N	103° 38' 48.362 W
11,500.0	0.00	0.00	11,435.8	470.0	750.0	388,039.58	754,016.87	32° 3′ 53.787 N	103° 38' 48.362 W
11,600.0	0.00	0.00	11,535.8	470.0	750.0	388,039.58	754,016.87	32° 3′ 53.787 N	103° 38' 48.362 W
11,700.0	0.00	0.00	11,635.8	470.0	750.0	388,039.58	754,016.87	32° 3′ 53.787 N	103° 38' 48.362 W
11,800.0	0.00	0.00	11,735.8	470.0	750.0	388,039.58	754,016.87	32° 3′ 53.787 N	103° 38' 48.362 W
11,900.0	0.00	0.00	11,835.8	470.0	750.0	388,039.58	754,016.87	32° 3′ 53.787 N	103° 38' 48.362 W
11,944.7	0.00	0.00	11,880.5	470.0	750.0	388,039.58	754,016.87	32° 3′ 53.787 N	103° 38' 48.362 W
12,000.0	0.00	0.00	11,935.8	470.0	750.0	388,039.58	754,016.87	32° 3' 53.787 N	103° 38' 48.362 W
12,019.7	0.00	0.00	11,955.5	470.0	750.0	388,039.58	754,016.87	32° 3′ 53.787 N	103° 38' 48.362 W
12,100.0	9.63	179.36	12,035.4	463.3	750.1	388,032.85	754,016.94	32° 3′ 53.721 N	103° 38' 48.362 W
12,200.0	21.63	179.36	12,131.5	436.4	750.4	388,005.96	754,017.24	32° 3′ 53.455 N	103° 38' 48.360 W
12,300.0	33.63	179.36	12,220.0	390.1	750.9	387,959.67	754,017.76	32° 3′ 52.997 N	103° 38' 48.358 W
12,400.0	45.63	179.36	12,296.8	326.4	751.6	387,896.01	754,018.46	32° 3′ 52.367 N	103° 38' 48.354 W
12,500.0	57.63	179.36	12,358.8	248.2	752.5	387,817.76	754,019.33	32° 3′ 51.592 N	103° 38' 48.350 W
12,600.0	69.63	179.36	12,403.1	158.7	753.5	387,728.34	754,020.33	32° 3′ 50.707 N	103° 38' 48.345 W
12,700.0	81.63	179.36	12,427.9	62.1	754.5	387,631.66	754,021.40	32° 3′ 49.750 N	103° 38' 48.340 W
12,769.7	90.00	179.36	12,433.0	-7.4	755.3	387,562.16	754,022.17	32° 3′ 49.063 N	103° 38' 48.336 W
12,800.0	90.00	179.36	12,433.0	-37.7	755.6	387,531.91	754,022.51	32° 3' 48.763 N	103° 38' 48.334 W
12,900.0	90.00	179.36	12,433.0	-137.7	756.8	387,431.92	754,023.62	32° 3' 47.774 N	103° 38' 48.329 W
13,000.0	90.00	179.36	12,433.0	-237.7	757.9	387,331.93	754,024.73	32° 3' 46.784 N	103° 38' 48.323 W
13,100.0	90.00	179.36	12,433.0	-337.7	759.0	387,231.94	754,025.85	32° 3' 45.795 N	103° 38' 48.318 W
13,200.0	90.00	179.36	12,433.0	-437.7	760.1	387,131.95	754,026.96	32° 3' 44.805 N	103° 38' 48.312 W
13,300.0	90.00	179.36	12,433.0	-537.7	761.2	387,031.96	754,028.07	32° 3′ 43.816 N	103° 38' 48.307 W
13,400.0	90.00	179.36	12,433.0	-637.6	762.3	386,931.97	754,029.18	32° 3′ 42.826 N	103° 38' 48.301 W
13,500.0	90.00	179.36	12,433.0	-737.6	763.4	386,831.98	754,030.29	32° 3' 41.837 N	103° 38' 48.296 W
13,600.0	90.00	179.36	12,433.0	-837.6	764.5	386,731.99	754,031.40	32° 3′ 40.847 N	103° 38' 48.290 W 103° 38' 48.284 W
13,700.0	90.00	179.36	12,433.0	-937.6	765.6	386,632.00 386,532.01	754,032.52 754,033.63	32° 3' 39.858 N	
13,800.0 13,900.0	90.00	179.36 179.36	12,433.0	-1,037.6	766.8 767.9	,	754,033.63 754,034.74	32° 3′ 38.868 N 32° 3′ 37.878 N	103° 38' 48.279 W 103° 38' 48.273 W
14,000.0	90.00 90.00	179.36	12,433.0 12,433.0	-1,137.6 -1,237.6	767.9 769.0	386,432.03 386,332.04	754,035.85	32° 3' 36.889 N	103° 38′ 48.268 W
14,000.0	90.00	179.36	12,433.0	-1,237.6	770.1	386,232.05	754,036.96	32° 3' 35.899 N	103° 38' 48.262 W
14,200.0	90.00	179.36	12,433.0	-1,437.6	770.1	386,132.06	754,038.07	32° 3' 34.910 N	103° 38' 48.257 W
14,300.0	90.00	179.36	12,433.0	-1, <del>4</del> 37.6	771.2	386,032.07	754,039.19	32° 3' 33.920 N	103° 38' 48.251 W
14,400.0	90.00	179.36	12,433.0	-1,637.6	773.4	385,932.08	754,040.30	32° 3' 32.931 N	103° 38' 48.246 W
14,500.0	90.00	179.36	12,433.0	-1,737.6	774.5	385,832.09	754,041.41	32° 3' 31.941 N	103° 38' 48.240 W
14,600.0	90.00	179.36	12,433.0	-1,837.6	775.7	385,732.10	754,042.52	32° 3' 30.952 N	103° 38' 48.235 W
14,700.0	90.00	179.36	12,433.0	-1,937.6	776.8	385,632.11	754,043.63	32° 3' 29.962 N	103° 38' 48.229 W
14,800.0	90.00	179.36	12,433.0	-2,037.6	777.9	385,532.12	754,044.74	32° 3′ 28.973 N	103° 38' 48.224 W
14,900.0	90.00	179.36	12,433.0	-2,137.6	779.0	385,432.13	754,045.86	32° 3' 27.983 N	103° 38' 48.218 W
15,000.0	90.00	179.36	12,433.0	-2,237.6	780.1	385,332.14	754,046.97	32° 3' 26.994 N	103° 38' 48.213 W
15,100.0	90.00	179.36	12,433.0	-2,337.5	781.2	385,232.15	754,048.08	32° 3' 26.004 N	103° 38' 48.207 W
15,200.0	90.00	179.36	12,433.0	-2,437.5	782.3	385,132.16	754,049.19	32° 3' 25.015 N	103° 38' 48.202 W
15,300.0	90.00	179.36	12,433.0	-2,537.5	783.4	385,032.17	754,050.30	32° 3' 24.025 N	103° 38' 48.196 W
15,400.0	90.00	179.36	12,433.0	-2,637.5	784.5	384,932.18	754,051.41	32° 3' 23.036 N	103° 38' 48.191 W
15,500.0	90.00	179.36	12,433.0	-2,737.5	785.7	384,832.19	754,052.53	32° 3' 22.046 N	103° 38' 48.185 W
15,600.0	90.00	179.36	12,433.0	-2,837.5	786.8	384,732.20	754,053.64	32° 3' 21.056 N	103° 38' 48.179 W
15,700.0	90.00	179.36	12,433.0	-2,937.5	787.9	384,632.21	754,054.75	32° 3' 20.067 N	103° 38' 48.174 W
15,800.0	90.00	179.36	12,433.0	-3,037.5	789.0	384,532.22	754,055.86	32° 3' 19.077 N	103° 38' 48.168 W

#### **Microsoft**

#### Planning Report - Geographic

Database: Old

Company: BTA Oil Producers, LLC
Project: Lea County, NM (NAD 83)

 Site:
 Mesa Sec 11, T26S, R32E

 Well:
 Mesa #78H

Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

**Survey Calculation Method:** 

Well Mesa #78H

GL @ 3245.0usft GL @ 3245.0usft

Grid

Minimum Curvature

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
15,900.0	90.00	179.36	12,433.0	-3,137.5	790.1	384,432.23	754,056.97	32° 3′ 18.088 N	103° 38' 48.163 W
16,000.0	90.00	179.36	12,433.0	-3,237.5	791.2	384,332.24	754,058.08	32° 3′ 17.098 N	103° 38' 48.157 W
16,100.0	90.00	179.36	12,433.0	-3,337.5	792.3	384,232.25	754,059.19	32° 3′ 16.109 N	103° 38' 48.152 W
16,200.0	90.00	179.36	12,433.0	-3,437.5	793.4	384,132.26	754,060.31	32° 3' 15.119 N	103° 38' 48.146 W
16,300.0	90.00	179.36	12,433.0	-3,537.5	794.6	384,032.27	754,061.42	32° 3' 14.130 N	103° 38' 48.141 W
16,400.0	90.00	179.36	12,433.0	-3,637.5	795.7	383,932.28	754,062.53	32° 3′ 13.140 N	103° 38' 48.135 W
16,500.0	90.00	179.36	12,433.0	-3,737.5	796.8	383,832.29	754,063.64	32° 3′ 12.151 N	103° 38' 48.130 W
16,600.0	90.00	179.36	12,433.0	-3,837.5	797.9	383,732.30	754,064.75	32° 3' 11.161 N	103° 38' 48.124 W
16,700.0	90.00	179.36	12,433.0	-3,937.4	799.0	383,632.31	754,065.86	32° 3′ 10.172 N	103° 38' 48.119 W
16,800.0	90.00	179.36	12,433.0	-4,037.4	800.1	383,532.32	754,066.98	32° 3′ 9.182 N	103° 38' 48.113 W
16,900.0	90.00	179.36	12,433.0	-4,137.4	801.2	383,432.33	754,068.09	32° 3′ 8.193 N	103° 38' 48.108 W
17,000.0	90.00	179.36	12,433.0	-4,237.4	802.3	383,332.34	754,069.20	32° 3′ 7.203 N	103° 38' 48.102 W
17,100.0	90.00	179.36	12,433.0	-4,337.4	803.4	383,232.35	754,070.31	32° 3′ 6.213 N	103° 38' 48.097 W
17,200.0	90.00	179.36	12,433.0	-4,437.4	804.6	383,132.36	754,071.42	32° 3′ 5.224 N	103° 38' 48.091 W
17,300.0	90.00	179.36	12,433.0	-4,537.4	805.7	383,032.37	754,072.53	32° 3′ 4.234 N	103° 38' 48.086 W
17,400.0	90.00	179.36	12,433.0	-4,637.4	806.8	382,932.38	754,073.65	32° 3′ 3.245 N	103° 38' 48.080 W
17,500.0	90.00	179.36	12,433.0	-4,737.4	807.9	382,832.39	754,074.76	32° 3' 2.255 N	103° 38' 48.074 W
17,566.5	90.00	179.36	12,433.0	-4,803.9	808.6	382,765.90	754,075.50	32° 3' 1.597 N	103° 38' 48.071 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 #78H BHL - plan hits target cent - Point	0.00 ter	0.00	12,433.0	-4,803.9	808.6	382,765.90	754,075.50	32° 3′ 1.597 N	103° 38' 48.071 W

District 1 1625 N. French Dr., Hobbs, NM 88240 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

#### State of New Mexico Energy, Minerals and Natural Resources Department

Submit Original to Appropriate District Office

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

Date: 5/27/2020	GAS CAPTURE PLAN	
<ul> <li>☑ Original</li> <li>☑ Amended - Reason for Amendment:</li> </ul>	Operator & OGRID No.:	260297

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomplete to new zone, re-frac) activity.

Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).

#### Well(s)/Production Facility - Name of facility

The well(s) that will be located at the production facility are shown in the table below.

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
MESA 8105 1	1	SEC 11; 26S; 32E	490 FNL 1560 FWL	2000	Flared	Battery Connected
FEDERAL 78		-				To ETP System

Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to Gas Transporter and will be connected to Gas Transporter low/high pressure gathering system located in LEA County, New Mexico. It will require 0 'of pipeline to (ETP) connect the facility to low/high pressure gathering system. Operator provides (periodically) to Gas Transporter a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, Operator and Gas Transporter have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at Gas Transporter Processing Plant located in Sec.\_\_\_\_, Twn.\_\_\_\_, Rng. County, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on Gas Transporter system at that time. Based on current information, it is Operator's belief the system can take this gas upon completion of the well(s)

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

#### Alternatives to Reduce Flaring

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation On lease
  - Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas On lease
  - . Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal On lease

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### **TOTAL LENGTH = 78'-3/8"**

#### **TUBING SPOOL**

SW-TCM

13-5/8" 5M x 7-1/16" 10M 5-1/2" PP SEAL

w/ (2) 1-13/16" 10M SSO

# CASING HANGER, C-22, 13-5/8" X 5-1/2" 13-5/8" 5M

#### SW-MB SPOOL ASSEMBLY

**UPPER MBH** 

13-5/8" 5M x 13-5/8" 5M w/ (2) 2-1/16" 5M SSO

13-5/8" 5M

7-1/16" 10M

#### CASING HEAD ASSEMBLY

**LOWER MBH** 

13-5/8" 5M x 10-3/4" SOW w/ (2) 2-1/16" 5M SSO



10-3/4" SOW x 7-5/8" x 5-1/2"





PACKOFF CSS, 13-5/8" X 7-5/8"



U.S. Department of the Interior BUREAU OF LAND MANAGEMENT SUPO Data Report

APD ID: 10400059092

Submission Date: 07/15/2020

Highlighted data reflects the most

Operator Name: BTA OIL PRODUCERS LLC

Well Number: 78H

recent changes **Show Final Text** 

Well Name: MESA 8105 11 FEDERAL Well Type: OIL WELL

Well Work Type: Drill

#### **Section 1 - Existing Roads**

Will existing roads be used? YES

**Existing Road Map:** 

19111280\_Mesa\_8105\_11\_Federal\_78H\_Topographical\_\_\_Access\_Rd\_20200715143344.pdf

**Existing Road Purpose: ACCESS** Row(s) Exist? NO

ROW ID(s)

ID:

Do the existing roads need to be improved? NO

**Existing Road Improvement Description:** 

**Existing Road Improvement Attachment:** 

#### **Section 2 - New or Reconstructed Access Roads**

Will new roads be needed? NO

#### **Section 3 - Location of Existing Wells**

**Existing Wells Map?** YES

Attach Well map:

19111280\_Mesa\_8105\_11\_Federal\_78H\_1\_Mile\_Radius\_\_\_C102\_20200715143359.pdf

Well Name: MESA 8105 11 FEDERAL Well Number: 78H

#### Section 4 - Location of Existing and/or Proposed Production Facilities

Submit or defer a Proposed Production Facilities plan? DEFER

Estimated Production Facilities description: Defer, CTB will be sundried at a later date.

#### **Section 5 - Location and Types of Water Supply**

**Water Source Table** 

Water source type: OTHER

Describe type: PIT

Water source use type: SURFACE CASING

**STIMULATION** 

**DUST CONTROL** 

INTERMEDIATE/PRODUCTION

**CASING** 

Source latitude: Source longitude:

Source datum:

Water source permit type: PRIVATE CONTRACT

Water source transport method: TRUCKING

Source land ownership: FEDERAL

Source transportation land ownership: PRIVATE

Water source volume (barrels): 100000 Source volume (acre-feet): 12.88930963

Source volume (gal): 4200000

Water source and transportation map:

MESA\_8105\_FEDERAL\_WATER\_TRANSPORT\_MAP\_20200527085530.pdf

Water source comments: Water Pit is in SESE QUARTER QUARTER OF SEC 1; T26S; R32E

New water well? N

**New Water Well Info** 

Well Name: MESA 8105 11 FEDERAL Well Number: 78H

Well latitude: Well Longitude: Well datum:

Well target aquifer:

Est. depth to top of aquifer(ft): Est thickness of aquifer:

**Aquifer comments:** 

Aquifer documentation:

Well depth (ft): Well casing type:

Well casing outside diameter (in.): Well casing inside diameter (in.):

New water well casing?

Used casing source:

Drilling method: Drill material:

Grout material: Grout depth:

Casing length (ft.): Casing top depth (ft.):

Well Production type: Completion Method:

Water well additional information:

State appropriation permit:

**Additional information attachment:** 

#### **Section 6 - Construction Materials**

Using any construction materials: YES

**Construction Materials description:** Caliche used for construction of the drilling pad and access road will be obtained from the closest existing caliche pit as approved by the BLM or from prevailing deposits found under the location. If there is not sufficient material available, caliche will be purchased from the nearest caliche pit located in the SESE Quarter Quarter of Section 4 T26S R32E Lea County, NM.

**Construction Materials source location attachment:** 

#### **Section 7 - Methods for Handling Waste**

Waste type: GARBAGE

Waste content description: Trash

**Amount of waste:** 500 pounds

Waste disposal frequency: One Time Only

Safe containment description: Trash produced during drilling and completion operations will be collected in a trash

container and disposed of properly. Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL Disposal location ownership: COMMERCIAL

**FACILITY** 

Disposal type description:

**Disposal location description:** Trucked to a state approved disposal facility.

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Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA 8105 11 FEDERAL Well Number: 78H

Waste type: SEWAGE

Waste content description: Human waste and grey water.

Amount of waste: 1000 gallons

Waste disposal frequency: One Time Only

Safe containment description: Waste material will be stored safely and disposed of properly.

Safe containment attachment:

Waste disposal type: HAUL TO COMMERCIAL Disposal location ownership: COMMERCIAL

**FACILITY** 

Disposal type description:

**Disposal location description:** Trucked to a state approved disposal facility.

Waste type: DRILLING

Waste content description: Drilling fluids and cuttings.

Amount of waste: 4164 barrels

Waste disposal frequency: One Time Only

Safe containment description: All drilling fluids will be stored safely and disposed of properly.

Safe containment attachment:

Waste disposal type: HAUL TO COMMERCIAL Disposal location ownership: COMMERCIAL

**FACILITY** 

Disposal type description:

**Disposal location description:** Trucked to a state approved disposal facility.

#### **Reserve Pit**

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit? NO

Reserve pit length (ft.) Reserve pit width (ft.)

Reserve pit depth (ft.)

Reserve pit volume (cu. yd.)

Is at least 50% of the reserve pit in cut?

Reserve pit liner

Reserve pit liner specifications and installation description

#### **Cuttings Area**

Cuttings Area being used? NO

Are you storing cuttings on location? N

Well Number: 78H Well Name: MESA 8105 11 FEDERAL

**Description of cuttings location** 

**Cuttings area length (ft.)** Cuttings area width (ft.)

Cuttings area depth (ft.) Cuttings area volume (cu. yd.)

Is at least 50% of the cuttings area in cut?

WCuttings area liner

Cuttings area liner specifications and installation description

#### **Section 8 - Ancillary Facilities**

Are you requesting any Ancillary Facilities?: N

**Ancillary Facilities attachment:** 

#### **Comments:**

#### **Section 9 - Well Site Layout**

#### Well Site Layout Diagram:

Rig Layout 20190930140859.pdf

19111280\_Mesa\_8105\_11\_Federal\_78H\_Well\_Site\_Plan\_\_600s\_\_20200715143423.pdf

Comments:

#### **Section 10 - Plans for Surface Reclamation**

Type of disturbance: New Surface Disturbance Multiple Well Pad Name: MESA 8105 11 FEDERAL

Multiple Well Pad Number: 78H, 79H, 80H, and 81H

#### Recontouring attachment:

Drainage/Erosion control construction: During construction proper erosion control methods will be used to control erosion, runoff, and siltation of the surrounding area.

Drainage/Erosion control reclamation: Proper erosion control methods will be used on the area to control erosion, runoff, and siltation of the surrounding area.

Well pad proposed disturbance

(acres): 6.75

Road proposed disturbance (acres): 0 Road interim reclamation (acres): 0

Well pad interim reclamation (acres):

Well pad long term disturbance

(acres): 6.06

Road long term disturbance (acres): 0

Powerline proposed disturbance

(acres): 0

Pipeline proposed disturbance

(acres): 0

Other proposed disturbance (acres): 0

Powerline interim reclamation (acres): Powerline long term disturbance

Other interim reclamation (acres): 0

(acres): 0

Pipeline interim reclamation (acres): 0 Pipeline long term disturbance

(acres): 0

Other long term disturbance (acres): 0

Total interim reclamation: 0.69

Well Name: MESA 8105 11 FEDERAL Well Number: 78H

Total proposed disturbance: 6.75 Total long term disturbance: 6.06

#### **Disturbance Comments:**

**Reconstruction method:** The areas planned for interim reclamation will then be recontoured to the original contour if feasible, or if not feasible, to an interim contour that blends with the surrounding topography as much as possible. Where applicable, the fill material of the well pad will be backfilled into the cut to bring the area back to the original contour. The interim cut and fill slopes prior to re-seeding will not be steeper than a 3:1 ratio, unless the adjacent native topography is steeper. Note: Constructed slopes may be much steeper during drilling, but will be recontoured to the above ratios during interim reclamation.

**Topsoil redistribution:** Topsoil will be evenly respread and aggressively revegetated over the entire disturbed area not needed for all-weather operations.

**Soil treatment:** To seed the area, the proper BLM seed mixture, free of noxious weeds, will be used. Final seedbed preparation will consist of contour cultivating to a depth of 4 to 6 inches within 24 hours prior to seeding, dozer tracking, or other imprinting in order to break the soil crust and create seed germination micro-sites.

**Existing Vegetation at the well pad:** The historic climax plant community is a grassland dominated by black grama, dropseeds, and blue stems with sand sage and shinnery oak distributed evenly throughout. Current landscape displays mesquite, shinnery oak, yucca, desert sage, fourwing saltbush, snakeweed, and bunch grasses.

**Existing Vegetation at the well pad attachment:** 

Existing Vegetation Community at the road: Refer to "Existing Vegetation at the well pad"

**Existing Vegetation Community at the road attachment:** 

Existing Vegetation Community at the pipeline: Refer to "Existing Vegetation at the well pad"

**Existing Vegetation Community at the pipeline attachment:** 

Existing Vegetation Community at other disturbances: Refer to "Existing Vegetation at the well pad"

**Existing Vegetation Community at other disturbances attachment:** 

Non native seed used? N

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project? N

Seedling transplant description attachment:

Will seed be harvested for use in site reclamation?

Seed harvest description:

Seed harvest description attachment:

Well Name: MESA 8105 11 FEDERAL Well Number: 78H

**Seed Management** 

**Seed Table** 

**Seed Summary** 

**Total pounds/Acre:** 

**Seed Type** 

Pounds/Acre

**Seed reclamation attachment:** 

**Operator Contact/Responsible Official Contact Info** 

First Name: Chad Last Name: Smith

Phone: (432)682-3753 Email: csmith@btaoil.com

Seedbed prep:

Seed BMP:

Seed method:

Existing invasive species? N

**Existing invasive species treatment description:** 

Existing invasive species treatment attachment:

**Weed treatment plan description:** No invasive species present. Standard regular maintenance to maintain a clear location and road.

Weed treatment plan attachment:

**Monitoring plan description:** Identify areas supporting weeds prior to construction; prevent the introduction and spread of weeds from construction equipment during construction; and contain weed seeds and propagules by preventing segregated topsoil from being spread to adjacent areas. No invasive species present. Standard regular maintenance to maintain a clear location and road.

Monitoring plan attachment:

Success standards: To maintain all disturbed areas as per Gold Book standards.

Pit closure description: N/A

Pit closure attachment:

**Section 11 - Surface Ownership** 

Well Name: MESA 8105 11 FEDERAL Well Number: 78H

Disturbance type: WELL PAD

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

**BIA Local Office:** 

**BOR Local Office:** 

**COE Local Office:** 

**DOD Local Office:** 

**NPS Local Office:** 

**State Local Office:** 

**Military Local Office:** 

**USFWS Local Office:** 

Other Local Office:

**USFS** Region:

**USFS Forest/Grassland:** 

**USFS Ranger District:** 

**Section 12 - Other Information** 

Right of Way needed? N

Use APD as ROW?

ROW Type(s):

**ROW Applications** 

**SUPO Additional Information:** 

Use a previously conducted onsite? Y

Previous Onsite information: Onsite conducted by McKenna Ryder BLM on 6/16/2020

**Other SUPO Attachment** 

U.S.G.S. TOPOGRAPHIC MAP

Released 48 FAKa Stab NS/108202 Y 4 YOS 38 PM

412 N. DAL PASO HOBBS, N.M. 88240 (575) 393-3117 www.jwsc.biz

TBPLS# 10021000

DISTRICT I
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DISTRICT II
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Phone: (575) 748-1283 Fax: (575) 748-9720
DISTRICT III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

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

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

□AMENDED REPORT

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

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

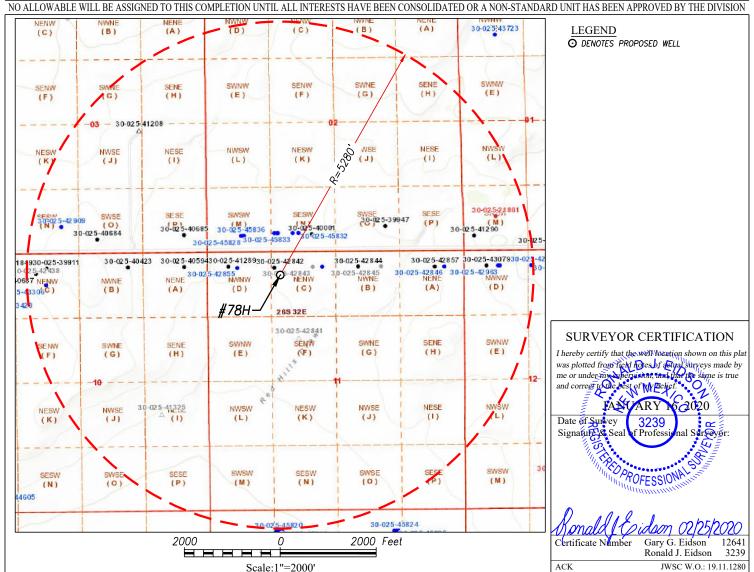
API Number	Pool Code	WC-025; Upper Wo	olfcamp		
Property Code		Property Name			
	MESA 810	MESA 8105 11 FEDERAL			
OGRID No.	Ope	Operator Name			
260297	BTA OIL PR	ODUCERS, LLC	3245'		

#### Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	11	26-S	32-E		490	NORTH	1560	WEST	LEA

#### Bottom Hole Location If Different From Surface

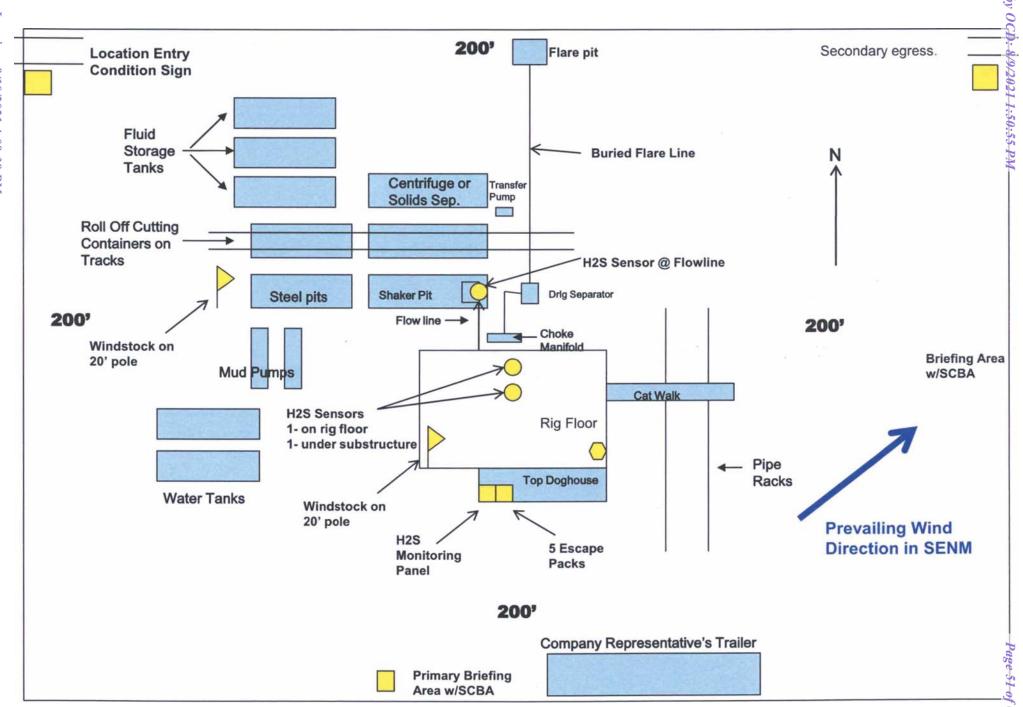
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	11	26-S	32-E		50	SOUTH	2310	WEST	LEA
Dedicated Acres	Joint or	Infill	Consolidation C	ode Ord	er No.				
160									

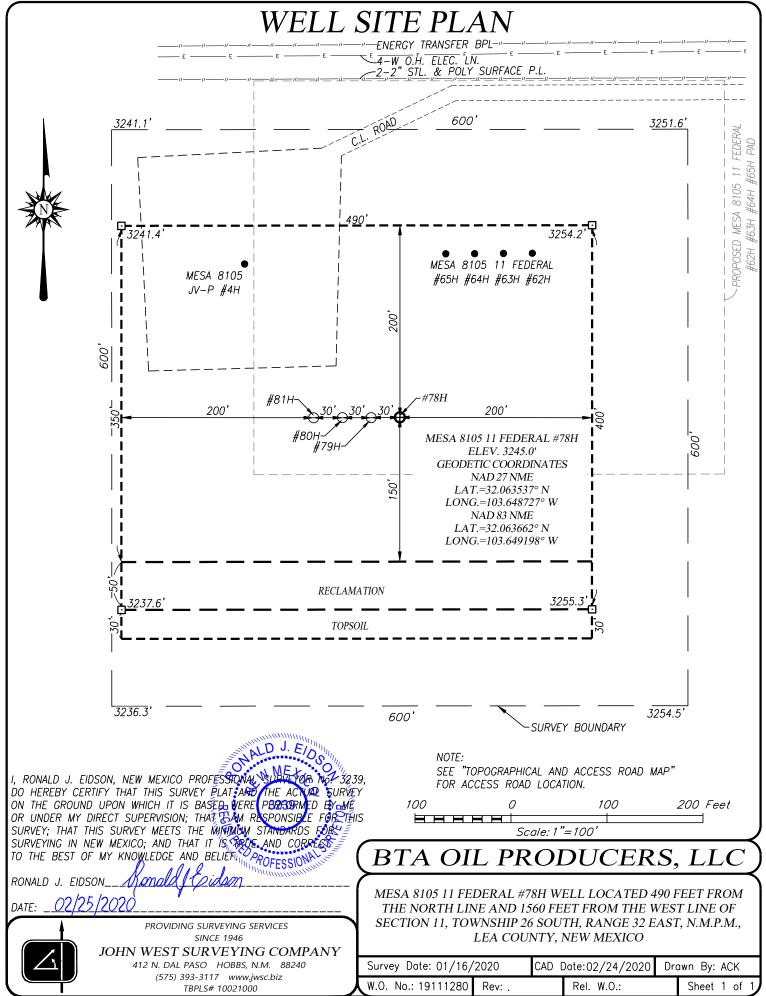




BTA OIL PRODUCERS, LLC
WATER TRANSPORTATION MAP
MESA 8105 FEDERAL WATER TRANSPORT MAP
SEC 1; T26S; R32E (Water Pit is in SESE QUARTER QUARTER)
LEA COUNTY, NM









U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

PWD Data Report

PWD disturbance (acres):

**APD ID:** 10400059092 **Submission Date:** 07/15/2020

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA 8105 11 FEDERAL Well Number: 78H

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? N

**Produced Water Disposal (PWD) Location:** 

PWD surface owner:

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:

Well Name: MESA 8105 11 FEDERAL Well Number: 78H

**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? N

**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?

Well Name: MESA 8105 11 FEDERAL Well Number: 78H

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? N

**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? N

**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? N

**Produced Water Disposal (PWD) Location:** 

PWD surface owner: PWD disturbance (acres):

Other PWD discharge volume (bbl/day):

Released to Imaging: 8/10/2021 4:08:38 PM

Well Name: MESA 8105 11 FEDERAL Well Number: 78H

Other PWD type description:

Other PWD type attachment:

Have other regulatory requirements been met?

Other regulatory requirements attachment:



U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

# Bond Info Data Report

07/20/2021

**APD ID:** 10400059092

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA 8105 11 FEDERAL

Well Type: OIL WELL

Submission Date: 07/15/2020

Highlighted data reflects the most recent changes

Show Final Text

Well Work Type: Drill

Well Number: 78H

#### **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:

#### State of New Mexico Energy, Minerals and Natural Resources Department

Submit Electronically Via E-permitting

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

#### NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

#### Section 1 – Plan Description Effective May 25, 2021

I. Operator:	BTA (	Dil Producer	s, LLC	OGRID: _	260297	Date:	_08_/_	09/2021
II. Type: ⊠ O	riginal [	☐ Amendment	due to □ 19.15.27.	9.D(6)(a) NM.	AC □ 19.15.27.9.D(	(6)(b) NMAC □	Other.	
If Other, please	describe	e:						
			formation for each to or connected to a connected t		eleted well or set of point.	wells proposed to	) be dri	lled or proposed to
Well Nai	ne	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D		Anticipated roduced Water BBL/D
MESA 8105 11	30-0	25-49296	C, SEC 11; 26S; 32	E 490 FNL,1560 F	EL +/- 800	+/- 2000	+/-	1200
FEDERAL 78H								
proposed to be	l Schedu recompl	le: Provide the	gle well pad or con	tion for each nonected to a cer		vell or set of well	s propo	
Well Nai		API	Spud Date	TD Reached Date	Completion Commencement			First Production Date
MESA 8105 11	30-	025-49296	8/9/2022	8/29/2022	9/12/2022	10/3/2	2022	11/2/2022
FEDERAL 78H								
VII. Operatio Subsection A t	nal Prac hrough F	tices:  Attaction of 19.15.27.8	ch a complete descr NMAC.	ription of the a	operator will size separations Operator will of Operator's best re	ll take to comply	with th	he requirements of

#### Section 2 Enhanced Plan

EFFECTIVE APRIL 1, 2022								
Beginning April 1, 2 reporting area must of			with its statewide natural ga	as capture requirement for the applicable				
☐ Operator certifies capture requirement	-	-	tion because Operator is in o	compliance with its statewide natural gas				
IX. Anticipated Nat	tural Gas Producti	on:						
We	ell	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF				
X. Natural Gas Gat	hering System (NC	GGS):						
Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in				
production operation the segment or portion the segment or portion in the segment or portion in the segment or portion in the segment or segment in the segment of the segment in the segm	s to the existing or pon of the natural gas gas. The natural gas gas rom the well prior to the compact of the c	planned interconnect of to gathering system(s) to we thering system will to the date of first product does not anticipate that above will continue to eduction in response to the terts confidentiality purs	he natural gas gathering systewhich the well(s) will be considered will not have capacity to go tion.  at its existing well(s) connect meet anticipated increases in the increased line pressure.  uant to Section 71-2-8 NMS 27.9 NMAC, and attaches a fixewhich which is the increased of the increased line pressure.	atticipated pipeline route(s) connecting the em(s), and the maximum daily capacity of nected.  ather 100% of the anticipated natural gas ted to the same segment, or portion, of the a line pressure caused by the new well(s).  SA 1978 for the information provided in full description of the specific information				

# Section 3 - Certifications Effective May 25, 2021

	Effective May 25, 2021
Operator certifies that, a	fter reasonable inquiry and based on the available information at the time of submittal:
one hundred percent of	to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering
hundred percent of the a into account the current	able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one nticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system. box, Operator will select one of the following:
<b>Well Shut-In.</b> □ Operat D of 19.15.27.9 NMAC;	or will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection or
	lan. □ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential es for the natural gas until a natural gas gathering system is available, including:  power generation on lease;  power generation for grid;  compression on lease;  liquids removal on lease;  reinjection for underground storage;  reinjection for temporary storage;  reinjection for enhanced oil recovery;  fuel cell production; and  other alternative beneficial uses approved by the division.

#### **Section 4 - Notices**

- 1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:
- (a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or
- (b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.
- 2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature: Sample jun
Printed Name: Sammy Hajar
Title: Regulatory Analyst
E-mail Address: SHAJAR@BTAOIL.COM
Date: 8/9/2021
Phone: 432-682-3753
OIL CONSERVATION DIVISION
(Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:

# VI. Separation Equipment: Attach a complete description of how Operator will size separation equipment to optimize gas capture.

- Separation equipment will be sized to provide adequate separation for anticipated rates.
- Separation equipment will allow for adequate retention time to allow gas and liquids to separate.
- Separation equipment will separate all three phases (Oil, Water, and Gas).
- Collection systems are appropriately sized to handle facility production rates on all (3) phases.
- Ancillary equipment and metering is selected to be serviced without flow interruptions or the need to release gas from the well.

# VII. Operational Practices: Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F 19.15.27.8 NMAC.

#### **Drilling Operations**

- All flare stacks will be properly sized. The flare stacks will be located at a minimum 100' from the nearest surface hole location on the pad.
- All natural gas produced during drilling operations will be flared, unless there is an equipment
  malfunction and/or to avoid risk of an immediate and substantial adverse impact on safety and
  the environment, at which point the gas will be vented.

#### **Completions/Recompletions Operations**

- New wells will not be flowed back until they are connected to a properly sized gathering system.
- The facility will be built/sized for maximum anticipated flowrates and pressures to minimize waste.
- For flowback operations, multiple stages of separation will be used as well as VRU and blowers to make sure waste is minimized off the storage tanks and facility.
- During initial flowback, the well stream will be routed to separation equipment.
- At an existing facility, when necessary, post separation natural gas will be flared until it meets pipeline specifications, at which point it will be turned into a collection system.
- At a new facility, post separation natural gas will be vented until storage tanks can safely function, at which point it will be flared until it meets pipeline spec.

#### **Production Operations**

- Weekly AVOs will be performed on all facilities that produce more than 60 MCFD.
- Leaking thief hatches and pressure safety valves found during AVOs will be cleaned and properly re-sealed.
- All flares will be equipped with auto-ignition systems and continuous pilot operations.
- After a well is stabilized from liquid unloading, the well will be turned back into the collection system.
- All gas lift systems will be optimized to limit the amount of waste.
- All tanks will have automatic gauging equipment installed.

#### **Performance Standards**

- Production equipment will be designed to handle maximum anticipated rates and pressure.
- All flared gas will be combusted in a flare stack that is properly sized and designed to ensure proper combustion.
- All gas will have multiple points of separation to ensure no liquids enter flares, combustors, or gas sales line.
- Weekly AVOs will be performed on all wells and facilities that produce more than 60 MCFD.
- All OOOOa facilities will be filmed with an Optical Gas Imaging Thermographer camera once per month to check for fugitive emissions.

#### **Measurement & Estimation**

- All volume that is flared and vented that is not measured will be estimated.
- All measurement equipment for flared volumes will conform to API 14.10.
- All meters will be calibrated at regular intervals according to meter manufacturer recommendations.
- When metering is not practical due to low pressure/low rate, the vented or flared volume will be estimated.

# VIII. Best Management Practices: Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

- During downhole well maintenance, BTA will use best management practices to vent as minimally as possible.
- Prior to the commencement of any maintenance, the tank or vessel will be isolated from the rest of the facilities.
- All valves upstream of the equipment will be closed and isolated.
- After equipment has been isolated, the equipment will be blown down to as low a pressure as possible into the collection system.
- If the equipment being maintained cannot be relieved into the collection system, it shall be released to a tank where the vapor can either be captured or combusted if possible.
- After downhole well maintenance, natural gas will be flared until it reaches pipeline specification.

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District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

**State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division** 1220 S. St Francis Dr. **Santa Fe, NM 87505** 

CONDITIONS

Action 40759

#### **CONDITIONS**

Operator:	OGRID:
BTA OIL PRODUCERS, LLC	260297
104 S Pecos	Action Number:
Midland, TX 79701	40759
	Action Type:
	[C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

#### CONDITIONS

Created	Condition	Condition
Ву		Date
pkautz	Will require a File As Drilled C-102 and a Directional Survey with the C-104	8/10/2021
pkautz	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or	8/10/2021
	zones and shall immediately set in cement the water protection string	