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Form 3160-3  
(March 2012)

DISTRICT II-ARTESIA O.C.D.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Carlsbad Field Office  
OCD Artesia

FORM APPROVED  
OMB No. 1004-0137  
Expires October 31, 2014

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. MNM019848
1b. Type of Well: <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other INJ-DIS <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator BTA OIL PRODUCERS LLC		7. If Unit or CA Agreement, Name and No.
3a. Address 104 S. Pecos Midland TX 79701		8. Lease Name and Well No. LAKESIDE 20702 SWD 1 32223
3b. Phone No. (include area code) (432)682-3753		9. API Well No. 30-015-45146
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface LOT G / 1750 FNL / 2640 FEL / LAT 32.278264 / LONG -104.006511 At proposed prod. zone LOT G / 1750 FNL / 2640 FEL / LAT 32.27864 / LONG -104.006511		10. Field and Pool, or Exploratory SWD; DEVONIAN-SILURIAN
14. Distance in miles and direction from nearest town or post office* 5.23 miles		11. Sec., T. R. M. or Blk and Survey or Area SEC 29 / T23S / R29E / NMP
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1750 feet	16. No. of acres in lease 960	17. Spacing Unit dedicated to this well 3
18. Distance from proposed location* to nearest well, drilling, completed, 1900 feet applied for, on this lease, ft.	19. Proposed Depth 16000 feet / 16000 feet	20. BLM/BIA Bond No. on file FED: NMB000849
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 2995 feet	22. Approximate date work will start* 04/01/2018	23. Estimated duration 45 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form:

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

25. Signature (Electronic Submission)	Name (Printed/Typed) Katy Reddell / Ph: (432)682-3753	Date 01/10/2018
Title Regulatory Analyst		
Approved by (Signature) (Electronic Submission)	Name (Printed/Typed) Cody Layton / Ph: (575)234-5959	Date 07/20/2018
Title Assistant Field Manager Lands & Minerals	Office CARLSBAD	

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

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

(Continued on page 2)

\*(Instructions on page 2)

**APPROVED WITH CONDITIONS**  
Approval Date: 07/20/2018

RP 8-9-18

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DISTRICT II-ARTESIA O.C.D.

## INSTRUCTIONS

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

**ITEM 1:** If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

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

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

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

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

## NOTICES

The Privacy Act of 1974 and regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

**AUTHORITY:** 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR 3160

**PRINCIPAL PURPOSES:** The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service well or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.

**ROUTINE USE:** Information from the record and/or the record will be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

**EFFECT OF NOT PROVIDING INFORMATION:** Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to allow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications.

Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

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

## Additional Operator Remarks

### Location of Well

1. SHL: LOT G / 1750 FNL / 2640 FEL / TWSP: 23S / RANGE: 29E / SECTION: 29 / LAT: 32.278264 / LONG: -104.006511 ( TVD: 16000 feet, MD: 16000 feet )

PPP: / FNL / FWL

BHL: LOT G / 1750 FNL / 2640 FEL / TWSP: 23S / RANGE: 29E / SECTION: 29 / LAT: 32.27864 / LONG: -104.006511 ( TVD: 16000 feet, MD: 16000 feet )

### BLM Point of Contact

Name: Katrina Ponder

Title: Geologist

Phone: 5752345969

Email: kponder@blm.gov

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## Review and Appeal Rights

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

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**PECOS DISTRICT  
DRILLING CONDITIONS OF APPROVAL**

<b>OPERATOR'S NAME:</b>	<b>BTA OIL</b>
<b>LEASE NO.:</b>	<b>NMNM019848</b>
<b>WELL NAME &amp; NO.:</b>	<b>LAKESIDE 20702 SWD 1</b>
<b>SURFACE HOLE FOOTAGE:</b>	<b>1750' FNL &amp; 2640' FEL</b>
<b>BOTTOM HOLE FOOTAGE:</b>	<b>' F L &amp; ' F L</b>
<b>LOCATION:</b>	<b>Section 29, T. 23 S., R 29 E., NMPM</b>
<b>COUNTY:</b>	<b>Eddy County, New Mexico</b>

Potash	<input checked="" type="radio"/> None	<input type="radio"/> Secretary	<input type="radio"/> R-111-P
Cave/Karst Potential	<input type="radio"/> Low	<input checked="" type="radio"/> Medium	<input type="radio"/> High
Variance	<input type="radio"/> None	<input checked="" type="radio"/> Flex Hose	<input type="radio"/> Other
Wellhead	<input type="radio"/> Conventional	<input checked="" type="radio"/> Multibowl	
Other	<input type="checkbox"/> 4 String Area	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> WIPP

**A. Hydrogen Sulfide**

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

**B. CASING**

1. The **20** inch surface casing shall be set at approximately **380** feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
  - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
  - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength,

whichever is greater.

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

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

2. The minimum required fill of cement behind the 13 3/8 inch intermediate casing is:

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

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

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

3. The minimum required fill of cement behind the 9 5/8 inch production casing is:

Operator has proposed a DV tool at a depth of 2880', 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 should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification.

4. The minimum required fill of cement behind the 7 inch production liner is:

- Cement should tie-back at least 100 feet into previous casing string. Operator shall provide method of verification.

5. **Open hole completion from 14507 to 16000.**

**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. 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**.

#### **D. WELL COMPLETION**

**The operator shall supply the BLM with a copy of a mudlog over the permitted disposal interval and estimated insitu water salinity based on open-hole logs. If hydrocarbon shows occur while drilling, the operator shall notify the BLM.**

**The operator shall provide to the BLM a summary of formation depth picks based on mudlog and geophysical logs along with a copy of the mudlog and open hole logs from TD to top of Devonian**

**A NOI sundry with the completion procedure for this well shall be submitted and approved prior to commencing completion work. The procedure will be reviewed to verify that the completion proposal will allow the operator to:**

- 1. Properly evaluate the injection zone utilizing open hole logs, swab testing and/or any other method to confirm that hydrocarbons cannot be produced in paying quantities. This evaluation shall be reviewed by the BLM prior to injection commencing.**
- 2. Restrict the injection fluid to the approved formation.**
- 3. If a step rate test will be run an NOI sundry shall be submitted to the BLM for approval**

**If off-lease water will be disposed in this well, the operator shall provide proof of right-of-way approval.**

**MHH 07182018**

## GENERAL REQUIREMENTS

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

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

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

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

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

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
  - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
  - b. When the operator proposes to set surface casing with Spudder Rig
    - Notify the BLM when moving in and removing the Spudder Rig.
    - Notify the BLM when moving in the 2<sup>nd</sup> Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
    - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.
2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

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

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log.
3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements.
4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

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

**B. PRESSURE CONTROL**

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.
  - d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
  - e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the

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

- b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time.
- c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- e. The results of the test shall be reported to the appropriate BLM office.
- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

C. DRILLING MUD

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

D. WASTE MATERIAL AND FLUIDS

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

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

**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 H<sub>2</sub>S 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.

BTA OIL PRODUCERS LLC has conducted a review to determine if an H2S contingency plan is required for the above referenced well. We were able to conclude that any potential hazardous volume would be minimal. H2S concentrations of wells in this area from surface to TD are low enough; therefore, we do not believe that an H2S contingency plan is necessary.

# **WARNING**

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

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

**BTA OIL PRODUCERS LLC**

**1-432-682-3753**

BTA OIL PRODUCERS, LLC  
LAKESIDE 20702 SWD 1  
SEC 29; T23S; R29E.  
EDDY COUNTY, NM

## EMERGENCY CALL LIST

	<u>OFFICE</u>	<u>MOBILE</u>
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

## EMERGENCY RESPONSE NUMBERS

	<u>OFFICE</u>
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  
LAKESIDE 20702 SWD 1  
SEC 29; T23S; R29E.  
EDDY COUNTY, NM



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

WELL: Lakeside SWD #1  
 TVD: 16000  
 MD: 16000

**DRILLING PLAN**

**Casing Program**

Hole Size	Csg. Size	From (MD)	To (MD)	From (TVD)	To (TVD)	Tapered String	Weight (lbs)	Grade	Conn.	Collapse	Burst	Body Tension	Joint Tension	Dry/Buoyant	Mud Weight (ppg)
26	20	0	650	0	650	N	94	H40	STC	3.2	9.5	17	9.5	DRY	8.4
17 1/2	13-3/8	0	2650	0	2650	N	54.5	J55	STC	1.4	3.4	5.9	3.5	dry	10
12 1/4	9 5/8	0	10800	0	10800	N	53.5	L-80	LTC	2.3	2.03	2.15	1.81	dry	9.3
8 1/2	7	10500	14507	10500	14507	N	32	P-110	LTC	1.53	2.85	4.1	3.93	dry	13.6
6	open hole	14507	16000	14507	16000										

**Cementing Program**

Csg. Size		Stage Tool Depth	Top MD of Segment	Bottom MD of Segment	Cement Type	Quantity (sk)	Yield (cu. Ft./sk)	Density (lbs. gal)	Volume (cu.ft.)	Additives
20	Lead		0	650	Class C	1200	1.35	14.8	1620	plus additives
	Tail									
13 3/8	Lead		0	2458	Class C	1300	2.45	11.8	3185	plus additives
	Tail		2458	2650	Class C	100	1.34	14.8	268	plus additives
9 5/8	Lead	1st stage	1250	9550	Class H	1470	2.21	12.7	3249	plus additives
	Tail		9550	10800	Class H	415	1.18	15.6	490	plus additives
	Lead	2nd stage. DV tool at 2880'	0	2264	Class C	475	2.21	12.7	1050	plus additives
	Tail		2264	2880	Class C	180	1.34	14.8	241	plus additives
7	Lead		10400	14507	50/50 Class H	545	1.2	14.5	654	plus additives
	Tail									
	Lead									

Approval Date: 07/20/2018

	Tail									
	Lead									
	Tail									

BTA WOULD LIKE TO REQUEST A VARIANCE OF 7" LINER IN 8 1/2" HOLE

**Approval Date: 07/20/2018**

**BOP/CHOKE**

Pressure Rating: 10M      Rating Depth 20,000'      Requesting Variance?      No

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**Pressure**

Anticipated Bottom Hole Pressure:      6905 psi

Anticipated Bottom Hole Temperature:      211

Anticipated Surface Hole Pressure:      280 psi

Anticipated abnormal pressures, temperatures, or potential geologic hazards?      none

Hydrogen sulfide drilling operations plan required?      No

<b>Circulating Medium Table</b>			
<b>Depth (TVD)</b>		<b>Type</b>	<b>Weight (ppg)</b>
<b>From</b>	<b>To</b>		
0	650	SPUD MUD	8.3-8.4
650	10800	direct imulsion brine	8.9-9.3
10800	14507	WATER BASED MUD	11.4-13.6
14507	16000	fresh water	8.3-8.4

**Approval Date: 07/20/2018**

**PECOS DISTRICT  
SURFACE USE  
CONDITIONS OF APPROVAL**

OPERATOR'S NAME:	BTA Oil Producers
LEASE NO.:	NMNM019848
WELL NAME & NO.:	Lakeside 20702 SWD 1
SURFACE HOLE FOOTAGE:	1750'/N & 2640'/E
BOTTOM HOLE FOOTAGE:	1750'/N & 2640'/E
LOCATION:	Section 29, T.23 S., R.29 E., NMPM
COUNTY:	Eddy County, New Mexico

**TABLE OF CONTENTS**

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

- General Provisions**
- Permit Expiration**
- Archaeology, Paleontology, and Historical Sites**
- Noxious Weeds**
- Special Requirements**
  - Cave/Karst
  - Hydrology
- Construction**
  - Notification
  - Topsoil
  - Closed Loop System
  - Federal Mineral Material Pits
  - Well Pads
  - Roads
- Road Section Diagram**
- Production (Post Drilling)**
  - Well Structures & Facilities
  - Pipelines
- Interim Reclamation**
- Final Abandonment & Reclamation**

## **I. GENERAL PROVISIONS**

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

## **II. PERMIT EXPIRATION**

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

## **III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES**

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

## **IV. NOXIOUS WEEDS**

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

## V. SPECIAL REQUIREMENT(S)

### Cave Karst

#### Construction Mitigation

In order to mitigate the impacts from construction activities on cave and karst resources, the following Conditions of Approval will apply to this APD:

- In the event that any underground voids are encountered during construction activities, construction activities will be halted and the BLM will be notified immediately.
- No blasting to prevent geologic structure instabilities.
- Pad Berming to minimize effects of any spilled contaminants.

#### Drilling Mitigation

Federal regulations and standard Conditions of Approval applied to all APDs require that adequate measures are taken to prevent contamination to the environment. Due to the extreme sensitivity of the cave and karst resources in this project area, the following additional Conditions of Approval will be added to this APD.

To prevent cave and karst resource contamination the following will be required.

- Closed Mud System Using Steel Tanks with All Fluids and Cuttings Hauled Off.
- Rotary drilling with fresh water where cave or karst features are expected to prevent contamination of freshwater aquifers.
- Directional Drilling allowed after at least 100 feet below the cave occurrence zone to prevent additional impacts resulting from directional drilling.
- Lost Circulation zones logged and reported in the drilling report so BLM can assess the situation and work with the operator on corrective actions.
- Additional drilling, casing, and cementing procedures to protect cave zones and fresh water aquifers. See Drilling COAs.

#### Production Mitigation

In order to mitigate the impacts from production activities and due to the nature of karst terrain, the following Conditions of Approval will apply to this APD:

- Tank battery liners and berms to minimize the impact resulting from leaks.
- Leak detection system to provide an early alert to operators when a leak has occurred.
- Automatic shut off, check valves, or similar systems will be installed for pipelines and tanks to minimize the effects of line failures used in production or drilling.

#### Residual and Cumulative Mitigation

- Nontoxic fluorescent dyes will be added to the drilling fluid when the hole is spudded and will be circulated to the bottom of the karst layers. This provides data as part of a long-term monitoring study.
- Annual pressure monitoring will be performed by the operator. If the test results indicate a casing failure has occurred, remedial action will be undertaken to correct the problem to the BLM's approval.

#### Plugging and Abandonment Mitigation

Abandonment Cementing: Upon well abandonment in high cave karst areas additional plugging conditions of approval may be required. The BLM will assess the situation and work with the operator to ensure proper plugging of the wellbore.

## **Hydrology**

- The entire well pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad. Topsoil shall not be used to construct the berm. No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad. The berm shall be maintained through the life of the well and after interim reclamation has been completed.
- Any water erosion that may occur due to the construction of the well pad during the life of the well will be quickly corrected and proper measures will be taken to prevent future erosion.

## **VI. CONSTRUCTION**

### **A. NOTIFICATION**

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-5909 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

### **B. TOPSOIL**

The operator shall strip the top portion of the soil (root zone) from the entire well pad area and stockpile the topsoil along the edge of the well pad as depicted in the APD. The root zone is typically six (6) inches in depth. All the stockpiled topsoil will be redistributed over the interim reclamation areas. Topsoil shall not be used for berming the pad or facilities. For final reclamation, the topsoil shall be spread over the entire pad area for seeding preparation.

Other subsoil (below six inches) stockpiles must be completely segregated from the topsoil stockpile. Large rocks or subsoil clods (not evident in the surrounding terrain) must be buried within the approved area for interim and final reclamation.

### **C. CLOSED LOOP SYSTEM**

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

### **D. FEDERAL MINERAL MATERIALS PIT**

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Carlsbad Field Office at (575) 234-5972.

### **E. WELL PAD SURFACING**

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation. The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

### **F. EXCLOSURE FENCING (CELLARS & PITS)**

**Exclosure Fencing**

The operator will install and maintain exclosure fencing for all open well cellars to prevent access to public, livestock, and large forms of wildlife before and after drilling operations until the pit is free of fluids and the operator initiates backfilling. (For examples of exclosure fencing design, refer to BLM's Oil and Gas Gold Book, Exclosure Fence Illustrations, Figure 1, Page 18.)

**G. ON LEASE ACCESS ROADS****Road Width**

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed twenty-five (25) feet.

**Surfacing**

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

**Crowning**

Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

**Ditching**

Ditching shall be required on both sides of the road.

**Turnouts**

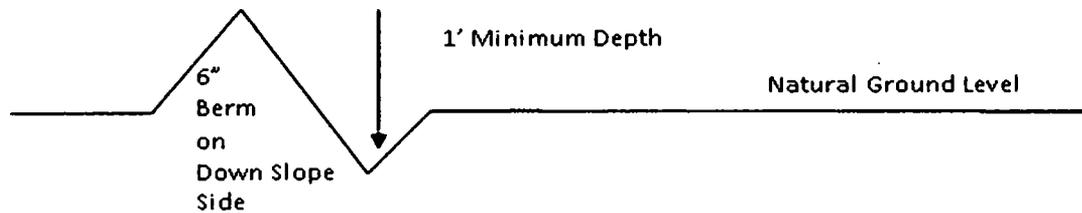
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

**Drainage**

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

### Cross Section of a Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

### Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

$$400 \text{ foot road with } 4\% \text{ road slope: } \frac{400'}{4\%} + 100' = 200' \text{ lead-off ditch interval}$$

### Cattle guards

An appropriately sized cattle guard sufficient to carry out the project shall be installed and maintained at fence/road crossings. Any existing cattle guards on the access road route shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattle guards that are in place and are utilized during lease operations.

### Fence Requirement

Where entry is granted across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting. The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fences.

### Public Access

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

**Construction Steps**

1. Salvage topsoil
2. Construct road

3. Redistribute topsoil
4. Revegetate slopes

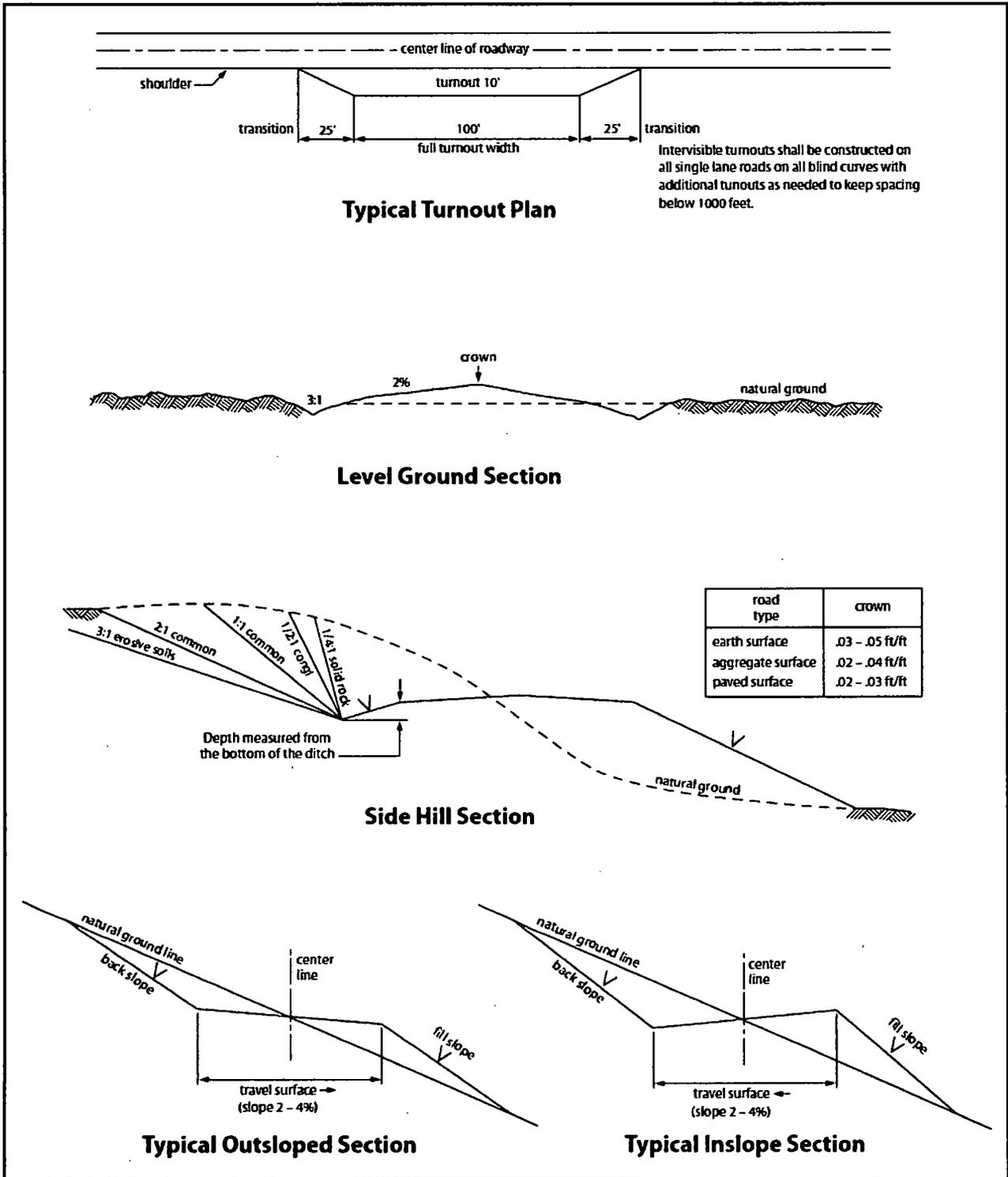


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

## **VII. PRODUCTION (POST DRILLING)**

### **A. WELL STRUCTURES & FACILITIES**

#### **Placement of Production Facilities**

Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

#### **Exclosure Netting (Open-top Tanks)**

Immediately following active drilling or completion operations, the operator will take actions necessary to prevent wildlife and livestock access, including avian wildlife, to all open-topped tanks that contain or have the potential to contain salinity sufficient to cause harm to wildlife or livestock, hydrocarbons, or Resource Conservation and Recovery Act of 1976-exempt hazardous substances. At a minimum, the operator will net, screen, or cover open-topped tanks to exclude wildlife and livestock and prevent mortality. If the operator uses netting, the operator will cover and secure the open portion of the tank to prevent wildlife entry. The operator will net, screen, or cover the tanks until the operator removes the tanks from the location or the tanks no longer contain substances that could be harmful to wildlife or livestock. Use a maximum netting mesh size of 1 ½ inches. The netting must not be in contact with fluids and must not have holes or gaps.

#### **Chemical and Fuel Secondary Containment and Exclosure Screening**

The operator will prevent all hazardous, poisonous, flammable, and toxic substances from coming into contact with soil and water. At a minimum, the operator will install and maintain an impervious secondary containment system for any tank or barrel containing hazardous, poisonous, flammable, or toxic substances sufficient to contain the contents of the tank or barrel and any drips, leaks, and anticipated precipitation. The operator will dispose of fluids within the containment system that do not meet applicable state or U. S. Environmental Protection Agency livestock water standards in accordance with state law; the operator must not drain the fluids to the soil or ground. The operator will design, construct, and maintain all secondary containment systems to prevent wildlife and livestock exposure to harmful substances. At a minimum, the operator will install effective wildlife and livestock exclosure systems such as fencing, netting, expanded metal mesh, lids, and grate covers. Use a maximum netting mesh size of 1 ½ inches.

#### **Open-Vent Exhaust Stack Exclosures**

The operator will construct, modify, equip, and maintain all open-vent exhaust stacks on production equipment to prevent birds and bats from entering, and to discourage perching, roosting, and nesting. (*Recommended exclosure structures on open-vent exhaust stacks are in the shape of a cone.*) Production equipment includes, but may not be limited to, tanks, heater-treaters, separators, dehydrators, flare stacks, in-line units, and compressor mufflers.

#### **Containment Structures**

Proposed production facilities such as storage tanks and other vessels will have a secondary containment structure that is constructed to hold the capacity of 1.5 times the largest tank, plus freeboard to account for precipitation, unless more stringent protective requirements are deemed necessary.

**Painting Requirement**

All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color, **Shale Green** from the BLM Standard Environmental Color Chart (CC-001: June 2008).

**B. PIPELINES**

**STANDARD STIPULATIONS FOR SURFACE INSTALLED PIPELINES**

**A copy of the Grant and attachments, including stipulations, survey plat(s) and/or map(s), shall be on location during construction. BLM personnel may request to review a copy of your permit during construction to ensure compliance with all stipulations.**

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. Holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
2. Holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, Holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC § 2601 *et seq.* (1982) with regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant (*see* 40 CFR, Part 702-799 and in particular, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193). Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the Authorized Officer concurrent with the filing of the reports to the involved Federal agency or State government.
3. Holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. § 9601, *et seq.* or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, *et seq.*) on the Right-of-Way (unless the release or threatened release is wholly unrelated to activity of the Right-of-Way Holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way Holder on the Right-of-Way. This provision applies without

regard to whether a release is caused by Holder, its agent, or unrelated third parties.

4. Holder shall be liable for damage or injury to the United States to the extent provided by 43 CFR Sec. 2883.1-4. Holder shall be held to a standard of strict liability for damage or injury to the United States resulting from pipe rupture, fire, or spills caused or substantially aggravated by any of the following within the right-of-way or permit area:

- a. Activities of Holder including, but not limited to: construction, operation, maintenance, and termination of the facility;
- b. Activities of other parties including, but not limited to:
  - (1) Land clearing
  - (2) Earth-disturbing and earth-moving work
  - (3) Blasting
  - (4) Vandalism and sabotage;

c. Acts of God.

The maximum limitation for such strict liability damages shall not exceed one million dollars (\$1,000,000) for any one event, and any liability in excess of such amount shall be determined by the ordinary rules of negligence of the jurisdiction in which the damage or injury occurred.

This section shall not impose strict liability for damage or injury resulting primarily from an act of war or from the negligent acts or omissions of the United States.

5. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil, salt water, or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil, salt water, or other pollutant, wherever found, shall be the responsibility of Holder, regardless of fault. Upon failure of Holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he/she deems necessary to control and clean up the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of Holder. Such action by the Authorized Officer shall not relieve Holder of any responsibility as provided herein.

6. All construction and maintenance activity shall be confined to the authorized right-of-way width of **20** feet. If the pipeline route follows an existing road or buried pipeline right-of-way, the surface pipeline shall be installed no farther than 10 feet from the edge of the road or buried pipeline right-of-way. If existing surface pipelines prevent this distance, the proposed surface pipeline shall be installed immediately adjacent to the outer surface pipeline. All construction and maintenance activity shall be confined to existing roads or right-of-ways.

7. No blading or clearing of any vegetation shall be allowed unless approved in

writing by the Authorized Officer.

8. Holder shall install the pipeline on the surface in such a manner that will minimize suspension of the pipeline across low areas in the terrain. In hummocky or dune areas, the pipeline shall be "snaked" around hummocks and dunes rather than suspended across these features.

9. The pipeline shall be buried with a minimum of 24 inches under all roads, "two-tracks," and trails. Burial of the pipe will continue for 20 feet on each side of each crossing. The condition of the road, upon completion of construction, shall be returned to at least its former state with no bumps or dips remaining in the road surface.

10. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.

12. Excluding the pipe, all above-ground structures not subject to safety requirement shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2; designated by the Rocky Mountain Five State Interagency Committee.

13. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. Signs will be maintained in a legible condition for the life of the pipeline.

14. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway.

15. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate cultural or scientific values. The holder will be responsible

for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.

16. The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, powerline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

17. Surface pipelines shall be less than or equal to 4 inches and a working pressure below 125 psi.

## **VIII. INTERIM RECLAMATION**

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

Within six (6) months of well completion, operators should work with BLM surface management specialists (Jim Amos: 575-234-5909) to devise the best strategies to reduce the size of the location. Interim reclamation should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche that is free of contaminants may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided below.

Upon completion of interim reclamation, the operator shall submit a Sundry Notices and Reports on Wells, Subsequent Report of Reclamation (Form 3160-5).

## **IX. FINAL ABANDONMENT & RECLAMATION**

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

## Seed Mixture 2, for Sandy Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)\* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law (s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed\* per acre:

<u>Species</u>	<u>lb/acre</u>
Sand dropseed ( <i>Sporobolus cryptandrus</i> )	1.0
Sand love grass ( <i>Eragrostis trichodes</i> )	1.0
Plains bristlegrass ( <i>Setaria macrostachya</i> )	2.0

\*Pounds of pure live seed:

Pounds of seed x percent purity x percent germination = pounds pure live seed

**BLM Lease Number:** NMNM019848

**Well Name & Number:** Lakeside 20702 SWD-1

## STANDARD STIPULATIONS FOR OIL AND GAS RELATED SITES

A copy of the application (Grant/Sundry Notice) and attachments, including stipulations and map, will be on location during construction. BLM personnel may request to view a copy of your permit during construction to ensure compliance with all stipulations.

The holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer, BLM.

1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant and for all response costs, penalties, damages, claims, and other costs arising from the provisions of the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. Chap. 82, Section 6901 et. seq., from the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. Chap. 109, Section 9601 et. seq., and from other applicable environmental statutes.

2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976, as amended (15 U.S.C. 2601, et. seq.) with regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized by this grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation and Liability Act, Section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the Authorized Officer concurrent with the filing of the reports to the involved Federal agency or State government.

3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et. seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et. seq.) on the right-of-way (unless the release or threatened release is wholly unrelated to the right-of-way holder's activity on the right-of-way). This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. If, during any phase of the construction, operation, maintenance, or termination of the site or related pipeline(s), any oil or other pollutant should be discharged from site facilities, the pipeline(s) or from containers or vehicles impacting Federal lands, the control and total removal, disposal, and cleanup of such oil or other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages to Federal lands resulting

**Approval Date: 07/20/2018**

therefrom, the Authorized Officer may take such measures as deemed necessary to control and cleanup the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve the holder of any liability or responsibility.

5. Sites shall be maintained in an orderly, sanitary condition at all times. Waste materials, both liquid and solid, shall be disposed of promptly at an appropriate, authorized waste disposal facility in accordance with all applicable State and Federal laws. "Waste" means all discarded matter including, but not limited to, human waste, trash, garbage, refuse, petroleum products, brines, chemicals, oil drums, ashes, and equipment.

6. The operator will notify the Bureau of Land Management (BLM) authorized officer and nearest Fish and Wildlife Service (FWS) Law Enforcement office within 24 hours, if the operator discovers a dead or injured federally protected species (i.e., migratory bird species, bald or golden eagle, or species listed by the FWS as threatened or endangered) in or adjacent to a pit, trench, tank, exhaust stack, or fence. (If the operator is unable to contact the FWS Law Enforcement office, the operator must contact the nearest FWS Ecological Services office.)

7. All above-ground structures not subject to safety requirements shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" designated by the Rocky Mountain Five-State Interagency Committee. The color selected for this project is **Shale Green**, Munsell Soil Color Chart Number 5Y 4/2.

8. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

9. A sales contract for removal of mineral material (caliche, sand, gravel, fill dirt) from an authorized pit, site, or on location must be obtained from the BLM prior to commencing construction. There are several options available for purchasing mineral material: contact the BLM office (575-234-5972).

10. The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

11. Once the site is no longer in service or use, the site must undergo final abandonment. At final abandonment, the site and access roads must undergo "final" reclamation so that the character and productivity of the land are restored. Earthwork for final reclamation must be completed within six (6) months of the abandonment of the site. All pads and facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact. After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

12. The holder shall stockpile an adequate amount of topsoil where blading occurs. The topsoil to be stripped is approximately   6   inches in depth. The topsoil will be segregated from other spoil piles. The topsoil will be used for final reclamation.

13. The holder will reseed all disturbed areas. Seeding will be done according to the attached seeding requirements, using the following seed mix.

- |   |  |
|---|--|
| <input type="checkbox"/> seed mixture 1     | <input type="checkbox"/> seed mixture 3          |
| <input type="checkbox"/> seed mixture 2     | <input type="checkbox"/> seed mixture 4          |
| <input type="checkbox"/> seed mixture 2/LPC | <input type="checkbox"/> Aplomado Falcon Mixture |

14. In those areas where erosion control structures are required to stabilize soil conditions, the holder shall install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound management practices. Any earth work will require prior approval by the Authorized Officer.

15. Open-topped Tanks - The operator will take actions necessary to prevent wildlife and livestock access, including avian wildlife, to all open-topped tanks that contain or have the potential to contain salinity sufficient to cause harm to wildlife or livestock, hydrocarbons, or Resource Conservation and Recovery Act of 1976-exempt hazardous substances. At a minimum, the operator will net, screen, or cover open-topped tanks to exclude wildlife and livestock and prevent mortality. If the operator uses netting, the operator will cover and secure the open portion of the tank to prevent wildlife entry. The operator will net, screen, or cover the tanks until the operator removes the tanks from the location or the tanks no longer contain substances that could be harmful to wildlife or livestock. Use a maximum netting mesh size of 1 ½ inches. The netting must not be in contact with fluids and must not have holes or gaps

16. The operator will prevent all hazardous, poisonous, flammable, and toxic substances from coming into contact with soil and water. At a minimum, the operator will install and maintain an impervious secondary containment system for any tank or barrel containing hazardous, poisonous, flammable, or toxic substances sufficient to contain the contents of the tank or barrel and any drips, leaks, and anticipated precipitation. The operator will dispose of fluids within the containment system that do not meet applicable state or U. S. Environmental Protection Agency

livestock water standards in accordance with state law; the operator must not drain the fluids to the soil or ground. The operator will design, construct, and maintain all secondary containment systems to prevent wildlife and livestock exposure to harmful substances. At a minimum, the operator will install effective wildlife and livestock exclusion systems such as fencing, netting, expanded metal mesh, lids, and grate covers. Use a maximum netting mesh size of 1 ½ inches.

17. Open-Vent Exhaust Stack Exlosures – The operator will construct, modify, equip, and maintain all open-vent exhaust stacks on production equipment to prevent birds and bats from entering, and to discourage perching, roosting, and nesting. (Recommended exclusion structures on open-vent exhaust stacks are in the shape of a cone.) Production equipment includes, but may not be limited to, tanks, heater-treaters, separators, dehydrators, flare stacks, in-line units, and compressor mufflers.

18. Containment Structures - Proposed production facilities such as storage tanks and other vessels will have a secondary containment structure that is constructed to hold the capacity of 1.5 times the largest tank, plus freeboard to account for precipitation, unless more stringent protective requirements are deemed necessary.

#### 19. Special Stipulations:

##### Cave, Karst, and Hydrology Conditions of Approval for APDs

\*\* Depending on location, additional Drilling, Casing, and Cementing procedures may be required by engineering to protect critical karst groundwater recharge areas.

##### Cave/Karst Surface Mitigation

The following stipulations will be applied to minimize impacts during construction, drilling and production:

##### Construction:

In the advent that any underground voids are opened up during construction activities, construction activities will be halted and the BLM will be notified immediately.

##### No Blasting:

No blasting will be utilized for pad construction. The pad will be constructed and leveled by adding the necessary fill and caliche.

##### Pad Berming:

- The entire perimeter of the well pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad.
- The compacted berm shall be constructed at a minimum of 12 inches high with impermeable mineral material (e.g., caliche).
- No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad.
- The topsoil stockpile shall be located outside the bermed well pad.
- Topsoil, either from the well pad or surrounding area, shall not be used to construct the berm.

- No storm drains, tubing or openings shall be placed in the berm.
- If fluid collects within the bermed area, the fluid must be vacuumed into a safe container and disposed of properly at a state approved facility.
- The integrity of the berm shall be maintained around the surfaced pad throughout the life of the well and around the downsized pad after interim reclamation has been completed.
- Any access road entering the well pad shall be constructed so that the integrity of the berm height surrounding the well pad is not compromised. (Any access road crossing the berm cannot be lower than the berm height.)
- Following a rain event, all fluids will vacuumed off of the pad and hauled off-site and disposed at a proper disposal facility.

#### Tank Battery Liners and Berms:

Tank battery locations and all facilities will be lined and bermed. A 20 mil permanent liner will be installed with a 4 oz. felt backing, or equivalent, to prevent tears or punctures. Tank battery berms must be large enough to contain 1 ½ times the content of the largest tank.

#### Leak Detection System:

A method of detecting leaks is required. The method could incorporate gauges to measure loss, situating valves and lines so they can be visually inspected, or installing electronic sensors to alarm when a leak is present. Leak detection plan will be submitted to BLM for approval.

#### Automatic Shut-off Systems:

Automatic shut off, check valves, or similar systems will be installed for pipelines and tanks to minimize the effects of catastrophic line failures used in production or drilling.

#### Cave/Karst Subsurface Mitigation

The following stipulations will be applied to protect cave/karst and ground water concerns:

##### Rotary Drilling with Fresh Water:

Fresh water will be used as a circulating medium in zones where caves or karst features are expected. SEE ALSO: Drilling COAs for this well.

##### Directional Drilling:

Kick off for directional drilling will occur at least 100 feet below the bottom of the cave occurrence zone. SEE ALSO: Drilling COAs for this well.

##### Lost Circulation:

ALL lost circulation zones from the surface to the base of the cave occurrence zone will be logged and reported in the drilling report.

Regardless of the type of drilling machinery used, if a void of four feet or more and circulation losses greater than 70 percent occur simultaneously while drilling in any cave-bearing zone, the BLM will be notified immediately by the operator. The BLM will assess the situation and work with the operator on corrective actions to resolve the problem.

##### Abandonment Cementing:

Upon well abandonment in cave karst areas additional plugging conditions of approval may be required. The BLM will assess the situation and work with the operator to ensure proper plugging of the wellbore.

**Pressure Testing:**

Annual pressure monitoring will be performed by the operator on all casing annuli and reported in a sundry notice. If the test results indicated a casing failure has occurred, remedial action will be undertaken to correct the problem to the BLM's approval.

**Hydrology:**

The entire well pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad. Topsoil shall not be used to construct the berm. No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad. The berm shall be maintained through the life of the well and after interim reclamation has been completed. Any water erosion that may occur due to the construction of the well pad during the life of the well will be quickly corrected and proper measures will be taken to prevent future erosion.



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

# Operator Certification Data Report

07/20/2018

## 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:** Katy Reddell

**Signed on:** 01/10/2018

**Title:** Regulatory Analyst

**Street Address:** 104 S Pecos

**City:** Midland

**State:** TX

**Zip:** 79701

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

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

## Field Representative

**Representative Name:** Nick Eaton

**Street Address:** 104 South Pecos

**City:** Midland

**State:** TX

**Zip:** 79701

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

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



APD ID: 10400025050

Submission Date: 01/10/2018

highlighted data  
reflects the most  
recent changes

Operator Name: BTA OIL PRODUCERS LLC

Well Name: LAKESIDE 20702 SWD

Well Number: 1

Show Final Text

Well Type: INJECTION - DISPOSAL

Well Work Type: Drill

**Section 1 - General**

APD ID: 10400025050

Tie to previous NOS?

Submission Date: 01/10/2018

BLM Office: CARLSBAD

User: Katy Reddell

Title: Regulatory Analyst

Federal/Indian APD: FED

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

Lease number: NMNM019848

Lease Acres: 960

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: pinskeep@btaoil.com

**Section 2 - Well Information**

Well in Master Development Plan? NO

Mater Development Plan name:

Well in Master SUPO? NO

Master SUPO name:

Well in Master Drilling Plan? NO

Master Drilling Plan name:

Well Name: LAKESIDE 20702 SWD

Well Number: 1

Well API Number:

Field/Pool or Exploratory? Field and Pool

Field Name: SWD; DEVONIAN- SILURIAN

Pool Name:

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

Operator Name: BTA OIL PRODUCERS LLC

Well Name: LAKESIDE 20702 SWD

Well Number: 1

Describe other minerals:

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

Type of Well Pad: SINGLE WELL

Multiple Well Pad Name:

Number:

Well Class: VERTICAL

Number of Legs: 1

Well Work Type: Drill

Well Type: INJECTION - DISPOSAL

Describe Well Type:

Well sub-Type: INJECTION - DISPOSAL

Describe sub-type:

Distance to town: 5.23 Miles

Distance to nearest well: 1900 FT

Distance to lease line: 1750 FT

Reservoir well spacing assigned acres Measurement: 3 Acres

Well plat: C\_102\_LAKESIDE\_20702\_SWD\_1\_final\_20180103151229.pdf

Well work start Date: 04/01/2018

Duration: 45 DAYS

**Section 3 - Well Location Table**

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83

Vertical Datum: NGVD29

Survey number:

	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD
SHL Leg #1	1750	FNL	2640	FEL	23S	29E	29	Lot G	32.278264	-104.006511	EDD Y	NEW MEXI CO	NEW MEXI CO	F	NMNM 019848	2995	16000	16000
KOP Leg #1		FSL		FWL										S	STATE	2995		
PPP Leg #1		FNL		FWL							EDD Y		NEW MEXI CO	S	STATE	2995		

Operator Name: BTA OIL PRODUCERS LLC

Well Name: LAKESIDE 20702 SWD

Well Number: 1

	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD
EXIT Leg #1	175 0	FNL	264 0	FEL	23S	29E	29	Lot G	32.27826 4	- 104.0065 11	EDD Y	NEW MEXI CO	NEW MEXI CO	F	NMNM 019848	- 130 05	160 00	160 00
BHL Leg #1	175 0	FNL	264 0	FEL	23S	29E	29	Lot G	32.27864	- 104.0065 11	EDD Y	NEW MEXI CO	NEW MEXI CO	F	NMNM 019848	- 130 05	160 00	160 00

Operator Name: BTA OIL PRODUCERS LLC

Well Name: LAKESIDE 20702 SWD

Well Number: 1

**Choke Diagram Attachment:**

CHOKE\_DIAGRAM\_LAKESIDE\_20702\_SWD\_1\_20180104141230.pdf

**BOP Diagram Attachment:**

BOP\_DIAGRAM\_LAKESIDE\_20702\_SWD\_1\_20180104141243.pdf

Flex\_Variance\_Choke\_Hose\_\_\_Test\_Chart\_and\_Specs\_20180524122546.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	26	20.0	NEW	API	N	0	650	0	650			650	H-40	94	STC	3.2	9.5	DRY	9.5	DRY	17
2	INTERMEDIATE	17.5	13.375	NEW	API	N	0	2650	0	2650			2650	J-55	54.5	STC	1.4	3.4	DRY	3.5	DRY	5.9
3	INTERMEDIATE	12.25	9.625	NEW	API	N	0	10800	0	10800			10800	HCL-80	40	LTC	1.35	2.02	BUOY	1.98	BUOY	2.49
4	LINER	8.5	7.0	NEW	API	N	10500	14507	10500	14507			4007	P-110	29	LTC	1.21	1.58	DRY	3.84	DRY	4.47
5	OPEN HOLE	6.125					14507	16000					1493									

**Casing Attachments**

Casing ID: 1      String Type: SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

DRILLING\_PLAN\_Lakeside\_SWD\_1\_20180529134243.xlsx

**Operator Name:** BTA OIL PRODUCERS LLC

**Well Name:** LAKESIDE 20702 SWD

**Well Number:** 1

---

**Casing Attachments**

---

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

**Inspection Document:**

**Spec Document:**

**Tapered String Spec:**

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

DRILLING\_PLAN\_\_Lakeside\_SWD\_\_1\_20180529135013.xlsx

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

**Inspection Document:**

**Spec Document:**

**Tapered String Spec:**

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

DRILLING\_PLAN\_\_Lakeside\_SWD\_\_1\_20180529141246.xlsx

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

**Inspection Document:**

**Spec Document:**

**Tapered String Spec:**

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

DRILLING\_PLAN\_\_Lakeside\_SWD\_\_1\_20180529141725.xlsx

---

Operator Name: BTA OIL PRODUCERS LLC

Well Name: LAKESIDE 20702 SWD

Well Number: 1

Casing Attachments

Casing ID: 5 String Type: OPEN HOLE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

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	650	1200	1.35	14.8	1620		CLASS C	PLUS ADDITIVES

INTERMEDIATE	Lead	1	1	2458	1300	2.45	11.8	3185		CLASS c	PLUS ADDITIVES
INTERMEDIATE	Tail		2458	2650	200	1.34	14.8	288		CLASS c	PLUS ADDITIVES
INTERMEDIATE	Lead	2880	1250	9550	1470	2.21	12.7	3249		CLASS H	PLUS ADDITIVES
INTERMEDIATE	Tail		9550	10800	415	1.18	15.6	490		CLASS H	PLUS ADDITIVES
LINER	Lead		10400	14507	545	1.2	14.5	654		50/50 CLASS H	PLUS ADDITIVES

OPEN HOLE	Lead		14507	16000	0	0	0	0		NONE	NONE
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Operator Name: BTA OIL PRODUCERS LLC

Well Name: LAKESIDE 20702 SWD

Well Number: 1

### 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	650	SPUD MUD	8.3	8.4							
650	1080 0	SALT SATURATED	8.9	9.3							
1080 0	1450 7	WATER-BASED MUD	11.4	13.6							
1450 7	1600 0	OTHER : FRESH WATER	8.3	8.4							

### 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:** LAKESIDE 20702 SWD

**Well Number:** 1

### **Section 7 - Pressure**

**Anticipated Bottom Hole Pressure:** 6905

**Anticipated Surface Pressure:** 3385

**Anticipated Bottom Hole Temperature(F):** 211

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

**Describe:**

**Contingency Plans geohazards description:**

**Contingency Plans geohazards attachment:**

**Hydrogen Sulfide drilling operations plan required?** NO

**Hydrogen sulfide drilling operations plan:**

### **Section 8 - Other Information**

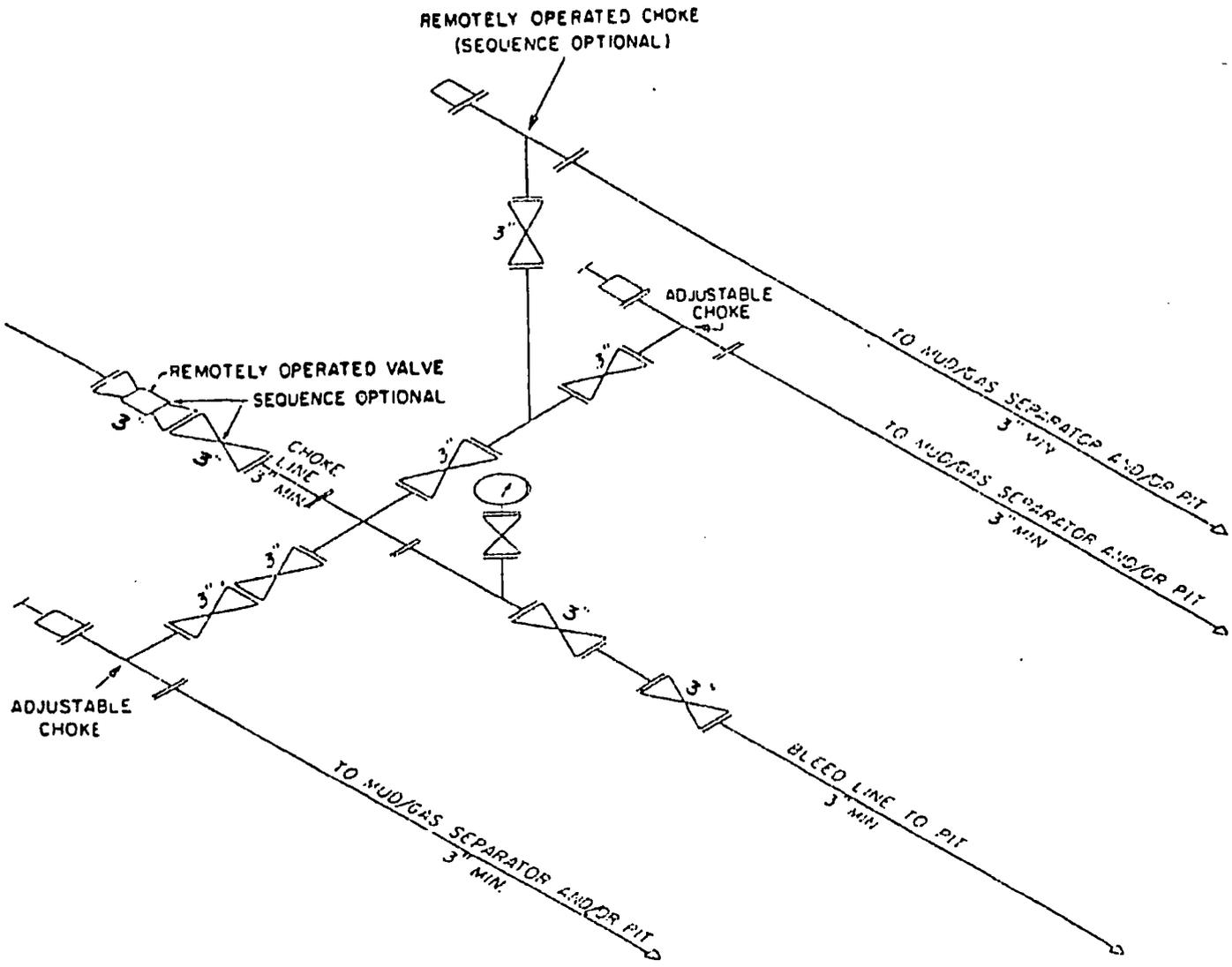
**Proposed horizontal/directional/multi-lateral plan submission:**

**Other proposed operations facets description:**

**Other proposed operations facets attachment:**

**Other Variance attachment:**

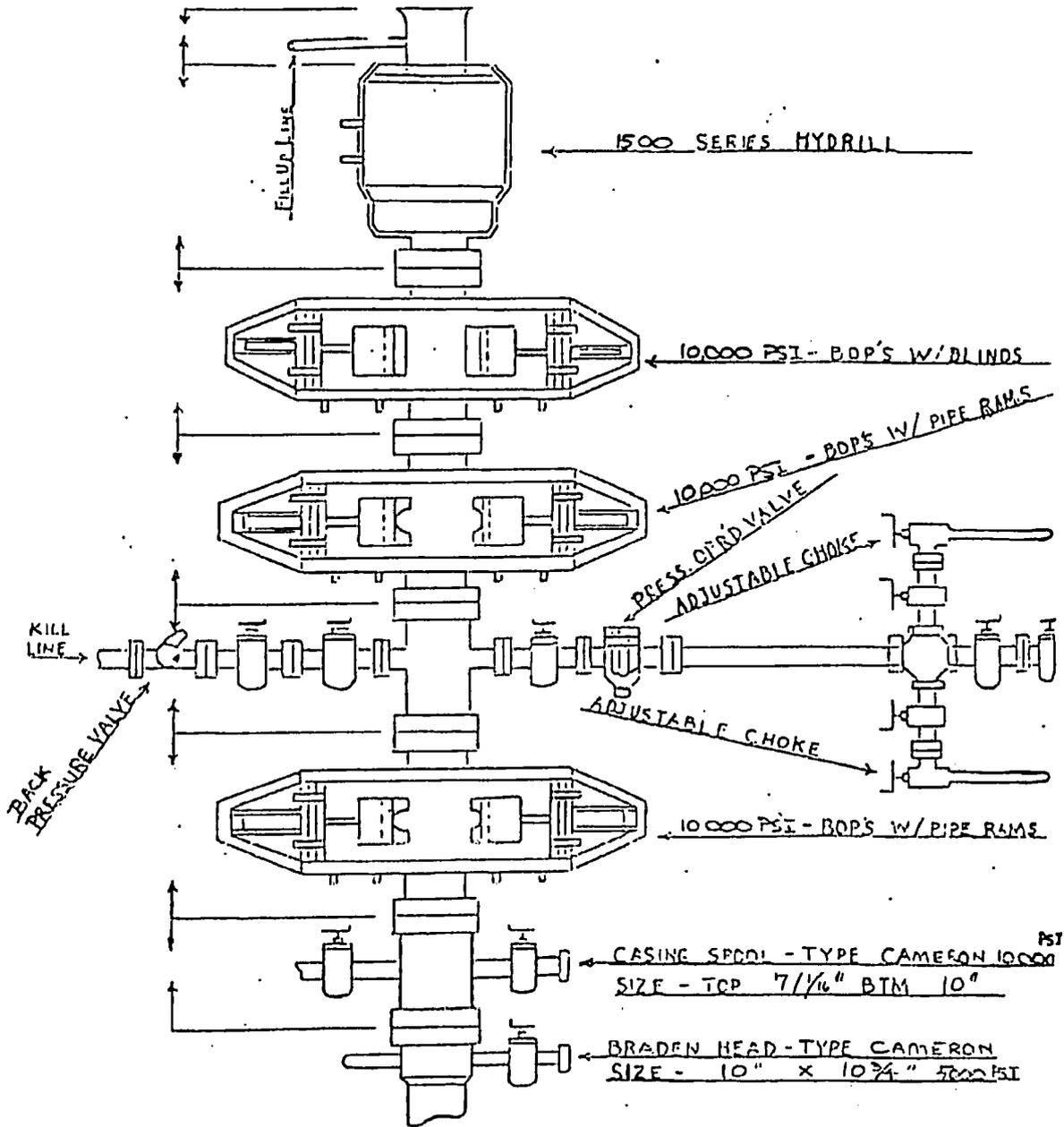
WBD\_LAKESIDE\_20702\_SWD\_1\_20180104145013.pdf



10M CHOKE MANIFOLD EQUIPMENT — CONFIGURATION MAY VARY

BTA Oil Producers, LLC  
 Lakeside 20702 SWD 1

DRILLER'S ZERO 1 FT ABOVE ROTARY TABLE



BTA Oil Producers, LLC  
 Lakeside 20702 SWD 1

10M BOP



CONTITECH RUBBER  
Industrial Kll.

No: QC-DB- 599/ 2014  
Page: 16 / 176

Rig 94

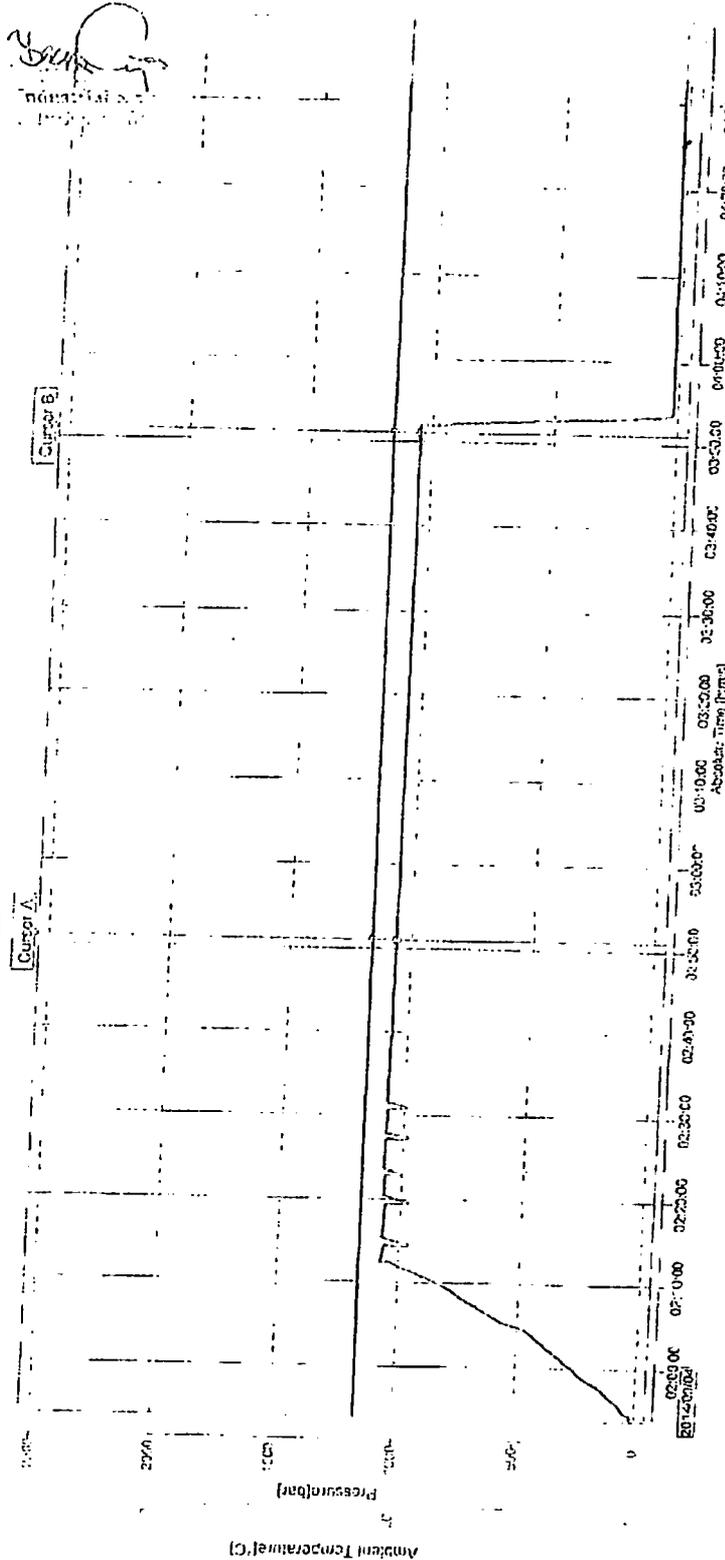
Asset 24455

QUALITY CONTROL INSPECTION AND TEST CERTIFICATE				CERT. N°: 1592	
PURCHASER: ContiTech Oil & Marine Corp.			P.O. N°: 4500461753		
CONTITECH ORDER N°	539225	HOSE TYPE:	3" ID	Choke & Kill Hose	
HOSE SERIAL N°		NOMINAL / ACTUAL LENGTH:		7,62 m / 7,66 m	
W.P. 68,9 MPa	10000 psi	T.P. 103,4 MPa	15000 psi	Duration:	60 min.
Pressure test with water at ambient temperature					
See attachment. ( 1 page )					
>	10 Min.				
↑	50 MPa				
COUPLINGS Type	Serial N°	Quality	Heat N°		
3" coupling with 4 1/16" 10K API Swivel Flange end Hub	2574 5533	AISI 4130	A1582N H8572		
		AISI 4130	58855		
		AISI 4130	A1199N A1423N		
Not Designed For Well Testing			API Spec 16 C		
Fire Rated			Temperature rate: "B"		
All metal parts are flawless					
WE CERTIFY THAT THE ABOVE HOSE HAS BEEN MANUFACTURED IN ACCORDANCE WITH THE TERMS OF THE ORDER INSPECTED AND PRESSURE TESTED AS ABOVE WITH SATISFACTORY RESULT.					
STATEMENT OF CONFORMITY: We hereby certify that the above items/equipment supplied by us are in conformity with the terms, conditions and specifications of the above Purchaser Order and that these items/equipment were fabricated inspected and tested in accordance with the referenced standards, codes and specifications and meet the relevant acceptance criteria and design requirements.					
Date:	Inspector	Quality Control			
04. September 2014.					

File Name : 000220\_68543\_68545-547.GEV.....000236\_68543\_68545-547.GEV  
 File Message : 68543\_68545\_5547  
 Device Type : GX1C  
 Serial No. : SSP606389  
 Data Count : 0046  
 Print Group : Press-Temp  
 Print Range : 2014/09/04 01:53:54.000 - 2014/09/04 04:39:39.000  
 Comment:

Sampling Int. : 1.000 sec  
 Start Time : 2014/09/04 01:53:54.000  
 Stop Time : 2014/09/04 04:39:39.000

Data No	Cursor A	Cursor B	Difference
1	34.12	7932	7897.88
Absolute Time	2014/09/04 01:53:54.000	2014/09/04 03:51:06.000	21.063191000
Log Comment	Value A	Value B	Value B-A
Pressure[bar]	1080.05	1045.57	-34.48
Ambient Temperature[C]	23.21	25.34	2.13



Legend



**BOP/CHOKE**

Pressure Rating: 10M

Rating Depth: 20,000'

Requesting Variance?

No

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**Pressure**

Anticipated Bottom Hole Pressure: 6905 psi

Anticipated Bottom Hole Temperature: 211

Anticipated Surface Hole Pressure: 280 psi

Anticipated abnormal pressures, temperatures, or potential geologic hazards? none

Hydrogen sulfide drilling operations plan required? No

Circulating Medium Table				
Depth (TVD)		Type	Weight (ppg)	hole size (in)
From	To			
0	650	SPUD MUD	8.3-8.4	26
650	2650	brine	10	17.5
2650	10800	Cut brine	8.9-9.3	12.25
10800	14507	WATER BASED MUD	11.4-13.6	8.5
14507	16000	fresh water	8.3-8.4	6.125

SUPO

Methods for Handling Waste			
Waste Type:	Amount of Waste: (Barrels, Gallons, Pounds)	Disposal Frequency: (Daily, Weekly , Annually, One time Only)	Waste Disposal Type: ( Burial Onsite, Hual to Commercial Facility, On/Off Lease Injection, Recycle, Other)
Drilling	1990 bbls	<i>one time</i>	<i>Hual to Commercial Facility</i>
Completions/ Stimulation	300 bbls	<i>one time</i>	<i>Hual to Commercial Facility</i>
Sewage	1500 gal	<i>one time</i>	<i>Hual to Commercial Facility</i>
Garbage	5000 lbs	<i>one time</i>	<i>Hual to Commercial Facility</i>
Chemicals	0	NA	<i>Hual to Commercial Facility</i>

<b>Disposal Location Ownership: (Fed, State, Private, Indian, Commercial, Other)</b>
<i>Commercial</i>



**BOP/CHOKE**

Pressure Rating: 10M

Rating Depth: 20,000'

Requesting Variance?

No

---

**Pressure**

Anticipated Bottom Hole Pressure: 6905 psi

Anticipated Bottom Hole Temperature: 211

Anticipated Surface Hole Pressure: 280 psi

Anticipated abnormal pressures, temperatures, or potential geologic hazards? none

Hydrogen sulfide drilling operations plan required? No

<b>Circulating Medium Table</b>				
<b>Depth (TVD)</b>		<b>Type</b>	<b>Weight (ppg)</b>	<b>hole size (in)</b>
<b>From</b>	<b>To</b>			
0	650	SPUD MUD	8.3-8.4	26
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**BOP/CHOKE**

Pressure Rating: 10M

Rating Depth: 20,000'

Requesting Variance?

No

---

**Pressure**

Anticipated Bottom Hole Pressure: 6905 psi

Anticipated Bottom Hole Temperature: 211

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Anticipated abnormal pressures, temperatures, or potential geologic hazards? none

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Methods for Handling Waste			
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Completions/ Stimulation	300 bbls	one time	Hual to Commercial Facility
Sewage	1500 gal	one time	Hual to Commercial Facility
Garbage	5000 lbs	one time	Hual to Commercial Facility
Chemicals	0	NA	Hual to Commercial Facility

<b>Disposal Location Ownership: (Fed, State, Private, Indian, Commercial, Other)</b>
<i>Commercial</i>



**BOP/CHOKE**

Pressure Rating: 10M

Rating Depth: 20,000'

Requesting Variance?

No

---

**Pressure**

Anticipated Bottom Hole Pressure: 6905 psi

Anticipated Bottom Hole Temperature: 211

Anticipated Surface Hole Pressure: 280 psi

Anticipated abnormal pressures, temperatures, or potential geologic hazards? none

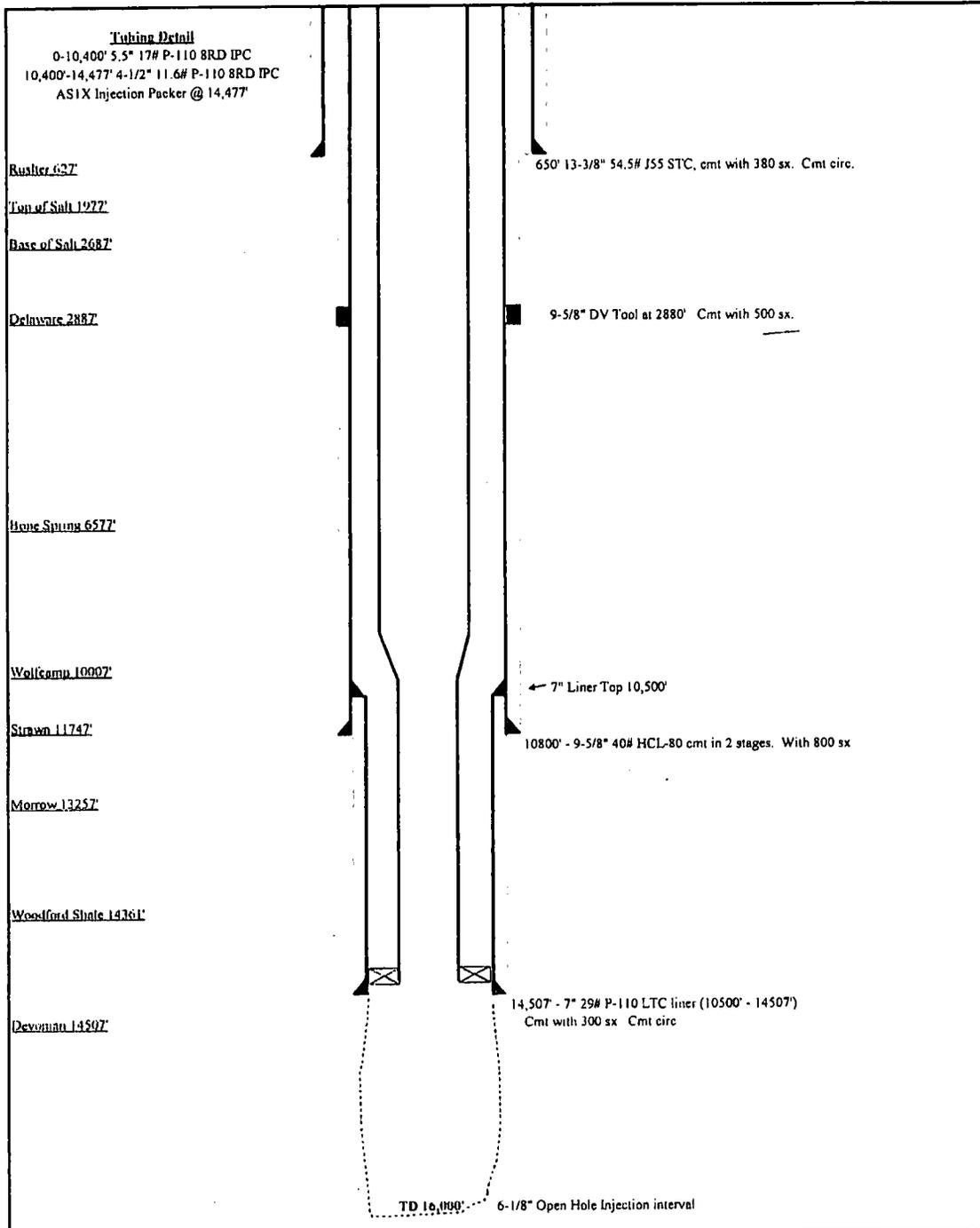
Hydrogen sulfide drilling operations plan required? No

Circulating Medium Table				
Depth (TVD)		Type	Weight (ppg)	hole size (in)
From	To			
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Garbage	5000 lbs	<i>one time</i>	<i>Hual to Commercial Facility</i>
Chemicals	0	<i>NA</i>	<i>Hual to Commercial Facility</i>

<b>Disposal Location Ownership: (Fed, State, Private, Indian, Commercial, Other)</b>
<i>Commercial</i>



		Lakeside SWD #1		Drawn	NE
		SWD			
		1750 FNL & 2640' FF1. 29, T23S, R29E			
		Eddy	NM	Date	11/6/2017
<b>BTA Oil Producers</b>					



APD ID: 10400025050

Submission Date: 01/10/2018

Highlighted data  
reflects the most  
recent changes

Operator Name: BTA OIL PRODUCERS LLC

Well Name: LAKESIDE 20702 SWD

Well Number: 1

Show Final Text

Well Type: INJECTION - DISPOSAL

Well Work Type: Drill

### Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

17110600\_Lakeside\_20702\_SWD\_\_1\_Vicinity\_Map\_20180104145329.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:

17110600\_Lakeside\_20702\_SWD\_\_1\_Topographic\_\_Access\_Rd\_20180104145631.pdf

New road type: RESOURCE

Length: 392

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:** LAKESIDE 20702 SWD

**Well Number:** 1

**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

**Additional Attachment(s):**

### Section 3 - Location of Existing Wells

**Existing Wells Map?** YES

**Attach Well map:**

Lakeside\_20702\_SWD\_\_1\_\_Half\_Mile\_Radius\_Map\_and\_well\_data\_20180110144610.pdf

**Existing Wells description:**

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

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

**Production Facilities description:** A production facility is proposed to be installed off the proposed well location. Production from the well will be processed at the Central Tank Battery located in Section 29, T23S, R29E. See attached Production Facility Layout and Central Tank Battery Location Plat. The proposed 4" surface poly flowline will be approximately 592' in length and follow alongside the proposed access road. See the attached proposed lease flowline plat. If any plans change regarding the production flow lines, production facility, or other infrastructure, we will submit a sundry notice or right of way (if applicable) prior to installation or construction.

**Operator Name:** BTA OIL PRODUCERS LLC

**Well Name:** LAKESIDE 20702 SWD

**Well Number:** 1

**Production Facilities map:**

LAKESIDE\_20702\_SWD\_\_1\_Production\_Facility\_20180105103418.pdf

LAKESIDE\_20702\_SWD\_\_1\_FLOWLINE\_PATH\_20180109102050.jpg

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

**Water Source Table**

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

**Water source type:** OTHER

**Describe type:**

**Source longitude:** -104.75295

**Source latitude:** 32.154545

**Source datum:** NAD83

**Water source permit type:** PRIVATE CONTRACT

**Source land ownership:** PRIVATE

**Water source transport method:** TRUCKING

**Source transportation land ownership:** PRIVATE

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

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

**Source volume (gal):** 4200000

**Water source and transportation map:**

LAKESIDE\_20702\_SWD\_\_1\_\_\_WTR\_SOURCE\_TRANS\_MAP\_20180110155639.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:**

**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.):**

**Operator Name:** BTA OIL PRODUCERS LLC

**Well Name:** LAKESIDE 20702 SWD

**Well Number:** 1

**Well Production type:**

**Completion Method:**

**Water well additional information:**

**State appropriation permit:**

**Additional information attachment:**

### Section 6 - Construction Materials

**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 21, T23S, R29E Eddy County, NM or Section 18 T23S R30E

**Construction Materials source location attachment:**

### Section 7 - Methods for Handling Waste

**Waste type:** GARBAGE

**Waste content description:** Trash

**Amount of waste:** 500 pounds

**Waste disposal frequency :** One Time Only

**Safe containment description:** Trash produced during drilling and completion operations will be collected in a trash container and disposed of properly.

**Safe containmant attachment:**

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

**Disposal type description:**

**Disposal location description:** Trucked to an approved disposal facility.

**Waste type:** DRILLING

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

**Amount of waste:** 4164 barrels

**Waste disposal frequency :** One Time Only

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

**Safe containmant attachment:**

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

**Disposal type description:**

**Disposal location description:** Trucked to an approved disposal facility.

**Operator Name:** BTA OIL PRODUCERS LLC

**Well Name:** LAKESIDE 20702 SWD

**Well Number:** 1

**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 FACILITY

**Disposal type description:**

**Disposal location description:** Trucked to an 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: LAKESIDE 20702 SWD

Well Number: 1

**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:

17110600\_Lakeside\_20702\_SWD\_\_1\_Well\_Site\_Plan\_\_600s\_\_20180109074112.pdf

Comments:

**Section 10 - Plans for Surface Reclamation**

Type of disturbance: New Surface Disturbance

Multiple Well Pad Name:

Multiple Well Pad Number:

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.

<b>Well pad proposed disturbance (acres):</b> 3.67	<b>Well pad interim reclamation (acres):</b> 3.38	<b>Well pad long term disturbance (acres):</b> 0
<b>Road proposed disturbance (acres):</b> 0.22	<b>Road interim reclamation (acres):</b> 0.13	<b>Road long term disturbance (acres):</b> 0.18
<b>Powerline proposed disturbance (acres):</b> 0	<b>Powerline interim reclamation (acres):</b> 0	<b>Powerline long term disturbance (acres):</b> 0
<b>Pipeline proposed disturbance (acres):</b> 0	<b>Pipeline interim reclamation (acres):</b> 0.0543618	<b>Pipeline long term disturbance (acres):</b> 0.0271809
<b>Other proposed disturbance (acres):</b> 0	<b>Other interim reclamation (acres):</b> 0	<b>Other long term disturbance (acres):</b> 0
<b>Total proposed disturbance:</b> 3.89	<b>Total interim reclamation:</b> 3.5643618	<b>Total long term disturbance:</b> 0.2071809

Disturbance Comments:

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

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

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

**Operator Name:** BTA OIL PRODUCERS LLC

**Well Name:** LAKESIDE 20702 SWD

**Well Number:** 1

**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 type:**

**Seed source:**

**Seed name:**

**Source name:**

**Source address:**

**Source phone:**

**Seed cultivar:**

**Seed use location:**

**PLS pounds per acre:**

**Proposed seeding season:**

### Seed Summary

**Total pounds/Acre:**

**Operator Name:** BTA OIL PRODUCERS LLC

**Well Name:** LAKESIDE 20702 SWD

**Well Number:** 1

**Seed Type**

**Pounds/Acre**

**Seed reclamation attachment:**

**Operator Contact/Responsible Official Contact Info**

**First Name:**

**Last Name:**

**Phone:**

**Email:**

**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:**

**Operator Name:** BTA OIL PRODUCERS LLC

**Well Name:** LAKESIDE 20702 SWD

**Well Number:** 1

**Military Local Office:**

**USFWS Local Office:**

**Other Local Office:**

**USFS Region:**

**USFS Forest/Grassland:**

**USFS Ranger District:**

### Section 12 - Other Information

**Right of Way needed?** YES

**Use APD as ROW?** YES

**ROW Type(s):** 288103 ROW – Salt Water Disposal Pipeline/Facility

### ROW Applications

**SUPO Additional Information:**

**Use a previously conducted onsite?** YES

**Previous Onsite information:** Onsite was conducted Wednesday, November 15, 2017 by Fernando Banos

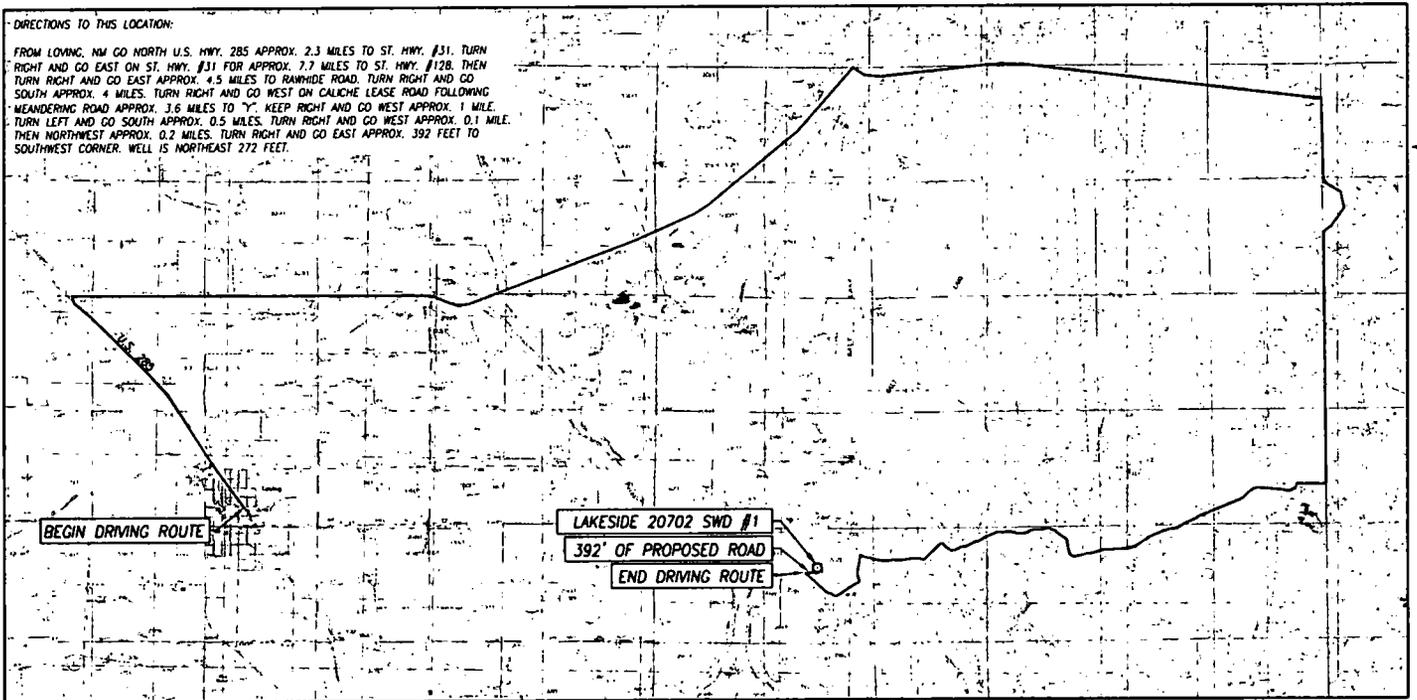
### Other SUPO Attachment



# TOPOGRAPHIC AND ACCESS ROAD MAP

**DIRECTIONS TO THIS LOCATION:**

FROM LOVING, NM GO NORTH U.S. HWY. 285 APPROX. 2.3 MILES TO ST. HWY. #31. TURN RIGHT AND GO EAST ON ST. HWY. #31 FOR APPROX. 7.7 MILES TO ST. HWY. #128. THEN TURN RIGHT AND GO EAST APPROX. 4.5 MILES TO RAWHIDE ROAD. TURN RIGHT AND GO SOUTH APPROX. 4 MILES. TURN RIGHT AND GO WEST ON CALICHE LEASE ROAD FOLLOWING MEANDERING ROAD APPROX. 3.6 MILES TO "Y". KEEP RIGHT AND GO WEST APPROX. 1 MILE. TURN LEFT AND GO SOUTH APPROX. 0.5 MILES. TURN RIGHT AND GO WEST APPROX. 0.1 MILE. THEN NORTHWEST APPROX. 0.2 MILES. TURN RIGHT AND GO EAST APPROX. 392 FEET TO SOUTHWEST CORNER. WELL IS NORTHEAST 272 FEET.



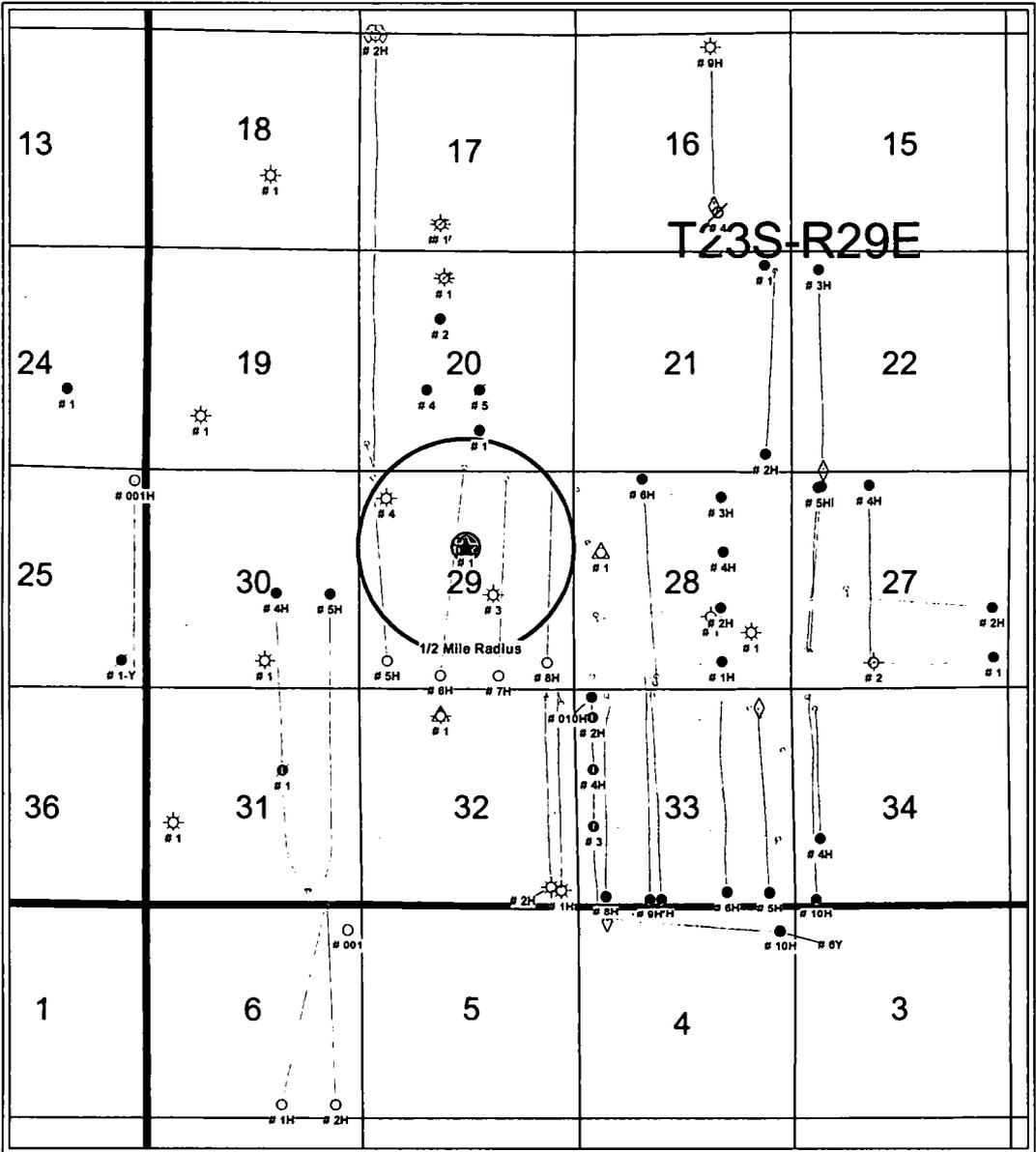
SEC. 29 TWP. 23-S RGE. 29-E  
 COUNTY EDDY STATE NEW MEXICO  
 DESCRIPTION 1750' FNL & 2640' FEEL  
 ELEVATION 2995'  
 OPERATOR BTA OIL PRODUCERS, LLC  
 EDDYSE LAKESIDE 20702 SWD  
 U.S.G.S. TOPOGRAPHIC MAP  
 SPRING LAKE, N.M. SURVEY N.M.P.M.

SCALE: 1" = 2000'

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



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<b>BTA OIL PRODUCERS, LLC</b>	
<b>Lakeside 20702 SWD #1</b>	
1/2 Mile Radius Map	
Section 29, T23S-29E	
Eddy County, New Mexico	
<p><b>WELL SYMBOLS</b></p> <ul style="list-style-type: none"> <li>★ Proposed Location</li> <li>○ Permitted Location</li> <li>⊗ Completing/Completed</li> <li>● Oil Well</li> <li>☆ Gas Well</li> <li>○ Dry Hole</li> <li>● Plugged &amp; Abandoned Oil Well</li> <li>☆ Plugged &amp; Abandoned Gas Well</li> <li>⊗ Injection From Oil</li> <li>△ Service Well</li> <li>◇ Pitot Hole</li> </ul>	
<p><b>REMARKS</b></p> <p>Lakeside 20702 SWD #1 Highlighted in Yellow</p> <p>1/2 Mile Radius Indicated in Red</p> <p>Only Wells Within 2 Mile Radius Shown on Map</p> <p>See Exhibit "A" For Well List</p>	
By: JHB	

## Exhibit "A"

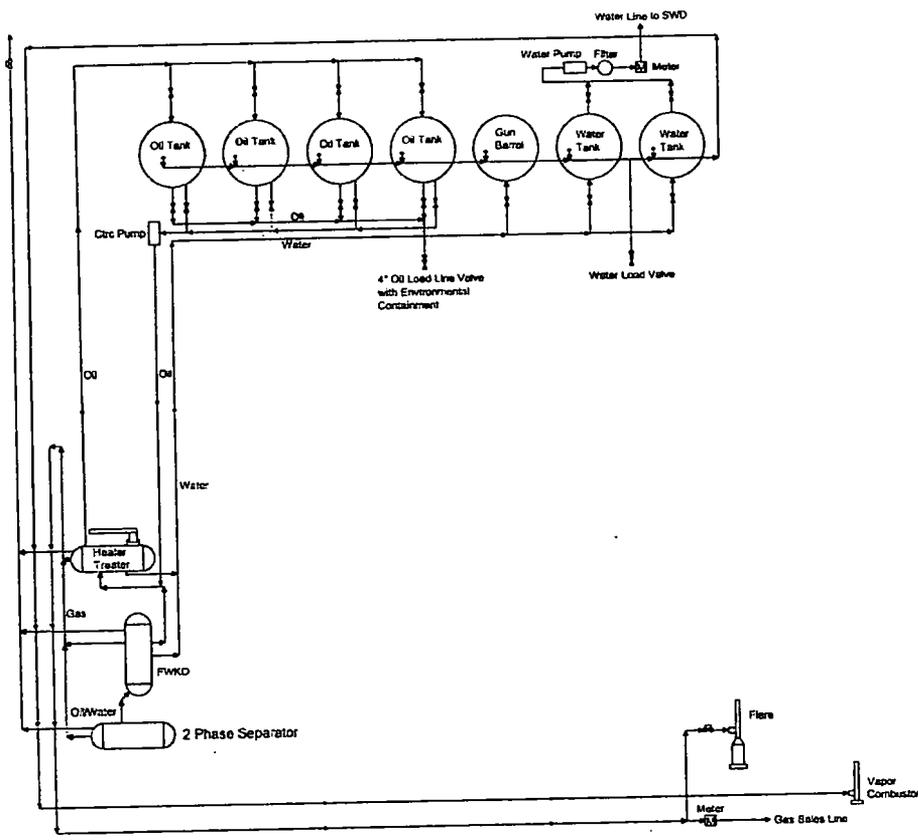
API #	Current Operator	Well Name	Well No.	Sec	Twn	Rng	Footage Calls
3001522780	PENROC OIL CORP	BRANTLEY B	1	24	23S	28E	1980'FSL & 1980'FEL
3001523973	DINERO OPERATING CO	HOWARD RAY	1-Y	25	23S	28E	660'FSL & 610'FEL
3001544288	MEWBOURNE OIL CO	RAY 25 W29A FEE	001H	25	23S	28E	185'FSL & 330'FEL
3001533923	DEVON ENERGY PROD	SPUD 16 ST	4	16	23S	29E	960'FSL & 1800'FEL
3001538059	DEVON ENERGY PROD	SPUD 16 ST	9H	16	23S	29E	1265'FSL & 1905'FEL
3001522553	CHEVRON USA INC	TELEDYNE 17	1	17	23S	29E	660'FSL & 1980'FWL
3001522650	ALTURA ENERGY LTD	TELEDYNE 18	1	18	23S	29E	1800'FSL & 2180'FEL
3001528165	DEVON ENERGY PROD	HARROUN TRUST 19	1	19	23S	29E	1316'FSL & 1320'FWL
3001522703	CHEVRON USA INC	TELEDYNE 20 GAS COM	1	20	23S	29E	660'FNL & 2080'FWL
3001532987	CHEVRON USA INC	TELEDYNE 20	2	20	23S	29E	1650'FNL & 1980'FWL
3001533323	BTA OIL PRODUCERS, LLC	TELEDYNE 20	4	20	23S	29E	1980'FSL & 1650'FWL
3001533504	CHEVRON USA INC	TELEDYNE 20	5	20	23S	29E	1980'FSL & 2310'FEL
3001533599	BTA OIL PRODUCERS, LLC	HARROUN RANCH FED 20702	1	20	23S	29E	990'FSL & 2310'FEL
3001543174	CIMAREX ENERGY CO	LAGUNA GRANDE 29 FED	6H	20	23S	29E	98'FSL & 2562'FWL
3001543360	BTA OIL PRODUCERS, LLC	HARROUN RANCH FED COM 20702	2H	20	23S	29E	680'FSL & 180'FWL
3001534750	CHEVRON USA INC	IMC 21	1	21	23S	29E	330'FNL & 660'FEL
3001536109	CHEVRON USA INC	IMC 21 FED COM	2H	21	23S	29E	460'FNL & 410'FEL
3001535073	DEVON ENERGY PROD	LAGUNA SALADO 22 FED	3H	22	23S	29E	130'FSL & 760'FWL
3001522157	OXY USA INC	LAGUNA GRANDE UNIT	2	27	23S	29E	660'FSL & 1980'FWL
3001536137	OXY USA INC	GOODNIGHT 27 FED	2H	27	23S	29E	2460'FSL & 1330'FWL
3001539142	OXY USA INC	GOODNIGHT 27 FED	4H	27	23S	29E	284'FSL & 1993'FWL
3001539220	OXY USA INC	GOODNIGHT 27 FED	3H	27	23S	29E	962'FSL & 364'FWL
3001539431	OXY USA INC	GOODNIGHT 27 FED	5H	27	23S	29E	906'FSL & 459'FWL
3001521636	LAGUNA GRANDE LLC	LAGUNA GRANDE UNIT	1	28	23S	29E	1380'FSL & 990'FEL
3001524577	EXXON CORPORATION	BLAKEMORE EST FED	1	28	23S	29E	1780'FSL & 1980'FEL
3001530113	DEVON ENERGY PROD	COCHITI 28 FED	1	28	23S	29E	1980'FNL & 660'FWL
3001537249	OXY USA INC	CYPRESS 28 FED	1H	28	23S	29E	330'FSL & 440'FWL
3001537331	OXY USA INC	CYPRESS 28 FED	2H	28	23S	29E	1833'FSL & 530'FWL
3001538287	OXY USA INC	CYPRESS 28 FED	3H	28	23S	29E	435'FNL & 60'FWL
3001539330	OXY USA INC	CYPRESS 28 FED	4H	28	23S	29E	1730'FNL & 330'FWL
3001541138	OXY USA INC	CYPRESS 28 FED	6H	28	23S	29E	330'FSL & 2000'FWL
3001543751	OXY USA INC	CYPRESS 33 FED COM	9H	28	23S	29E	140'FSL & 1935'FWL
3001523414	CIMAREX ENERGY CO	LAGUNA GRANDE UNIT	3	29	23S	29E	2310'FSL & 1980'FEL
3001533219	CIMAREX ENERGY CO	LAGUNA GRANDE FED	4	29	23S	29E	660'FNL & 660'FWL
3001542258	CIMAREX ENERGY CO	LAGUNA GRANDE 29 FED	5H	29	23S	29E	140'FNL & 330'FWL
3001542739	CIMAREX ENERGY CO	LAGUNA GRANDE UNIT	7H	29	23S	29E	180'FNL & 1650'FEL
3001542740	CIMAREX ENERGY CO	LAGUNA GRANDE UNIT	8H	29	23S	29E	280'FNL & 530'FEL
	<b>BTA OIL PRODUCERS, LLC</b>	<b>LAKESIDE 20702 SWD</b>	<b>1</b>	<b>29</b>	<b>23S</b>	<b>29E</b>	<b>1850'FNL &amp; 2640'FEL</b>
3001526172	DEVON ENERGY PROD	HARROUN TRUST	1	30	23S	29E	660'FSL & 2310'FEL
3001526414	DEVON ENERGY PROD	MALAGA HARROUN 31	1	31	23S	29E	2012'FNL & 1899'FEL
3001526954	DEVON ENERGY PROD	HARROUN TRUST 31 FED COM	1	31	23S	29E	1980'FSL & 660'FWL
3001540826	DEVON ENERGY PROD	HARROUN TRUST 31	4H	31	23S	29E	330'FSL & 1345'FEL
3001540827	DEVON ENERGY PROD	HARROUN TRUST 31	5H	31	23S	29E	330'FSL & 1299'FEL
3001531910	MARATHON OIL PERMIAN	GRANDE ST	1	32	23S	29E	660'FNL & 1980'FWL
3001539345	MARATHON OIL PERMIAN	MACHO GRANDE ST	1H	32	23S	29E	330'FNL & 330'FEL
3001542659	MARATHON OIL PERMIAN	MACHO GRANDE ST	2H	32	23S	29E	200'FNL & 700'FEL
3001536987	OXY USA INC	CYPRESS 33 FED	3	33	23S	29E	1650'FSL & 400'FEL
3001537308	OXY USA INC	CYPRESS 33 FED	2H	33	23S	29E	635'FNL & 765'FEL
3001537368	OXY USA INC	CYPRESS 33 FED	4H	33	23S	29E	1490'FNL & 250'FEL
3001540768	OXY USA INC	CYPRESS 33 FED COM	5H	33	23S	29E	453'FNL & 803'FEL
3001540768	OXY USA INC	CYPRESS 33 FED COM	5H	33	23S	29E	453'FNL & 803'FEL
3001541557	OXY USA INC	CYPRESS 33 FED COM	6H	33	23S	29E	466'FNL & 1040'FEL
3001542616	OXY USA INC	CYPRESS 33 FED COM	7H	33	23S	29E	150'FNL & 1900'FWL
3001543075	OXY USA INC	CYPRESS 33 FED COM	8H	33	23S	29E	150'FNL & 780'FWL
3001535742	OXY USA INC	CYPRESS 34 FED	4H	34	23S	29E	480'FNL & 560'FWL
3001543076	OXY USA INC	CYPRESS 34 FED	10H	34	23S	29E	210'FNL & 330'FWL

3001537076	EOG Y RESOURCES INC	JUNIPER BIP FED	6Y	4	24S	29E	330'FNL & 680'FWL
3001537968	EOG Y RESOURCES INC	JUNIPER BIP FED	10H	4	24S	29E	296'FNL & 718'FWL
3001544096	OXY USA INC	CYPRESS 33 FED COM	010H	4	24S	29E	212'FNL & 1337'FWL
3001542714	DEVON ENERGY PROD	HARROUN TRUST 6 FED COM	1H	6	24S	29E	10'FNL & 890'FEL
3001542715	DEVON ENERGY PROD	HARROUN TRUST 6 FED COM	2H	6	24S	29E	40'FNL & 850'FEL
3001543262	DEVON ENERGY PROD	HARROUN TRUST 6 SWD	1	6	24S	29E	660'FNL & 350'FEL

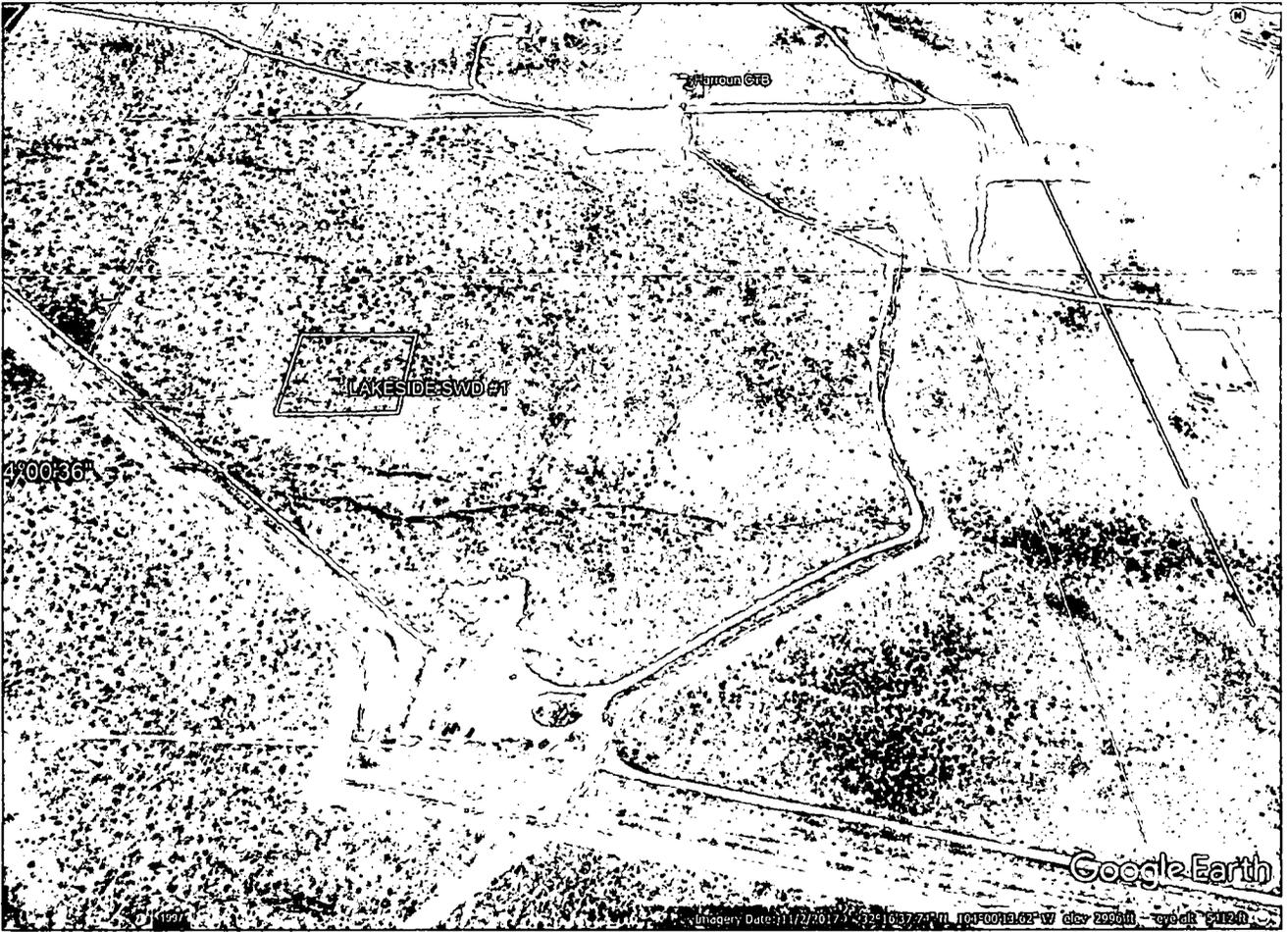
**PRODUCTION FACILITY LAYOUT**  
CENTRAL TANK BATTERY

EDDY COUNTY, NEW MEXICO

LAKESIDE 20702 SWD #1  
SEC 29; T23S; R29E



SWD #2



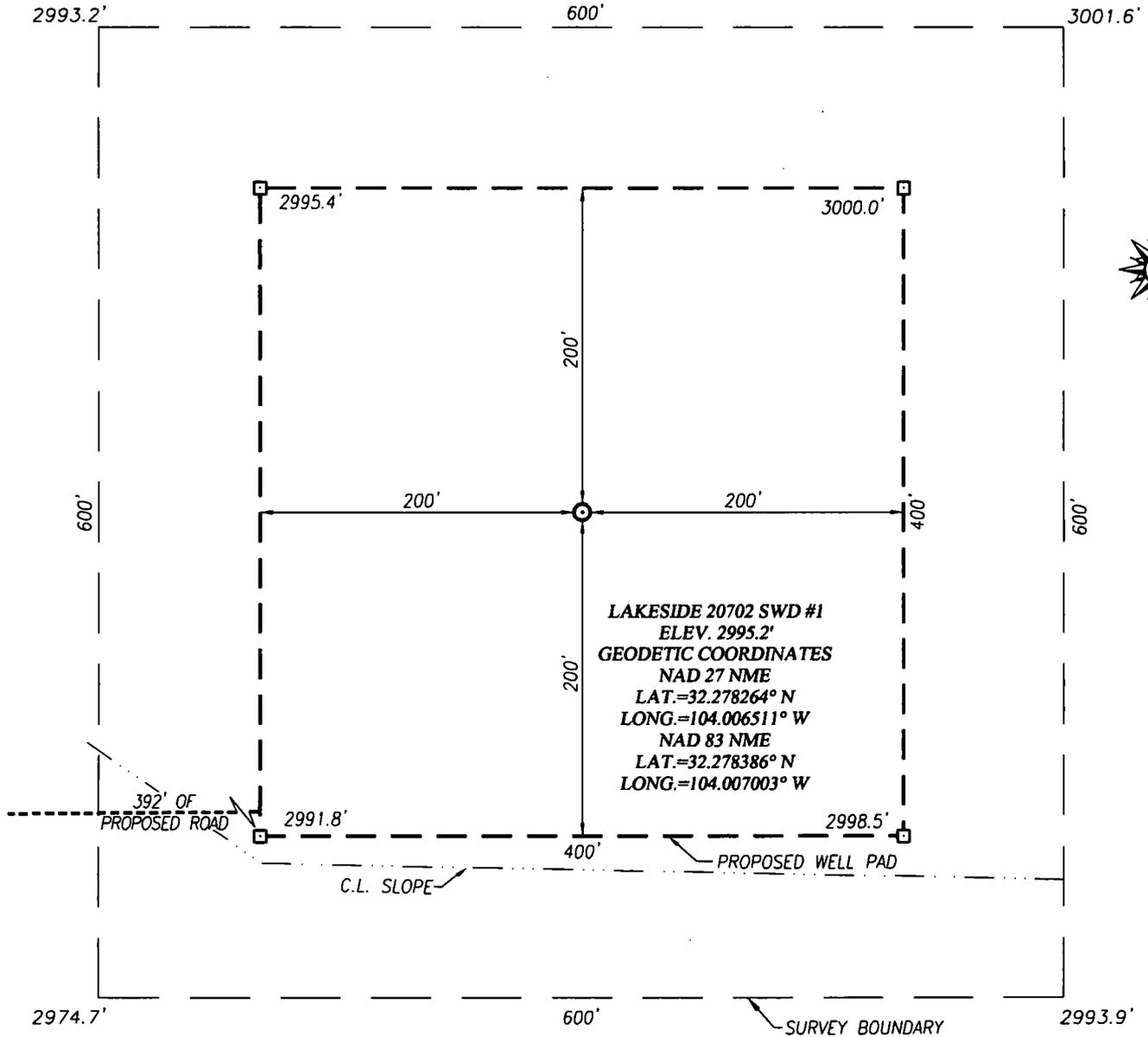
HARROUN RANCH, FRAC POND  
SEC. 20 - T23S - R29E



LAKESIDE 20702 SWD

BTA OIL PRODUCERS, LLC  
LAKESIDE 20702 SWD #1  
WATER SOURCE TRANSPORTATION MAP

# WELL SITE PLAN

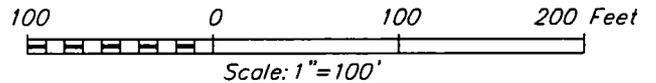


**NOTE:**

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

**DIRECTIONS TO THIS LOCATION:**

FROM LOVING, NM GO NORTH U.S. HWY. 285 APPROX. 2.3 MILES TO ST. HWY. #31. TURN RIGHT AND GO EAST ON ST. HWY. #31 FOR APPROX. 7.7 MILES TO ST. HWY. #12B. THEN TURN RIGHT AND GO EAST APPROX. 4.5 MILES TO RAWHIDE ROAD. TURN RIGHT AND GO SOUTH APPROX. 4 MILES. TURN RIGHT AND GO WEST ON CALICHE LEASE ROAD FOLLOWING MEANDERING ROAD APPROX. 3.6 MILES TO "Y". KEEP RIGHT AND GO WEST APPROX. 1 MILE. TURN LEFT AND GO SOUTH APPROX. 0.5 MILES. TURN RIGHT AND GO WEST APPROX. 0.1 MILE. THEN NORTHWEST APPROX. 0.2 MILES. TURN RIGHT AND GO EAST APPROX. 392 FEET TO SOUTHWEST CORNER. WELL IS NORTHEAST 272 FEET.



## BTA OIL PRODUCERS, LLC

**LAKESIDE 20702 SWD #1 WELL LOCATED 1750 FEET FROM THE NORTH LINE AND 2640 FEET FROM THE EAST LINE OF SECTION 29, TOWNSHIP 23 SOUTH, RANGE 29 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO**



PROVIDING SURVEYING SERVICES  
 SINCE 1946  
**JOHN WEST SURVEYING COMPANY**  
 412 N. DAL PASO HOBBS, N.M. 88240  
 (575) 393-3117 www.jwsc.biz  
 TBPLS# 10021000

Survey Date: 6/21/17	CAD Date: 7/10/17	Drawn By: ACK
W.O. No.: 17110600	Rev.:	Rel. W.O.:
		Sheet 1 of 1



**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:

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 surface owner:

PWD disturbance (acres):

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?

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:**

**Assigned injection well API number?**

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

**Minerals protection information:**

**Mineral protection attachment:**

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

**UIC Permit attachment:**

**Injection well name:**

**Injection well API number:**

### **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):**

**Other PWD type description:**

**Other PWD type attachment:**

**Have other regulatory requirements been met?**

**Other regulatory requirements attachment:**



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

## Bond Info Data Report

07/20/2018

### Bond Information

Federal/Indian APD: FED

BLM Bond number: NMB000849

BIA Bond number:

Do you have a reclamation bond? NO

Is the reclamation bond a rider under the BLM bond?

Is the reclamation bond BLM or Forest Service?

BLM reclamation bond number:

Forest Service reclamation bond number:

Forest Service reclamation bond attachment:

Reclamation bond number:

Reclamation bond amount:

Reclamation bond rider amount:

Additional reclamation bond information attachment: