

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**APPLICATION FOR PERMIT TO DRILL OR REENTER**

**OCD - HOBBS**  
**07/31/2020**  
**RECEIVED**

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

1a. Type of work: <input type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No.
1b. Type of Well: <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		6. If Indian, Allottee or Tribe Name
1c. Type of Completion: <input type="checkbox"/> Hydraulic Fracturing <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		7. If Unit or CA Agreement, Name and No.
2. Name of Operator <b>[260297]</b>		8. Lease Name and Well No. <b>[317432]</b>
3a. Address	3b. Phone No. (include area code)	9. API Well No. <b>30-025-47518</b>
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface At proposed prod. zone		10. Field and Pool, or Exploratory <b>[98180]</b>
14. Distance in miles and direction from nearest town or post office*		11. Sec., T. R. M. or Blk. and Survey or Area
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No of acres in lease	17. Spacing Unit dedicated to this well
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. in file
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration
24. Attachments		

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

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

25. Signature	Name (Printed/Typed)	Date
Title		
Approved by (Signature)	Name (Printed/Typed)	Date
Title		
Office		

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**GCP Rec 07/31/2020**

SL

(Continued on page 2)

**APPROVED WITH CONDITIONS**  
**Approval Date: 07/30/2020**

**Kz**  
**08/19/2020**

\*(Instructions on page 2)

# PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

<b>OPERATOR'S NAME:</b>	<b>BTA OIL PRODUCERS LLC</b>
<b>LEASE NO.:</b>	<b>NMNM097153</b>
<b>WELL NAME &amp; NO.:</b>	<b>VACA DRAW 9418 10 FEDERAL 25H</b>
<b>SURFACE HOLE FOOTAGE:</b>	<b>420'/S &amp; 1335'/E</b>
<b>BOTTOM HOLE FOOTAGE:</b>	<b>50'/N &amp; 1650'/E</b>
<b>LOCATION:</b>	<b>Section 10, T.25 S., R.33 E., NMPM</b>
<b>COUNTY:</b>	<b>Lea County, New Mexico</b>

COA

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

## A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the Wildcat Pool formation. As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please 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 **1,155** 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.

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

2. The minimum required fill of cement behind the **7-5/8** inch intermediate casing, which shall be set at approximately **12,038** feet is:

**Option 1 (Single Stage):**

- Cement to surface. If cement does not circulate see B.1.a, c-d above.

**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.
  - b. Second stage above DV tool:
    - Cement to surface. If cement does not circulate, contact the appropriate BLM office.
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.

### Option 1:

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

### Option 2:

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



## 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)

☒ 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. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
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. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
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: The flex line must meet the requirements of API 16C. 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, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).
- 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.

**OTA07282020**



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

# Operator Certification Data Report

07/31/2020

## Operator Certification

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

**NAME:** Sammy Hajar

**Signed on:** 04/17/2019

**Title:** Regulatory Analyst

**Street Address:** 104 S. Pecos

**City:** Midland

**State:** TX

**Zip:** 79701

**Phone:** (432)682-3753

**Email address:** shajar@btaoil.com

## Field Representative

**Representative Name:**

**Street Address:** 104 South Pecos

**City:** Midland

**State:** TX

**Zip:** 79701

**Phone:** (432)682-3753

**Email address:** neaton@btaoil.com



APD ID: 10400040918

Submission Date: 04/17/2019

Highlighted data  
reflects the most  
recent changes

Operator Name: BTA OIL PRODUCERS LLC

Well Name: VACA DRAW 9418 10 FEDERAL

Well Number: 25H

[Show Final Text](#)

Well Type: OIL WELL

Well Work Type: Drill

## Section 1 - General

APD ID: 10400040918

Tie to previous NOS?

Submission Date: 04/17/2019

BLM Office: CARLSBAD

User: Sammy Hajar

Title: Regulatory Analyst

Federal/Indian APD: FED

Is the first lease penetrated for production Federal or Indian? FED

Lease number: NMNM097153

Lease Acres: 640

Surface access agreement in place?

Allotted?

Reservation:

Agreement in place? NO

Federal or Indian agreement:

Agreement number:

Agreement name:

Keep application confidential? YES

Permitting Agent? NO

APD Operator: BTA OIL PRODUCERS LLC

Operator letter of designation:

## Operator Info

Operator Organization Name: BTA OIL PRODUCERS LLC

Operator Address: 104 S. Pecos

Zip: 79701

Operator PO Box:

Operator City: Midland

State: TX

Operator Phone: (432)682-3753

Operator Internet Address:

## Section 2 - Well Information

Well in Master Development Plan? NO

Master Development Plan name:

Well in Master SUPO? NO

Master SUPO name:

Well in Master Drilling Plan? NO

Master Drilling Plan name:

Well Name: VACA DRAW 9418 10 FEDERAL

Well Number: 25H

Well API Number:

Field/Pool or Exploratory? Field and Pool

Field Name: JOHNSON RANCH Pool Name: WOLFCAMP

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

Operator Name: BTA OIL PRODUCERS LLC

Well Name: VACA DRAW 9418 10 FEDERAL

Well Number: 25H

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? YES New surface disturbance? Y

Type of Well Pad: MULTIPLE WELL

Multiple Well Pad Name: VACA Number: 24-27

DRAW 9418 10 FEDERAL

Well Class: HORIZONTAL

Number of Legs:

Well Work Type: Drill

Well Type: OIL WELL

Describe Well Type:

Well sub-Type: INFILL

Describe sub-type:

Distance to town: 22 Miles

Distance to nearest well: 1785 FT

Distance to lease line: 420 FT

Reservoir well spacing assigned acres Measurement: 160 Acres

Well plat: Vaca\_Draw\_9418\_10\_Federal\_25H\_c102\_20190417091726.pdf

Well work start Date: 09/19/2019

Duration: 30 DAYS

### Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83

Vertical Datum: NGVD29

Survey number:

Reference Datum:

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this lease?
SHL Leg #1	420	FSL	1335	FEL	25S	33E	10	Aliquot SWSE	32.138963	-103.555965	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 097153	3377	0	0	
KOP Leg #1	330	FSL	1650	FEL	25S	33E	10	Aliquot SWSE	32.138712	-103.556984	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 097153	-8711	12105	12088	
PPP Leg #1-1	330	FSL	1650	FEL	25S	33E	10	Aliquot SWSE	32.138712	-103.556984	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 097153	-8949	12357	12326	



**Operator Name:** BTA OIL PRODUCERS LLC

**Well Name:** VACA DRAW 9418 10 FEDERAL

**Well Number:** 25H

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	330	FNL	1650	FEL	25S	33E	10	Aliquot NWNE	32.151424	- 103.556991	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 097153	- 9284	17364	12661	
BHL Leg #1	50	FNL	1650	FEL	25S	33E	10	Aliquot NWNE	32.152194	- 103.556991	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 097153	- 9284	17644	12661	



APD ID: 10400040918

Submission Date: 04/17/2019

Highlighted data  
reflects the most  
recent changes

Operator Name: BTA OIL PRODUCERS LLC

Well Name: VACA DRAW 9418 10 FEDERAL

Well Number: 25H

[Show Final Text](#)

Well Type: OIL WELL

Well Work Type: Drill

## Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
440169	QUATERNARY	3377	0	0	ALLUVIUM	NONE	N
440167	RUSTLER	2276	1101	1101		NONE	N
440172	TOP SALT	1878	1499	1499		NONE	N
440174	BASE OF SALT	-1437	4814	4814		NONE	N
440173	DELAWARE	-1688	5065	5065		NATURAL GAS, OIL	N
440177	BELL CANYON	-1713	5090	5090		NATURAL GAS, OIL	N
440178	CHERRY CANYON	-2987	6364	6364		NATURAL GAS, OIL	N
440179	BRUSHY CANYON	-4281	7658	7658		NATURAL GAS, OIL	N
440175	BONE SPRING	-5832	9209	9209		NATURAL GAS, OIL	N
440180	FIRST BONE SPRING SAND	-6597	9974	9974		NATURAL GAS, OIL	N
440181	BONE SPRING 2ND	-7385	10762	10762		NATURAL GAS, OIL	N
440182	BONE SPRING 3RD	-8380	11757	11757		NATURAL GAS, OIL	N
440176	WOLFCAMP	-8949	12326	12326		NATURAL GAS, OIL	Y

## Section 2 - Blowout Prevention

**Operator Name:** BTA OIL PRODUCERS LLC

**Well Name:** VACA DRAW 9418 10 FEDERAL

**Well Number:** 25H

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

**Rating Depth:** 14000

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

**Requesting Variance?** YES

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

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

**Choke Diagram Attachment:**

Choke\_Hose\_\_\_Test\_Chart\_and\_Specs\_20181129153440.pdf

10M\_choke\_mannifold\_20181129153440.pdf

**BOP Diagram Attachment:**

5M\_annular\_well\_control\_plan\_for\_BLM\_20181129153535.docx

10M\_annular\_variance\_\_\_20190205150746.pdf

BLM\_10M\_BOP\_with\_5M\_annular\_20190205150734.pdf

### Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	14.75	10.75	NEW	API	N	0	1150	0	1150			1150	J-55	40.5	ST&C	3.2	6.3	DRY	9	DRY	13.5
2	PRODUCTI ON	6.75	5.5	NEW	API	Y	0	11856	0	11839			11856	P-110	20	BUTT	1.3	1.4	DRY	2.8	DRY	2.7
3	INTERMED IATE	9.875	7.625	NEW	API	N	0	12056	0	12038			12056	P-110	29.7	BUTT	1.7	1.6	DRY	2.7	DRY	2.6
4	PRODUCTI ON	6.75	5.0	NEW	API	Y	11856	17644	11839	12661			5788	P-110	18	BUTT	1.5	1.5	DRY	2.8	DRY	2.5

**Casing Attachments**

**Operator Name:** BTA OIL PRODUCERS LLC

**Well Name:** VACA DRAW 9418 10 FEDERAL

**Well Number:** 25H

### Casing Attachments

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

**Inspection Document:**

**Spec Document:**

**Tapered String Spec:**

**Casing Design Assumptions and Worksheet(s):**

Vaca\_Draw\_25H\_Casing\_Assumption\_20190417100405.JPG

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**Casing ID:** 2      **String Type:** PRODUCTION

**Inspection Document:**

**Spec Document:**

**Tapered String Spec:**

vaca\_draw\_5.5\_tapered\_string\_spec\_20190327151801.JPG

**Casing Design Assumptions and Worksheet(s):**

Vaca\_Draw\_25H\_Casing\_Assumption\_20190417100359.JPG

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**Casing ID:** 3      **String Type:** INTERMEDIATE

**Inspection Document:**

**Spec Document:**

**Tapered String Spec:**

**Casing Design Assumptions and Worksheet(s):**

Vaca\_Draw\_25H\_Casing\_Assumption\_20190417100353.JPG

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**Operator Name:** BTA OIL PRODUCERS LLC

**Well Name:** VACA DRAW 9418 10 FEDERAL

**Well Number:** 25H

## Casing Attachments

**Casing ID:** 4 **String Type:** PRODUCTION

**Inspection Document:**

**Spec Document:**

**Tapered String Spec:**

vaca\_draw\_5\_tapered\_string\_spec\_20190327151747.JPG

**Casing Design Assumptions and Worksheet(s):**

Vaca\_Draw\_25H\_Casing\_Assumption\_20190417100347.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	905	560	1.8	13.5	1008	100	Class C	2% CaCl2
SURFACE	Tail		905	1150	200	1.34	14.8	268	100	Class C	2% CaCl2
INTERMEDIATE	Lead		0	4635	745	2.19	12.7	1631.55	50	Class C	0.5% CaCl2
INTERMEDIATE	Tail		4635	5065	150	1.33	14.8	199.5	50	Class C	1% CaCl2
INTERMEDIATE	Lead	5065	5065	11500	2055	2.64	10.5	5425.2	15	Class H	0.5% CaCl2
INTERMEDIATE	Tail		11500	12056	400	1.19	15.6	476	15	Class H	1% CaCl2
PRODUCTION	Lead		10955	11856	0	0	0	0		n/a	n/a

PRODUCTION	Lead		11856	17644	630	1.27	14.8	800.1	10	Class H	0.1% Fluid Loss
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**Operator Name:** BTA OIL PRODUCERS LLC

**Well Name:** VACA DRAW 9418 10 FEDERAL

**Well Number:** 25H

## Section 5 - Circulating Medium

**Mud System Type:** Closed

**Will an air or gas system be Used?** NO

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

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

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

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

## Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	1150	OTHER : FW Spud	8.3	8.4							
1150	1205 6	OTHER : DBE	9	9.4							
1205 6	1266 1	OIL-BASED MUD	11	14							

## Section 6 - Test, Logging, Coring

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

Drill Stem Tests will be based on geological sample shows.

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

CBL,GR,MUDLOG

**Coring operation description for the well:**

None planned

**Operator Name:** BTA OIL PRODUCERS LLC

**Well Name:** VACA DRAW 9418 10 FEDERAL

**Well Number:** 25H

## Section 7 - Pressure

**Anticipated Bottom Hole Pressure:** 9217

**Anticipated Surface Pressure:** 6431.58

**Anticipated Bottom Hole Temperature(F):** 183

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

**Describe:**

**Contingency Plans geohazards description:**

**Contingency Plans geohazards attachment:**

**Hydrogen Sulfide drilling operations plan required?** YES

**Hydrogen sulfide drilling operations plan:**

H2S\_Plan\_20181129153648.pdf

H2S\_Equipment\_Schematic\_20181129153733.pdf

BTA\_Oil\_Producers\_LLC\_\_\_EMERGENCY\_CALL\_LIST\_20190205154800.pdf

## Section 8 - Other Information

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

Vaca\_Draw\_\_25H\_directional\_plan\_20190417120507.pdf

Vaca\_Draw\_\_25H\_wall\_plot\_20190417120508.pdf

Vaca\_Draw\_9418\_10\_Federal\_25H\_Gas\_Capture\_Plan\_20190417120531.pdf

**Other proposed operations facets description:**

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

**Other proposed operations facets attachment:**

**Other Variance attachment:**

Casing\_Head\_Running\_Procedure\_20181129153916.pdf

Multi\_Bowl\_Diagram\_\_3\_STRING\_10\_34\_SOW\_For\_VACA\_DRAW\_20191015143813.pdf

### 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

1. Sound alarm (alert rig crew)
2. Stab full opening safety valve and close valve
3. Space 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
3. 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)



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

#### Pulling BHA thru Stack

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

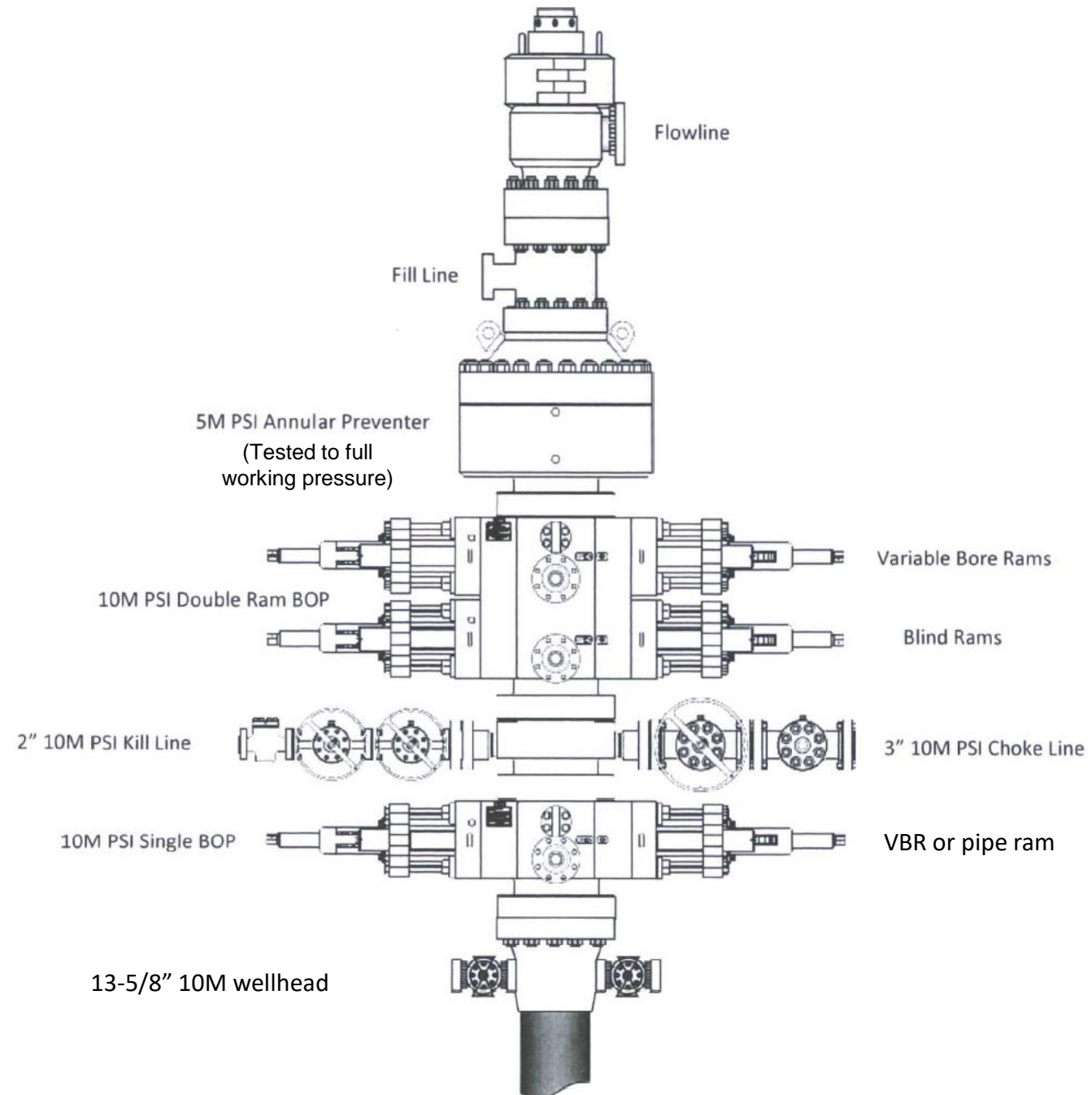
## **Drilling component and preventer compatibility table** **for 10M approval**

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.

<b>6-1/8" hole section – 10M BOPE requirement (13-5/8" BOP)</b>			
<b>Component</b>	<b>OD</b>	<b>Preventer</b>	<b>RWP</b>
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

<b>12-1/4" &amp; 8-3/4" hole sections – 5M BOPE requirement (13-5/8" BOP)</b>			
<b>Component</b>	<b>OD</b>	<b>Preventer</b>	<b>RWP</b>
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

# 13-5/8" 10M PSI BOP Stack



## DIMENSIONS AND

Size O.D. In.	Grade	Wt. Per Ft. With Cplg., Lb.	Inside Dia. In.	Thread & Cplg.		Extreme Line		Col/pse Resistance PSI
				Drift Dia. in.	O.D. of Cplg. In.	Drift Dia. in.	O.D. of Box In.	
5 1/2	T-95	29.70	4.376	4.251	—	—	—	17,430
	T-95	32.60	4.250	4.125	—	—	—	19,140
	T-95	35.30	4.126	4.001	—	—	—	20,760
	T-95	38.00	4.000	3.875	—	—	—	22,380
	T-95	40.50	3.876	3.751	—	—	—	23,920
	T-95	43.10	3.750	3.625	—	—	—	25,400
	HCP-110	17.00	4.892	4.767	—	—	—	8,580
	P-110	17.00	4.892	4.767	6.050	4.653	5.860	7,460
	P-110	20.00	4.778	4.653	6.050	4.653	5.860	11,080
	P-110	23.00	4.670	4.545	6.050	4.545	5.860	14,520
	P-110*	26.00	4.548	—	—	4.423	5.656†	17,390
	HCC-125+	17.00	4.892	4.767	—	—	—	8,580
	Q-125+	17.00	4.892	4.767	—	—	—	12,080
	Q-125+	20.00	4.778	4.653	—	—	—	16,070
	Q-125	23.00	4.670	4.545	—	—	—	19,770
	Q-125+	26.00	4.548	4.423	—	—	—	8,580
	LS-140+	17.00	4.892	4.767	—	—	—	12,950
	LS-140+	20.00	4.778	4.653	—	—	—	17,500
	LS-140+	23.00	4.670	4.545	—	—	—	13,460
	V-150	20.00	4.778	4.653	—	—	—	13,480
	V-150*	20.00	4.778	4.653	6.050	—	—	18,390
	V-150*	23.00	4.670	4.545	6.050	—	—	23,720
	V-150*	26.00	4.548	4.423	6.050	—	—	—



## STRENGTHS OF CASING

Internal Yield Pressure PSI**				Body/ Yield Stph. 1,000 Lbs.	Joint Strength - 1000 Lbs.**			
Plan End or Ext. Line	Round Thread		But- tress Thd.		Threaded & Cplg. Joint			Ext. Line Joint
	Short	Long			Round Thread		But- tress Thd.	
					Short	Long		
16,990	—	—	—	828	—	—	—	—
18,810	—	—	—	909	—	—	—	—
20,770	—	—	—	987	—	—	—	—
22,670	—	—	—	1,063	—	—	—	—
24,540	—	—	—	1,136	—	—	—	—
26,450	—	—	—	1,208	—	—	—	—
10,640	—	10,640	10,640	546	—	445	568	—
10,640	—	10,640	10,640	546	—	445	568	620
12,640	—	12,640	12,360	641	—	548	667	654
14,520	—	13,580	12,360	729	—	643	724	722
16,660	—	—	—	—	569†	393††	564†	892††
12,090	—	12,090	12,090	620	—	481	620	—
12,090	—	12,090	12,090	620	—	481	620	—
14,360	—	14,360	14,050	729	—	592	728	—
16,510	—	15,430	14,050	829	—	694	782	—
18,930	—	15,430	14,050	939	—	808	782	—
13,540	—	13,540	13,540	695	—	534	890	—
16,080	—	16,080	15,740	816	—	657	810	—
18,490	—	17,290	15,740	928	—	771	869	—
17,230	—	17,230	16,860	874	—	701	865	—
—	—	17,230	16,860	874	—	701	908	—
—	—	18,520	16,860	994	—	823	910	—
—	—	22,720	—	—	—	—	—	722†
11,870	—	9,880	8,990	612	—	—	—	—

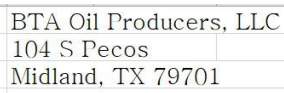
# DIMENSIONS AND

Size O.D. In.	Grade	Wt. Per Ft. With Cplg. Lb.	Inside Dia. In.	Thread & Cplg.		Extreme Line		Collapse Resistance PSI
				Drift Dia. In.	O.D. of Cplg. In.	Drift Dia. In.	O.D. of Box In.	
5	C-75*	20.30	4.184	—	—	4.059	5.094	11,240
	C-75*	23.20	4.044	—	—	3.919	5.094†	12,970
	HCL-80+	15.00	4.408	4.283	—	—	—	9,390
	HCL-80+	18.00	4.276	4.151	—	—	—	11,880
	HCL-80+	23.20	4.044	3.919	—	—	—	15,820
	HCN-80+	15.00	4.408	4.283	—	—	—	9,380
	HCN-80+	18.00	4.276	4.151	—	—	—	11,680
	HCN-80+	23.20	4.044	3.919	—	—	—	15,820
	L-80	15.00	4.408	4.283	—	—	—	7,250
	L-80	24.10	4.000	3.875	—	—	—	14,400
	L-80	18.00	4.276	4.151	—	—	—	10,500
	L-80	21.40	4.126	4.001	—	—	—	12,760
	L-80	23.20	4.044	3.919	—	—	—	13,830
	N-80	15.00	4.408	4.283	5.563	4.151	5.360	7,250
	N-80	18.00	4.276	4.151	5.563	4.151	5.360	10,490
	N-80	20.30	4.184	—	—	4.059	5.250	11,990
	N-80	23.20	4.044	—	—	3.919	5.094†	13,830
	N-80	21.40	4.126	4.001	—	—	—	12,760
	N-80	24.10	4.000	3.875	—	—	—	14,400
	C-90	15.00	4.408	4.233	—	—	—	7,840
	C-90	18.00	4.276	4.151	—	—	—	11,530
	C-90	21.40	4.126	4.001	—	—	—	14,360
	C-90	23.20	4.044	3.919	—	—	—	15,560
	C-90	24.10	4.000	3.875	—	—	—	16,200
	C-95	15.00	4.408	4.283	5.563	4.151	5.360	8,090
	C-95	18.00	4.276	4.151	5.563	4.151	5.360	12,010
	C-95	20.30	4.184	—	—	4.059	5.250	14,250
	C-95	23.20	4.044	—	—	3.919	5.094†	16,430
	C-95	21.40	4.126	4.001	—	—	—	15,160
	C-95	24.10	4.000	3.875	—	—	—	17,100
	S-95+	15.00	4.408	4.283	—	—	—	9,380
	S-95+	18.00	4.276	4.151	—	—	—	12,030
	S-95+	23.20	4.044	3.919	—	—	—	16,430
	T-95	15.00	4.408	4.283	—	—	—	8,110
	T-95	18.00	4.276	4.151	—	—	—	12,030
	T-95	21.40	4.126	4.001	—	—	—	15,160
	T-95	23.20	4.044	3.919	—	—	—	16,430
	T-95	24.10	4.000	3.875	—	—	—	17,100
	P-110	15.00	4.408	4.283	5.563	4.151	5.360	8,830
	P-110	18.00	4.276	4.151	5.563	4.151	5.360	13,450
	P-110	20.30	4.184	—	—	4.059	5.094†	16,490

NO. 203

# STRENGTHS OF CASING

Plain End or Ext. Line	Internal Yield Pressure PSI**			Body Yield Stgth. 1,000 Lbs.	Joint Strength - 1000 Lbs.**			
	Round Thread		Buttress Thd.		Threaded & Cplg. Joint			Ext. Line Joint
					Round Thread		Buttress Thd.	
					Short	Long		
10,710	—	—	—	—	369†	—	—	529††
12,550	—	—	—	—	369†	—	—	529††
8,290	—	8,290	8,290	—	—	311	408	—
10,140	—	10,140	9,910	422	—	396	492	—
13,380	—	10,810	9,910	543	—	540	516	—
8,290	—	8,290	8,290	350	—	311	408	—
10,140	—	10,140	9,910	422	—	396	492	—
13,380	—	10,810	9,910	543	—	540	517	—
8,290	—	8,290	8,290	350	—	295	379	—
14,000	—	10,810	9,910	566	—	538	510	—
10,140	—	10,140	9,910	422	—	377	457	—
12,240	—	10,810	9,910	501	—	466	510	—
13,380	—	10,810	9,910	543	—	513	510	—
8,290	—	8,290	8,290	350	—	311	396	437
10,140	—	10,140	9,910	422	—	396	477	469
11,420	—	—	—	—	388†	284††	363†	556††
13,380	—	—	—	—	388†	284††	363†	556††
12,240	—	10,810	9,910	501	—	490	537	—
14,000	—	10,810	9,910	566	—	558	537	—
9,320	—	9,320	9,320	394	—	311	404	—
11,400	—	11,400	11,150	475	—	396	484	—
13,770	—	12,170	11,150	564	—	490	537	—
15,060	—	12,170	11,150	611	—	540	537	—
15,750	—	12,170	11,150	636	—	567	537	—
9,840	—	9,840	9,840	416	—	326	424	459
12,040	—	12,040	11,770	501	—	416	512	493
13,560	—	—	—	—	—	—	—	584††
15,890	—	—	—	—	—	—	—	584††
14,530	—	12,840	11,770	595	—	515	563	—
16,630	—	12,840	11,770	672	—	595	563	—
9,840	—	9,840	9,840	416	—	342	441	—
12,040	—	12,040	11,770	501	—	436	532	—
15,890	—	12,840	11,770	645	—	594	590	—
9,840	—	9,840	9,840	416	—	326	424	—
12,040	—	12,040	11,770	501	—	416	512	—
14,530	—	12,840	11,770	595	—	515	563	—
15,890	—	12,840	11,770	645	—	567	563	—
16,630	—	12,840	11,770	672	—	595	563	—
11,400	—	11,400	11,400	481	—	388	503	547
13,940	—	13,940	13,620	580	—	495	606	587
15,710	—	—	—	—	—	—	—	—

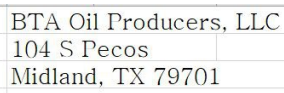


WELL:	Vaca Draw 9418 10 Fed #25H (WUOB)
TVD:	12661
MD:	17644

Casing Program	
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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	1150	0	1150	No	40.5	J-55	STC	3.2	6.3	13.5	9.0	Dry	8.3
9 7/8	7 5/8	0	12056	0	12039	No	29.7	P110	Buttress	1.7	1.6	2.6	2.7	Dry	9.4
6 3/4	5 1/2	0	11856	0	11839	Yes	20	P110	Buttress	1.3	1.4	2.7	2.8	Dry	14
6 3/4	5	11856	17644	11839	12661	Yes	18	P110	Buttress	1.5	1.5	2.5	2.8	Dry	14

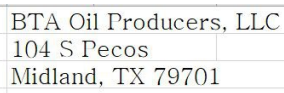
\*7 5/8" has DV Tool @ 5065'



WELL:	Vaca Draw 9418 10 Fed #25H (WUOB)			
TVD:	12661			
MD:	17644			

Casing Program	
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[illegible]



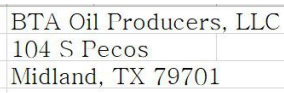
WELL:	Vaca Draw 9418 10 Fed #25H (WUOB)
TVD:	12661
MD:	17644

Casing Program	
----------------	--

Hole Size	Csg.Size	From (MD)	To (MD)	From (TVD)	To (TVD)	Tapered String	Weight (lbs)	Grade	Conn.	Collapse	Burst	Body Tension	Joint Tension	Dry/ Buoyant	Mud Weight (ppg)
14 3/4	10 3/4	0	1150	0	1150	No	40.5	J-55	STC	3.2	6.3	13.5	9.0	Dry	8.3
9 7/8	7 5/8	0	12056	0	12038	No	29.7	P110	Buttress	1.7	1.6	2.6	2.7	Dry	9.4
6 3/4	5 1/2	0	11856	0	11839	Yes	20	P110	Buttress	1.3	1.4	2.7	2.8	Dry	14
6 3/4	5	11856	17644	11839	12661	Yes	18	P110	Buttress	1.5	1.5	2.5	2.8	Dry	14

\*7 5/8" has DV Tool @ 5065'





WELL:	Vaca Draw 9418 10 Fed #25H (WUOB)			
TVD:	12661			
MD:	17644			

Casing Program	
----------------	--

Hole Size	Csg.Size	From (MD)	To (MD)	From (TVD)	To (TVD)	Tapered String	Weight (lbs)	Grade	Conn.	Collapse	Burst	Body Tension	Joint Tension	Dry/ Buoyant	Mud Weight (ppg)
14 3/4	10 3/4	0	1150	0	1150	No	40.5	J-55	STC	3.2	6.3	13.5	9.0	Dry	8.3
9 7/8	7 5/8	0	12056	0	12039	No	29.7	P110	Buttress	1.7	1.6	2.6	2.7	Dry	9.4
6 3/4	5 1/2	0	11856	0	11839	Yes	20	P110	Buttress	1.3	1.4	2.7	2.8	Dry	14
6 3/4	5	11856	17644	11839	12661	Yes	18	P110	Buttress	1.5	1.5	2.5	2.8	Dry	14

\*7 5/8" has DV Tool @ 5065'

## **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 H<sub>2</sub>S 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 H<sub>2</sub>S zone (within 3 days or 500 feet) and weekly H<sub>2</sub>S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H<sub>2</sub>S 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 H<sub>2</sub>S. If H<sub>2</sub>S greater than 100 ppm is encountered in the gas stream we will shut in and install H<sub>2</sub>S 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. H<sub>2</sub>S 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.

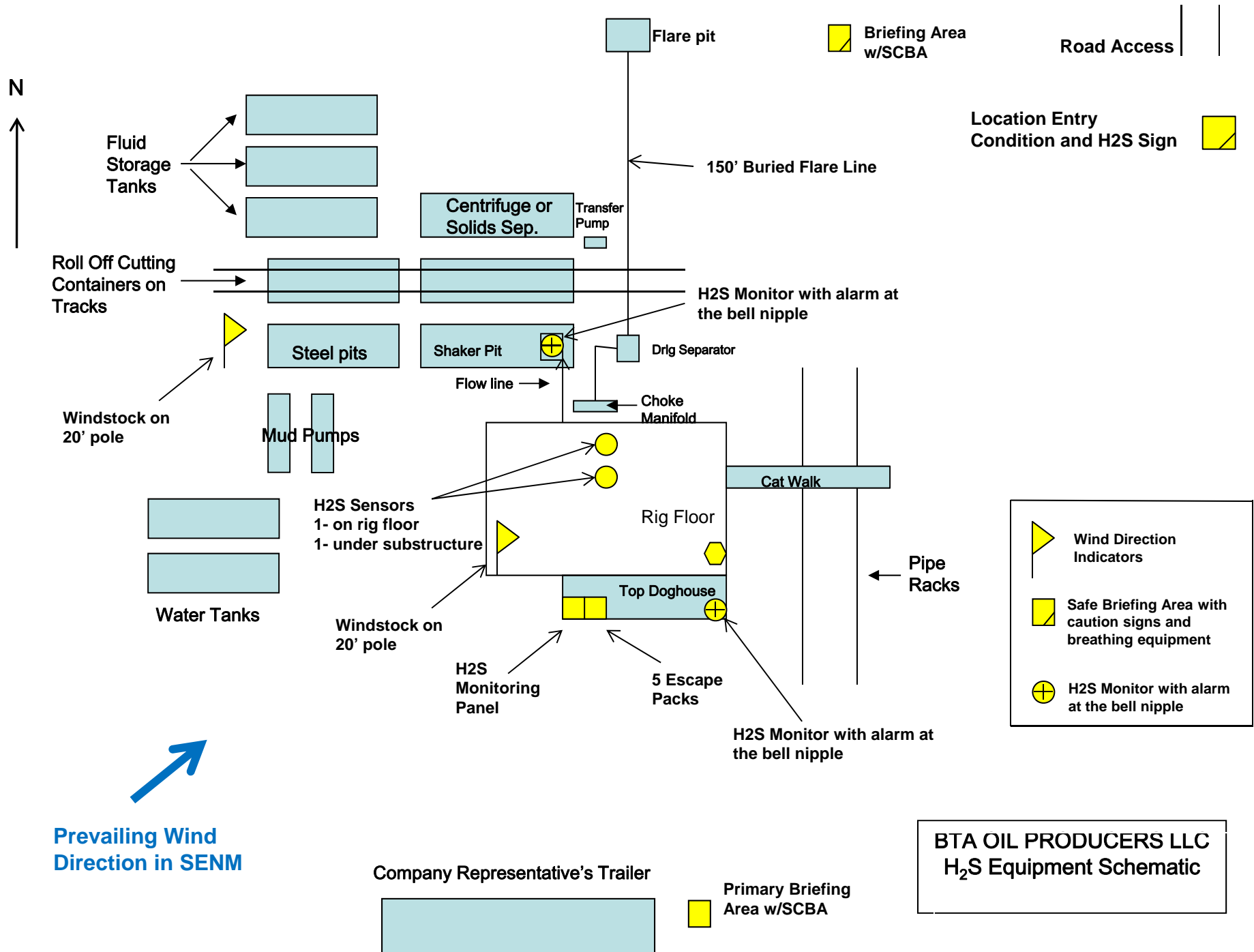
# **W A R N I N G**

**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**



## **EMERGENCY CALL LIST**

	<b><u>OFFICE</u></b>	<b><u>MOBILE</u></b>
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**

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

# **BTA Oil Producers, LLC**

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

**Vaca Draw Sec 10, T25S, R33E**

**Vaca Drawl #25H**

**Wellbore #1**

**Plan: Design #1**

## **Standard Planning Report - Geographic**

**10 April, 2019**

**Microsoft**  
Planning Report - Geographic

<b>Database:</b>	Old	<b>Local Co-ordinate Reference:</b>	Well Vaca Drawl #25H
<b>Company:</b>	BTA Oil Producers, LLC	<b>TVD Reference:</b>	GL @ 3377.0usft
<b>Project:</b>	Lea County, NM (NAD 83)	<b>MD Reference:</b>	GL @ 3377.0usft
<b>Site:</b>	Vaca Draw Sec 10, T25S, R33E	<b>North Reference:</b>	Grid
<b>Well:</b>	Vaca Drawl #25H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

<b>Project</b>	Lea County, NM (NAD 83), Lea County, NM		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Ground Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	New Mexico Eastern Zone		Using geodetic scale factor

<b>Site</b>	Vaca Draw Sec 10, T25S, R33E		
<b>Site Position:</b>		<b>Northing:</b>	419,812.34 usft
<b>From:</b>	Map	<b>Easting:</b>	779,596.21 usft
<b>Position Uncertainty:</b>	0.0 usft	<b>Slot Radius:</b>	13-3/16 "
		<b>Latitude:</b>	32° 9' 6.483 N
		<b>Longitude:</b>	103° 33' 48.478 W
		<b>Grid Convergence:</b>	0.41 °

<b>Well</b>	Vaca Drawl #25H		
<b>Well Position</b>	<b>+N/-S</b>	0.0 usft	<b>Northing:</b>
	<b>+E/-W</b>	0.0 usft	<b>Easting:</b>
<b>Position Uncertainty</b>	0.0 usft	<b>Wellhead Elevation:</b>	0.0 usft
		<b>Latitude:</b>	32° 8' 20.268 N
		<b>Longitude:</b>	103° 33' 21.822 W
		<b>Ground Level:</b>	3,377.0 usft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF200510	12/31/2009	7.74	60.16	48,743.72829549

<b>Design</b>	Design #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	356.17

<b>Plan Survey Tool Program</b>	<b>Date</b>	4/10/2019		
<b>Depth From (usft)</b>	<b>Depth To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>
1	0.0	17,643.8 Design #1 (Wellbore #1)		

<b>Plan Sections</b>										
<b>Measured Depth (usft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Dogleg Rate (°/100usft)</b>	<b>Build Rate (°/100usft)</b>	<b>Turn Rate (°/100usft)</b>	<b>TFO (°)</b>	<b>Target</b>
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
4,556.9	0.00	0.00	4,556.9	0.0	0.0	0.00	0.00	0.00	0.00	
4,756.9	4.00	218.22	4,756.7	-5.5	-4.3	2.00	2.00	0.00	218.22	
11,855.6	4.00	218.22	11,838.2	-394.5	-310.7	0.00	0.00	0.00	0.00	
12,055.6	0.00	0.00	12,038.0	-400.0	-315.0	2.00	-2.00	0.00	180.00	
12,105.7	0.00	0.00	12,088.0	-400.0	-315.0	0.00	0.00	0.00	0.00	
13,005.7	90.00	359.92	12,661.0	173.0	-315.8	10.00	10.00	0.00	359.92	
17,643.8	90.00	359.92	12,661.0	4,811.1	-322.4	0.00	0.00	0.00	0.00	Vaca Draw #25H BHL

**Microsoft**  
Planning Report - Geographic

<b>Database:</b>	Old	<b>Local Co-ordinate Reference:</b>	Well Vaca Drawl #25H
<b>Company:</b>	BTA Oil Producers, LLC	<b>TVD Reference:</b>	GL @ 3377.0usft
<b>Project:</b>	Lea County, NM (NAD 83)	<b>MD Reference:</b>	GL @ 3377.0usft
<b>Site:</b>	Vaca Draw Sec 10, T25S, R33E	<b>North Reference:</b>	Grid
<b>Well:</b>	Vaca Drawl #25H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.0	0.00	0.00	0.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
100.0	0.00	0.00	100.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
200.0	0.00	0.00	200.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
300.0	0.00	0.00	300.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
400.0	0.00	0.00	400.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
500.0	0.00	0.00	500.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
600.0	0.00	0.00	600.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
700.0	0.00	0.00	700.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
800.0	0.00	0.00	800.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
900.0	0.00	0.00	900.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
1,000.0	0.00	0.00	1,000.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
1,100.0	0.00	0.00	1,100.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
1,200.0	0.00	0.00	1,200.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
1,300.0	0.00	0.00	1,300.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
1,400.0	0.00	0.00	1,400.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
1,500.0	0.00	0.00	1,500.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
1,600.0	0.00	0.00	1,600.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
1,700.0	0.00	0.00	1,700.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
1,800.0	0.00	0.00	1,800.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
1,900.0	0.00	0.00	1,900.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
2,000.0	0.00	0.00	2,000.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
2,100.0	0.00	0.00	2,100.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
2,200.0	0.00	0.00	2,200.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
2,300.0	0.00	0.00	2,300.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
2,400.0	0.00	0.00	2,400.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
2,500.0	0.00	0.00	2,500.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
2,600.0	0.00	0.00	2,600.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
2,700.0	0.00	0.00	2,700.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
2,800.0	0.00	0.00	2,800.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
2,900.0	0.00	0.00	2,900.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
3,000.0	0.00	0.00	3,000.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
3,100.0	0.00	0.00	3,100.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
3,200.0	0.00	0.00	3,200.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
3,300.0	0.00	0.00	3,300.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
3,400.0	0.00	0.00	3,400.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
3,500.0	0.00	0.00	3,500.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
3,600.0	0.00	0.00	3,600.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
3,700.0	0.00	0.00	3,700.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
3,800.0	0.00	0.00	3,800.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
3,900.0	0.00	0.00	3,900.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
4,000.0	0.00	0.00	4,000.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
4,100.0	0.00	0.00	4,100.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
4,200.0	0.00	0.00	4,200.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
4,300.0	0.00	0.00	4,300.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
4,400.0	0.00	0.00	4,400.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
4,500.0	0.00	0.00	4,500.0	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
4,556.9	0.00	0.00	4,556.9	0.0	0.0	415,158.70	781,921.60	32° 8' 20.268 N	103° 33' 21.822 W
4,600.0	0.86	218.22	4,600.0	-0.3	-0.2	415,158.44	781,921.40	32° 8' 20.266 N	103° 33' 21.824 W
4,700.0	2.86	218.22	4,699.9	-2.8	-2.2	415,155.89	781,919.39	32° 8' 20.241 N	103° 33' 21.847 W
4,756.9	4.00	218.22	4,756.7	-5.5	-4.3	415,153.22	781,917.28	32° 8' 20.214 N	103° 33' 21.872 W
4,800.0	4.00	218.22	4,799.7	-7.8	-6.2	415,150.85	781,915.42	32° 8' 20.191 N	103° 33' 21.894 W
4,900.0	4.00	218.22	4,899.5	-13.3	-10.5	415,145.37	781,911.10	32° 8' 20.137 N	103° 33' 21.945 W
5,000.0	4.00	218.22	4,999.2	-18.8	-14.8	415,139.89	781,906.79	32° 8' 20.083 N	103° 33' 21.995 W
5,100.0	4.00	218.22	5,099.0	-24.3	-19.1	415,134.41	781,902.47	32° 8' 20.029 N	103° 33' 22.046 W
5,200.0	4.00	218.22	5,198.8	-29.8	-23.4	415,128.93	781,898.16	32° 8' 19.976 N	103° 33' 22.097 W



**Microsoft**  
Planning Report - Geographic

<b>Database:</b>	Old	<b>Local Co-ordinate Reference:</b>	Well Vaca Drawl #25H
<b>Company:</b>	BTA Oil Producers, LLC	<b>TVD Reference:</b>	GL @ 3377.0usft
<b>Project:</b>	Lea County, NM (NAD 83)	<b>MD Reference:</b>	GL @ 3377.0usft
<b>Site:</b>	Vaca Draw Sec 10, T25S, R33E	<b>North Reference:</b>	Grid
<b>Well:</b>	Vaca Drawl #25H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
5,300.0	4.00	218.22	5,298.5	-35.2	-27.8	415,123.45	781,893.84	32° 8' 19.922 N	103° 33' 22.147 W	
5,400.0	4.00	218.22	5,398.3	-40.7	-32.1	415,117.97	781,889.52	32° 8' 19.868 N	103° 33' 22.198 W	
5,500.0	4.00	218.22	5,498.0	-46.2	-36.4	415,112.49	781,885.21	32° 8' 19.814 N	103° 33' 22.249 W	
5,600.0	4.00	218.22	5,597.8	-51.7	-40.7	415,107.01	781,880.89	32° 8' 19.760 N	103° 33' 22.299 W	
5,700.0	4.00	218.22	5,697.5	-57.2	-45.0	415,101.53	781,876.58	32° 8' 19.706 N	103° 33' 22.350 W	
5,800.0	4.00	218.22	5,797.3	-62.7	-49.3	415,096.05	781,872.26	32° 8' 19.652 N	103° 33' 22.401 W	
5,900.0	4.00	218.22	5,897.1	-68.1	-53.7	415,090.57	781,867.95	32° 8' 19.598 N	103° 33' 22.451 W	
6,000.0	4.00	218.22	5,996.8	-73.6	-58.0	415,085.09	781,863.63	32° 8' 19.544 N	103° 33' 22.502 W	
6,100.0	4.00	218.22	6,096.6	-79.1	-62.3	415,079.61	781,859.31	32° 8' 19.490 N	103° 33' 22.553 W	
6,200.0	4.00	218.22	6,196.3	-84.6	-66.6	415,074.13	781,855.00	32° 8' 19.436 N	103° 33' 22.603 W	
6,300.0	4.00	218.22	6,296.1	-90.1	-70.9	415,068.65	781,850.68	32° 8' 19.382 N	103° 33' 22.654 W	
6,400.0	4.00	218.22	6,395.8	-95.5	-75.2	415,063.17	781,846.37	32° 8' 19.328 N	103° 33' 22.704 W	
6,500.0	4.00	218.22	6,495.6	-101.0	-79.5	415,057.69	781,842.05	32° 8' 19.275 N	103° 33' 22.755 W	
6,600.0	4.00	218.22	6,595.3	-106.5	-83.9	415,052.21	781,837.74	32° 8' 19.221 N	103° 33' 22.806 W	
6,700.0	4.00	218.22	6,695.1	-112.0	-88.2	415,046.73	781,833.42	32° 8' 19.167 N	103° 33' 22.856 W	
6,800.0	4.00	218.22	6,794.9	-117.5	-92.5	415,041.25	781,829.11	32° 8' 19.113 N	103° 33' 22.907 W	
6,900.0	4.00	218.22	6,894.6	-122.9	-96.8	415,035.77	781,824.79	32° 8' 19.059 N	103° 33' 22.958 W	
7,000.0	4.00	218.22	6,994.4	-128.4	-101.1	415,030.29	781,820.47	32° 8' 19.005 N	103° 33' 23.008 W	
7,100.0	4.00	218.22	7,094.1	-133.9	-105.4	415,024.81	781,816.16	32° 8' 18.951 N	103° 33' 23.059 W	
7,200.0	4.00	218.22	7,193.9	-139.4	-109.8	415,019.33	781,811.84	32° 8' 18.897 N	103° 33' 23.110 W	
7,300.0	4.00	218.22	7,293.6	-144.9	-114.1	415,013.85	781,807.53	32° 8' 18.843 N	103° 33' 23.160 W	
7,400.0	4.00	218.22	7,393.4	-150.3	-118.4	415,008.37	781,803.21	32° 8' 18.789 N	103° 33' 23.211 W	
7,500.0	4.00	218.22	7,493.2	-155.8	-122.7	415,002.89	781,798.90	32° 8' 18.735 N	103° 33' 23.262 W	
7,600.0	4.00	218.22	7,592.9	-161.3	-127.0	414,997.41	781,794.58	32° 8' 18.681 N	103° 33' 23.312 W	
7,700.0	4.00	218.22	7,692.7	-166.8	-131.3	414,991.93	781,790.26	32° 8' 18.628 N	103° 33' 23.363 W	
7,800.0	4.00	218.22	7,792.4	-172.3	-135.7	414,986.45	781,785.95	32° 8' 18.574 N	103° 33' 23.414 W	
7,900.0	4.00	218.22	7,892.2	-177.7	-140.0	414,980.97	781,781.63	32° 8' 18.520 N	103° 33' 23.464 W	
8,000.0	4.00	218.22	7,991.9	-183.2	-144.3	414,975.49	781,777.32	32° 8' 18.466 N	103° 33' 23.515 W	
8,100.0	4.00	218.22	8,091.7	-188.7	-148.6	414,970.01	781,773.00	32° 8' 18.412 N	103° 33' 23.566 W	
8,200.0	4.00	218.22	8,191.5	-194.2	-152.9	414,964.53	781,768.69	32° 8' 18.358 N	103° 33' 23.616 W	
8,300.0	4.00	218.22	8,291.2	-199.7	-157.2	414,959.05	781,764.37	32° 8' 18.304 N	103° 33' 23.667 W	
8,400.0	4.00	218.22	8,391.0	-205.1	-161.5	414,953.57	781,760.05	32° 8' 18.250 N	103° 33' 23.717 W	
8,500.0	4.00	218.22	8,490.7	-210.6	-165.9	414,948.09	781,755.74	32° 8' 18.196 N	103° 33' 23.768 W	
8,600.0	4.00	218.22	8,590.5	-216.1	-170.2	414,942.61	781,751.42	32° 8' 18.142 N	103° 33' 23.819 W	
8,700.0	4.00	218.22	8,690.2	-221.6	-174.5	414,937.13	781,747.11	32° 8' 18.088 N	103° 33' 23.869 W	
8,800.0	4.00	218.22	8,790.0	-227.1	-178.8	414,931.65	781,742.79	32° 8' 18.034 N	103° 33' 23.920 W	
8,900.0	4.00	218.22	8,889.7	-232.5	-183.1	414,926.16	781,738.48	32° 8' 17.980 N	103° 33' 23.971 W	
9,000.0	4.00	218.22	8,989.5	-238.0	-187.4	414,920.68	781,734.16	32° 8' 17.927 N	103° 33' 24.021 W	
9,100.0	4.00	218.22	9,089.3	-243.5	-191.8	414,915.20	781,729.85	32° 8' 17.873 N	103° 33' 24.072 W	
9,200.0	4.00	218.22	9,189.0	-249.0	-196.1	414,909.72	781,725.53	32° 8' 17.819 N	103° 33' 24.123 W	
9,300.0	4.00	218.22	9,288.8	-254.5	-200.4	414,904.24	781,721.21	32° 8' 17.765 N	103° 33' 24.173 W	
9,400.0	4.00	218.22	9,388.5	-259.9	-204.7	414,898.76	781,716.90	32° 8' 17.711 N	103° 33' 24.224 W	
9,500.0	4.00	218.22	9,488.3	-265.4	-209.0	414,893.28	781,712.58	32° 8' 17.657 N	103° 33' 24.275 W	
9,600.0	4.00	218.22	9,588.0	-270.9	-213.3	414,887.80	781,708.27	32° 8' 17.603 N	103° 33' 24.325 W	
9,700.0	4.00	218.22	9,687.8	-276.4	-217.7	414,882.32	781,703.95	32° 8' 17.549 N	103° 33' 24.376 W	
9,800.0	4.00	218.22	9,787.6	-281.9	-222.0	414,876.84	781,699.64	32° 8' 17.495 N	103° 33' 24.427 W	
9,900.0	4.00	218.22	9,887.3	-287.3	-226.3	414,871.36	781,695.32	32° 8' 17.441 N	103° 33' 24.477 W	
10,000.0	4.00	218.22	9,987.1	-292.8	-230.6	414,865.88	781,691.00	32° 8' 17.387 N	103° 33' 24.528 W	
10,100.0	4.00	218.22	10,086.8	-298.3	-234.9	414,860.40	781,686.69	32° 8' 17.333 N	103° 33' 24.578 W	
10,200.0	4.00	218.22	10,186.6	-303.8	-239.2	414,854.92	781,682.37	32° 8' 17.280 N	103° 33' 24.629 W	
10,300.0	4.00	218.22	10,286.3	-309.3	-243.5	414,849.44	781,678.06	32° 8' 17.226 N	103° 33' 24.680 W	
10,400.0	4.00	218.22	10,386.1	-314.7	-247.9	414,843.96	781,673.74	32° 8' 17.172 N	103° 33' 24.730 W	
10,500.0	4.00	218.22	10,485.8	-320.2	-252.2	414,838.48	781,669.43	32° 8' 17.118 N	103° 33' 24.781 W	
10,600.0	4.00	218.22	10,585.6	-325.7	-256.5	414,833.00	781,665.11	32° 8' 17.064 N	103° 33' 24.832 W	
10,700.0	4.00	218.22	10,685.4	-331.2	-260.8	414,827.52	781,660.79	32° 8' 17.010 N	103° 33' 24.882 W	

**Microsoft**  
Planning Report - Geographic

<b>Database:</b>	Old	<b>Local Co-ordinate Reference:</b>	Well Vaca Drawl #25H
<b>Company:</b>	BTA Oil Producers, LLC	<b>TVD Reference:</b>	GL @ 3377.0usft
<b>Project:</b>	Lea County, NM (NAD 83)	<b>MD Reference:</b>	GL @ 3377.0usft
<b>Site:</b>	Vaca Draw Sec 10, T25S, R33E	<b>North Reference:</b>	Grid
<b>Well:</b>	Vaca Drawl #25H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
10,800.0	4.00	218.22	10,785.1	-336.7	-265.1	414,822.04	781,656.48	32° 8' 16.956 N	103° 33' 24.933 W	
10,900.0	4.00	218.22	10,884.9	-342.1	-269.4	414,816.56	781,652.16	32° 8' 16.902 N	103° 33' 24.984 W	
11,000.0	4.00	218.22	10,984.6	-347.6	-273.8	414,811.08	781,647.85	32° 8' 16.848 N	103° 33' 25.034 W	
11,100.0	4.00	218.22	11,084.4	-353.1	-278.1	414,805.60	781,643.53	32° 8' 16.794 N	103° 33' 25.085 W	
11,200.0	4.00	218.22	11,184.1	-358.6	-282.4	414,800.12	781,639.22	32° 8' 16.740 N	103° 33' 25.136 W	
11,300.0	4.00	218.22	11,283.9	-364.1	-286.7	414,794.64	781,634.90	32° 8' 16.686 N	103° 33' 25.186 W	
11,400.0	4.00	218.22	11,383.7	-369.5	-291.0	414,789.16	781,630.59	32° 8' 16.632 N	103° 33' 25.237 W	
11,500.0	4.00	218.22	11,483.4	-375.0	-295.3	414,783.68	781,626.27	32° 8' 16.579 N	103° 33' 25.288 W	
11,600.0	4.00	218.22	11,583.2	-380.5	-299.7	414,778.20	781,621.95	32° 8' 16.525 N	103° 33' 25.338 W	
11,700.0	4.00	218.22	11,682.9	-386.0	-304.0	414,772.72	781,617.64	32° 8' 16.471 N	103° 33' 25.389 W	
11,800.0	4.00	218.22	11,782.7	-391.5	-308.3	414,767.24	781,613.32	32° 8' 16.417 N	103° 33' 25.440 W	
11,855.6	4.00	218.22	11,838.2	-394.5	-310.7	414,764.19	781,610.92	32° 8' 16.387 N	103° 33' 25.468 W	
11,900.0	3.11	218.22	11,882.5	-396.7	-312.4	414,762.03	781,609.22	32° 8' 16.366 N	103° 33' 25.488 W	
12,000.0	1.11	218.22	11,982.4	-399.6	-314.7	414,759.13	781,606.94	32° 8' 16.337 N	103° 33' 25.514 W	
12,055.6	0.00	0.00	12,038.0	-400.0	-315.0	414,758.71	781,606.61	32° 8' 16.333 N	103° 33' 25.518 W	
12,100.0	0.00	0.00	12,082.4	-400.0	-315.0	414,758.71	781,606.61	32° 8' 16.333 N	103° 33' 25.518 W	
12,105.7	0.00	0.00	12,088.0	-400.0	-315.0	414,758.71	781,606.61	32° 8' 16.333 N	103° 33' 25.518 W	
12,200.0	9.43	359.92	12,182.0	-392.3	-315.0	414,766.46	781,606.59	32° 8' 16.410 N	103° 33' 25.518 W	
12,300.0	19.43	359.92	12,278.7	-367.4	-315.0	414,791.35	781,606.56	32° 8' 16.656 N	103° 33' 25.516 W	
12,400.0	29.43	359.92	12,369.6	-326.0	-315.1	414,832.66	781,606.50	32° 8' 17.065 N	103° 33' 25.513 W	
12,500.0	39.43	359.92	12,452.0	-269.6	-315.2	414,889.14	781,606.42	32° 8' 17.623 N	103° 33' 25.510 W	
12,600.0	49.43	359.92	12,523.3	-199.6	-315.3	414,959.05	781,606.32	32° 8' 18.315 N	103° 33' 25.505 W	
12,700.0	59.43	359.92	12,581.4	-118.4	-315.4	415,040.29	781,606.20	32° 8' 19.119 N	103° 33' 25.499 W	
12,800.0	69.43	359.92	12,624.5	-28.3	-315.5	415,130.39	781,606.08	32° 8' 20.011 N	103° 33' 25.493 W	
12,900.0	79.43	359.92	12,651.3	67.9	-315.7	415,226.59	781,605.94	32° 8' 20.963 N	103° 33' 25.487 W	
13,000.0	89.43	359.92	12,661.0	167.3	-315.8	415,325.99	781,605.80	32° 8' 21.946 N	103° 33' 25.480 W	
13,005.7	90.00	359.92	12,661.0	173.0	-315.8	415,331.65	781,605.79	32° 8' 22.002 N	103° 33' 25.480 W	
13,100.0	90.00	359.92	12,661.0	267.3	-315.9	415,425.99	781,605.66	32° 8' 22.936 N	103° 33' 25.473 W	
13,200.0	90.00	359.92	12,661.0	367.3	-316.1	415,525.99	781,605.51	32° 8' 23.925 N	103° 33' 25.467 W	
13,300.0	90.00	359.92	12,661.0	467.3	-316.2	415,625.99	781,605.37	32° 8' 24.915 N	103° 33' 25.460 W	
13,400.0	90.00	359.92	12,661.0	567.3	-316.4	415,725.98	781,605.23	32° 8' 25.904 N	103° 33' 25.453 W	
13,500.0	90.00	359.92	12,661.0	667.3	-316.5	415,825.98	781,605.09	32° 8' 26.894 N	103° 33' 25.447 W	
13,600.0	90.00	359.92	12,661.0	767.3	-316.7	415,925.98	781,604.95	32° 8' 27.883 N	103° 33' 25.440 W	
13,700.0	90.00	359.92	12,661.0	867.3	-316.8	416,025.98	781,604.80	32° 8' 28.873 N	103° 33' 25.433 W	
13,800.0	90.00	359.92	12,661.0	967.3	-316.9	416,125.97	781,604.66	32° 8' 29.862 N	103° 33' 25.426 W	
13,900.0	90.00	359.92	12,661.0	1,067.3	-317.1	416,225.97	781,604.52	32° 8' 30.852 N	103° 33' 25.420 W	
14,000.0	90.00	359.92	12,661.0	1,167.3	-317.2	416,325.97	781,604.38	32° 8' 31.841 N	103° 33' 25.413 W	
14,100.0	90.00	359.92	12,661.0	1,267.3	-317.4	416,425.96	781,604.24	32° 8' 32.831 N	103° 33' 25.406 W	
14,200.0	90.00	359.92	12,661.0	1,367.3	-317.5	416,525.96	781,604.09	32° 8' 33.821 N	103° 33' 25.399 W	
14,300.0	90.00	359.92	12,661.0	1,467.3	-317.7	416,625.96	781,603.95	32° 8' 34.810 N	103° 33' 25.393 W	
14,400.0	90.00	359.92	12,661.0	1,567.3	-317.8	416,725.96	781,603.81	32° 8' 35.800 N	103° 33' 25.386 W	
14,500.0	90.00	359.92	12,661.0	1,667.3	-317.9	416,825.95	781,603.67	32° 8' 36.789 N	103° 33' 25.379 W	
14,600.0	90.00	359.92	12,661.0	1,767.3	-318.1	416,925.95	781,603.52	32° 8' 37.779 N	103° 33' 25.373 W	
14,700.0	90.00	359.92	12,661.0	1,867.3	-318.2	417,025.95	781,603.38	32° 8' 38.768 N	103° 33' 25.366 W	
14,800.0	90.00	359.92	12,661.0	1,967.3	-318.4	417,125.95	781,603.24	32° 8' 39.758 N	103° 33' 25.359 W	
14,900.0	90.00	359.92	12,661.0	2,067.3	-318.5	417,225.94	781,603.10	32° 8' 40.747 N	103° 33' 25.352 W	
15,000.0	90.00	359.92	12,661.0	2,167.3	-318.6	417,325.94	781,602.96	32° 8' 41.737 N	103° 33' 25.346 W	
15,100.0	90.00	359.92	12,661.0	2,267.3	-318.8	417,425.94	781,602.81	32° 8' 42.726 N	103° 33' 25.339 W	
15,200.0	90.00	359.92	12,661.0	2,367.3	-318.9	417,525.94	781,602.67	32° 8' 43.716 N	103° 33' 25.332 W	
15,300.0	90.00	359.92	12,661.0	2,467.3	-319.1	417,625.93	781,602.53	32° 8' 44.705 N	103° 33' 25.325 W	
15,400.0	90.00	359.92	12,661.0	2,567.3	-319.2	417,725.93	781,602.39	32° 8' 45.695 N	103° 33' 25.319 W	
15,500.0	90.00	359.92	12,661.0	2,667.3	-319.4	417,825.93	781,602.24	32° 8' 46.684 N	103° 33' 25.312 W	
15,600.0	90.00	359.92	12,661.0	2,767.3	-319.5	417,925.93	781,602.10	32° 8' 47.674 N	103° 33' 25.305 W	
15,700.0	90.00	359.92	12,661.0	2,867.3	-319.6	418,025.92	781,601.96	32° 8' 48.663 N	103° 33' 25.298 W	
15,800.0	90.00	359.92	12,661.0	2,967.3	-319.8	418,125.92	781,601.82	32° 8' 49.653 N	103° 33' 25.292 W	

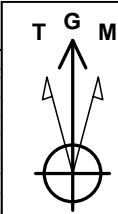
**Microsoft**  
Planning Report - Geographic

<b>Database:</b>	Old	<b>Local Co-ordinate Reference:</b>	Well Vaca Drawl #25H
<b>Company:</b>	BTA Oil Producers, LLC	<b>TVD Reference:</b>	GL @ 3377.0usft
<b>Project:</b>	Lea County, NM (NAD 83)	<b>MD Reference:</b>	GL @ 3377.0usft
<b>Site:</b>	Vaca Draw Sec 10, T25S, R33E	<b>North Reference:</b>	Grid
<b>Well:</b>	Vaca Drawl #25H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
15,900.0	90.00	359.92	12,661.0	3,067.3	-319.9	418,225.92	781,601.68	32° 8' 50.642 N	103° 33' 25.285 W	
16,000.0	90.00	359.92	12,661.0	3,167.3	-320.1	418,325.92	781,601.53	32° 8' 51.632 N	103° 33' 25.278 W	
16,100.0	90.00	359.92	12,661.0	3,267.3	-320.2	418,425.91	781,601.39	32° 8' 52.621 N	103° 33' 25.272 W	
16,200.0	90.00	359.92	12,661.0	3,367.3	-320.4	418,525.91	781,601.25	32° 8' 53.611 N	103° 33' 25.265 W	
16,300.0	90.00	359.92	12,661.0	3,467.3	-320.5	418,625.91	781,601.11	32° 8' 54.600 N	103° 33' 25.258 W	
16,400.0	90.00	359.92	12,661.0	3,567.3	-320.6	418,725.91	781,600.97	32° 8' 55.590 N	103° 33' 25.251 W	
16,500.0	90.00	359.92	12,661.0	3,667.3	-320.8	418,825.90	781,600.82	32° 8' 56.579 N	103° 33' 25.245 W	
16,600.0	90.00	359.92	12,661.0	3,767.3	-320.9	418,925.90	781,600.68	32° 8' 57.569 N	103° 33' 25.238 W	
16,700.0	90.00	359.92	12,661.0	3,867.3	-321.1	419,025.90	781,600.54	32° 8' 58.558 N	103° 33' 25.231 W	
16,800.0	90.00	359.92	12,661.0	3,967.3	-321.2	419,125.90	781,600.40	32° 8' 59.548 N	103° 33' 25.224 W	
16,900.0	90.00	359.92	12,661.0	4,067.3	-321.4	419,225.89	781,600.25	32° 9' 0.537 N	103° 33' 25.218 W	
17,000.0	90.00	359.92	12,661.0	4,167.3	-321.5	419,325.89	781,600.11	32° 9' 1.527 N	103° 33' 25.211 W	
17,100.0	90.00	359.92	12,661.0	4,267.3	-321.6	419,425.89	781,599.97	32° 9' 2.516 N	103° 33' 25.204 W	
17,200.0	90.00	359.92	12,661.0	4,367.3	-321.8	419,525.89	781,599.83	32° 9' 3.506 N	103° 33' 25.197 W	
17,300.0	90.00	359.92	12,661.0	4,467.3	-321.9	419,625.88	781,599.69	32° 9' 4.495 N	103° 33' 25.191 W	
17,400.0	90.00	359.92	12,661.0	4,567.3	-322.1	419,725.88	781,599.54	32° 9' 5.485 N	103° 33' 25.184 W	
17,500.0	90.00	359.92	12,661.0	4,667.3	-322.2	419,825.88	781,599.40	32° 9' 6.474 N	103° 33' 25.177 W	
17,600.0	90.00	359.92	12,661.0	4,767.3	-322.3	419,925.88	781,599.26	32° 9' 7.464 N	103° 33' 25.171 W	
17,643.8	90.00	359.92	12,661.0	4,811.1	-322.4	419,969.70	781,599.20	32° 9' 7.898 N	103° 33' 25.168 W	

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
- hit/miss target										
- Shape										
Vaca Draw #25H BHL	0.00	0.00	12,661.0	4,811.1	-322.4	419,969.70	781,599.20	32° 9' 7.898 N	103° 33' 25.168 W	
- plan hits target center										
- Point										

# BTA Oil Producers, LLC



Azimuths to Grid North  
True North: -0.41°  
Magnetic North: 7.32°  
  
Magnetic Field  
Strength: 48743.7nT  
Dip Angle: 60.16°  
Date: 12/31/2009  
Model: IGRF200510

WELL DETAILS: Vaca Drawl #25H					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	415158.70	781921.60	32° 8' 20.268 N	103° 33' 21.822 W

SITE DETAILS: Vaca Draw Sec 10, T25S, R33E

Site Centre Northing: 419812.34  
Easting: 779596.22

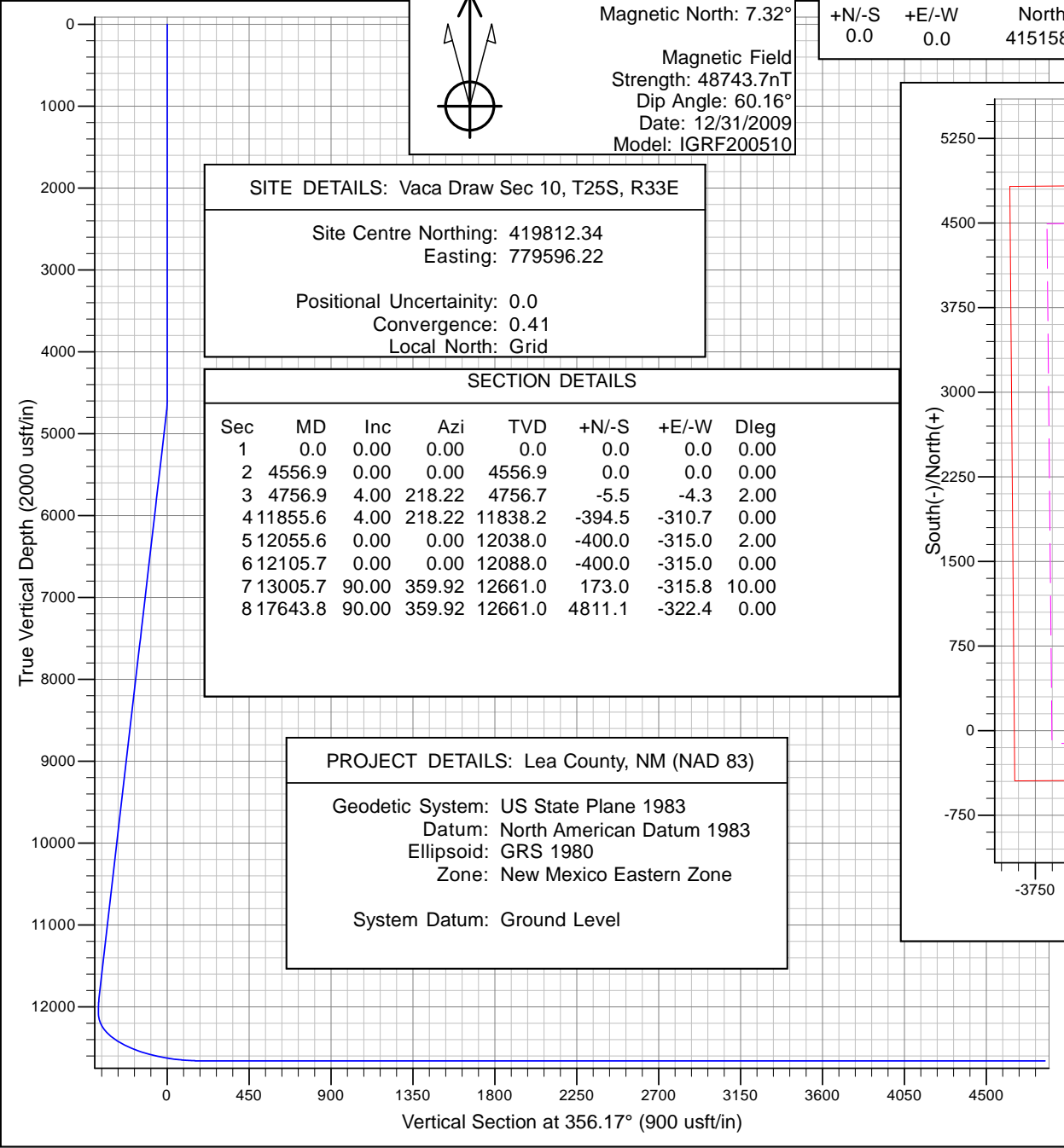
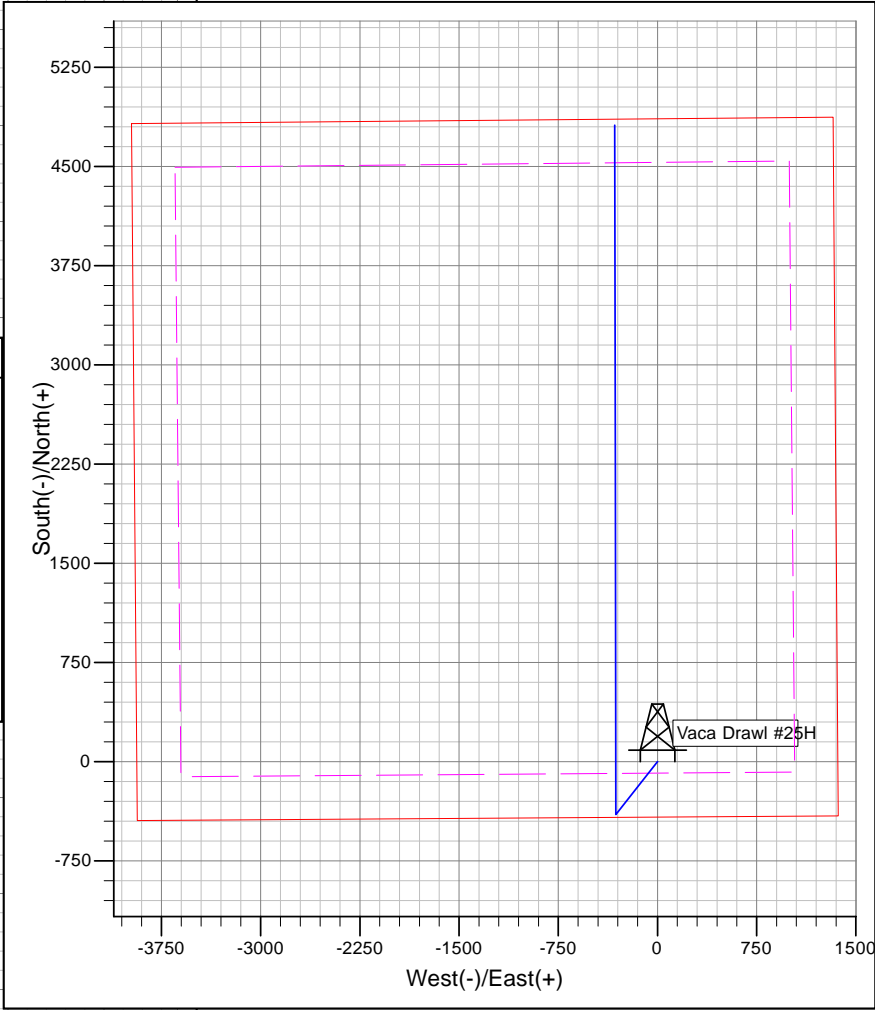
Positional Uncertainty: 0.0  
Convergence: 0.41  
Local North: Grid

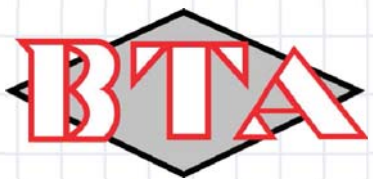
SECTION DETAILS							
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00
2	4556.9	0.00	0.00	4556.9	0.0	0.0	0.00
3	4756.9	4.00	218.22	4756.7	-5.5	-4.3	2.00
4	11855.6	4.00	218.22	11838.2	-394.5	-310.7	0.00
5	12055.6	0.00	0.00	12038.0	-400.0	-315.0	2.00
6	12105.7	0.00	0.00	12088.0	-400.0	-315.0	0.00
7	13005.7	90.00	359.92	12661.0	173.0	-315.8	10.00
8	17643.8	90.00	359.92	12661.0	4811.1	-322.4	0.00

PROJECT DETAILS: Lea County, NM (NAD 83)

Geodetic System: US State Plane 1983  
Datum: North American Datum 1983  
Ellipsoid: GRS 1980  
Zone: New Mexico Eastern Zone

System Datum: Ground Level





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

TubingHead

SW-TCM

13-5/8"10M x 7-1/16"15M w/  
5-1/2" PP Seal  
w/ (2) 1-13/16"15M SSO

SW-MB Spool Assembly Upper  
MBH

13-5/8"10Mx 13-5/8"5M w/(2)  
1-13/16" 10MSSO

CasingHead Assembly Lower  
MBH

13-5/8"5Mx 10-3/4"SOW w/(2)  
2-1/16"5MSSO

Casing Hanger C-22,  
13-5/8"x 5-1/2"

Packoff Assembly SW  
MB, 13-5/8" x 7-5/8"

Casing Hanger  
SW MDRL, 13-5/8" x 7-5/8"





APD ID: 10400040918

Submission Date: 04/17/2019

Highlighted data  
reflects the most  
recent changes

Operator Name: BTA OIL PRODUCERS LLC

Well Name: VACA DRAW 9418 10 FEDERAL

Well Number: 25H

[Show Final Text](#)

Well Type: OIL WELL

Well Work Type: Drill

## Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

18110534\_Vaca\_Draw\_9418\_10\_Federal\_\_25H\_Vicinity\_Map\_20190417121810.pdf

Existing Road Purpose: ACCESS,FLUID TRANSPORT

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? YES

New Road Map:

18110534\_Vaca\_Draw\_9418\_10\_Federal\_\_25H\_Topographical\_\_Access\_Rd\_20190417121823.pdf

New road type: RESOURCE

Length: 1063.9 Feet

Width (ft.): 25

Max slope (%): 2

Max grade (%): 2

Army Corp of Engineers (ACOE) permit required? NO

ACOE Permit Number(s):

New road travel width: 15

New road access erosion control: Road construction requirements and regular maintenance would alleviate potential impacts to the access road from water erosion damage.

New road access plan or profile prepared? NO

New road access plan attachment:

Access road engineering design? NO

Access road engineering design attachment:

**Operator Name:** BTA OIL PRODUCERS LLC

**Well Name:** VACA DRAW 9418 10 FEDERAL

**Well Number:** 25H

**Turnout?** N

**Access surfacing type:** OTHER

**Access topsoil source:** BOTH

**Access surfacing type description:** Native Caliche

**Access onsite topsoil source depth:** 6

**Offsite topsoil source description:** Material will be obtained from the closest existing caliche pit as designated by the BLM.

**Onsite topsoil removal process:** The top 6 inches of topsoil is pushed off and stockpiled along the side of the location. An approximate 160' X 160' area is used within the proposed well site to remove caliche. Subsoil is removed and stockpiled within the pad site to build the location and road. Then subsoil is pushed back in the hole and caliche is spread accordingly across proposed access road.

**Access other construction information:**

**Access miscellaneous information:**

**Number of access turnouts:**

**Access turnout map:**

### Drainage Control

**New road drainage crossing:** OTHER

**Drainage Control comments:** Proposed access road will be crowned and ditched and constructed of 6 inch rolled and compacted caliche. Water will be diverted where necessary to avoid ponding, maintain good drainage, and to be consistent with local drainage patterns.

**Road Drainage Control Structures (DCS) description:** Any ditches will be at 3:1 slope and 3 feet wide.

**Road Drainage Control Structures (DCS) attachment:**

### Access Additional Attachments

### Section 3 - Location of Existing Wells

**Existing Wells Map?** YES

**Attach Well map:**

18110534\_Vaca\_Draw\_9418\_10\_Fed\_\_25H\_1\_MILE\_RADIUS\_20190417121847.pdf

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

**Submit or defer a Proposed Production Facilities plan?** SUBMIT

**Production Facilities description:** If well is productive, we will use the existing well pad for the tank battery and all necessary production facilities.

**Production Facilities map:**

Production\_Facility\_Layout\_20191015144141.pdf

**Operator Name:** BTA OIL PRODUCERS LLC

**Well Name:** VACA DRAW 9418 10 FEDERAL

**Well Number:** 25H

## Section 5 - Location and Types of Water Supply

### Water Source Table

**Water source type:** OTHER

**Describe type:** null

**Water source use type:** SURFACE CASING  
STIMULATION  
DUST CONTROL  
INTERMEDIATE/PRODUCTION  
CASING

**Source latitude:**

**Source longitude:**

**Source datum:** NAD83

**Water source permit type:** OTHER

**Water source transport method:** TRUCKING  
PIPELINE

**Source land ownership:** FEDERAL

**Source transportation land ownership:** FEDERAL

**Water source volume (barrels):** 100000

**Source volume (acre-feet):** 12.88931

**Source volume (gal):** 4200000

**Water source and transportation map:**

Vaca\_Draw\_24\_27H\_Water\_Transport\_Map\_20191015143841.pdf

**Water source comments:**

**New water well?** NO

### New Water Well Info

**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:**



**Operator Name:** BTA OIL PRODUCERS LLC

**Well Name:** VACA DRAW 9418 10 FEDERAL

**Well Number:** 25H

**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 Section 1 T25S R33E Lea County, NM. Alternative location if original location closes will be located in Sec 34 T24S R33E

**Construction Materials source location attachment:**

### Section 7 - Methods for Handling Waste

**Waste type:** DRILLING

**Waste content description:** Drilling fluids and cuttings.

**Amount of waste:** 3990 barrels

**Waste disposal frequency :** One Time Only

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

**Safe containmant attachment:**

**Waste disposal type:** HAUL TO COMMERCIAL FACILITY

**Disposal location ownership:** COMMERCIAL

**Disposal type description:**

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

**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 containmant attachment:**

**Waste disposal type:** HAUL TO COMMERCIAL FACILITY

**Disposal location ownership:** COMMERCIAL

**Operator Name:** BTA OIL PRODUCERS LLC

**Well Name:** VACA DRAW 9418 10 FEDERAL

**Well Number:** 25H

**Disposal type description:**

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

**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 FACILITY **Disposal location ownership:** COMMERCIAL

**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?**

**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?** NO

**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**

Operator Name: BTA OIL PRODUCERS LLC

Well Name: VACA DRAW 9418 10 FEDERAL

Well Number: 25H

## Section 8 - Ancillary Facilities

Are you requesting any Ancillary Facilities?: NO

Ancillary Facilities attachment:

Comments: It is possible that a mobile home will be used at the well site during drilling operations.

## Section 9 - Well Site Layout

Well Site Layout Diagram:

Access\_Road\_to\_Vaca\_24\_25\_26\_27\_20191015144049.pdf

0436\_VACA\_DRAW\_E2\_CTB\_SOUTH\_20191015144059.pdf

Vaca\_Draw\_E\_CTB\_access\_road\_for\_16\_19\_and\_24\_27\_pad\_20191015144112.pdf

18110534\_Vaca\_Draw\_9418\_10\_Federal\_\_25H\_Well\_Site\_Plan\_with\_Topsoil\_and\_IR\_\_600s\_\_20191106112322.pdf

Rig\_Layout\_20191106112359.pdf

Comments: VACA DRAW 9418 10 FEDERAL 24H-27H will be on the same already approved pad as the VACA DRAW 9418 10 FEDERAL 16H-19H

## Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance

Multiple Well Pad Name: VACA DRAW 9418 10 FEDERAL

Multiple Well Pad Number: 24-27

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): 0

Well pad interim reclamation (acres): 4.49

Well pad long term disturbance  
(acres): 4.49

Road proposed disturbance (acres): 0

Road interim reclamation (acres): 0.26

Road long term disturbance (acres): 0.16

Powerline proposed disturbance  
(acres): 0

Powerline interim reclamation (acres): 0

Powerline long term disturbance  
(acres): 0

Pipeline proposed disturbance  
(acres): 0

Pipeline interim reclamation (acres): 0

Pipeline long term disturbance  
(acres): 0

Other proposed disturbance (acres): 0

Other interim reclamation (acres): 0

Other long term disturbance (acres): 0

Total proposed disturbance: 0

Total interim reclamation: 4.75

Total long term disturbance: 4.65

Disturbance Comments: Interim Reclamation will be at North side of well pad, 50' (see attachment under SUPO Section 9).

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

**Operator Name:** BTA OIL PRODUCERS LLC

**Well Name:** VACA DRAW 9418 10 FEDERAL

**Well Number:** 25H

interim reclamation.

**Topsoil redistribution:** Topsoil will be evenly respread and aggressively revegetated over the entire disturbed area not needed for all-weather operations. Topsoil will be at North side of well pad, 30' (see attachment under SUPO Section 9).

**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?** NO

**Non native seed description:**

**Seedling transplant description:**

**Will seedlings be transplanted for this project?** NO

**Seedling transplant description attachment:**

**Will seed be harvested for use in site reclamation?** NO

**Seed harvest description:**

**Seed harvest description attachment:**

**Seed Management**

**Seed Table**

**Seed Summary**

**Seed Type**

**Pounds/Acre**

**Total pounds/Acre:**

**Operator Name:** BTA OIL PRODUCERS LLC

**Well Name:** VACA DRAW 9418 10 FEDERAL

**Well Number:** 25H

**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?** NO

**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

**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:**

**Operator Name:** BTA OIL PRODUCERS LLC

**Well Name:** VACA DRAW 9418 10 FEDERAL

**Well Number:** 25H

**Other Local Office:**

**USFS Region:**

**USFS Forest/Grassland:**

**USFS Ranger District:**

**Fee Owner:** Harvey Williams

**Fee Owner Address:**

**Phone:** (325)653-8211

**Email:**

**Surface use plan certification:** NO

**Surface use plan certification document:**

**Surface access agreement or bond:** Agreement

**Surface Access Agreement Need description:** BTA will have a surface use agreement in place, before operations begin.

**Surface Access Bond BLM or Forest Service:**

**BLM Surface Access Bond number:**

**USFS Surface access bond number:**

**Disturbance type:** NEW ACCESS ROAD

**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:**

**Operator Name:** BTA OIL PRODUCERS LLC

**Well Name:** VACA DRAW 9418 10 FEDERAL

**Well Number:** 25H

## Section 12 - Other Information

**Right of Way needed?** NO

**Use APD as ROW?**

**ROW Type(s):**

### ROW Applications

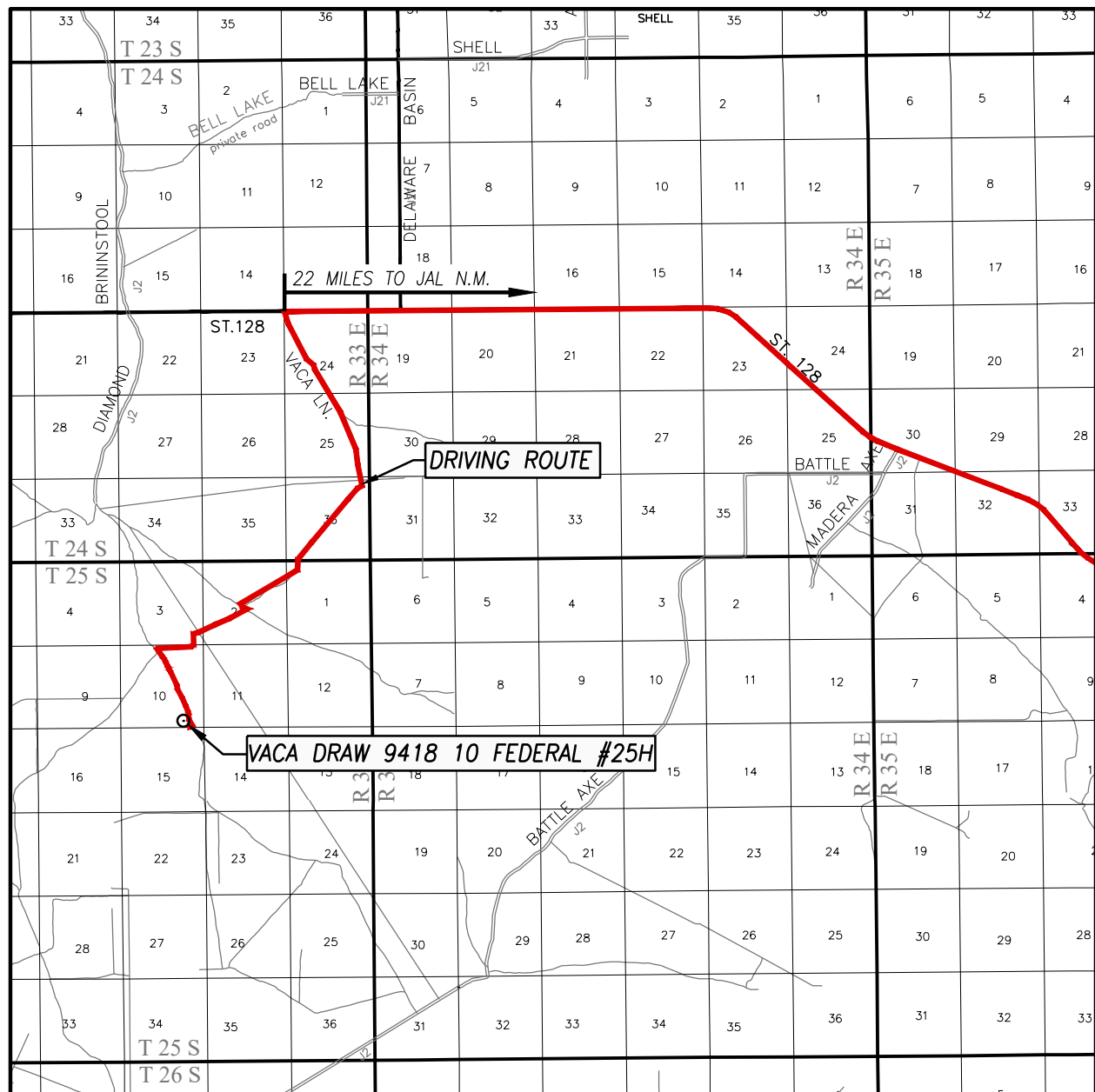
**SUPO Additional Information:**

**Use a previously conducted onsite?** YES

**Previous Onsite information:** Onsite was conducted December 19th, 2018 by William DeGrush.

### Other SUPO Attachment

# VICINITY MAP



SCALE: 1" = 2 MILES

DRIVING ROUTE: SEE TOPOGRAPHICAL AND ACCESS ROAD MAP

SEC. 10 TWP. 25-S RGE. 33-E

SURVEY N.M.P.M.

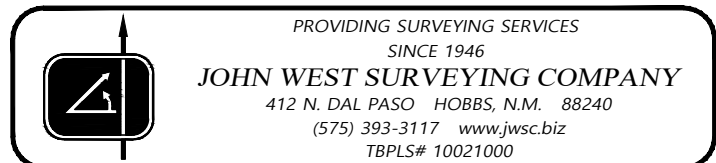
COUNTY LEA STATE NEW MEXICO

DESCRIPTION 420' FSL & 1335' FEL

ELEVATION 3377'

OPERATOR BTA OIL PRODUCERS, LLC

LEASE VACA DRAW 9418 10 FEDERAL

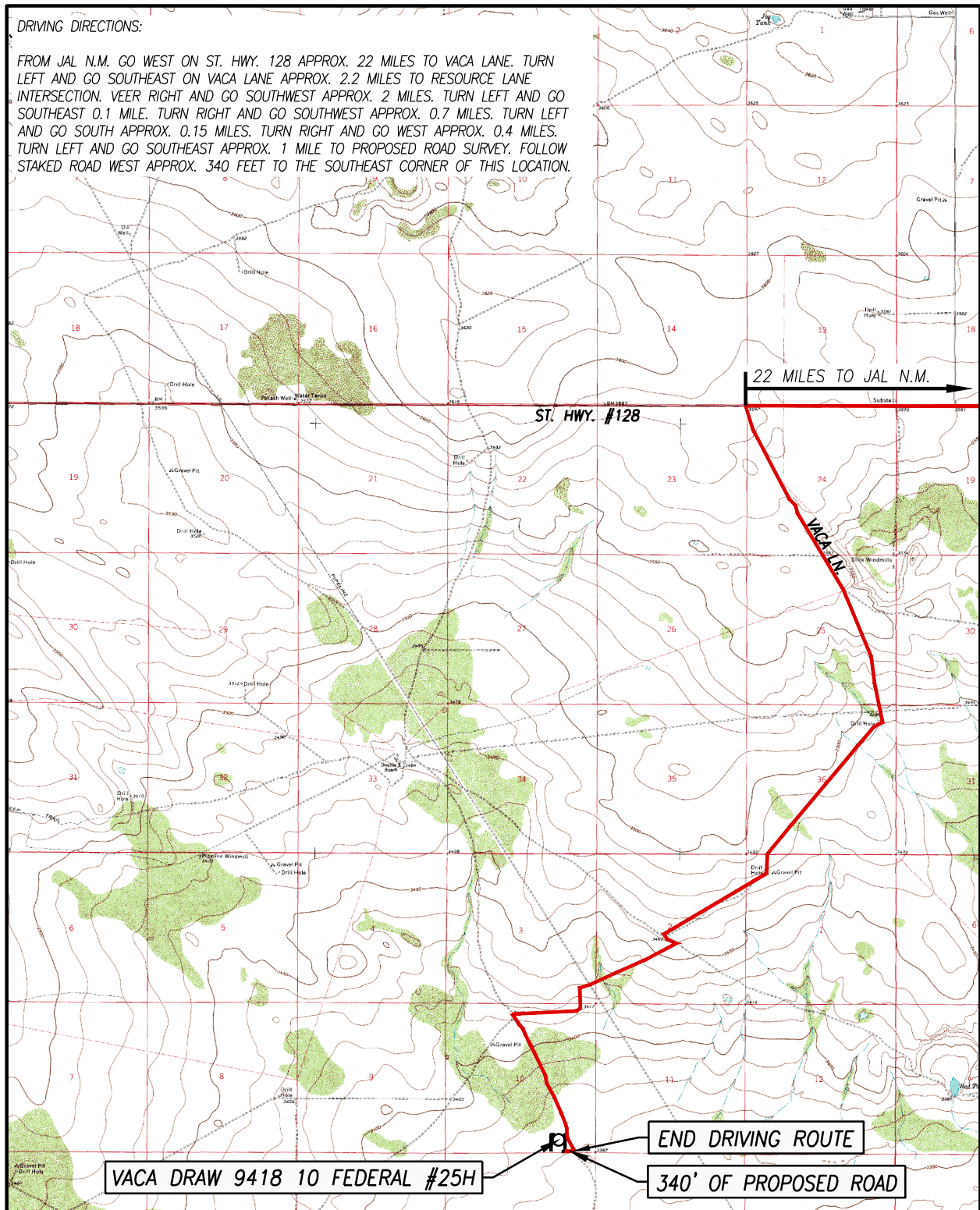




# TOPOGRAPHIC AND ACCESS ROAD MAP

## DRIVING DIRECTIONS:

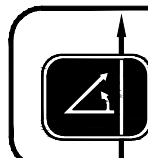
FROM JAL. N.M. GO WEST ON ST. HWY. 128 APPROX. 22 MILES TO VACA LANE. TURN LEFT AND GO SOUTHEAST ON VACA LANE APPROX. 2.2 MILES TO RESOURCE LANE INTERSECTION. VEER RIGHT AND GO SOUTHWEST APPROX. 2 MILES. TURN LEFT AND GO SOUTHEAST 0.1 MILE. TURN RIGHT AND GO SOUTHWEST APPROX. 0.7 MILES. TURN LEFT AND GO SOUTH APPROX. 0.15 MILES. TURN RIGHT AND GO WEST APPROX. 0.4 MILES. TURN LEFT AND GO SOUTHEAST APPROX. 1 MILE TO PROPOSED ROAD SURVEY. FOLLOW STAKED ROAD WEST APPROX. 340 FEET TO THE SOUTHEAST CORNER OF THIS LOCATION.



SEC. 10 TWP. 25-S RGE. 33-E  
 COUNTY LEA STATE NEW MEXICO  
 DESCRIPTION 420' FSL & 1335' FEL  
 ELEVATION 3377'  
 OPERATOR BTA OIL PRODUCERS, LLC  
 LEASE VACA DRAW 9418 10 FEDERAL  
 U.S.G.S. TOPOGRAPHIC MAP  
 BELL LAKE, N.M. SURVEY N.M.P.M.

SCALE: 1" = 5280'

CONTOUR INTERVAL:  
 BELL LAKE, N.M. - 10'



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 TBPLS# 10021000

DISTRICT I  
1625 N. French Dr., Hobbs, NM 88240  
Phone: (575) 393-6161 Fax: (575) 393-0720  
DISTRICT II  
811 S. First St., Artesia, NM 88210  
Phone: (575) 748-1283 Fax: (575) 748-9720  
DISTRICT III  
1000 Rio Brazos Road, Aztec, NM 87410  
Phone: (505) 334-6178 Fax: (505) 334-6170  
DISTRICT IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone: (505) 476-3460 Fax: (505) 476-3462

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
		JOHNSON RANCH ; WOLFCAMP
Property Code	Property Name	Well Number
	VACA DRAW 9418 10 FEDERAL	25H
OGRID No.	Operator Name	Elevation
260297	BTA OIL PRODUCERS, LLC	3377'

Surface Location

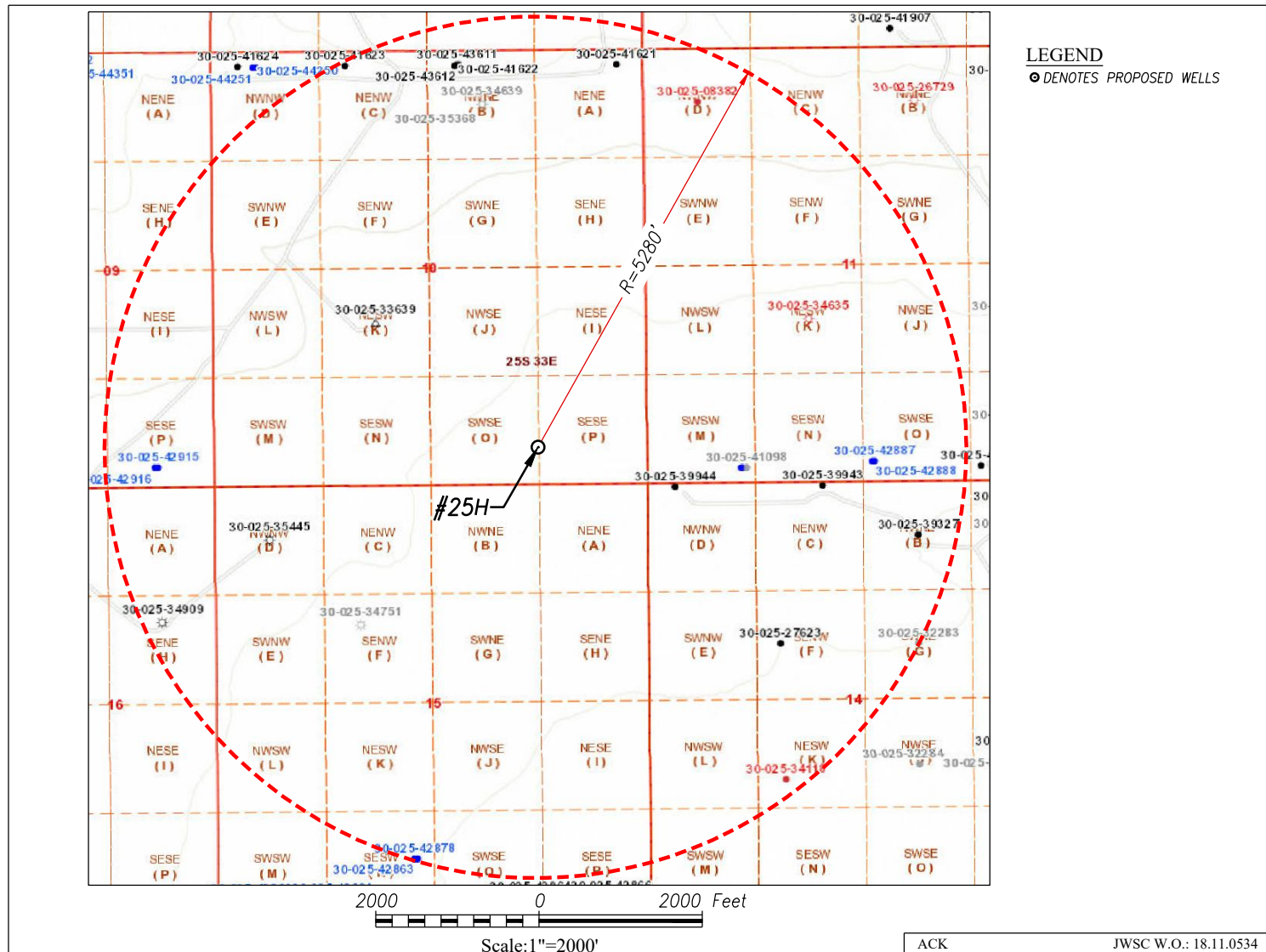
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	10	25-S	33-E		420	SOUTH	1335	EAST	LEA

Bottom Hole Location If Different From Surface

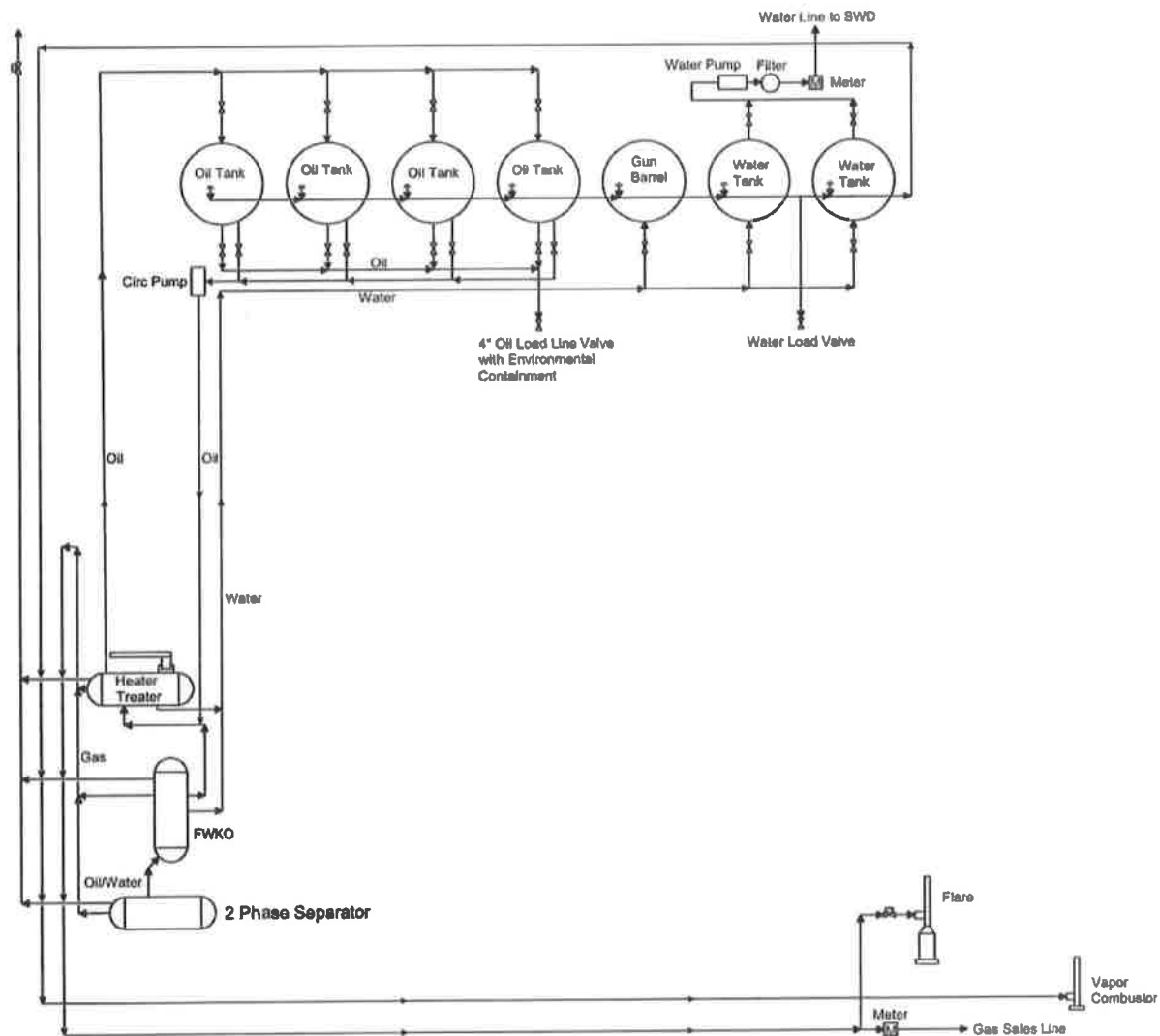
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	10	25-S	33-E		50	NORTH	1650	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160			

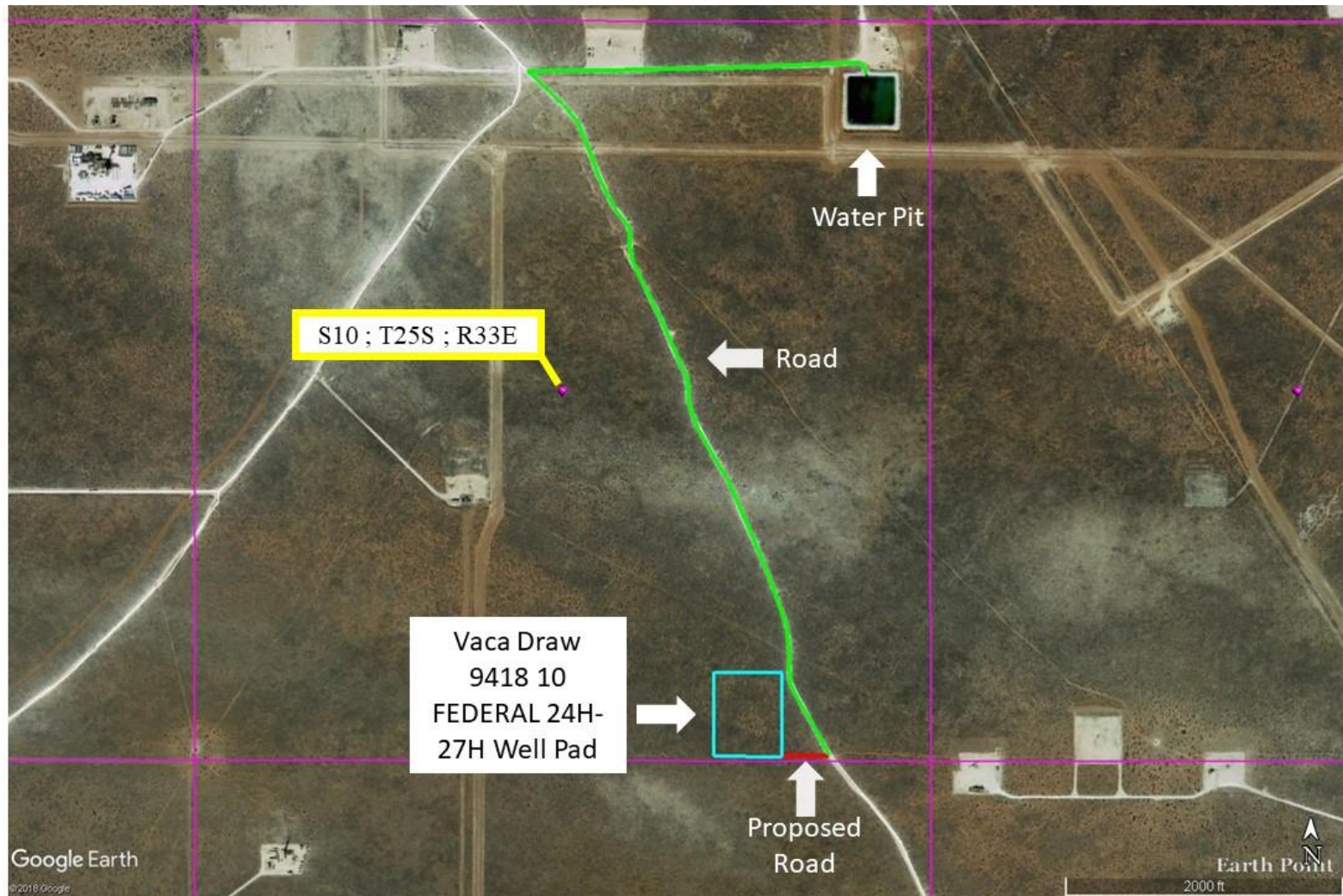
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



## PRODUCTION FACILITY LAYOUT



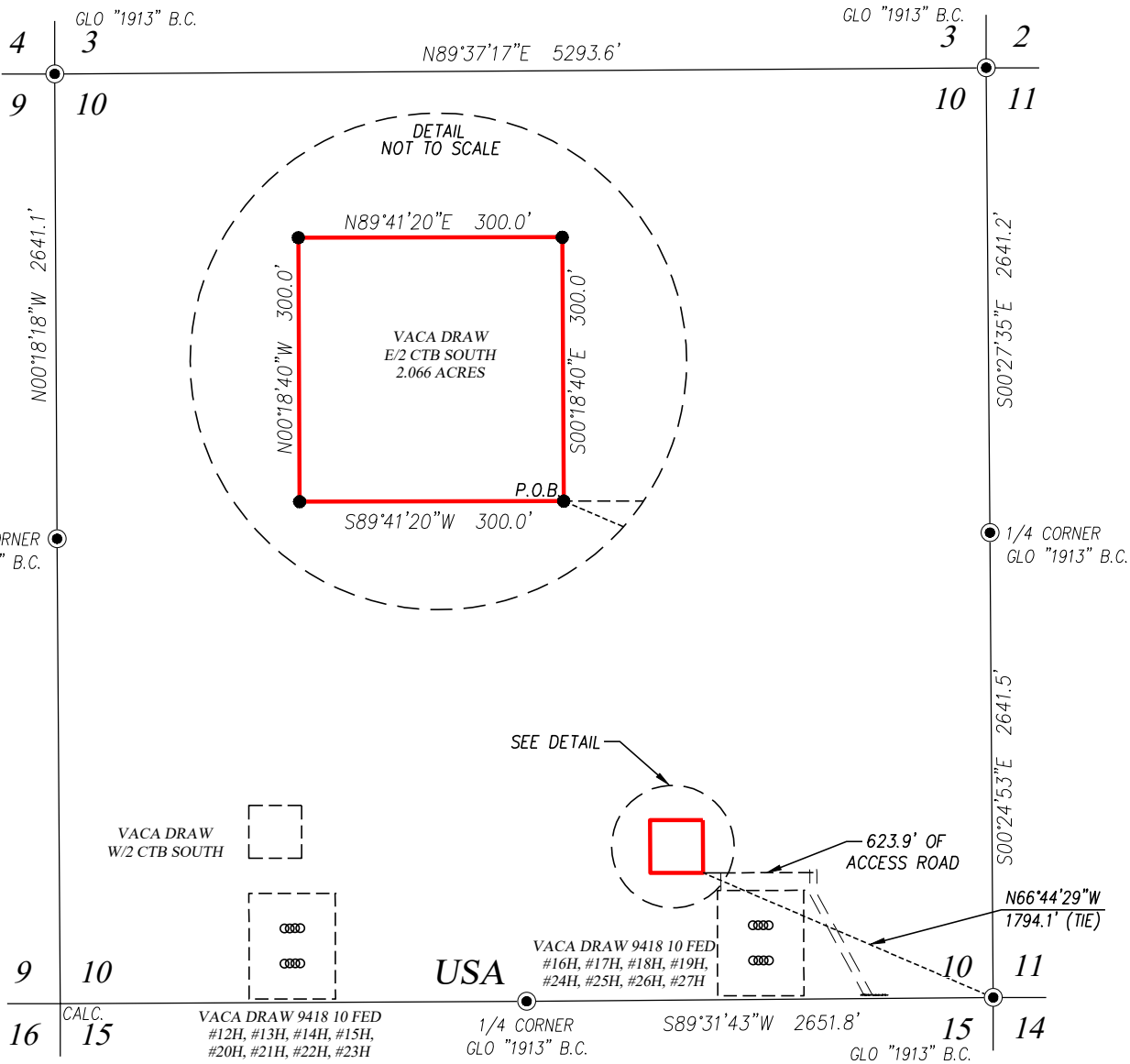




BTA OIL PRODUCERS, LLC  
WATER TRANSPORTATION MAP  
VACA DRAW 9418 10 FEDERAL 24H-27H WELL PAD TO WATER PIT  
SEC 10 ; T25S ; R33E  
LEA COUNTY, NM







**DESCRIPTION:**  
A TRACT SITUATED IN THE SOUTHEAST QUARTER OF SECTION 10, TOWNSHIP 25 SOUTH, RANGE 33 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER WHICH LIES N66°44'29"W 1794.1 FEET FROM THE SOUTHEAST CORNER; THEN S89°41'20"W 300.0 FEET; THEN N00°18'40"W 300.0 FEET; THEN N89°41'20"E 300.0 FEET; THEN S00°18'40"E 300.0 FEET TO THE POINT OF BEGINNING AND CONTAINING 2.066 ACRES MORE OR LESS.

**NOTE**  
BEARINGS SHOWN HEREON ARE MERCATOR GRID AND CONFORM TO THE NEW MEXICO COORDINATE SYSTEM, "NEW MEXICO EAST ZONE" NORTH AMERICAN DATUM 1983. DISTANCES ARE SURFACE VALUES.

I, RONALD J. EIDSON, NEW MEXICO PROFESSIONAL SURVEYOR No. 3239, DO HEREBY CERTIFY THAT THIS SURVEY PLAN AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH THIS SURVEY PLAN IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY; THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO; AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

RONALD J. EIDSON  
DATE: 04/23/2019

**LEGEND**

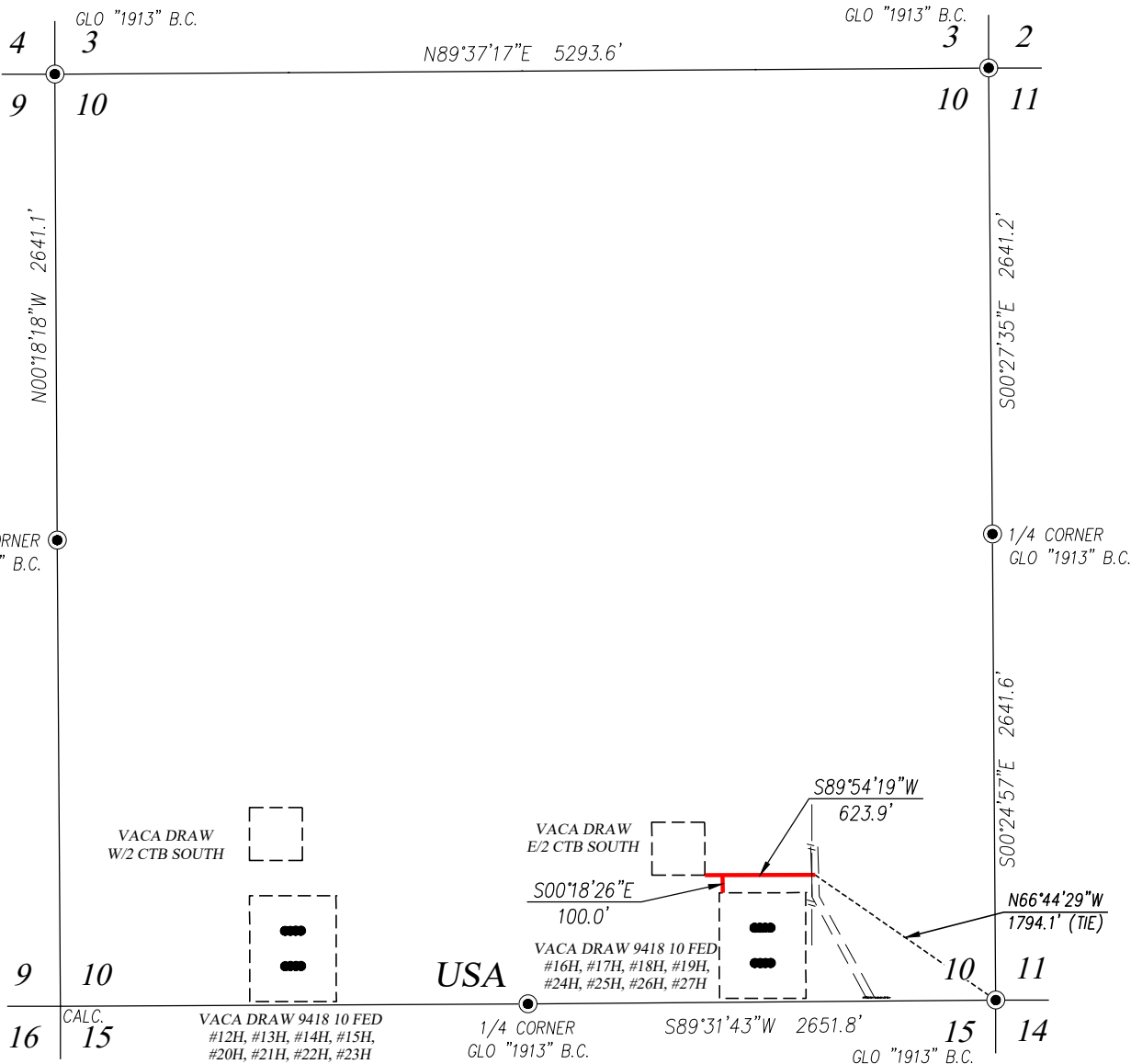
- - DENOTES SET SPIKE NAIL
- ⊙ - DENOTES FOUND CORNER AS NOTED
- (Red line) - DENOTES SURVEY LINE

1000 0 1000 2000 FEET  
Scale: 1"=1000'

**BTA OIL PRODUCERS, LLC**

**SURVEY FOR THE VACA DRAW E/2 CTB SOUTH PAD SITUATED IN THE SE/4 OF SECTION 10, TOWNSHIP 25 SOUTH, RANGE 33 EAST, N.M.P.M. LEA COUNTY, NEW MEXICO**

Survey Date: 03/07/19	CAD Date: 04/22/19	Drawn By: LSL
W.O. No.: 19110436	Rev: .	Rel. W.O.: Sheet 1 of 1



**DESCRIPTION**

SURVEY FOR A STRIP OF LAND 30.0 FEET WIDE AND 723.9 FEET OR 0.137 MILES IN LENGTH CROSSING USA LAND IN SECTION 10, TOWNSHIP 25 SOUTH, RANGE 33 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO, AND BEING 15.0 FEET LEFT AND 15.0 FEET RIGHT OF THE ABOVE PLATTED CENTERLINE SURVEY.

**NOTE**

BEARINGS SHOWN HEREON ARE MERCATOR GRID AND CONFORM TO THE NEW MEXICO COORDINATE SYSTEM, "NEW MEXICO EAST ZONE" NORTH AMERICAN DATUM 1983. DISTANCES ARE SURFACE VALUES.

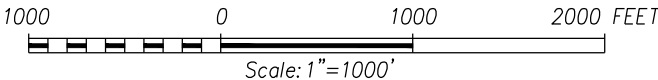
I, RONALD J. EIDSON, NEW MEXICO PROFESSIONAL SURVEYOR No. 3239, DO HEREBY CERTIFY THAT THIS SURVEY PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH THIS IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY; THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO; AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

RONALD J. EIDSON

DATE: 09/12/2019

**LEGEND**

- - DENOTES FOUND CORNER AS NOTED
- - DENOTES CENTERLINE SURVEY



**BTA OIL PRODUCERS, LLC**

SURVEY FOR ACCESS ROAD TO THE VACA DRAW 9418 10 FED #16H, #17H, #18H, #19H, #24H, #25H, #26H & #27H AND VACA DRAW E/2 CTB SOUTH PAD CROSSING SECTION 10, TOWNSHIP 25 SOUTH, RANGE 33 EAST, N.M.P.M. LEA COUNTY, NEW MEXICO

Survey Date: 03/07/19

CAD Date: 09/12/19

Drawn By: LSL

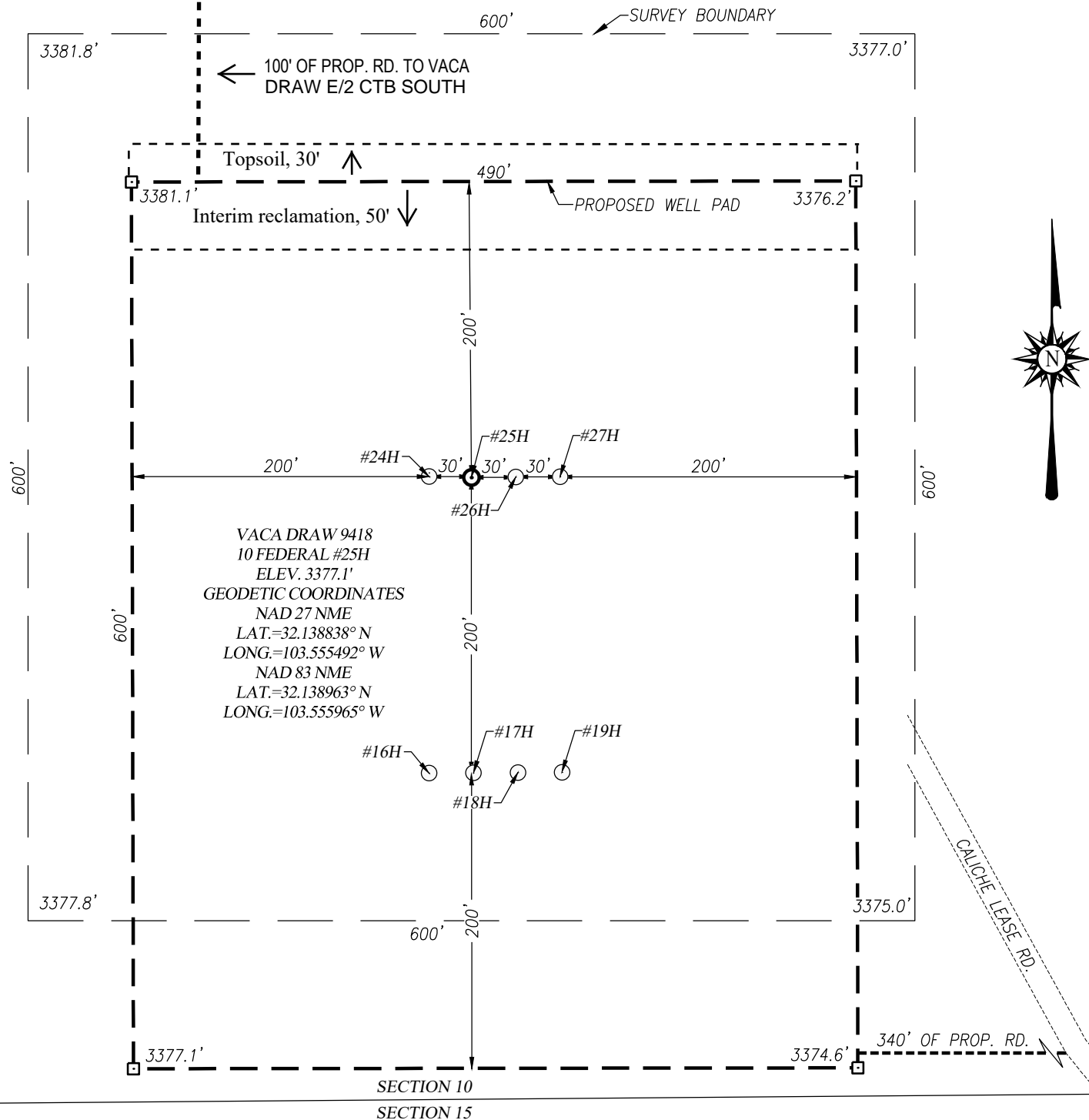
W.O. No.: 19131029

Rev: .

Rel. W.O.: 19110436

Sheet 1 of 1

# WELL SITE PLAN



*BTA OIL PRODUCERS, LLC*

VACA DRAW 9418 10 FEDERAL #25H WELL LOCATED  
420 FEET FROM THE SOUTH LINE AND 1335 FEET FROM THE EAST  
LINE OF SECTION 10, TOWNSHIP 25 SOUTH,  
RANGE 33 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO

Survey Date: 5/01/18

CAD Date: 5/31/18

Drawn By: ACK

W.O. No.: 18110534

Rev: .

Rel. W.O.:

Sheet 1 of 1

DRIVING DIRECTIONS:

FROM JAL N.M. GO WEST ON ST. HWY. 128 APPROX. 22 MILES TO VACA LANE. TURN LEFT AND GO SOUTHEAST ON VACA LANE APPROX. 2.2 MILES TO RESOURCE LANE INTERSECTION. VEER RIGHT AND GO SOUTHWEST APPROX. 2 MILES. TURN LEFT AND GO SOUTHEAST 0.1 MILE. TURN RIGHT AND GO SOUTHWEST APPROX. 0.7 MILES. TURN LEFT AND GO SOUTH APPROX. 0.15 MILES. TURN RIGHT AND GO WEST APPROX. 0.4 MILES. TURN LEFT AND GO SOUTHEAST APPROX. 1 MILE TO PROPOSED ROAD SURVEY. FOLLOW STAKED ROAD WEST APPROX. 340 FEET TO THE SOUTHEAST CORNER OF THIS LOCATION.

NOTE:

SEE "TOPOGRAPHICAL AND ACCESS ROAD MAP" FOR PROPOSED ROAD LOCATION.

100                      0                      100                      200 Feet

Scale: 1"=100'



PROVIDING SURVEYING SERVICES  
SINCE 1946

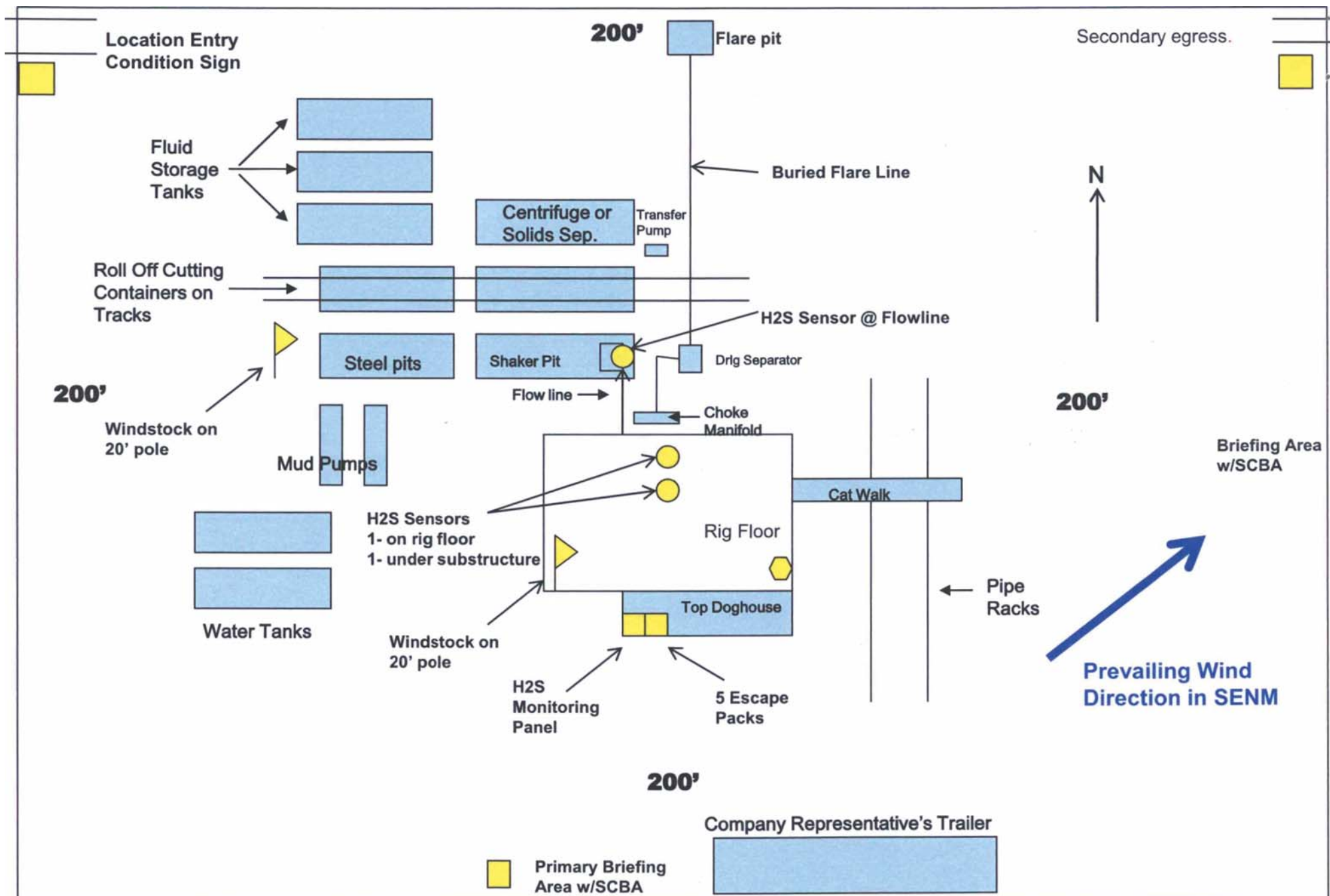
**JOHN WEST SURVEYING COMPANY**

412 N. DAL PASO HOBBS, N.M. 88240

(575) 393-3117 [www.iwsc.biz](http://www.iwsc.biz)

TBPLS# 10021000







**APD ID:** 10400040918

**Submission Date:** 04/17/2019

**Operator Name:** BTA OIL PRODUCERS LLC

**Well Name:** VACA DRAW 9418 10 FEDERAL

**Well Number:** 25H

**Well Type:** OIL WELL

**Well Work Type:** Drill

## Section 1 - General

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

## Section 2 - Lined Pits

**Would you like to utilize Lined Pit PWD options?** NO

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

**PWD surface owner:**

**PWD disturbance (acres):**

**Lined pit PWD on or off channel:**

**Lined pit PWD discharge volume (bbl/day):**

**Lined pit specifications:**

**Pit liner description:**

**Pit liner manufacturers information:**

**Precipitated solids disposal:**

**Describe precipitated solids disposal:**

**Precipitated solids disposal permit:**

**Lined pit precipitated solids disposal schedule:**

**Lined pit precipitated solids disposal schedule attachment:**

**Lined pit reclamation description:**

**Lined pit reclamation attachment:**

**Leak detection system description:**

**Leak detection system attachment:**

**Operator Name:** BTA OIL PRODUCERS LLC

**Well Name:** VACA DRAW 9418 10 FEDERAL

**Well Number:** 25H

**Lined pit Monitor description:**

**Lined pit Monitor attachment:**

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

**Is the reclamation bond a rider under the BLM bond?**

**Lined pit bond number:**

**Lined pit bond amount:**

**Additional bond information attachment:**

### Section 3 - Unlined Pits

**Would you like to utilize Unlined Pit PWD options?** NO

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

**PWD disturbance (acres):**

**PWD surface owner:**

**Unlined pit PWD on or off channel:**

**Unlined pit PWD discharge volume (bbl/day):**

**Unlined pit specifications:**

**Precipitated solids disposal:**

**Describe precipitated solids disposal:**

**Precipitated solids disposal permit:**

**Unlined pit precipitated solids disposal schedule:**

**Unlined pit precipitated solids disposal schedule attachment:**

**Unlined pit reclamation description:**

**Unlined pit reclamation attachment:**

**Unlined pit Monitor description:**

**Unlined pit Monitor attachment:**

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

**Beneficial use user confirmation:**

**Estimated depth of the shallowest aquifer (feet):**

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

**TDS lab results:**

**Geologic and hydrologic evidence:**

**State authorization:**

**Unlined Produced Water Pit Estimated percolation:**

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

**Operator Name:** BTA OIL PRODUCERS LLC

**Well Name:** VACA DRAW 9418 10 FEDERAL

**Well Number:** 25H

**Is the reclamation bond a rider under the BLM bond?**

**Unlined pit bond number:**

**Unlined pit bond amount:**

**Additional bond information attachment:**

#### Section 4 - Injection

**Would you like to utilize Injection PWD options?** NO

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

**PWD surface owner:**

**PWD disturbance (acres):**

**Injection PWD discharge volume (bbl/day):**

**Injection well mineral owner:**

**Injection well type:**

**Injection well number:**

**Injection well name:**

**Assigned injection well API number?**

**Injection well API number:**

**Injection well new surface disturbance (acres):**

**Minerals protection information:**

**Mineral protection attachment:**

**Underground Injection Control (UIC) Permit?**

**UIC Permit attachment:**

#### Section 5 - Surface Discharge

**Would you like to utilize Surface Discharge PWD options?** NO

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

**PWD surface owner:**

**PWD disturbance (acres):**

**Surface discharge PWD discharge volume (bbl/day):**

**Surface Discharge NPDES Permit?**

**Surface Discharge NPDES Permit attachment:**

**Surface Discharge site facilities information:**

**Surface discharge site facilities map:**

#### Section 6 - Other

**Would you like to utilize Other PWD options?** NO

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

**PWD surface owner:**

**PWD disturbance (acres):**

**Other PWD discharge volume (bbl/day):**

**Operator Name:** BTA OIL PRODUCERS LLC

**Well Name:** VACA DRAW 9418 10 FEDERAL

**Well Number:** 25H

**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

07/31/2020

**APD ID:** 10400040918

**Submission Date:** 04/17/2019

Highlighted data  
reflects the most  
recent changes

**Operator Name:** BTA OIL PRODUCERS LLC

**Well Name:** VACA DRAW 9418 10 FEDERAL

**Well Number:** 25H

[Show Final Text](#)

**Well Type:** OIL WELL

**Well Work Type:** Drill

### Bond Information

**Federal/Indian APD:** FED

**BLM Bond number:** NMB001711

**BIA Bond number:**

**Do you have a reclamation bond?** NO

**Is the reclamation bond a rider under the BLM bond?**

**Is the reclamation bond BLM or Forest Service?**

**BLM reclamation bond number:**

**Forest Service reclamation bond number:**

**Forest Service reclamation bond attachment:**

**Reclamation bond number:**

**Reclamation bond amount:**

**Reclamation bond rider amount:**

**Additional reclamation bond information attachment:**

DISTRICT I  
1625 N. French Dr., Hobbs, NM 88240  
Phone: (575) 393-6161 Fax: (575) 393-0720  
DISTRICT II  
811 S. First St., Artesia, NM 88210  
Phone: (575) 748-1283 Fax: (575) 748-9720  
DISTRICT III  
1000 Rio Brazos Road, Aztec, NM 87410  
Phone: (505) 334-6178 Fax: (505) 334-6170  
DISTRICT IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone: (505) 476-3460 Fax: (505) 476-3462

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

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

OCB - HOBBS  
07/31/2020  
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AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number <b>30-025-47518</b>	Pool Code <b>98180</b>	Pool Name <b>Johnson Ranch Wolfcamp</b>
Property Code <b>317432</b>	Property Name <b>VACA DRAW 9418 10 FEDERAL</b>	Well Number <b>WC-025 G-09 S253309P; UPR WOLF CAMP</b>
OGRID No. <b>260 297</b>	Operator Name <b>BTA OIL PRODUCERS, LLC</b>	Elevation <b>3377'</b>

Surface Location

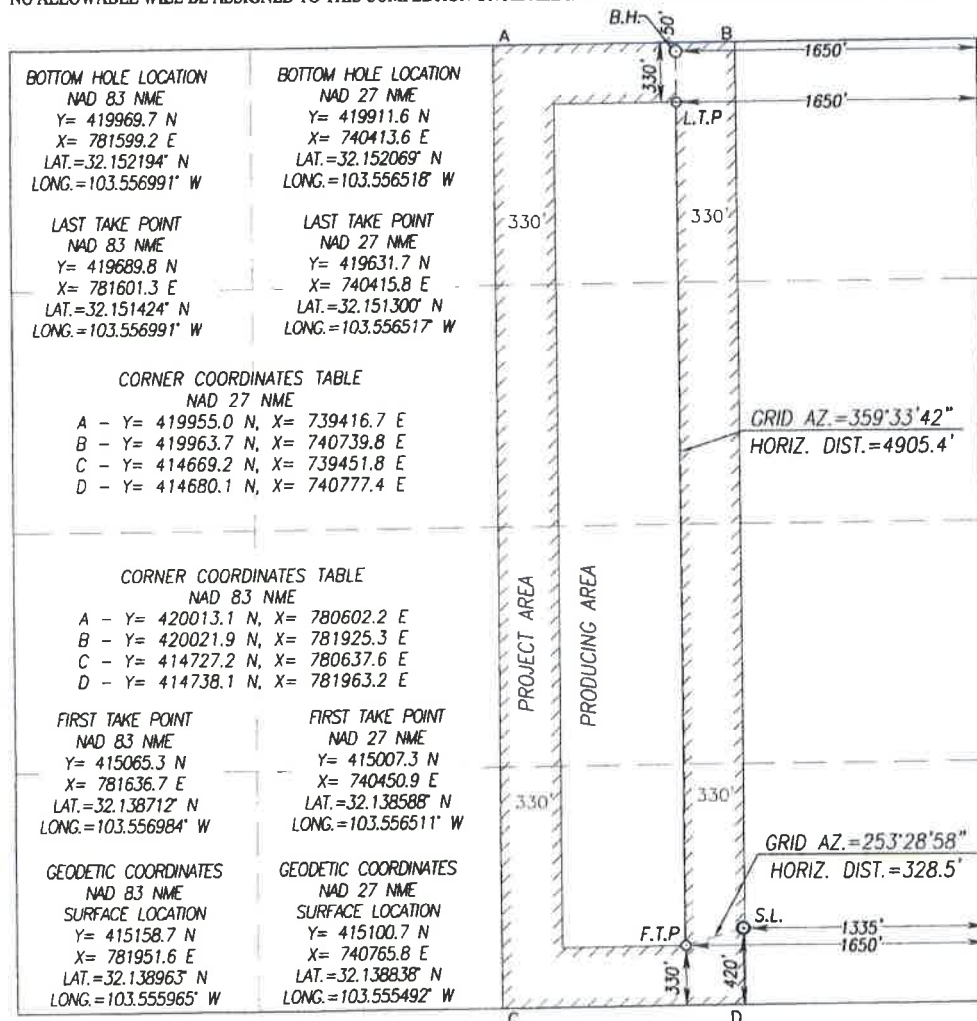
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
<b>O</b>	<b>10</b>	<b>25-S</b>	<b>33-E</b>		<b>420</b>	<b>SOUTH</b>	<b>1335</b>	<b>EAST</b>	<b>LEA</b>

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
<b>B</b>	<b>10</b>	<b>25-S</b>	<b>33-E</b>		<b>50</b>	<b>NORTH</b>	<b>1650</b>	<b>EAST</b>	<b>LEA</b>

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
<b>160</b>			

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.

Signature: *Sammy Hajar* Date: **3-14-19**  
Printed Name: **Sammy Hajar**  
E-mail Address: **SHAJAR@BTAOIL.COM**

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

MAY 1, 2018

Date of Survey  
Signature & Seal of Professional Surveyor:

*Ronald J. Eidson*  
Certificate Number: **3239**  
Gary G. Eidson 12641  
Ronald J. Eidson 3239  
ACK JWSC W.O. 18.11.0534



District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
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

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

Submit Original  
to Appropriate  
District Office

OCD - HOBBS  
07/31/2020  
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**GAS CAPTURE PLAN**

Date: 3/14/19

☒ Original

Operator & OGRID No.: 260297

☐ Amended - Reason for Amendment: \_\_\_\_\_

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomple 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
Vala Draw 9418		Sec 10, 25-S	420 FSL 1335 FEL	100	Flared	Battery Connected
10 Federal 25 H	30-025-47518	33 E				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 (ETP) low/high pressure gathering system located in LEA County, New Mexico. It will require 0 ' of pipeline to 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
  - Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines